

The Foundation for Interdisciplinary Team Learning in the 360 Degree Global Ed Model

Karen R. Breitreuz

Grand Canyon University, USA,  <https://orcid.org/0000-0002-4404-3446>

Anthony Songer

Boise State University, USA

Abstract: The 360 Degree Global Education Model (360 Global Ed Model) provides a comprehensive framework for creating meaningful interdisciplinary student team learning through international service learning. Providing successful multi-disciplined undergraduate education necessitates creating a foundation for productive team-science based learning between disciplines. The pedagogical foundation employed by Breitreuz and Songer within the 360 Global Ed model creates a shared values student dialogue for enhancing undergraduate team learning and performance. This paper provides a summary of the 360 Global Ed Model, a discussion of methods used to create a student shared dialogue (*Team Learning Foundation*), lessons learned, and student outcomes. Methods for shared dialogues include creating a team-defined mission, team-defined behavioral standards, building shared cultural understandings and expectations for developing cultural intelligence, and developing realistic expectations for interpersonal understandings through use of self-assessments. Student team-led projects provide an authentic context impetus for implementing the team learning foundation.

Keywords: Interdisciplinary, Team Learning Foundation, 360 Global Ed Model, International

Citation: Breitreuz, K. R. & Songer, A. (2022). The Foundation for Interdisciplinary Team Learning in the 360 Degree Global Ed Model. In M. Shelley, V. Akerson, & I. Sahin (Eds.), *Proceedings of IConSES 2022--International Conference on Social and Education Sciences* (pp. 316-326), Austin, TX, USA. ISTES Organization.

Introduction

This paper provides a foundation of methods used to create a student shared dialogue or *Team Learning Foundation*, for an international interdisciplinary service-learning class for undergraduate students. The overall framework, rationale, lessons learned, and student outcomes are discussed. Methods for creating a shared dialogue with students, include creating a team-defined mission, facilitating team-defined behavioral standards, building shared cultural understandings and expectations for developing cultural intelligence, and developing

realistic expectations for interpersonal understandings through use of self-assessments. Student team-led projects provide an authentic context impetus for implementing the team learning foundation.

Background

In 2012, Breitzkreuz and Songer partnered with Peacework Inc., and the Belizean Ministry of Education to create an interdisciplinary, service-learning course for students at Boise State University. Through Peacework Inc., a non-profit organization, the Belizean Ministry of Education invited the authors' undergraduate interdisciplinary service-learning class to partner with elementary schools in Belize. The facilitative efforts of Peacework Inc., offered coordination and logistical support to the interdisciplinary cross-cultural teaching team from the university. Peacework's long standing collaboration with the Belizean Ministry of Education provides invaluable in-country stability for the program. The logistical support allows the interdisciplinary teaching team leaders to focus on creating a successful a class framework, in-depth student development, and subsequently successful project outcomes.

The 360 Degree Global Education Model

The *360 Global Ed model* is an evolving education model that brings together a variety of educational concepts to form an educational approach for an international service-learning class that impacts students' knowledge, attitudes, and skills, through partnerships with an international community. Since 2013, six iterations of model implementation demonstrate effectiveness for educating socially responsible global citizens. The authors describe the theoretical underpinnings of the model in previous work (Songer and Breitzkreuz, 2014).

The 360 Global Ed model for international service learning includes a theoretical framework, educational environment, academic coursework, and evidence-based outcomes. The current higher education paradigm emphasizing the broader context of globalization and inter-professional collaboration in producing effective solutions to society's problems motivated model development. This higher education purview necessitates continued investigation of innovative interdisciplinary approaches for higher education. The 360 Global Ed model is offered in contrast to the traditional silo-based, discipline specific models.

