Examining Student Learning Outcomes from the Global Citizenship and Sustainability Community-Based Research Exchange Program

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Abstract
“Global Citizenship and Sustainability” (GCS) is an exchange program that fosters engaged research, global learning, teamwork, leadership, and civic and social responsibility for students at Cornell University (Ithaca, NY, USA) and Mahidol University (Nakon Pathom, Bangkok, Thailand). In 2011, floods devastated local communities near both universities’ campus. Students in this program conducted community-based research to better understand resident, farmer, and business owner experiences with flooding and working with local governments to build long-term community resilience and adaptation. Data on students’ learning outcome on global citizenship and programmatic impact were collected through qualitative data analysis of student journal reflections.

Keywords: global citizenship, service-learning, community-based research

Introduction
Flooding is a natural disaster that impacts people more than any other worldwide. The community need addressed by this program is that of community flood resilience and how best to select and implement adaptation strategies for the future. A resilient community has the capacity to better withstand a disaster and its social, economic, and environmental consequences. The ultimate goal of this approach is to provide insights and guidance to stakeholders to effectively address the urban flood challenges through action research and capacity building.

In this program, Cornell students worked collaboratively and cross-culturally with their “research buddies” (students at Mahidol University in Bangkok) and research mentors (community partners in Bangkok) in Thailand to conduct an applied community-based research project. These teams of Cornell and Mahidol students conduct community-based research with the intention of gaining a broader understanding of the complexities of water resource management, flooding, and broader issues of sustainability and climate change facing our world.

Many universities, including Cornell, have placed an emphasis on global education and students also desire global learning opportunities as part of their undergraduate education. Cornell University President Skorton and the Task Force on Internationalization established a goal of at least 50% of students having a substantive international experiences during their time at Cornell—up from Cornell’s current rate that is near 20% (Torres et al., 2012). The Global Citizenship and Sustainability program described here helps Cornell in achieving these desired goals by providing opportunities for curriculum-linked study abroad experiences that focus on “teaching, research, and engagement.” This paper focuses on student learning outcomes associated with the GSC student exchange program.

Service-Learning
Service-Learning is a pedagogical approach that combines meaningful community service activities with academic instruction. The pedagogy of the field began about fifty, 50 years ago, started by a group of activists and educators that were heavily involved with campus and community-based movements such as anti-war, civil rights, and others. Academics were looking for ways to enhance their work in the community and in the classroom, pedagogically, going beyond simply an experience gained. Educators challenged the students not only to volunteer in the “soup kitchens” to feed those that are hungry but also to think

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critically as to why they felt the need to volunteer in “soup kitchens,” why “soup kitchens” exist, and the broader question of why people are hungry.

The term “service” according to the early educators of the field is about community action, “…and efforts to learn from that action and connect what is learned to existing knowledge, the “learning” (Stanton, Giles and Cruz, p2). Proponents of this pedagogical approach advocate for reciprocity between the people that are receiving the service and people that are delivering the service. It is not a one or two way street as it is multiple ways due to the number of stakeholders and the complexity of our social issues. As Dr. Michele Whitham, a former faculty member in Cornell University's former Human Ecology Field Study Program describes, “service-learning as on the enabling to empowering end of the service-social change continuum, emphasizing support for people who seek to address their own needs as opposed to a “doing for’ kind of service.” (Ibid, p. 3)

The term “learning” relies on experiential learning theories such as David Kolb’s (1984) four stage of cyclical learning and Albert Bandura’s (1977) social learning theories and self-efficacy. John Dewey was a proponent of experiential education and provided a philosophical framework for this pedagogical approach through his writing of Experience and Education (1938). Paulo Freire is known for his work Pedagogy of the Oppressed (1968), where he discussed conscientization - critical awareness and praxis - action and reflection, and other learning theories to better support, implement, challenge and understand students' learning experience and their own process of critically analyzing their experience.

