

Student and Instructor Perceptions of Collaborative Online International Learning Projects for Increasing Intercultural Competence

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Ethics Statement

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Abstract

I developed a Collaborative Online International Learning (COIL) project with a partnering international institution for my intercultural communication students. This project was designed to enhance students' intercultural competence. This research report assesses the impact of COIL on students' intercultural competence, using Darla Deardorff's (2006) Process Model of Intercultural Competence as the guiding analytical framework. Through qualitative interviews with former students and an international faculty partner, I explored how COIL projects influence attitudes, knowledge, and skills, as well as internal and external outcomes, in intercultural competence. The findings indicate that COIL projects enhance students' respect, openness, curiosity, cultural self-awareness, and communication skills. Students reported increased empathy and adaptability, crucial for effective intercultural communication. I have highlighted two major challenges around time zone differences and varying communication styles as areas for COIL pedagogical improvement. This study underscores COIL's potential in fostering intercultural competence and suggests strategies for enhancing its implementation in higher education.

Keywords: Collaborative Online International Learning; Intercultural Communication; Deardorff Process Model of Intercultural Competence; Student Perceptions of COIL Effectiveness; Faculty Perceptions of COIL Effectiveness

Dedication

I dedicate this research project to all my students. I learn more from you than you from me. You give me grace as we walk the intercultural path together. Thank you.

Acknowledgements

I respectfully acknowledge that this research project was conducted on the unceded traditional and ancestral lands of the Coast Salish Peoples, including the territories of the q'ícəy' (Katzie), q'wa:ńł'əń (Kwantlen), kwikwəłəm (Kwikwetlem), xʷməθkʷəyəm (Musqueam), and qiqéyt (Qayqayt).

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List of Acronyms

BEVI	Beliefs, Events and Values Inventory
COIL	Collaborative Online International Learning

Glossary

COIL	According to the State University of New York COIL Centre (2020), Collaborative Online International Learning is an educational approach that connects students and instructors from geographically different locations through the use of online technologies that allows for the integration of intercultural collaboration in course projects, discussions, and assignments.
Intercultural Competence	According to Darla Deardorff (2006), intercultural competence comprises attitudes, skills, and knowledge that support internal empathy and motivation to achieve effective and appropriate communication between interlocutors.

Introduction

In the Fall 2022 semester, I looked to distinguish myself as a new regular faculty member after transitioning from postsecondary program administration and part-time teaching to full-time academic work. Before starting full-time teaching, I met with my dean to discuss how I could support the faculty's internationalization strategy. My passion for internationalization developed over a long career in international education program development and management. The dean relayed that there was little appetite for the expansion of traditional internationalization programs, such as field schools and study abroad partnerships; however, she suggested I discuss with department colleagues on how they were pursuing internationalization in their teaching practice. One colleague introduced me to their Collaborative Online International Learning (COIL) project with partners in Japan and Mexico. Although I had known of COIL for years before being introduced to their project, the fact that colleagues were integrating COILs into their teaching practice was inspiring. I wanted to develop a COIL for my intercultural communication courses in the upcoming academic year.

The State University of New York created the term COIL in 2006 (Hackett et al., 2023). COIL falls under the virtual exchange category of online teaching and learning activities that join classrooms across geographical distances in a virtual pedagogical space. A common approach to COIL involves two instructors collaborating on the creation of a shared academic project that classes of students complete in small teams. COILs are generally a minimum of five weeks to an entire semester in duration (SUNY COIL Center, 2020). COIL project topics can be discipline specific, for example, two business administration marketing courses developing new marketing strategies for products. Conversely, they can have a broader focus, such as second language acquisition, culture learning, intercultural communication, global citizenship, sustainability, and research (SUNY COIL Centre, 2020). Instructors design COIL project outcomes and objectives and guide students through the learning process. Due to time zone differences, student teams meet mostly asynchronously over social media and during time outside scheduled class. Student COIL projects can be showcased in a live, synchronous session with all participants and instructors or via social media (Padlet, YouTube, Facebook, Instagram, etc.) for convenient sharing with peers and the public.

Since the beginning of the COVID-19 pandemic, COILs have grown in popularity at my college¹. COILs contribute to internationalization-at-home for higher education institutions seeking strategic global partnership development beyond the traditional field schools and global mobility exchange agreements (Beelen and Doscher, 2022). For students, COILs represent an opportunity to work in intercultural global virtual teams with peers across the world. Student teams collaborate on projects to meet COIL and course objectives and learning outcomes that often, as well, involve a degree of intercultural competence development. Depending on the COIL topic, intercultural competence development may be considered a by-product of the learning experience, that is, something that happens naturally or automatically when students work across cultures. I believe that intercultural competence development is a COIL aim that should, and can, be intentional, and, as such, I consider it the primary learning objective and main motivation for incorporating COIL into my teaching practice.

I completed four COIL projects in two years where my students collaborated with peers in postsecondary institutions in Japan and Spain. I am convinced that this pedagogical pursuit advanced students' intercultural communication competence and my own teaching development. While I know the ways my teaching practice has benefited from facilitating COILs, I wished to follow a line of inquiry into my students' development of intercultural competence beyond what I had assessed from their project outputs and end-of-term reflection assessments: Do students perceive COIL as useful in supporting intercultural competence development? What challenges did students face in the COIL projects and how were these overcome to ensure project success? What benefits to my teaching practice could I draw from listening to students' COIL experiences? And finally, because I collaborated with international faculty members, how can my COIL partners' perceptions inform how I approach future project collaboration?

Intercultural Competence Framework

Darla Deardorff's (2006) Process Model of Intercultural Competence has informed my teaching practice as an intercultural communication instructor for over 10 years (Appendix A). This model provides the intercultural competence framework foundation

¹ As of 2024, there are nine active COIL projects at my college with international partners in the Americas, Europe, and Asia.

for my course curriculum design and delivery. As a graduate student in the Intercultural and International Communication Master of Arts program at Royal Roads University, I was deeply influenced by Deardorff's model. There are several models of intercultural competence available to educators and students, such as the Hunter Global Competence Model and Ting-Toomey's Staircase Model of Intercultural Communication Competence (Deardorff & Hunter, 2006; Ting-Toomey & Cheng, 2022). All provide conceptualizations of intercultural or cross-cultural competence; however, I was drawn to Deardorff's model for its accessibility and applicability, presenting students with clear language that defines and articulates the process by which intercultural competence is developed and demonstrated in attitudes, knowledge, skills, and internal and external outcomes (Deardorff, 2006, 2008, 2009a, 2009b, 2011).