The first challenge in forming the international-service learning course is clearly defining the term interdisciplinary. Terms such as interdisciplinary, multidisciplinary, and transdisciplinary are often used interchangeably, but in fact are defined differently. *Cross-disciplinary* is a generic term used in discussing any or all approaches to collaborations of disciplines. Hubbs et al. (2020), notes that cross disciplinary work can involve both individuals and groups. The term *multidisciplinary* applies when the inputs are only slightly varied (Multidisciplinary, 2021). A multidisciplinary example from healthcare would involve surgeons, oncologists, physical therapists, nurses, and social workers who all may offer different insights to provide optimal care for a cancer patient. In contrast, an *interdisciplinary* approach involves two or more specific disciplines working together to solve a problem with each discipline bringing a unique perspective. In the case of this class,

colleagues from the School of Nursing and College of Engineering (Breitkreuz and Songer respectively) made up the interdisciplinary leadership team. These disciplines have markedly different purposes, processes, outcomes, value systems, and different, yet similarly high ethical standards. Collaborations on this level involve greater deliberation and consideration to succeed. A *transdisciplinary* approach is used when collaborators combine their work to create a new field, and the outcome of this work contains new information (Hubbs et al., 2021). Songer and Breitkreuz chose the interdisciplinary definition. The purpose of the introductory class was to create opportunities for students from any program on campus to come together to create solutions for international partners, based on the partners needs and requests. Participating students are primarily undergraduate students from any major on campus.



Figure 1. 360 Degree Model for Educating Socially Responsible Global Citizens (Songer and Breitkreuz 2014)

Hubbs et al. (2021) describes a powerful dialogue method for high-level multi-disciplined researchers to collaborate and communicate expectations across the disciplinary divides. The foundations of successful dialogue are clear communication standards and philosophical understandings (Hubbs et al, 2021). Within the context of interdisciplinary curricular efforts, the 360 Team Learning Foundation discussed below addresses these same issues.

360 Team Learning Foundation: A Basis for Shared Dialogue

Issues in creating inter-disciplinary international service-learning classes parallel Hubbs's clear communication standards and philosophical understandings. An initial challenge is bringing leaders from different disciplines together who understand the philosophical differences and foundations of their discipline and subsequently, creating a language to communicate across these divides. Breitkreuz & Songer created a multifaceted approach to facilitate student communication about the common work of the course, the content of international service, and the projects that were undertaken. This foundational level of cross-disciplinary team learning can be applied in any program and is particularly useful for undergraduate education. The resulting *360 Team*

Learning Foundation is a curricular platform that facilitates shared dialogue among diverse student groups. It involves sound educational theory and iterative practice with the primary concepts of cultural intelligence, teaming-work, self-understanding and interpersonal dynamics, conflict management, shared community ethics and standards, and a model for servant leadership. Figure 2 illustrates the components of the 360 Team Learning Foundation model.



Figure 2. The Team Learning Foundation

Cultural Intelligence

The first and most basic aspect of the interdisciplinary international service-learning course was understanding cultural intelligence. The framework used was the one offered by Livermore et al. (2015). After completing a short CQ self-assessment, the Cultural Intelligence framework offers students the opportunity to examine their personal CQ score. Students examine and learn to practice various aspects of the CQ framework through weekly pre-trip in-class exercises. Students learn CQ knowledge by studying Belizean culture, food, music, art, the economy, healthcare systems, education, and politics. Integrated discussions identifying reasons for their motivation to participate in the international service-learning class reinforce the concepts of cultural intelligence. Additionally, planning and practicing cultural strategies prior to and during the in-country experience demonstrates the final aspect of CQ, CQ action. CQ action is defined as operating successfully in a different culture using cultural intelligence (Livermore, 2015).

During the 10-day service trips, students use evening free-time to debrief the work of the day and/or hold informal planning and strategy sessions for the next day of CQ action and project work at the elementary school.

Students learn that all aspects of cultural intelligence are applicable in a multi-layered cross-cultural setting. Not only do students experience the cultural differences and similarities between US and Belizean cultures, values, and aspects of everyday life, they witness similarities and differences between Belizean and U.S. school systems and even between their various disciplines. Students who were health science, and education majors excelled in leading the day-camp offered to Belizean school children (alongside their teachers), and students from the Science and Engineering disciplines exceed in planning and leading and implementing the small renovation projects implemented at the school's request. The students, however, all worked together and learned from their peer leaders, which proved to be a basis for developing an understanding of interdisciplinary teaming.

