

# Cross-Cultural Competencies in a Scholarship of Teaching and Learning Process

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## Abstract

*Do intentional pedagogical practices in a Global Scholars program transform students and faculty in their growth to become inclusive global citizens? This scholarship of teaching and learning (SoTL) study explored whether the content and assignments in Professionalism Across Cultures, a course collaboratively co-taught by faculty in five different disciplines, change student interactions with aspects of cultural competence (Antola Crowe et al., 2013). Professionalism Across Cultures is a course designed to provide students in the Global Scholars program with experiences to increase awareness, acceptance, and diversity, as well as to emphasize the importance of communicating effectively with people across cultures and disciplines. The Global Scholars program requires students to take this course, a world language course, have an international experience, attend global activities, and present on their own international experiences. This Scholarship of Teaching and Learning (SoTL) study was approved by Institutional Review Board (IRB) and utilized an observational, mixed methods no design for students enrolled in the required course for the Global Scholars program. Data were collected via a pre- and post-reflection, a pre- and post- cultural intelligence scale, and two cultural presentations. Using the validated, quantitative Cultural Intelligence Scale (CQS) developed by Ang et al. (2007), results suggested that students, over the course of a semester, increased their cultural intelligence across all levels (metacognitive, cognitive, motivational, and behavioral) with a statistically significant difference with cognitive and behavioral ( $p < 0.05$ ). Similarly, using the framework by King and Baxter (2005) and Perez et al. (2015) regarding intercultural maturity, qualitative results indicated students increased intercultural maturity across all levels (cognition, intrapersonal, and interpersonal) over the course of the semester. These results agree with other studies that have shown that semester long experiences can positively impact the cultural development of students (Marx & Moss, 2011). Further, the process of evaluating the students and engaging in research while teaching brought not only cohesion and lively discussion among the faculty team, but also purposeful reflection, blurring of boundaries of the learner/teacher dynamic. The learning community of the course Professionalism Across Cultures created a space for growing together toward inclusion, while learning to withhold judgment.*

*Keywords:* cultural intelligence, cultural maturity, transformative learning, SoTL, transdisciplinary teaching

## **Introduction**

In an increasingly global world, it is imperative that students become inclusive global citizens (Noddings, 2005). Higher education institutions, being keenly aware of this need, often require coursework and experiences outside of the disciplinary requirements of programs in an attempt to foster students who are globally minded (Lilley et al., 2015). These educational experiences must be intentional to promote the desired growth within students (Rennick, 2015). Faculty play a significant role in this endeavor, particularly when utilizing a transdisciplinary teaching approach, which is centered on the learner and grounded in a constructivist framework (Antola Crowe et al., 2013; Illeris, 2015).

This transdisciplinary teaching approach has been shown to lead to transformative learning (Lange, 2015), which changes the learners frame of reference (Mezirow, 1997). With transformative learning, the habits of mind and a point of view are critical components of the frame of reference, and a paradigm shift in these may transform future experiences (Mezirow, 1997). Ultimately, this can result in fundamental changes in the self-identity of the learner and in their world view (Heddy & Pugh, 2015; Illeris, 2015). According to Mezirow, this can move learners “toward a frame of reference that is more inclusive, discriminating, self-reflective, and integrative of experience” (1997, p. 5).

Transformative learning is common in relation to cultural experiences (Lilley et al., 2015; Rennick, 2015). Students have been shown to have defining cultural experiences that alter their view point of themselves and their world, particularly with immersive experiences such as study abroad (Lilley et al., 2015; Rennick, 2015; Robinson & Levac, 2018). The cultural development of students can be difficult to measure, particularly with experiences that are on a smaller scale. However, even small transformations are an important part of the learning process and these can lead to growth (Heddy & Pugh, 2015). Non-immersive, frequent encounters with individuals of different ethnic and cultural backgrounds in the everyday life of students can support the development of cultural competence (Choi & Kim, 2018; Chen et al., 2018). Additionally, opportunities to pursue knowledge about diverse individuals or groups can provide small transformational learning experiences (Choi & Kim, 2018; Chen et al., 2018).