Deardorff created her model through a survey of 24 US postsecondary senior level internationalization administrators and a three-round Delphi study of 23 intercultural scholars. In the studies she reviewed, there was an 80% consensus rate on what constituted intercultural competence. These shared ideas are the components of Deardorff's (2006) Process Model of Intercultural Competence. Deardorff categorized the components as knowledge, skills, and attitudes required to communicate effectively and appropriately with individuals who do not share cultural values or identities (Deardorff, 2006). According to Deardorff's research, to demonstrate effective and appropriate intercultural competence, individuals need to maintain attitudes of respect, openness, and curiosity, as well as seek cultural self-awareness, deep cultural knowledge, and sociolinguistic appreciation while engaging in active listening skills in intercultural dialogue and relationships (Arasaratnam-Smith & Deardorff, 2023). In my teaching, I typically introduce Deardorff's model at the beginning of the term and refer to it throughout the semester as the guiding intercultural competence framework for students to follow as they engage with concepts, theories, assessments, and as they work in COIL projects.

As of the completion of this research project, there is no standardized questionnaire instrument based exclusively on Deardorff's (2006) model to assess intercultural competence development in students.² Consultants and educators employ

² The Association of American Colleges and Universities designed the Intercultural Knowledge and Competence VALUE Rubric using, in part, Deardorff's (2006) Process Model of Intercultural Competence.

several intercultural competence instruments to support intercultural awareness and self-reflection, such as the Intercultural Development Inventory, the Beliefs, Events, and Values Inventory, and the Intercultural Effectiveness Scale (Anderson & Or, 2023; Grant et al., 2021; Johnson & Ledbetter, 2022). I initially planned to assess intercultural competence development in my students using the Beliefs, Events, and Values Inventory (BEVI) as a pre- and post-COIL assessment. The resulting data could have measured intercultural competence development in students. However, using the BEVI while being the instructor to the student-research participants during the term in which students were participating in the COIL project presented the Research Ethics Board with significant issues. I therefore changed my data collection to occur after the COIL had been completed and final grades had been approved.

Having been required to abandon use of the BEVI instrument to assess intercultural competence development in COIL students, I decided to pursue research similar to qualitative and mixed methods inquiries into the benefits of participating in COIL on student development outcomes. For example, Mestre-Segarra and Ruiz-Garrido (2022) provided course pre- and post-COIL questionnaires and then conducted semi-structured interviews with four participating graduate level business students to assess perceived change in intercultural competence development as a result of virtual projects. Garcia, Smith, Burger, and Helms (2023) analyzed open-ended questions from course evaluations for student perceptions of effectiveness of COIL in developing students' global mindset. Naicker, Singh, and van Genugten (2021) used pre- and post-COIL questionnaires and focus groups to assess student perceptions of cultural open mindedness after completing virtual projects. Jenssen et al. (2024) used focus group interviews and a content-analysis approach in assessing the impact of COIL on Norwegian and American urban health students' global perspective development. Ghosh and Verma (2022) applied a mixed method approach using student surveys, personal interviews, instructor reflections, and course assessments in their analysis of Chinese and American engineering student perceptions of challenges and benefits of COIL. In addition to not utilizing a quantitative assessment instrument to assess competence development, what is prominent in this present research project is the deliberate methodological approach of applying Deardorff's (2006) model of intercultural competence to generate guiding research and interview questions, as well as to guide data coding.

Research Questions

In my experience as a COIL instructor, students working interculturally in global virtual teams are required to maintain supportive attitudes, acquire and utilize deep cultural knowledge, and navigate sociolinguistic communication patterns and expectations to successfully complete international projects. These are the attitudes, knowledge, and skill competencies outlined in Deardorff's (2006) model. Anderson and Or (2023), Hackett et al. (2023), Jenssen et al. (2024), and Zheng et al. (2022) have demonstrated the effectiveness of COIL projects on positively affecting intercultural competence development in American, Brazilian, Chinese, Norwegian, and Dutch undergraduate students. As I have observed in my own COIL teaching, it does appear that such projects are an effective pedagogical tool that supports students in achieving intercultural competence development outcomes. Moving beyond my own self-assessment as a COIL instructor, I felt it important to heed Deardorff's (2022) call to assess the effectiveness of COIL programs vis-à-vis intercultural competence development outcomes by seeking the perspectives of the participants and co-facilitators. Through this research project, therefore, I attempted to better understand:

1. In what ways do COIL projects impact students' intercultural competence?
2. What is the nature of students' experiences in participating in COIL projects as a means of increasing intercultural competence development?
3. What can I learn from the experiences of former students and teacher-partners to better develop and deliver future COIL projects?

In order to answer these research questions, I undertook qualitative interviews with student-participants who had completed a COIL project with international peers. The COIL was part of a course that developed applied intercultural communication skills for culturally dynamic workplaces, such as those in the Metro Vancouver area. The COIL required students to create a video social media campaign supporting the implementation of the United Nations Sustainable Development Goals (SDGs). The project had four main components over a 14-week semester: (1) icebreaking and initial COIL team meeting; (2) creating an infographic on a chosen SDG; (3) preparing a final video social media campaign that incorporates culturally informed communication styles in a call to action on the chosen SDG; (4) writing an individual self-reflection on the COIL

experience that explores challenges, successes, and shifts in worldview and intercultural understanding. The COIL project comprised 40% of the total grade for the course, which was the single largest component.

Methodology

To understand perceptions of effectiveness of COIL projects on increasing intercultural competence development in students who participated in the COIL project, I chose an inductive, interview-based research approach (Creswell, 2014). Such an approach allows for the analysis of perception through the organization, examination, and codification of data, resulting in the identification of themes that may address guiding research questions (Creswell, 2014). Interviews provide a rich source of qualitative data that permits research participants the opportunity to express lived experiences and opinions through a partnership style relationship with the principal investigator (Weiss, 1994). Having been the instructor on the Canadian side of the COIL project, I felt that I was in an informed position to guide research participants through an interview on experiences that supported or inhibited the development of intercultural competence (Weiss, 1994).