**About the Global Citizenship and Sustainability (GCS) Program**

The GCS program is offered by the Department of Natural Resources and Public Service Center at Cornell University in partnership with the Faculty of Environment and Resource Studies at Mahidol University and the Thailand-United States Sufficiency Education Foundation (TUSEF). At Cornell, the program sponsors and funders are the Public Service Center, the Center for Engaged Learning and Research, the Southeast Asia Program, and the Einaudi Center for International Studies, and the Cornell Institute for Food, Agriculture, and Development (CIFAD’s Student Multi-Disciplinary Applied Research Team-SMART Program). The program was designed through collaborations between the faculty Director of the program at Mahidol University and the two Cornell program Directors. Program design entailed multiple meetings over approximately one-year between the program Directors (Mahidol and Cornell), site visits to areas affected by flooding in Bangkok, meetings with potential community partners in Thailand to discuss the program and their possible involvement, and faculty seminars to better understand shared research interests. Program planning also included budgeting and grantwriting to acquire the funds needed to carry out the program (student and faculty airfare and housing, travel to study sites, meals, etc.).

The Global Citizenship and Sustainability program at Cornell University has 4 primary components:

1. **Pre-departure course** (3 credits) for Cornell students (each Fall semester) that focuses on flooding and climate change, global citizenship, cultural learning, team-building, and reflection. (Fall 2013)
2. **Winter session** community-based research project in Thailand with Mahidol students and Thai research mentors from provincial government and NGO’s. After getting to know each other, students pair up with one “research buddy” to work closely with on the research project. This helps to facilitate cross-cultural learning. Student teams also work closely with “research mentors” from provincial and village government and NGO’s. The length of the program is 4 weeks. (Winter 2014)
3. **Post-departure** course (2 credits, Spring semester) for Cornell students where students write up results of the research and prepare community product. Drafts are provided to community partners in Thailand and students continue to work with their “research buddies” from Mahidol University in Bangkok. (Spring 2014)
4. **Summer exchange** where Mahidol students from Bangkok travel to Cornell to conduct a community-based research project in New York State with Cornell
students and research mentors from local government and NGO’s. The length of the program is 4 weeks. (Summer 2014)

**Student Selection Process for the GCS Program**

Cornell University students were selected through a rigorous application and interview process. Each applicant was required to provide academic transcripts showing grades, complete an application, and respond to four essay questions. Upon reviewing applications students were interviewed and then selected based on academic qualifications, commitment to the program, and interest in global citizenship and sustainability. The profile of the students in the program is below (Table 1). In total, there were 9 students in the program: one Master’s student, four Seniors, one Junior, and three Sophomores. They came from a variety of academic backgrounds from the Humanities such as Africana Studies to Environmental majors such as Natural Resources. There were two first generation college students in the program.

Table 1. Profile of Cornell University students in the Global Citizenship and Sustainability Program.

<table>
<thead>
<tr>
<th>Class (as of fall 2013)</th>
<th>Major</th>
<th>Gender</th>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master’s</td>
<td>Natural Resources</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Senior</td>
<td>Natural Resources</td>
<td>Female</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Senior</td>
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<td>Male</td>
<td>Caucasian</td>
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<tr>
<td>Senior</td>
<td>Africana Studies and International Ag. and Rural Development</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Senior</td>
<td>Natural Resources</td>
<td>Female</td>
<td>Chinese-American</td>
</tr>
<tr>
<td>Junior</td>
<td>Biology and Society</td>
<td>Female</td>
<td>African-American</td>
</tr>
<tr>
<td>Sophomore</td>
<td>Chemical Engineering</td>
<td>Female</td>
<td>Singaporean</td>
</tr>
<tr>
<td>Sophomore</td>
<td>(Double Major) International Ag. and Rural Development and Environmental Science and Sustainability</td>
<td>Female</td>
<td>Bolivian-American</td>
</tr>
<tr>
<td>Sophomore</td>
<td>(Double Major) International Ag. and Rural Development and Natural Resources</td>
<td>Female</td>
<td>Caucasian</td>
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**Pre-Departure Course**

In the Fall 2013 course, students explored various theoretical frameworks for global citizenship as relevant to questions of ethics, privilege, power, democracy, diversity, and the environment. They applied these theories to the social dimensions of water governance in Thailand.