This growth can be measured in many ways, but the focus of this study was with cultural intelligence (Ang et al., 2007) and cultural maturity (King & Baxter Magolda, 2005; Perez et al., 2015). Cultural intelligence refers to one’s ability to function in culturally diverse settings and Ang et al. developed the cultural intelligence scale (CQS) to measure this concept using four dimensions (metacognitive, cognitive, motivational, and behavioral) (2007). King and Baxter-Magolda (2005) created a 3 x 3 matrix framework for cultural maturity, which includes an initial, intermediate and mature level of development for cognitive, intrapersonal, and interpersonal development. Perez et al. (2015) built upon this model including two transitional phases between each of the three levels of development. Importantly, both of these instruments can be utilized in a classroom setting. For the present study, the vehicle through which these ideas were developed was through reflecting on class experiences, interactions, and learning from projects (Schön, 1987).

The Scholarship of Teaching and Learning (SoTL) is regularly used in higher education to scrutinize the effectiveness of classroom practices and student learning and to make that scrutiny public (Bishop-Clark & Dietz-Uhler, 2012). The purpose of the present SoTL study was to investigate whether intentional pedagogical practices in a required Professionalism Across Cultures course, with a transdisciplinary teaching approach, transforms students and faculty in their growth to become inclusive global citizens.

## **Methodology**

### **Participants**

Participants were enrolled in a required Professionalism Across Cultures course, which was co-taught by faculty in five different disciplines, as a part of a Global Scholars program. Other requirements of the program include completing a world language course, completing an international experience, attending activities involving international interactions and global topics, and presenting on their own

international experiences. Students take Professionalism Across Cultures at different stages in the program, though generally as a junior or senior. Data were collected from students who consented to participate in the study ( $n = 7$ ). Due to the small sample size, the generalizability of the findings is limited to the participants in this study.

### Procedures

This Institutional Review Board (IRB) approved SoTL project utilized an observational, mixed methods study design to gather multiple types of information due to the anticipation of a small class size and to help triangulate the data. The study was designed to incorporate assignments that were already a part of the course with only one new assessment. All were required components of the class, thus, there was no difference in coursework between students who consented to participate in the study and those who did not. Specifically, students completed three pre- and post-assessments including reflections, quantitative surveys, and presentations, totaling six data points.

On the first day of class, students completed a reflection that had six questions relevant to this study, such as “describe your experiences with other cultures” and “what does being a global citizen mean to you” to garner their thoughts, experiences, and opinions prior to digging into the coursework. Students completed the same reflection on the last day of class and the qualitative data were analyzed using a thematic approach. A new assignment to the course was introduced as a part of this research study and it aligned with one of the course objectives. This was the 20-item, four-factor (metacognitive, cognitive, motivational, and behavioral) Cultural Intelligence Scale (CQS) (Ang et al., 2007). This scale utilizes a 7-point Likert scale where 1 = strongly disagree and 7 = strongly agree. The 20 questions are divided as follows: cognition (6), motivational (5), behavioral (5), and metacognitive (4); thus, scores cannot be compared directly as sums range from 28 to 42. Students completed the validated CQS at the beginning and the end of the semester and results were compared using t-tests with significance set at  $p < 0.05$ .