Positionality

As an emerging researcher, I bring a decade of experience designing and delivering intercultural communication courses and workshops to postsecondary students, university staff, and non-university professionals seeking knowledge and skill development. I have also gained significant experience in the administration of international higher education programs in my former career as a manager at two major Western Canadian universities. I also bring two years experience in developing and delivering COIL programs. In 2023, I completed a four-week COIL training course provided by the University Mobility in Asia and the Pacific Consortium. In 2024, I presented on COIL development and best practice at a major college level higher education conference with a team of postsecondary COIL practitioners from British Columbia. I consider myself to be an advocate for the intercultural competence benefits that COIL can offer to students.

Being the instructor of the COIL project at the centre of this research project, I must acknowledge the position of power I held/hold over the student interview participants. While an entire semester had passed since the research participants were in the COIL project, the student-(former) teacher relationship continues to inform the research context. I consider that I have positive relationships with all student research participants. I believe the research participants had had positive COIL experiences, partially informing their decision to participate in the research project.

Participant Recruitment

I held two online information sessions for the college public to learn about my research project goals, stages, risks and benefits, and processes. I put up an online session information poster in an accessible area of the college that contained a QR code where prospective participants could access further information about Zoom sessions on a Padlet page. To ensure accessibility, I included enough contact information on the poster for individuals to contact me without having to access the Padlet. From those in attendance, interested potential participants could arrange for further discussion or choose an interview date and time. With the online information sessions and through word-of-mouth sharing from within the prospective student research-participant pool, I scheduled four interviews. Due to personal issues, only two in-person interviews could be successfully completed with former students, Mary and Gigi (pseudonyms). As the research project was specific to students who participated in the COIL project, there were a limited number of possible interview candidates, and it is likely many had convoked from the college by the time of data collection. I held one-hour student interviews at the college in May 2024. I maintained interview participant confidentiality through the use of pseudonyms, as well as through the elimination of most identifying demographic information or specific COIL project information. These measures minimized the chance that specific individuals could be identified. I made interviewees aware of the use of data recording, secure storage of data files, and the process by which a copy of the research report can be made available.

I interviewed over Zoom a faculty member, Carlos³, with whom I developed the COIL project. I provided him with the same privacy and safe storage of data procedures

³ A pseudonym.

information as the student-interviewees. The one-hour interview with Carlos completed the data collection process in June 2024. Carlos asked for a copy of the research report in order to inform potential research collaboration on the effectiveness of COIL and to support our future COIL collaboration in the Fall 2024 semester.

Data Collection

To determine if Collaborative Online International Learning projects are helpful in developing intercultural competence in students, I applied Deardorff's (2006) Process Model of Intercultural Competence to the experiences reported by students and faculty member. I analyzed data using Deardorff's (2006) model on interviewees' experiences of attitudes, knowledge, skills, and internal and external outcomes demonstrated in the COIL project.

I created interview questions to provide participants the opportunity to reflect on their process of intercultural competence development using language directly from Deardorff's (2006) framework. I asked Mary and Gigi seven questions about their experiences, challenges, and the strategies they used for working across cultures in a COIL project in order to elicit responses that reflected intercultural competence components. I asked Carlos three questions about reported challenges, and strategies used by his students in the COIL that reflected intercultural competence components. I conducted one-hour interviews in person at the college site or over Zoom when in-person interviews were not possible. I attempted to maintain an unstructured interviewing technique to allow for spontaneous question generation and response follow-up in order to provide space for participants and I to explore COIL experiences not prompted by prepared questions (Creswell, 2014). In the process of interviewing Mary and Gigi, I asked over 20 questions that provided an opportunity for greater sharing and dialogue. When interviewing Carlos, I asked fewer follow-up questions than in the student-participant interviews due to the conversational nature of the interview.

I recorded all interviews and generated transcripts from the audio files using Otter.ai or Zoom's transcription feature. English was not the interviewees' first language. Although I found comprehension during the interviews was high, I made the decision to edit transcripts for grammatical clarity to remove excessive filler words and phrases (um, ah, you know, so, like, etc.). First, I analyzed transcript data, beginning with a primary

review of responses to the initial student or faculty member guiding interview questions. My second analysis process involved coding transcripts for knowledge, skills, attitudes, and internal and external outcomes language. I drew themes from the intercultural competence coding to assess student perceptions of the effectiveness of COIL projects for developing intercultural competence (Ryan & Bernard, 2003). Then I coded interview transcripts for attitudes, knowledge, skills and internal and external outcomes. Finally, I compared transcripts across competence themes to assess congruency or divergence among participant perceptions.

I followed the same data analysis process with Carlos' interview except for the final comparative analysis step, given that there was only one interview. Although I posed fewer guiding interview questions to Carlos than to student participants, I probed his perceptions of the intercultural communication effectiveness through questions surrounding challenges experienced by students. Of note in the experience of interviewing my colleague, and co-developer of the COIL project, is the conversational nature of the interview. I believe that a differing power dynamic in the relationship between Carlos and me produced a more reciprocal interview dialogue than that experienced when interviewing students. Carlos and I engaged in much more small talk than I exchanged with students. We shared the challenges of postsecondary program administration and teaching. We agreed to pursue research around institutional COIL policy and to work toward publishing a paper on COIL implementation best practice. And we exchanged sincere hopes to meet in person in 2025 to celebrate our COIL success. The interview with Carlos also provided the opportunity for me to respond to the guiding interview questions and, in a way, play the role of research participant. This experience spurred introspection into my own COIL pedagogy and into how to approach future COIL collaboration.

Trustworthiness

Given this project's inductive, qualitative methodological construct, I have benefited from the application of reflexivity in examining my role as researcher (Creswell, 2014). As recommended by Creswell (2014), I have provided personal experiences and my position on the place of COIL in my pedagogy. I have also provided information on the connection I hold to the research site and to the interview participants. Finally, I have critically assessed the choices I have made in research design and on perceived

limitations assessing trustworthiness of results, reflecting on objectives, methods, successes, and pitfalls of the research.

In terms of trustworthiness, when presented with the reported experiences of students and faculty COIL partner in interviews, I felt those perceptions were congruent with my memory of the events of the COIL project semester. Due to my prolonged engagement with the COIL experience contextualizing this research project, I trust the triangulation of my instinct, memory, and COIL notes from the semester as I analyzed interviewees' perceptions. These instincts stem from my position as a COIL practitioner, as former instructor of student-interviewees, and as faculty COIL co-collaborator with my international teaching partner. Based on my previous COIL teaching experience and on witnessing student-interviewees having completed outstanding COIL projects⁴, I have taken at face value the reported experiences of research interview participants.