Teaming Work

Introducing a teaming framework early in the curriculum creates the mission and motivation for the student groups to “stick together” and finish their projects. The Team Learning Foundation uses *Collaborative Way* model for teamwork provided by Fickett and Fickett (2006). This model encourages students to listen generously to all ideas, speak straight, or be forthright with one another, be encouraging, honor commitments to the project, and respect and appreciate the contributions of the others. Students were encouraged to reflect on their competence and progress in keeping their commitments to the project throughout the in-country experience. Prior to departure, students create their own mission statement or in terms of the Collaborative Way model, the “up to”. This mission provides the focus and purpose of the trip. This in-class activity provides the first true opportunity for student dialogue and group cohesion.

As expected, each year the mission varies. For example, in 2016, the group decided the mission was to: “increasing awareness of our global situation by engaging with community partners and taking responsibility for ongoing relations”. Though each year was different, each year the mission was team defined, which developed cohesive individual buy-in.

Even though the model provided a positive group focus, we learned we also need to develop trust and overcome common team dysfunctions. Lencioni (2005) describes these as building trust, acknowledging, and managing the role of conflict, involving everyone in decision making, holding each other accountable and holding the team accountable. The first strategy to build trust was offered during classroom sessions by having students do small group work during preparation assignments prior to departure. These include group presentations on various aspects of Belize, planning the project they would implement in Belize, and weekly CQ Question of the day challenges. Other activities included sharing personal stories and strengths, and team-building activities like *Helium Stick Challenge* (Priestly, 2017).

Self-Understanding and Interpersonal Dynamics

Self-awareness and interpersonal dynamics are critical components of successful teaming, particularly in interdisciplinary environments. Strategies for student growth in understanding their personal working strengths

and those of their classmates include the implementation of two established behavioral self-assessments. The first was the DISC Personality Assessment (What Is the DiSC Assessment? n.d.). The DISC Personality Profile tool helps to users understand a various personality factor that impact human dynamics and team function. The DISC offers users a common language, user-friendly assessments, and insights into the four major personality types they present. The personality factors proposed offers users a chance to consider actionable insights into dealing with personalities other than the dominant one the student identifies with.

Additionally, students completed the more detailed Strength Finders 2.0 assessment (Top 5 CliftonStrengths | En-us - Gallup, n.d.). Strength Finders 2.0 basic assessment for students offered insights into the student's top five strengths. For each class, students unanimously agreed to share their personal results so the whole class could see everyone's results. The students learned that others had strengths of encouraging, including, achieving, analyzing, strategizing, focusing and many more (Strengthsfinder 2.0: A New and Upgraded Edition of the Online Test from Gallup's Now Discover Your Strengths) [by: Tom Rath] [Feb, 2007], 2022).

Making the positive attributes of the team available for everyone were remarkable. The petty difficulties teams often deal with (such as the always late one) were mostly put aside considering these positive attributes, and the understanding that they could count on their teammates and even more so, how they could count on their teammates came to the front of the team dynamic. Suddenly, the engineering student with strengths in analyzing was useful in describing for the group the details of how the group would manage a small construction project in a foreign country, and the strength was appreciated. Those with interpersonal relationship building strengths were appreciated as they could easily navigate a classroom of 7-year-olds and negotiate relationships with the Belizean teachers. Everyone had a strength, and everyone had a purpose, and the minor frustrations of long workdays were buffered by appreciation of each part of the personality puzzle coming together to complete the projects the team had taken on.

Conflict Management

To manage team dysfunctions (which vary from year-to-year), students were taught fundamental principles of conflict management. First, the professors asked students to brain-storm and list the unacceptable methods for solving conflict. Students creates a list of the behaviors they considered unacceptable. Students then compiled a similar list of acceptable methods of solving conflict. The lists were discussed and narrowed down to the most egregious and acceptable behaviors. The lists were typed up as the acceptable and unacceptable behavioral guide. The professors acted as facilitators and the group of students subsequently held each other accountable for managing conflict. Figure 3 illustrates the results of one group's approach.