Students completed two cultural presentations during the semester and these presentations were evaluated two ways by faculty. The first project was a Country of Interest presentation (week 5) and the second, Cross-Cultural Interdisciplinary project (weeks 13 and 14, respectively). Initially, students were evaluated using traditional rubrics with scores included as part of their overall grade, but these scores were not a part of the present study. Data that was utilized for this study included intercultural maturity as defined by King and Baxter Magolda (2005) and Perez et al. (2015). Student presentations were videotaped to enable faculty to focus solely on intercultural maturity at a later date. Specifically, after the completion of the semester, the five faculty who co-taught the course, met as a group for data analysis, which consisted of both independent evaluation and group discussion to come to a consensus on which of the five levels (initial, transitional phase from initial to intermediate level, intermediate level, transitional phase from intermediate to mature level, and mature level) for each category (cognitive, intrapersonal, and interpersonal) to assign to each presentation. Data were reported as pre- and post- levels to assess progression of intercultural maturity over the duration of the semester. Additionally, this process generated some interesting findings that were not part of the original project. These findings are addressed in the discussion section of this paper.

## Results

### Reflections

Responses from both the pre- and post- reflections indicated that students had an interest in learning about different cultures and that most had traveled outside of the United States on multiple occasions. Due to the requirements of the Global Scholars program, this was not surprising. A comparison of the pre- and post- responses revealed a broadening of how students described global citizens, culture, and cultural diversity. For instance, one student described cultural diversity as “differences between cultures and how they interact with people different [*sic*]” in the pre- reflection, and as “accepting/learning about different cultures and learning that people are different than you” in the post-reflection. The reflections shifted from simply identifying differences to embracing differences.

Growth was also evident with the question that asked what the most important thing that could/did come out of the class. The intent behind this question was to gauge priorities and aid faculty instruction at the beginning of the semester and to evaluate what students felt they learned, if anything, at the end of the semester. Pre-reflection comments focused on gaining knowledge about various cultures. The comments suggested that learning about culture was finite and that they wanted to become culturally competent by the end of the semester. However, post-reflection comments suggested that students gained a deeper appreciation for the complexities of culture, or as one student put it “I’ve learned that everyone is different from place to place and no one fits a “perfect” description.” Additionally, comments focused on the application of information, rather than simply the knowledge. The students seemed to be thinking about how they will use what they learned in class in their future careers, as evidenced by comments such as “learning about cultures and diversity and how that applies to being a professional” and “learning about basic practices from other cultures and incorporating that into healthcare.”

### Cultural intelligence

The questions from the CQS can be found in table 1 with the corresponding factor (metacognitive, cognitive, motivational, and behavioral). Table 2 depicts the means and standard deviations for each of the four categories, as well as the overall scores for the CQS for both the pre-test (administered on the first day of the semester) and the post-test (administered on the last day of the semester). The means for all categories were higher in the post-test data compared to the pre-test, indicating an increase in cultural intelligence over the course of the semester. A comparison of the means using t-tests revealed a statistically significant difference between the pre- and post-tests of both the cognitive and behavioral factors ( $p < 0.05$ ), but not for metacognitive or motivational factors.

Table 1

#### *Questions aligned with the corresponding factors on the Cultural Intelligence Scale (CQS)*

CQ Factor	Question
Metacognitive	1. I am conscious of the cultural knowledge I use when interacting with people with different cultural backgrounds.
	2. I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me.
	3. I am conscious of the cultural knowledge I apply to cross-cultural interactions.
	4. I check the accuracy of my cultural knowledge as I interact with people from different cultures.
Cognitive	5. I know the legal and economic systems of other cultures.
	6. I know the rules (e.g. vocabulary, grammar) of other languages.
	7. I know the cultural values and religious beliefs of other cultures.
	8. I know the marriage systems of other cultures.
	9. I know the arts and crafts of other cultures.
	10. I know the rules for expressing nonverbal behaviors in other cultures.
Motivational	11. I enjoy interacting with people from other cultures.
	12. I am confident that I can socialize with locals in a culture that is unfamiliar to me.
	13. I am sure I can deal with the stresses of adjusting to a culture that is new to me.
	14. I enjoying living in cultures that are unfamiliar to me.

Table 1 Continued

Behavioral	15. I am confident that I can get accustomed to the shopping conditions in a different culture.
	16. I change my verbal behavior (e.g. accent, tone) when a cross-cultural interaction requires it.
	17. I use pause and silence differently to suit different cross-cultural situations.
	18. I vary the rate of my speaking when a cross-cultural situation requires it.
	19. I change my nonverbal behavior when a cross-cultural situation requires it.
	20. I alter my facial expressions when a cross-cultural interaction requires it.