**Community-Based Research Project in Thailand**

Taking an inter-disciplinary and cross-cultural approach, students worked in pairs (Mahidol and Cornell) drawing on their combined ability to research the environmental, economic, and social aspects of water management on local communities. Students collected data through a variety of sources including government documents, in-depth interviews with community members, farmers, and business owners, interviews with government officials and resource professionals, and community meetings. The questions that students researched were driven

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3 1) Please tell us about your motivations for applying for this program. What do you hope to bring to the program? What do you hope to gain from this and how will it enhance your education?  
2) Have you been on an Alternative Break, service-learning trip, or international educational experience before? If so, how have your past experience influenced your desire to become involved in this program? If not, what is important to you about this kind of educational experience?  
3) Select one of your past group experiences and write about what made that group work well, and what challenges you faced and how you overcame them.  
4) You will be expected to enroll in a preparatory and post-trip course, in addition to the January 2014 trip and various tasks you are assigned related to organizing the trip. Are you willing to accept this time commitment?
by the needs of the local community leaders and their need to understand the impacts of the 2011 floods and how they could collectively learn from that experience to be better prepared in the future.

Post-trip class
As part of the post-departure class, Cornell students worked with their Mahidol University counterparts and community partners (research mentors) to obtain feedback on the draft community products. There were two student research teams that worked in each of two sites (Bang Luang and Mahasawad), working collaboratively with research mentors from the community. The Bang Luang team wrote an archival case study documenting the experience of this community in the 2011 floods. In collaboration with government, business owners in this area were able to protect a central business district that served as a center of relief for the community as well as allowing them to sustain their livelihood. Students documented, through interviews, the participatory process and decision-making surrounding this success story of community flood resilience. Community partners stress the importance of this case study as a way to produce a historical record of their strategy and to also help other communities learn from these strategies. The case study will help to promote this approach to community flood resilience within other areas of Thailand where this could benefit others. For the second research site, the Mahasawad Canal, students are working on a brochure that documents the successful flood mitigation strategies used by the community during the flood as well as adaptation strategies following the flood to prepare for the future. This region is a hub of agro-tourism where subsistence farmers also earn income from bringing tourists to see their farms, which include a Lotus farm, an orchid farm, a fruit orchard, and an OTOP (One Tambon, One Product) market that specializes in producing and training others to produce locally made rice crackers. This paper reports on activities through the post-departure course.

Research Methods
In order to examine learning outcomes related to global citizenship, we used qualitative research methods and employed thematic analysis (Boyatzis, 1998) of the data. Thematic analysis is a form of qualitative data analysis that sorts data into categories, allowing researchers to uncover patterns and develop themes. The questions that the research was designed to answer were: How does the GCS program impact student learning with regard to global citizenship? How does the GCS program impact student development? We collected data through five written reflection assignments that the students completed (Figure 1, Figure 2). We then thematically coded and analyzed the qualitative data (Boyatzis, 1998) resulting from the journal reflections. Each journal reflection was approximately 1-3 pages in length (12-point font with 1” margins). One of the assignments was a set of readings and a journal reflection on the topic of global citizenship (Figure 1). Cornell University students were required to complete readings and explore global citizenship topics in Fall 2013 before they travelled to Thailand in the Winter of 2014. Cornell students were also asked to re-read the global citizenship papers and complete the assignment again upon returning from the GCS program trip to Thailand in Winter 2014 (Figure 1). In the results, we present a comparison of the pre-and post global citizenship reflections using the frequency of terms students used in their assignments. We used an online software program to create a word cloud (http://www.wordle.net) for a visual presentation of the frequencies and calculated and analyzed the frequencies in Microsoft excel. In the Summer of 2014, Mahidol University students from Thailand travelled to Ithaca, NY for the exchange with Cornell University students. Both Cornell University and Mahidol University students completed three reflection assignments (Figure 2). The reflections were analyzed using thematic analysis and primary themes are presented in the results.
ASSIGNMENT, Good Intentions and Global Citizens: Read the Illich paper first, followed by Zemach-Bersin and Schlabach. What is the first word that comes to mind that captures your emotional response to these articles. Do you agree with Illich? Why or why not? What do you think Schlabach and Zemach-Bersin contribute to the discussion of international service and education? Think about the motivations for why you are in this course and what you want to accomplish both for yourself and for our host community. How have these articles informed (if at all) how you will approach this learning experience? Summarize Appiah’s perspective on globalization. Compare this to Illich’s view. Which perspective do you agree with more? Why? Appiah suggests that it is possible to balance universal global ethics with people’s freedom to make choices. From reading Revkin and McKibben, global thinking has become almost impossible without environmental thinking. What are the implications of this for what makes a person a “good global citizen”?