Figure 3. Class List of Acceptable/Unacceptable Behaviors

During the conflict management class session, students were also given insights into various types of conflict management/negotiation personality styles. The simple three negotiator style list is in no-way a comprehensive review of conflict management but offers an overview that is easy to understand. The Black Swan Group Negotiator Personality types are highlighted and discussed in class to help students understand that just as individual possess personality strengths, they also demonstrate different approaches to solving problems and negotiating solutions to problems (The Black Swan Group, n.d.). The class conversation opened the door, so to speak, to address the fact that conflict can and should be managed in a respectful and adult manner. Students learned that there are many different ideas, opinions, styles, of managing conflict and this is a normal part of life. Developing adult conflict skill is a normal part of life is essential for undergraduate students (Lencioni, 2005).

Shared Community Ethics and Standards

By creating acceptable and unacceptable group norms classes created a standard and ethic. The foundational ethical standard for the class was the university code-of-conduct for students studying abroad. Prior to acceptance into the course, students sign an agreement to recognize and adhere to the University policy.

Servant Leadership

The final component of the Teaming Learning Foundation is the concept of servant leadership. Principles of servant leadership involve building community, commitment to the growth of their team members, stewardship, foresight, listening, empathy and healing, and foresight are introduced and discussed. This assists team member realization that when in a leadership role, students have a responsibility in the growth of their team members, as opposed to an authoritarian approach to directing project activities (J. C. Hunter, 2004).

Reflections: A Source of Student Outcomes

Reflections from the students following the trip often provided insights into outcomes that went far beyond the surface projects completed:

“The true growth lies in the interaction with each other, as neither truly understood each other’s culture, and blindly conversed without any real idea of social or verbal cues. We each impacted each other in ways that reach far beyond the material realm, which lead me to my conclusion. The more we can learn from and teach each other, the more we can understand why we do what we do, rather than just the basic understanding, the more we can become a unified front against global issues.”
Engineering Student 2019.

“One of the main problems that we encountered (or could have encountered more often) because of being a multi-disciplinary team was butting heads due to having different opinions. Seniors may have different ways of viewing a problem and its solution than a freshman, and an education major may have a different teaching style in the classroom than a healthcare major. Thus, it’s easy for conflict to arise this way because most of the students have different opinions than each other. Honestly, I did not see much, if any, signs of conflict within our group as we worked on our construction projects and lesson plans. I found it very refreshing how seemingly everyone worked together so well and were open to each other’s ideas. It created such a strong sense of teamwork and, I think, was such a key reason why we ended up getting so much done on the wall and bathroom.” Pre-med sophomore 2019.

Working in a multi-disciplinary group was a great opportunity for growth. We were faced with some challenges throughout the week. One of them being that the science projects were a lot bigger of a task than we imagined. Because we all came from different strengths, we had different ways to go about it. Though, we had the opportunity to really use each of our strengths to help solve this. Nicole and I both are very strong in adaptability, so we were able to act on the spot to help for problems such as running out of things to do. We were great at coming up with new activities for them to do. Natalie is strong in “strategic”, so she was able to prepare each of the many materials in the back for each lesson, so we were more prepared for the multi-step science projects. We are also very strong in relationship building so we really added P.J as another member of our group and utilize him as such.
Education Major, 2019.

I have learned so much about global citizenship, social responsibility, and cultural intelligence after being able to take the trip to Belize. Talking about it in class was helpful but I didn’t realize how important it was in our daily lives until experiencing it myself firsthand outside the country. Education Major, 2019.

Conclusion

Tony Robbins (Tony, 2022) states there are six human needs that drive humans and that tie all of us together. There is a need for certainty and assurance that we can learn to avoid pain and gain pleasure. Conversely, there is also a need for uncertainty and variety along with change and new stimuli. Finally, all individuals have a need for significance, connection, growth, and contribution. David Livermore, (2015), points to the importance of understanding the values of cultures, the things that are both similar and dissimilar. The shared dialogue method proposed by Hubbs, 2020, and refined for our undergraduate international service-learning course provided a “Team Learning Foundation”. This foundation included striving to understand and improve our cultural intelligence, providing frameworks for understanding teaming, and understanding ourselves and others through *DISC*TM and Strength Finder 2.0TM assessments, models, and class activities for managing conflict, and striving to gain a shared ethic, value and servant approach to the time spent together and the projects completed.