(Ang et al. 2007)

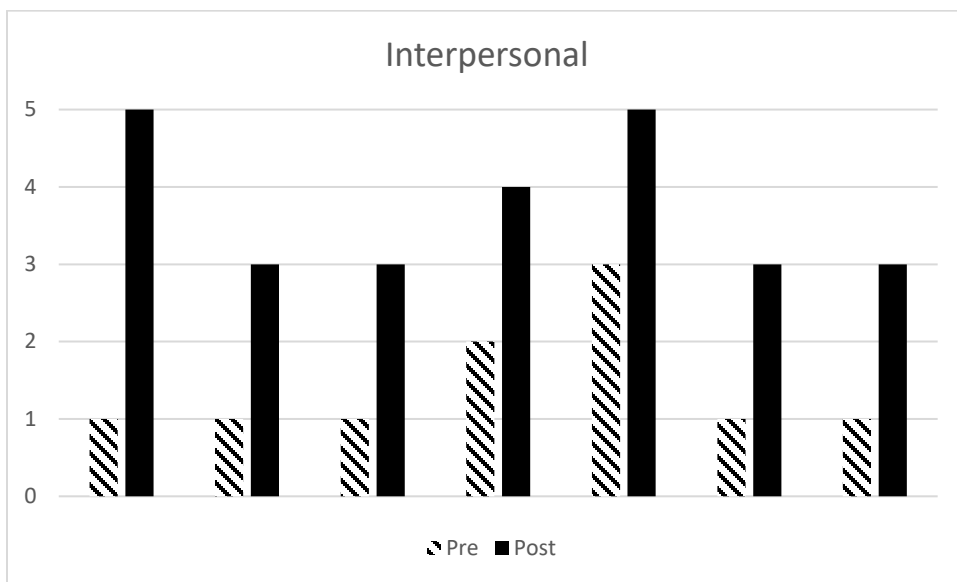
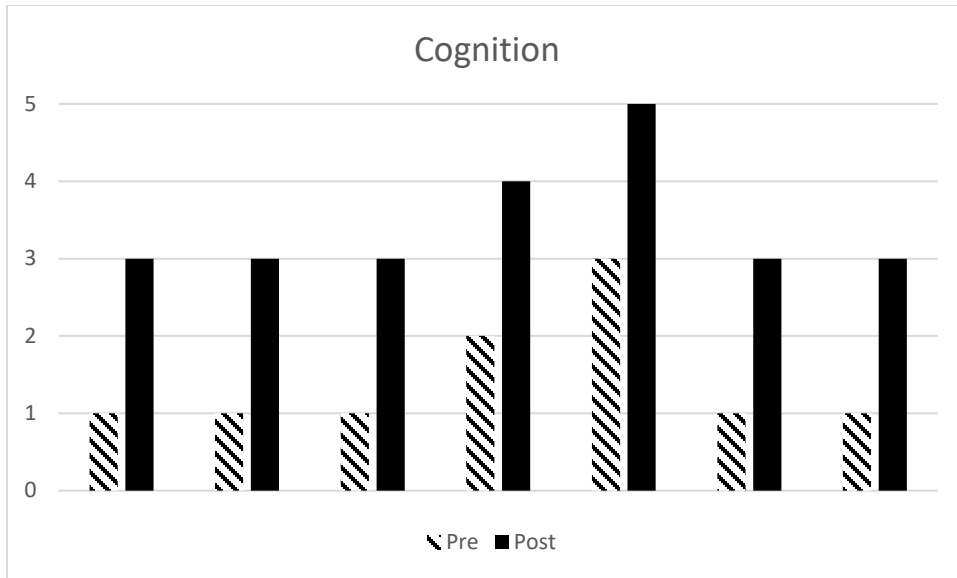
Table 2