Interviewees reported on experiences nine months after the completion of the COIL project. In light of the time between the project and the interviews, there is the possibility that recollection of events concerning the COIL experience would have been different had the interviews happened immediately after the COIL project. The question remains: In what way could the months between the COIL event and the interview discussion have shaped or transformed participants' perception?

The number of student interviews represents 2% of the total possible participants who experienced the COIL. While I feel the limitation of the number of interviews conducted does not diminish research findings, as participants provided noteworthy information, representation across gender identity, language, and academic and cultural backgrounds, for example, has not been achieved. While this project was not an attempt to survey a representation of the students who completed the COIL project, the limitation is worth noting and prompts reflection on how a more inclusive set of interviewees could have provided a fuller understanding of COIL effectiveness.

At my institution, COIL design and implementation are at the discretion of the instructor. Instructors follow recognized fundamental components in order for the experience to be qualified as a COIL, such as shared learning outcomes, structured student groups, synchronous and/or asynchronous group meetings, projects and

⁴ An outstanding letter grade is A or higher.

presentations, and student self-reflections (SUNY COIL Center, 2020). I follow these general COIL components in the design and delivery of my projects. Personal experience plays a role, as well, in that I have completed four COIL projects and have gained some pedagogical fluency and methodological confidence in implementing COIL. The possibility remains that perceptions of students and faculty collaborators are more related to instructor effectiveness than to the effectiveness of COIL methodology itself.

COILs provide an opportunity for students to engage in intercultural communication with peers on projects that meet course learning outcomes. The intercultural competence development that can occur in a COIL project is not the result of a process of intercultural osmosis, whereby working within culturally dynamic teams translates to automatic competence development. Rather, intercultural competence development is intentional and mindful, requiring critical self-reflection across the stages of the COIL project in order to assess one's self-awareness as a communicator informed by cultural identity and language (Deardorff, 2022). Interviewing COIL participants to assess perceptions of intercultural competence development provides an excellent opportunity for researchers to dive deeply into the world of student lived experience and beyond formalized project and classroom assessments. My decision to use Deardorff's (2006) model of intercultural competence does limit the analytical scope of the research to a conceptualization of intercultural competence centred in the primacy of an Anglo-American construct (Kim, 2002). Participants may, moreover, report perceptions of the effectiveness of COIL in supporting intercultural competence in language not found in the Deardorff model.

I believe that all of the interview participants had already achieved significant levels of intercultural competence before the commencement of the COIL project as a result of living in highly culturally cosmopolitan urban contexts in Asia. Student participants have university degrees and came to the COIL project class with 10 to 20 years of professional experience working in healthcare and the travel industry. Their perspectives provided an important opportunity for me to examine how these students experience the return to postsecondary education with unfamiliar pedagogical practices like COIL.⁵ I found the interviewees to be confident and motivated to engage in intercultural communication in the COIL, which I attribute to previous academic and

⁵ Neither Mary nor Gigi had experienced a COIL project before.

professional experiences before relocating to Canada. Given that the two students identified as coming from the same culture, I was presented with a more culturally homogeneous research participant identity than I had expected when designing this project. This has prompted me to consider how students from other cultural backgrounds or in different stages of life might have perceived the usefulness of working across global virtual teams as supporting intercultural competence development.

All student interviewees reported taking multiple classes in the COIL semester. Given that the students were actively pursuing other courses and areas of study, participants may have developed intercultural competence in coursework, discussions, and team-based learning in ways beyond the COIL that this research design and interview questions do not address. For example, one interviewee, Gigi, reported the experience of applying the lesson learned in an interpersonal conflict resolution communication course to her approach to conflict management in the COIL project. I am encouraged when students apply attitudes, knowledge, and skills gained in class across academic pursuits. Once Gigi told me of her other course and its key learning that supported her in the COIL, I started to consider how students might be informing their perceptions of the effectiveness of COIL on developing intercultural competence within the broader context of knowledge and skills gained in other courses.

Finally, I consider that having a strong, positive relationship with all participants was an advantage when conducting interview-based research, as respondents appeared to be comfortable opening up to me. The caveat is that with this type of pre-existing relationship comes the possibility that student-respondents may wish to qualify their responses to ensure that the relationship is not negatively affected by presenting a view that directly challenges the assumption that COIL is an effective pedagogical tool to develop student intercultural competence. I recognize the risk of the researcher effect in this project as I was both COIL instructor and principal investigator (Miles, Huberman, & Saldaña, 2019). I prefaced each student interview with remarks that encouraged them to feel comfortable to respond with honesty and confidence about personal experience, regardless of our pre-existing relationship. I therefore had to be open to accepting a respondent being comfortable with reporting that their COIL experience did not support their intercultural competence and in so doing challenge the idea of COIL's usefulness in an intercultural communication classroom. The likelihood of a respondent willing to communicate strong critical opinions in such a research project, many months after the

end of the COIL, is an unlikely research expectation. However, I believe that students who may not have found the COIL a positive experience could have provided critical perspectives that would broaden and deepen the learnings from this research project.

After the completion of the research project, I have benefited from reflection on different approaches in interview question construction that may have provided opportunity for student and faculty respondents to express specific types of intercultural interactions, cultural misunderstandings, and attempts at navigating cultural communication styles and norms in greater detail. In hindsight, I did not sufficiently address deep cultural knowledge, a component of the Deardorff model (2006), in the interview question prompts to allow for students to share how they applied cultural self-awareness or cultural knowledge of others in communication situations in the COIL project. I should have provided greater opportunity in the interview for students to share intercultural communication critical incidents or transformative experiences in the different stages of the COIL project, noting shifts in sense of cultural identity, worldview, or challenges to cultural values. Beginning the interview by asking students to share an experience that situates themselves in the memory of a specific COIL meeting might have spurred deeper levels of intercultural competence introspection (Langley and Meziani, 2020). When interviewing the faculty member about sharing specific student incidents observed during the COIL, the use of a recall device, like an instructor's journal kept throughout the project, might provide greater specificity in responses concerning how students met and overcame intercultural communication challenges and demonstrated intercultural competence. COIL journaling is a practice that my faculty partner and I feel would be a benefit to our teaching practice.