Pre assignment completed Sept. 2013; Post trip assignment completed March 2014

Readings
Schlabach, G.W. 2013. Lest Best Intentions Become the Enemy of the Good.

Reflection #1 (June 13, 2014)
Open reflection on experiences during the first week of the program.

Reflection #2 (June 20, 2014)

a. Reflect on the learning goals you discussed and developed as a group on Tuesday, June 10 (categories of learning goals are): researcher, teamwork, work experience, learn culture, friends, language, new experience.

b. How is this learning experience/program helping you to reach those goals? Please describe.

c. Are there any challenges you are experiencing in meeting these learning goals? If so, which ones?

Reflection #3 (July 7, 2014)

a. How do you see yourself using or applying what you learned in this program? Personally, professionally, academically, etc.? In what ways do you think you will draw on your experiences in the program as you move forward?

b. Imagine that you were writing a letter or note to a future student in this program. What would you say to the next group of students to participate in this program? What should they expect? How can they prepare themselves? What can they look forward to? What will be challenging? We would like to use responses to this question to share anonymously between “generations” of program participants—to share knowledge and experience across program years.

c. Is there anything else that you would like add? Do you have any final reflection or thoughts about the program?
Results: Global Citizenship

During the Pre-Departure course, students read several articles on global citizenship and were asked to respond to the articles as their written assignment (Figure 1). After the trip, students were asked to re-read the article and their response paper that they submitted in the Fall 2013. They provided their own reaction to the concept and theories presented from these articles, as applied to their experience in Thailand.

We noticed in the reflection journals that there were some shifts based on the word usage that they provided in the journals. To demonstrate the shift, we utilized a word cloud to create a visual depiction (Figure 3). The larger the word, the greater the frequency of occurrence was in student journals. From the word cloud, you can see that there were many words that a high frequency of occurrence. For example, words prominently reflect in pre-trip journal reflections were “cultures”, “people”, “service”, “global”, and “think”.

![Figure 3. Pre-trip global citizenship reflection assignment word cloud (Cornell University students).](image)

The word cloud for the post trip (Figure 4) is much different from the pre-trip. First, there are several terms which stand out in contrast to the pre-trip where there was a greater breadth of terminology used but not a high frequency of any given term. For the post-trip reflection, the term “global” is prominently displayed along with “community”, “people”, and “experience”. Students were experiencing dissonance as they did not yet comprehend what was happening and the post class allowed for students to critically reflect on their actual travel and community-based research experience.

![Figure 4. Post-trip global citizenship reflection assignment word cloud (Cornell University students).](image)
One of the students reflected on her journal before the trip discussed about her desire to work with others, with people that are different from her. This way, she can personally experience and learn it.

“The personal dissonance I face stems from my attempt to balance my desire to work with [others] and my strictly selfish yearn to experience and learn. In this context, I say that learning and experiencing are primarily self-centered because their ends lead to personal-development.” [Student #2, Global Citizenship pre-trip Journal Reflection]

After the trip, she started to rethink the cultural dynamics that were happening during the trip. For her, she realized and accepted the limitation of being an American.

“Being raised within the American education system, I have been taught to think in a goal-setting fashion; there were always clearly defined goals with labeled steps, and barricades to prevent you from deviating. Thus, if the end-goal in sight is abstract, or not quite clear, or if it changes, it made me feel uneasy and to a certain extent unaccomplished. Currently I am working on stopping this goal-driven mentality; I am trying to internalize that there is validity and worth in engaging in activities that do not necessarily produce a product.” [Student #2, Global Citizenship post-trip Journal Reflection]

For students, the concept of global citizenship was also about building a cultural understanding. Student # 18 from Cornell expressed it as “One thing I appreciate is that while I am learning Thai culture I am becoming more conscious of what American culture truly is.” Another student described the depth of the global cultural learning.