*Descriptive statistics for pre- and post- Cultural Intelligence Scale (CQS) (n = 7)*

Factor	Maximum value	Pre-test mean $\pm$ SD	Post-test mean $\pm$ SD
Metacognitive	28	19.57 $\pm$ 2.07	22.71 $\pm$ 4.23
Cognitive	42	16.43 $\pm$ 3.91	23.14 $\pm$ 6.99
Motivational	35	27.21 $\pm$ 4.26	30.29 $\pm$ 4.68
Behavioral	35	21.57 $\pm$ 4.58	28.00 $\pm$ 3.74
Total	140	84.79 $\pm$ 11.94	104.14 $\pm$ 16.52

**Intercultural maturity**

The intercultural maturity scores were rated on a five-point scale where 1 = initial, 2 = transitional phase from initial to intermediate level, 3 = intermediate level, 4 = transitional phase from intermediate to mature level, and 5 = mature level. Figure 1 highlights the results of the progression of intercultural maturity over the semester per each of the seven students. Similar to the trend noted with cultural intelligence, all participants increased on each category from pre- to the post-assessment. The means for all three categories were similar, as noted in table 3.



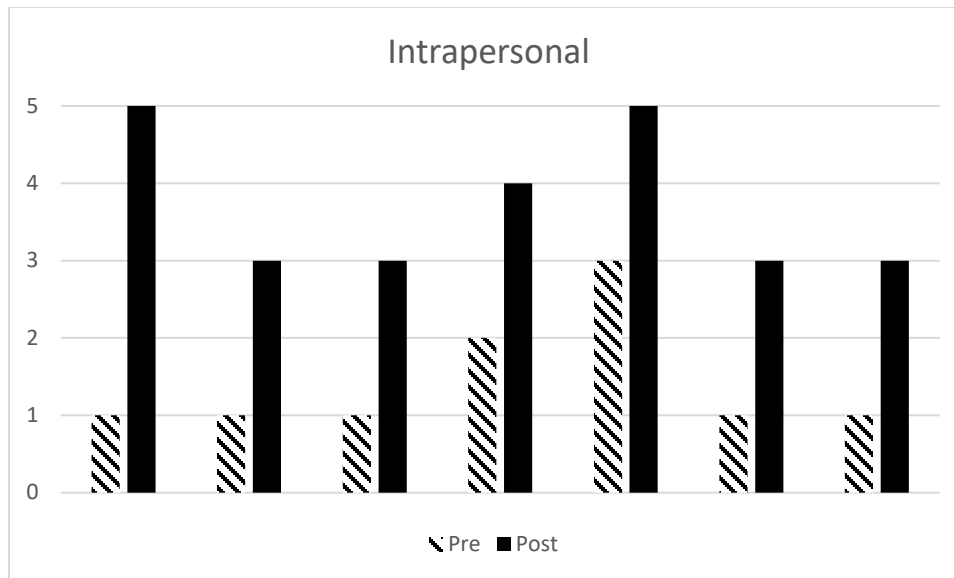


Figure 1. Comparison of pre- and post- intercultural maturity (1 = initial, 2 = transitional phase from initial to intermediate level, 3 = intermediate level, 4 = transitional phase from intermediate to mature level, and 5 = mature level for each student (n = 7) for each of the three intercultural maturity categories (cognition, interpersonal, and intrapersonal).