Findings

Students reported that the COIL project supported the development of intercultural competence. Interviewees demonstrated in their responses to questions, analyzed through Deardorff's (2006) Process Model of Intercultural Competence framework components, language reflective of attitudes, knowledge, skills, and internal and external outcomes. Internal outcomes represent a state of intercultural flexibility, adaptability, and ethnorelative mindset, which refers to equal recognition and appreciation of one's culture

and of others' cultures. Internal outcomes inform external outcomes of effective and appropriate verbal and non-verbal communication.

Student Experiences

Attitudes

The foundational attitudes of intercultural competence according to Deardorff (2006) are respect, openness, and curiosity. Students reported expressing openness towards their international COIL counterparts by indicating that they had a willingness and excitement to learn from international peers: "I enjoyed [the COIL] very much. I just wanted to learn from them" (Mary). Curiosity of self and others was reported as excitement: "We were really excited about it. We wanted to discover the culture or the background of [our international COIL peers]" (Mary). The curiosity of the COIL project provided Mary a reason to not drop the course: "When I just heard in the course that we have the chance to work with the people from a different country I feel very interesting" (Mary). The open-mindedness resulting from working in a COIL project was a theme articulated by Gigi:

[The COIL] teaches me how to be flexible. Flexibility to be open minded. The possibility to be open minded. Because you understand that different cultures have their own perspective (Gigi).

As a pedagogical tool for focusing students' awareness on the role of positive attitudes associated with intercultural competence, COILs provide a learning experience beyond what might be traditionally expected in a Canadian postsecondary classroom.

Knowledge

Cultural self-awareness, deep cultural knowledge, and sociolinguistic awareness, such as local language skills and the use of verbal and non-verbal communication to accommodate an intercultural communication partner, are foundational to students' intercultural competence development according to Deardorff's model (2006). By participating in the COIL project, Mary reported that she gained increased cultural self-awareness on how she sees herself as a communicator informed by culture:

It's better for me to understand we are an indirect culture...maybe we just need an eye contact. Just the smile can convey everything. Because we don't know this is a kind of indirect culture before I learned this from

this course. Because we know this is the things we all know from the Chinese. But I don't know this is a kind of indirect [communication] thing. So this is a new term for me (Mary).

The differentiation between cultural self-awareness and deep cultural knowledge (of others) was presented in descriptive perceptions of others' culturally-bound communication styles. When describing the communication style of her international COIL interlocutors and COIL partners, Gigi reported:

Yes, [our team had] smooth communication, because once I know they're quite passive, I'm going to actively to ask questions, tactfully to ask them to get the information from them...Passive means they won't take initiative to speak out what they want, what they got for their plan. They are waiting for my opinions, they are waiting for my planning first (Gigi).

Gigi believed that her international COIL counterparts communicated in a passive way, which implies that she thinks of herself as having a more direct cultural communication style. This analysis is evidence of cultural self-reflection and of the search for deeper cultural knowledge of others.

Skills

Deardorff (2006) outlines the following six communication skills: listening, observing, interpreting, analyzing, evaluating, and relating to messages among cross-cultural interlocutors. Mary and Gigi reported practicing active listening and careful observation of communication to better understand their COIL partners. Mary applied the metaphor of the cultural iceberg to her desire to relate to her international COIL peers:

Yeah, you look at just a small part of it [the iceberg], and the other is at the bottom. So, when you encounter a different culture, that people from a different culture, then what you will see is very superficial. You have to go into the culture maybe you have to take some time to work with them, to talk with them. Maybe you have to go into the family or go into their work, so that you can know what is inside (Mary).

Gigi evaluated her COIL team members in the language of intercultural communication dichotomies of individualistic or collectivistic cultural values, which then guided her application of the skills of dialogue, collaboration, and leadership in completing the project:

I feel the [our COIL international peers are] more collectivistic than us. Because when I'm going to start the project, it seems no one is willing to be the one to take the initiative. So if [our COIL international peers are] more individualism than me, than my culture, so when I ask the questions or how they wanted to work, the COIL project they will give me a response, but they're just like 'oh' and 'whatever'. The kind of feeling I got [from international COIL peers] is that 'It's up to you'. So for me, I will change the way that I feel that 'Oh, you're quite passive'. So for me and for my Canadian COIL partner, I think I said I just wanted to do this project. I know when the deadline is and I have our planning on how to do it. So we just voiced out what our plan is going to do this project. So after we say everything then I asked: 'Is it okay for you or do you have any opinions or do you disagree or agree with anything we planned?' So normally they say, 'oh, it's fine, everything is totally fine'. So from that communication, it made me feel we are more individualistic, and are more active than them. So for the second part of the project, I'm also the one to voice: 'Oh, as you see, this is what we are going to do, ladies, so in your way, is it the same information as us and the same plan as us, as well?' I do this because most times [the international COIL team members] are complying with us (Gigi).

Mary compared cultures in reporting how she applied collaboration, communication, and leadership skills in the COIL project to take the initiative:

I think for [our international COIL peers] they are more indirect and we, in the project, we have to make everything very clear for a timeline for what we need to include in the project, what kind of pictures what kind of formats such as they need and how they want to share in videos (Mary).

While the risk of cultural generalizations of others to inform a better understanding of one's own cultural identity and culturally informed communication style is apparent in the responses of the students, Mary and Gigi utilize intercultural knowledge to support the navigation of cross-cultural communication, planning, and working in COIL teams.

Internal Outcomes

Attitudes, knowledge, and skills inform an internal state of intercultural flexibility, adaptability, and ethnorelative mindset. While not intended as a stage of intercultural competence that one necessarily fully completes, individuals who maintain supportive attitudes acquire and use cultural knowledge, and mindfully apply communication skills to achieve a level of internal intercultural empathy and confidence that supports the pursuit of cross-cultural dialogue (Deardorff, 2006). Mary described how COILs provided

the opportunity to hone internal outcomes of intercultural empathy through use of the metaphor of cultural lenses that shape perspective:

So [the COIL project] tells me how to understand the other people and the other culture. We use different lenses. Through the lens, we see the people from different culture. Whenever we use different lens we have received different pictures. So it's helped me to show more empathy for a different culture, different people. And it made me more happy (Mary).

Mary then switched to “fish from different oceans” as metaphor to express that COIL supported the development of intercultural empathy that directly impacted her sense of happiness working in the project:

Because we understand this is different. We accept difference. We accept people from a different country because they are from a different culture. They are different fish from different oceans. It helps me to know not to be angry all the time. Because we are different. The difference is a fact. We cannot change because we are growing up in a different country. So whenever I know it, 'Oh, it's a truth'. You don't have to be angry at difference (Mary).