“As for learning culture and building friendships, we have been able to share the ‘Thai Beliefs’ and other silly things but also I’ve started having deeper conversations, especially with [Student # 11], which is what I really enjoy. I think it is difficult to really be intentional with other team members sometimes, and be active in seeking to get to know them, but I have been able to make some strides, namely in taking [Student #11] and [Student #13] to the [Cornell] plantations [Natural Area]. And also I have not laughed as much as I have in a while, so that’s great.” (Student #16, Reflection #2)

**Results: Themes from the Summer 2014 GSC Reflections**

This past summer both Cornell and Mahidol University students spent four weeks of working and learning together on a community-based research project with the City of Ithaca. They were asked to submit three reflection journals to the faculty members. From the reflection journals, several themes generated. Since the journals were written in English, Mahidol University students faced the challenge of being able to fully describe and share their critical reflections with the Program Directors. Two categories that emerged from the qualitative thematic analysis were new experiences and teamwork.

**New Experiences**

Many of the students talked about the new experiences since this is an exchange program where students will be conducting community based research to benefit the City of Ithaca its residents. In addition, they are new to each other. For Cornell students, it was the first time that they worked together as a team whereas Mahidol University students have worked together as a team in January when a group of Cornell students visited and worked with them on research projects in Mahasawad Canal and the Bangluang – 100 Year Market. Coming together as a Cornell-Mahidol research team was a brand new experience for everyone. Also, for the Mahidol University students, it was their first time visiting the United States, Ithaca, and Cornell University. For some, it was their first time traveling on an airplane.

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“In the airplane I talk with air hostess, but she don't understand me. [I] have someone ask me 'why you go to the US?' I answer him 'I'm [in a] student exchange program.' So he speak English with me very fast. He ask me 'you understand or not?' And I told him, 'I don't understand.' He laugh [at] me [and] I felt so sad. And I felt nervous because I think when I met everyone I cannot talk, listen, and understand when you speak English (Student #10, Reflection 1).

So the Mahidol students were coping with adapting to a new culture and primary language (English)—which was at times an emotionally difficult process as this student expresses her sadness at someone laughing at her on the flight from Bangkok to New York City. For many of the Mahidol University (MU) students, this is also their first time having to live together and cook for themselves. MU students discovered their ability in adjusting and adapting to their new environment and the food.

“A culture that always I learn and adapt everyday is about the food every foods. It's always eat with a bread such as a burger for me. It's hard to eat because is big for me and it will be dirty because I don't know a technique to carry my burgers.” (Student #14, Reflection 2). They are also willing to take on the challenge as needed, like doing their own laundry. “Moreover I went to laundry I think I just a little story but I think it gave me new experience that had a lot of washing machine and drying machine then I didn’t know how to use it but I could figure it out though.” (Student #12, Reflection 2) So the Mahidol students were adjusting to a new way of life (most live in the dormitory on campus and don't have to prepare meals and take on responsibility of cleaning a shared apartment) in addition to speaking in English as the dominant language (rather than Thai).

For Cornell University (CU) students, this is their first experience interacting with people whose English is not their first language. The language barrier had a significant role in the program as none of the CU students speak Thai.

“The first few days of this program have definitely been exciting. I could have never imagined learning so much in such a short period of time, especially without even being in a classroom. The most direct things that I noticed and has to adjust to in this program was the language barrier. Upon meeting the students, I quickly discovered that they weren’t as fluent in English as the many other exchange students that I have met. Come to think of it, I’m not sure that I’ve ever met any exchange students from such a distant area of the world. Even this challenge didn’t deter me though, it challenges me and encourages me to find new ways to communicate and make it easier for them to understand. In doing so, I would love to gain the confidence to communicate with those outside of my language barrier, and possibly to even feel more comfortable learning another language to help communicate with others outside of my language barrier.” (Student #1, reflection 1).

The Mahidol University students frequently mentioned the challenge of not being able to communicate and understand fully in English. The language barrier is a challenge for everyone to work together and collaborate if they cannot communicate effectively. This also creates difficulties for conducting community-based research, especially if the community’s native language is not familiar or fluent for the researcher.

**Teamwork**

Working together, in collaboration, and achieving a common goal were pronounced throughout the students’ reflection journals. In conducting the community-based research project, the research is not an individual exercise; rather it is a collective activity for a common purpose set by community partners involved. Amongst the students, they have to learn to work together, getting to know one another and build trust amongst each other so
that they can deliver high quality of work for the City of Ithaca officials and City of Ithaca residents. We utilized Bruce Tuckman’s group formation process sequence (Tuckman, 1965; Tuckman and Jensen, 1977) to help us devise activities and environment to allow all students to form into an effective team. The five stages are: forming, storming, norming, performing and then adjourning or mourning. As faculty leaders of the program, we focus our effort at the beginning in creating opportunities and developing activities for students to all to get to know one another.