Table 3

*Descriptive statistics for pre- and post- intercultural maturity (n = 7)*

Category	Pre-test mean $\pm$ SD	Post-test mean $\pm$ SD
Cognition	1.43 $\pm$ 0.79	3.43 $\pm$ 0.79
Intrapersonal	1.43 $\pm$ 0.79	3.71 $\pm$ 0.95
Interpersonal	1.43 $\pm$ 0.79	3.71 $\pm$ 0.95

### Discussions and Implications

The findings from this SoTL study agree with previous research that shows that semester long experiences can positively impact the cultural development of students (Marx & Moss, 2011). Specifically, over the course of the semester, the qualitative comments in the reflections highlighted a broadening of the culture and diversity, as well as a shift from knowledge to application. Additionally, cultural intelligence, as defined by Ang et al. (2007) and intercultural maturity, as defined by King and Baxter Magolda (2005) and Perez et al. (2015), were both shown to increase over the course of the semester. This suggests that the course resulted in transformative learning, described as “learning which implies change in the identity of the learner” (Illeris, 2014, in Illeris in 2015) and as an “expanded consciousness” for the students (Heddy & Pugh, 2015, p. 53). As with many educators, this is certainly a goal of the course, which was strategically planned throughout the semester. Since this course is part of a Global Scholars Program, it is hoped that each of the other requirements of the program are at minimum transformative experiences. Heddy and Pugh (2015) describe the importance of transformative experiences in an educational journey that may not result in a fundamental shift of how one thinks about the world, but that do lead to smaller transformations, such as an appreciation of various cultures. Since students in this course were at different points in the program, it is difficult to distinguish the influence among each of these requirements; however, it is evident that transformation occurs.

Transformative student learning has been a goal of faculty for this course since its inception, but transformative faculty learning was not a consideration prior to this SoTL project. A unique component of this course is that it is taught by five faculty members from five different disciplines within the same college. The interdisciplinary approach was for the benefit of the students to ensure that students were able to learn from multiple perspectives. In fact, classroom diversity is an important component of student learning (Choi & Kim, 2018; Chen et al., 2018; Gurin et al., 2002) and this concept is threaded throughout the Professionalism Across Cultures course. However, this SoTL project unexpectedly brought to light transformative learning that occurred within the faculty. The process of designing the study and evaluating the projects with the added layer of using the validated instruments for cultural intelligence and intercultural maturity, required faculty to think about the course in a more intentional manner to try to elicit growth in the students. Further, this project enabled faculty to reflect on their own role in the classroom, which seemed to blur the boundaries of the learner/teacher dynamic. This was most notable during the discussions between faculty during the evaluation of the videotaped presentations which were used to measure intercultural maturity. Lively and deep discussions among faculty during these evaluations served to find consensus for each presentation, as well as to discuss faculty's own understanding and experiences with the criteria.

As far as the nature of SoTL, the public sharing of our work occurred in phases. The experience of interdisciplinary teaming in this course initially was a new opportunity for all team members. The teaming (all teachers present at all sessions) created a space where each team member gradually got more comfortable sharing their teacher persona, their expertise and sharing their voice to a primarily spontaneous dynamic of classroom interactions. Culture was celebrated not only in the class but in the people present; our international experiences and cultural backgrounds contributed to that atmosphere. From these interactions trust grew, and the first public sharing outside of the team occurred in a regional academic teaching conference, and presently, writing the study for a journal depicting the very theme of international experiences that the teaching team had experienced.

A limitation to this study, however, is the sample size of seven participants. Using one class, resulting in a small sample, is common with many SoTL projects. While the small sample size reduces generalizability of the findings, the faculty are collecting additional data on subsequent classes in an attempt to increase the number of participants.

The present study has taught that the power of collaborative learning experiences cannot be underestimated in learning cross-cultural competencies. The SoTL approach in a course developed is an organically living entity itself, challenging a group of faculty in fruitful ways to focus on the development of student learning and their own development as teachers. The SoTL approach concretely allowed for a step of thoughtful deliberation, metacognition (becoming aware of one's awareness, thinking about thinking), a deep look at one's learning through the processes that are involved while learning (Scharff, 2020). Based on the trustful relationships developed over time teaching this course, the team had the courage to interact in honest and surprisingly authentic ways. The intercultural maturity of faculty as well as the readiness to enter into dialogue with students at various points in their development is at the same time rewarding, transformative, challenging, and productive.

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