Gigi reported that the COIL project experience supported her empathetic navigation of perspectives on differences when working across her culturally dynamic team:

Even if we are from the same country, we can have different culture as well. When we are working with the same people is just like, we speak quietly. But compared with the others' perspective, some people will say, 'oh, you're rude'. But I know this is their culture. They didn't mean 'it's rude' it is their culture, their communication way is like this. So for me when I work with them, I will not feel any bad feeling. I won't feel they're rude to me. I won't feel any anger in my perspective. I know this is the culture this is their communication way. So okay. Well, no hard feelings. We're happy (Gigi).

The demonstration of intercultural flexibility, adaptability, and ethnorelative perspective-taking required to successfully complete a COIL project is an expression of the internal outcome change resulting in the application of the fundamental components of attitudes, knowledge, and skills. Students developed a deeper understanding of cultural self and developed greater empathy for their international COIL peers.

External Outcomes

The application of attitudes, knowledge, skills, and internal outcomes inform the interlocutor in an intercultural communication experience. By mindfully cultivating the components of the intercultural competence framework, one may utilize behaviour and language effectively and appropriately that demonstrates intercultural competence when mutual understanding is achieved in cross-cultural dialogue (Deardorff, 2006). Effective and appropriate intercultural communication is an external outcome that requires acknowledgment from one's cross-cultural communication partner. With the few instances of reported conflict by students in the interviews, COIL partners must have achieved a high degree of effective and appropriate communication and behaviour. When asked to consider if any challenges inhibited COIL project teamwork, Mary reported that relying on a flexible, adaptable, and culturally empathetic approach ensured success:

To accept the different cultural values we have to make some adjustments in our work, because we see their work is good. We have to make some adjustments to fit with them (Mary).

Intercultural communicators may use Hofstede's cultural value dimensions of individualism and collectivism to inform their perspectives of self and other (Ting-Toomey & Chung, 2022). Gigi expressed a knowledge of different cultural values by adapting her communication style to working across cultures in the COIL to positive effect:

If I'm individualistic when I know this collectivistic culture is like this, so once they didn't speak out their opinions, I wouldn't think they ignore me. This is because in their culture they won't disagree with someone, but if I wanted to get more information from them or get their opinion from them, I will switch the way I speak. I will ask to invite them to speak, for example. If I'm a collectivistic person from a collective culture, when we deal with someone who is individualistic, if I don't understand the individual person, I would think 'Oh, they're so rude. Why? Why are they always challenging me?' I have hurt feelings, but I'm learning that's because of the culture. They didn't mean it. They just wanted to express their opinions. So for me I don't have hard feelings on this because they are goal oriented. They just wanted to do their job. They are just expressing their opinion directly. They just let me know what they want. I don't have any hard feelings. I will change it to a discussion instead of thinking this is a conflict and argument. It helps us to work smoothly and happily when we work together (Gigi).

The voices of the international COIL student-partners are not present to account for their experiences of the intercultural communication that occurred throughout the COIL project. Gigi and Mary's COIL teams did receive an outstanding grade for their COIL projects. The outstanding grade, the reported experiences of minimal conflict, and the articulation of ethnorelative perspectives informing intercultural dialogue, are evidence that the students achieved intercultural competence.

Challenges

Both Mary and Gigi discussed challenges experienced in the COIL project that emerged in the interviews. Time zone differences were found to be the most difficult issue to navigate when working across their global virtual teams. Coordinating meetings in a 15-hour time change with students experiencing different academic and personal lifestyles (cohort vs self-paced education models and work-life-study balance differences) translated to a leadership challenge for Gigi and Mary. Compounding the time zone issue were Gigi and Mary's perceptions of communicative indirectness of their international COIL interlocutors, resulting in both students assuming a more direct communication style to compensate. What strikes me is that both Mary and Gigi identify as coming from a more indirect and collectivistic culture than that of Anglo-Canada in which they are now immersed. They are navigating the spectrum of directness and indirectness in communication styles as a way to make meaning of their intercultural experiences in terms of culturally informed language. As an instructor of COIL, I like to see students developing leadership confidence and competence in cross-cultural situations that have been informed by intercultural knowledge. Mary and Gigi's leadership in the COIL meeting and planning situations was partially the result of their perceptions of culturally indirect communication as a barrier to project success, and less a benefit. They did not consider that these differences in communication styles can be complementary to teamwork. These perspectives provide me with an area of intercultural empathy development work I intend to pursue in prefacing future COIL projects with students.

Faculty Perspective

Carlos reported that the COIL project supported his students' intercultural competence development. In the conversation with Carlos, attitudes, knowledge, and skill themes emerged that reflect the Deardorff model (2006).

Attitudes

Initially, Carlos stated that his students were very shy and hesitant when introduced to the COIL project in August, one month before the Canadian students joined.⁶ His students developed a more open-minded perspective as they progressed through the project and as they began to work in collaborative teams:

So in terms of attitudes, the COIL project makes them more open. Makes them more open and acceptable that cultures might be different, especially regarding time, especially the way they communicate verbally (Carlos).

Carlos' initial doubts about his teaching abilities in delivering a quality COIL experience to his students underwent a significant change through the intercultural competence and confidence that developed in the COIL experience:

I have doubts really as a teacher. If, my god, will my students be able to work well with these students because they might be intimidated?...Because of course English is not our first language....But they were able to do the project, then we [his institution] must have done something good in teaching them English (Carlos).

Knowledge

The COIL project provided Carlos' students with cultural self-awareness and cultural knowledge that they would not have otherwise received. At the end of the COIL project, Carlos created a mini conference for his students to share personal experiences and key learnings from the COIL. Carlos noted that many of his students became more knowledgeable about the culturally informed constructs of time and work-life-study balance:

⁶ Due to semester misalignment, the class for the international COIL partner started in August and in September in Canada.

Regarding the time schedule meeting is concerned, their Canadian classmates have good efforts in terms of the project. Their thought from the students from the Canadian college is that they are sometimes unresponsive, maybe very busy with work. And when the students shared to me their experiences, then I just simply told them, then that's your challenge now (Carlos).