One of the activities that all students mentioned in their reflection journal was an activity that pushed teams from the “forming” stage to the “performing” stage. The activity was a modified version of the Food Network television show “Chopped”. All students were divided into two groups. Each group was tasked with making a Thai and a North American dish on two separate days. The assignment required that dishes include particular ingredients that have been set by the Program advisors. They are judged by the presentation, the taste, creativity, and their ability to work together as a team to create the dish (everyone must explain their contributions). They were all judged by people outside of the program, many of whom were our community partners, that were invited as guest judges. One student from Cornell expressed their trepidation with this idea originally and how it changed over the course of the program.

“At first when I heard of the idea I kind of cringed because I thought it was going to be too cheesy and none of the students would like it. I am happy to admit that I was very wrong. “Chopped” was teamwork at its finest. I helped my team with prepare the vegetables by chopping, dicing or slicing them. The best part was watching them cook because they all seemed to be moving in tandem. While showing us what they cooked, they taught us some basic Thai. Such as how to count from one to ten and the difference between beautiful and unlucky in Thai is simple intonation. “Chopped” was a genius idea on the part of Amy and Shorna because it definitely brought our groups closer together and it allowed me to sample so delicious Thai food.” (Student #17, Reflection 1)

Students all delegated their tasks and used each other’s strengths and abilities to accomplish the goal. We saw the process also being modeled in their research teams.

“In teamwork, our ultimate goal is for everyone’s abilities to be highlighted in our experience. What this really means is that we are able to create an environment in which all students feel comfortable sharing what they bring to the table for the good of everyone else.” (Student #15, Reflection 2)

One theme that emerged from the thematic analysis was that of “friendship.” All students in the program expressed how the friendships developed, surprisingly in such a short time, because of all the time students were spending together and all of the personal and academic experiences in which they were engaged. Becoming closer friends had positive implications for the research they were conducting in their teams.

“Because the Cornell students spend the majority of their time with our Mahidol counterparts the friend aspect has been completed and can only be strengthened. I truly believe the amount of time we spend with each other not only has allowed us to become close friends in a short time frame but the abundance of shared time also begs for new experiences and team work. (Student #18, Reflection 2)

By the end of the program, students were sad to see the program come to an end. However, they formed such an effective team and a strong friendship with each other. We took the time to celebrate their accomplishments by having them present their research to the City officials and other university departments’ faculty and staff members. They received praises and positive and concrete feedback on their research and were each presented with Certificate of Appreciation. In addition, the students presented their most memorable times with their research buddy in an informal presentation.

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Conclusions
Global Citizenship and Sustainability completed its first year with Mahidol University, as the partnering higher education institution. There were many lessons learned from this model. One lesson learned is the importance of reflection in helping students make sense of the international education experience. Having students reflect on global citizenship before, during, and after the trip was an important part of the learning process. Initially, the reflections were just completed by the Cornell students, but we quickly realized that the Mahidol students would benefit from this practice as well (even with the challenge of writing in English); thus we incorporated reflections for all students (CU and MU) into the summer program and this was very valuable—for both students and the program directors.

Also, critical was the need to be intentional about giving students space to develop friendships. The friendships that developed benefited the team research process and helped students move from the “storming” phase of group development to the “performing” stage. They learned to come together as a team for a common purpose, while also forming what they deemed as “lifelong friends.”

Future Plans
One aspect that we found challenging in this program was the language barrier as was elucidated in the results from the perspective of both Cornell and Mahidol students. We are exploring ways to address this challenge in the upcoming program year. Cornell recently provided resources to offer a 1-credit language course as a supplement to the pre-departure course to help prepare Cornell students in the GSC program gain familiarity with the Thai language. Also, in selecting the Mahidol University students for participation in the GSC program, English language proficiency will be paramount.

In future iterations of the program, we will collect data from community-partners (survey or interview) to assess their experiences with the GSC program. In the pilot year of the program, community partners and GSC faculty provided oral and written feedback to students on their community products. Future research will include an assessment from the community members on the utility and efficacy of the research and outreach materials produced by students.

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References