The class offered students variety, immersion in another culture, and a chance for growth and connections that were felt far beyond the semester-long class and 10-day trip. While many university courses offer students in-depth insights into future professions, this class offered students the chance for meaningful connection with each other and with colleagues in another country. Saying goodbye was often the hardest portion of the trip illustrating that students had found connection, significance, and purpose.



Figure 4. Belizean Principal Carlos Watching the Students and Children Say Farewell

The *360° Team Learning Foundation* offered students the structure necessary to learn, grow, and thrive. This model is easily replicable and offers a strong base for the undergraduate student population who are not ready for complex dialogue on philosophical foundations, but who all need the chance to learn and grow. It can be replicated in many contexts and adjusted to circumstances. It is a basis for continued expansion and growth of the 360 Degree Education Model.

Acknowledgements

Thank you to the students and many supporters throughout the many years of service-learning trips at Boise State University.

References

- Breitkreuz, K.R., Songer, A.D. (2015) The Emerging 360 Degree Model for Global Citizenship Education. *International Journal of Research on Service-Learning and Community Engagement* 3(1). <http://journals.sfu.ca/iarslce/index.php/journal/article/view/121/76>.
- Discprofile (2022 October 2). What is the DiSC assessment? (n.d.). Discprofile.com. Retrieved from <https://www.discprofile.com/what-is-disc/>
- Fickett, L., Fickett, J. (2006). *The Collaborative Way: A Story About Engaging the Mind and Spirit of a Company*. Independently published.
- Gallup Store (2022, October 2). Top 5 CliftonStrengths | en-us - Gallup. (n.d.). Gallup Store. Retrieved from <https://store.gallup.com/p/en-us/10108/top-5-cliftonstrengths>
- Hubbs, G., O'Rourke, M., & Orzack, S. H. (2020). *The Toolbox Dialogue Initiative: The Power of Cross-Disciplinary Practice* (1st ed.). CRC Press.
- Hunter, J. C. (2004, June 29). *The World's Most Powerful Leadership Principle: How to Become a Servant Leader* (1st ed.). WaterBrook.
- Interdisciplinary Network for Group Research, & Fiore, S. M. (2012, October). *President's Essay: The "ABC's" of Interdisciplinarity: Understanding the Attitudinal, Behavioral, and Cognitive Factors Involved in Interdisciplinary Research* (No. 2, 3: 4-6). INGroup Newsletter. https://csl.ist.ucf.edu/Portals/3/INGRoup_ABCs_of_Interdisciplinary_Research.pdf?ver=2016-02-29-154947-697.
- Lencioni, P. (2005, March 10). *Overcoming the Five Dysfunctions of a Team: A Field Guide for Leaders, Managers, and Facilitators*. Jossey-Bass.
- Livermore, D., Pabon, T. A., & Gildan Media, LLC. (2015). *Leading with Cultural Intelligence, Second Edition: The Real Secret to Success*. Gildan Media, LLC.
- Multidisciplinary*. (2021). The Merriam-Webster.Com Dictionary. <https://www.merriam-webster.com/dictionary/multidisciplinary>. Accessed July 19, 2021

- Priestley, D. (2017, April 7). *Magic Cane, Helium Stick Team Building Challenge | Exercise*. Team Building Activities, Challenges | Venture Team Building. Retrieved October 2, 2022, Retrieved from <https://ventureteambuilding.co.uk/magic-cane-helium-stick-team-building/#.YznfSnbMLb0>
- Rath, T. (2007). StrengthsFinder 2.0: A New and Upgraded Edition of the Online Test from Gallup's Now. Discover Your Strengths.
- The Black Swan Group. (n.d.). (2022). *How to Negotiate With Specific Personality Types*. Retrieved from <https://info.blackswanltd.com/guide-to-3-negotiator-types>
- Tony, T. (2022, July 16). *6 human needs: why are they so important?* tonyrobbins.com. Retrieved from <https://www.tonyrobbins.com/mind-meaning/do-you-need-to-feel-significant/>
- Yong, K., Sauer, S. J., & Mannix, E. A. (2014). Conflict and Creativity in Interdisciplinary Teams. *Small Group Research*, 45(3), 266–289. <https://doi.org/10.1177/1046496414530789>.