Carlos considered the primary knowledge gained by his students working in COIL teams was that of a different cultural and postsecondary lifestyle:

Perhaps number one, it gave them a knowledge of [Canadian] culture. It gave them a knowledge of the kind of study habits that [Canadian] students have. Yeah, because somehow perhaps [the international COIL] students, especially at university, they have different study habits, you know, the way they take the project in terms of commitment. And through this COIL project, I think it has given them a knowledge on how to probably, you know, manifest better study habits (Carlos).

As I came to understand in conversation with Carlos, the students in our respective countries had different academic realities that impacted teamwork. More knowledge of the respective academic systems would have benefited both sides of the COIL. It is not uncommon for Canadian postsecondary students to manage full-time studies with full-time work. This lived experience was less familiar to the international COIL peers and resulted in issues of project management when meetings were canceled due to work shift conflicts on the Canadian side.

Skills

The intercultural collaboration required to successfully complete a COIL project in global virtual teams is extensive. Team members must actively listen to each other in order to assess the best course of action to complete the components of the COIL, such as meeting planning, task organizing, communicating, document generating, presentation recording, and sharing on social media. With so little prior knowledge about the other side, the COIL teams demonstrated a high degree of observation and analysis skills in order to meet project outcomes. Carlos reported that he felt his students were able to demonstrate a high degree of skill application that supported COIL success:

In terms of skills, yes, I think COIL has fortunately, I suppose, given them a good skill in terms of online communication outputs. You know, they were exposed to different apps. Apps introduced by their classmates or apps introduced by their other classmates that they have

never heard before. So I think that particular skill through the COIL, they were able to discover what are these very useful online tools that could help them. That could help them achieve the objective of the project. It's higher above than your social media skills as far as liking and posting on Facebook. But working on a project, academic project would somehow need a different high level of communication skill that they have learned by working together (Carlos).

Internal Outcomes

In identifying perceptions of internal outcome change in his students' ethnorelative perspectives and motivations, Carlos used powerful metaphorical language in describing the internal change his cohort of students experienced as a result of the COIL:

So you know they've been very comfortable seeing these similar faces since first year to fourth year. And now in this COIL project, they've met, my god, so many new classmates. Different classmates and different nationalities. So that's somehow, you know, ignited something, a kind of spark in them because...[they will] be working on a [COIL] project with Canadians (Carlos).

The fact that a COIL project surged interest in a cohort of students as they neared completion of their degree program is not insignificant. As an educator, generating interest in my students to pursue intercultural communication studies is an ever-present pedagogical quest. Mary, the student, also reported feeling excitement about the prospect of working with international COIL colleagues in a COIL project: "I feel excited. For me, I love [our international COIL peers], because they are so energetic, and they always just give me a lot of happiness" (Mary). COIL may not represent a panacea to the challenge of motivating students in the classroom, but it may provide a boost to generating positive intercultural perceptions when learning.

External Outcomes

Carlos' perceptions of student effectiveness and appropriateness in intercultural communication with team members in Canada in the COIL project are expressed in terms of outputs. His logic, to which I also subscribe given the limited evidence to the contrary, was that teams who created and submitted strong projects had to have achieved success through a degree of interculturally competent dialogue. After reflecting on the success of the mini conference Carlos hosted with his students about their COIL project experiences, he remarked:

Although the process along the way was a little bit rocky for some, I must say they have wonderful intercultural communication because if there's no communication like that, how can they arrive at such good [project] outputs? (Carlos).

Given that I had completed a COIL project with another international partner prior to undertaking the one with Carlos, I was confident of overall COIL project success based on previous experience. Carlos' initial expressions of doubt in his teaching abilities and in the uncertain novelty of the COIL experience for his students seemed allayed by the end of the COIL when presented with such well-executed student outputs.

Challenges

Carlos reported challenges his students faced during the COIL project similar to those reported by Mary and Gigi. Like their Canadian peers, the international COIL peer-students were challenged in coordinating COIL team meetings given the 15-hour time zone difference. Carlos also reported students' frustration over canceled meetings by Canadian team members due to work commitments. Some of Carlos' students had perceived their Canadian peers to be quite direct in communication style and as a result felt intimidated to communicate. Mary and Gigi reported their use of directness to achieve COIL meeting and planning results. It seems that some international COIL students were caught off guard by the difference in communication styles resulting in perpetuation of the perception on the part of Mary and Gigi that international COIL teammates were indirect. It is not totally unexpected that reported challenges from the international COIL partners were similar to those experienced by their Canadian peers. It is surprising that there were so few reported instances of challenges surrounding language and translation, as one might expect in a COIL where teams were composed entirely of non-English as a first language speakers. This could be due to an under-reporting of issues. I believe it to be a successful demonstration of intercultural competence informing collaboration across cultures that teams successfully completed COIL projects in the face of significant time zone and communication style (mis)perceptions.

Discussion

Through this research project, I attempted to assess how Collaborative Online International Learning projects, or COILs, supported students' intercultural competence. In interviews with students who completed the COIL project with an international partner institution in Asia, findings revealed development of intercultural competence that aligns with the Deardorff (2006) Process Model of Intercultural Competence. Students reported enhanced attitudes of respect, openness, and curiosity, as well as increased cultural self-awareness and knowledge about culturally informed communication styles. Students also reported the development of intercultural competence skills of listening, observing, and analyzing when working in global virtual teams with peers. These findings are consistent with research that highlights the role of structured intercultural interactions in enhancing students' intercultural competence (Deardorff, 2006, 2022).

Students and the faculty member reported challenges and opportunities in their experiences in COIL projects. Hesitation and uncertainty around the novelty of the COIL project gave way to academic confidence and a more open-minded perspective, demonstrating the profound effect of sustained and structured intercultural dialogue in fostering intercultural competence. The open-mindedness reported by students and faculty member in the interviews is qualified with generalizing and polarizing language around the perception of others as cultural beings of individualism or collectivism or indirectness or directness. While knowledge of intercultural constructs that categorize groups into communication or cultural value types is a demonstration of competence, its application in broad, sweeping statements describing the cultural 'other' demonstrates a lack of nuance in the application of knowledge and self-awareness.

My learning through listening to students' perceptions of COIL effectiveness in developing their intercultural competence points to certain implications COIL practitioners can focus on to improve student experiences and outcomes. I can start by developing structured reflections for students to ruminate on their preconceptions of working cross-culturally, on their lived experiences during projects, and on their post-COIL takeaways to focus student awareness. Prefacing the COIL project with lessons on academic and lifestyle differences of international partner-peers offers the chance to examine and challenge culturally bound perceptions of the student work-life-study

balance construal. Doing so might minimize surprises about how much a student studies or works or is required to be absent from COIL project meetings due to family or community responsibilities. As a faculty member and COIL practitioner, student interviews have provided me with perceptions of the effectiveness of global virtual projects that I might have missed while managing a busy semester with a full course teaching load and solely relying on COIL project assessments to capture what students experienced.

I have acknowledged several key limitations of this research project. Consideration of the limitations provides an opportunity to imagine future COIL effectiveness research designs. Increasing the sample size of interview participants will provide greater diversity of views and of lived experiences. Drawing from Carlos' post-COIL mini conference activity, I would benefit from conducting interviews as soon as possible after project completion to capture students' detailed reflections. Incorporating a mixed methods approach using the BEVI instrument could provide data on pre- and post-COIL changes in student perceptions of intercultural competence that would complement interviewing after project completion and would allow for surveying a larger number of research participants efficiently. Finally, given that there are multiple COILs being offered at my college, and that I have already completed four COIL projects with three international partner institutions across two academic years, consideration should be given to longitudinal study design that collects individual student experiences but also tracks perceptions of COIL effectiveness in other areas: perceptions on the use of COIL social media platforms in intercultural communication, perceptions on student levels of interest relating to COIL project topics, and on perceptions of the effectiveness of COIL in supporting intercultural competence in early, mid, and late academic program students.

Conclusion

From the experiences reported by the participants in this small qualitative study, COIL projects serve as an impactful pedagogical tool for the development of student intercultural competence learning outcomes. This conclusion reflects similar findings in the studies of Inada (2022), Garcia et al. (2023), Ramírez-Marín, Núñez-Figueroa, & Blair (2020), Vahed & Rodriguez (2020), Hackett et al. (2023), and Naicker, Singh, & van

Genugten (2021). The benefit to students requires mindfulness on the part of COIL practitioners in designing project outcomes and in creating a learning environment where students are supported with key knowledge of culture, communication styles, and worldviews, as well as real world applications of their project outcomes (Voelker, Bulger, Tsuda & Wyant, 2024). The level of resiliency and determination I have witnessed in students to meet and overcome COIL challenges in order to learn and grow interculturally is remarkable. The student experiences relayed in this project reflect a willingness to explore a new global virtual classroom experience in order to grow personally, academically, and professionally. Part of the success of COIL is that it is as adaptable and flexible as the intercultural competencies it instills in students. COIL can be a transformative educational experience for students and faculty. My students and I bring to COIL lived experience and learned knowledge that support the development of intercultural growth. Evidenced in the voice of students is the eagerness to engage with new types of learning. COIL experiences affect intercultural change that sees individuals come away with more inclusive, affirming, and empathetic perspectives of cultural differences. Educational leadership is enhanced as students are transformed. In this, I am reminded of the power of contemporary educational innovation as I consider bell hooks' (1994) words:

Students...are willing to surrender to the wonder of re-learning and learning ways of knowing that go against the grain. When we, as educators, allow our pedagogy to be radically changed by our recognition of a multicultural world, we can give students the education they desire and deserve (p. 44).

Students benefit interculturally from COIL experiences when they are supported with knowledge that challenges preconceptions and prompts introspection and self-awareness before, during, and after the project. COIL faculty members benefit interculturally and pedagogically by listening to the lived experiences of students beyond the final assessment presented at the project's completion. Taking time to dialogue with students and critically reflect on faculty leadership roles is key to informing COIL praxis.

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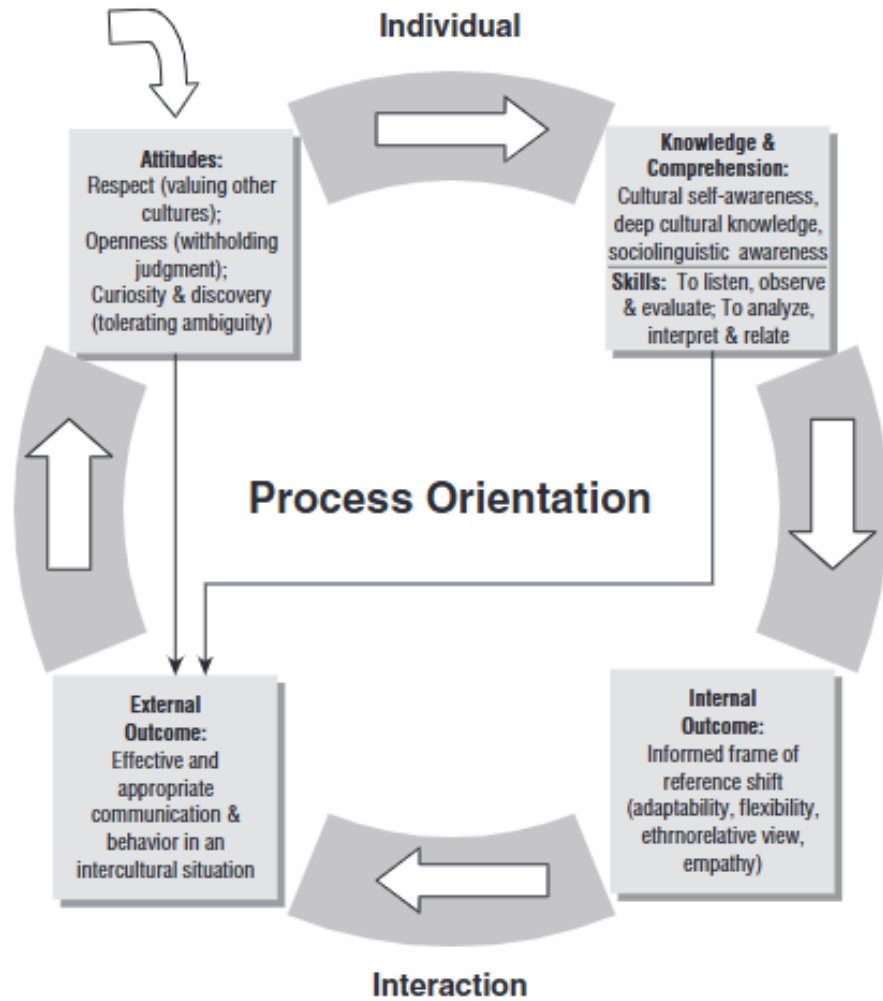
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Appendix.

Process Model of Intercultural Competence



Source: Deardorff, 2006