Overcoming the Challenges to Launch a Successful Initiative of an Engineering Faculty-led Travel Course While Boosting Interdisciplinary Collaborations

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Abstract

The benefits to students in achieving learning outcomes through faculty-led travel courses have been studied in the literature, and yet a new faculty member, who has no experience in offering a travel course, may be either deluded by the vacation mentality or daunted by the trip-planning logistics and hence loses out on the opportunity to incorporate this practice. This paper presents a case study on an initiative to encourage and mentor faculty members to offer faculty-led trips enhanced by interdisciplinary collaborations. From the instructor's point of view, we provided our timeline, collaborative relationship development, backward course design driven by learning outcomes, and the transferrable strategies to overcome the challenges along the way. From the students' learning effectiveness point of view, we provided student reflections using the DEAL model [5] to demonstrate the obtainment of student learning outcomes. A significant contribution of this work is our approach to, and the outcomes of, interdisciplinary collaboration for faculty-led travel courses. Further, through extensive reflections to transmute their travel experiences to learning, the students uncovered valuable practices that have been consciously enacted into their daily lives at home.

Introduction

Experiential learning, such as in a faculty-led trip, is regarded as a powerful high-impact practice for student transformation. A faculty-led travel course is a relatively low-stress study-abroad activity for students [1] where they travel with faculty and fellow students for a duration of one to three weeks. Despite the short travel period, making these immersive experiences meaningful and enriching requires tremendous amount of time and effort in course design, connection establishment, and logistics arrangement, prior to the trip [2]. Once on the trip, a structured reflection is essential to transform student experiences to actual learning [2]. The form of reflection vary depending on the travel structure and schedule [3], but reflection is indispensable [4]. For example, students can complete short and simple reflections during the trip and more comprehensive reflections upon completion of travel [5][6].

The many challenges to implement these courses include varying levels of institutional support, inconsistent student enrollment, difficulty establishing foreign connections, budgetary constraints, logistics planning, and internal collaborations [7][8]. Any of these can cause a trip to be canceled. Despite all the challenges, we were motivated and determined in this initiative in the College of Engineering and Technology at Western Carolina University (WCU), inspired by the student transformation during a trip and the mutual mentoring among faculty members who share the same passion. This paper shares mentoring and coping strategies for faculty members who are interested in offering faculty-led courses, especially the assessment-driven course design to achieve student learning objectives. The key to succeed is to be flexible, patient, and collaborative.

Global learning has shifted from an option to a priority, and teaching effectiveness is evaluated by what the students have learned, instead of what has been taught in class, as those two do not always overlap [9]. This paper draws from global learning efforts around curricular development mapping [10] and backward course design strategies [9] to present student reflections and other course submissions that demonstrate what is expected and what is achieved from such a course.

Timeline of the Successful Initiative of an Engineering Faculty-Led Course

At the 2016 ASEE Annual Conference's International Forum, we presented an attempt from summer 2015 to start a faculty-led travel course with an expected trip in May 2016 to Germany. Unfortunately, that plan was eventually canceled in February 2016, due to lower than expected enrollment when collaborating with a third-party provider. Ten students were expected, but nine students applied and two of them later withdrew amidst the needed program adjustment [8]. This first attempt is Task 1 in the Gantt Chart in Figure 1. In Figure 1, ET stands for Engineering and Technology. SM stands for Sport Management. Task 1 status bar is in light gray indicating that it did not materialize. However, this attempt prompted us to propose a travel course that has since been offered successfully in three faculty-led trips to China, Japan, and Costa Rica. The authors gained valuable experience from the first attempt, revised the plan, and continued the efforts.

ID	Tasks	Start	Finish	Duration	2015	2016	2017	2018	2019	
					Q2 Q3 Q4	Q1 Q2 Q3				
1	Germany: 1st Attempt	5/15/2015	2/25/2016	41w						
2	Travel Course Approval	5/16/2016	5/12/2017	52w						
3	China: ET	5/15/2017	8/10/2018	65w			>			
4	Japan: ET, SM	5/17/2017	8/6/2019	116w			+			
5	Costa Rica: ET, Sustainability	8/8/2018	8/6/2019	52w				+		

Figure 1. The Gantt Chart of the Faculty-led Initiative

Dr. Yan initiated a course proposal that is specially designed for a faculty-led course in fall 2016 and it was approved in spring 2017. This course, ENGR 365 Global Engineering and Technology, also has the potential to be offered on campus with an internationalized curriculum for students who cannot afford a trip, although we have not offered it on campus yet. The travel course approval has been a crucial step in this initiative, as this course is in the world culture category (one of the required liberal studies curriculum categories, but students have many course choices in each category on campus), open to all the students on campus who are interested in how cultures affect engineering designs and sustainability plans, but not just open to engineering and technology students. This step poured the foundation for interdisciplinary collaborations among faculty, staff, and students. This course proposal and its approval is Task 2 in Figure 1. Task 2 status bar is linked to all the future courses indicating that it paved the way for the later faculty-led trips.

We planned the first trip in the 2017-2018 academic year and offered one section in summer 2018. In this first course section, Dr. Yan led one engineering student and one technology student to China. The group shared close interactions with daily reflection discussions and journaling. This China trip is Task 3 in Figure 1.

We planned two more trips in the 2018-2019 academic year and offered two sections in summer 2019. Dr. Yan in electrical engineering collaborated with Dr. Tyler in sport management to lead seven students to Japan (Task 4 in Figure 1), and Dr. Granda-Marulanda in engineering technology collaborated with Mrs. Bishop directing the WCU Office of Sustainability and Energy Management to lead six students to Costa Rica (Task 5 in Figure 1). These two sections were both with intensive interdisciplinary collaborations among faculty, staff, and students from other disciplines such as sports management, business, communication, environmental science, philosophy, park and recreation management. The students came from various backgrounds and contributed their unique expertise to the common learning experience. The idea of a collaborative trip to Japan was seeded much earlier and the discussions among engineering, business and Japanese programs started at about the same time as the China trip, as reflected in the Task 4 status bar in Figure 1. It has been a fulfilling journey for all the instructors and the students on both trips. However, there have been multiple instances throughout the journey when we would almost have to give up when significant challenges emerged.

The strategies that we have used to overcome those challenges to enable this successful initiative of an engineering faculty-led course will be shared in this paper. Being prepared to be flexible and responsive to each situation is a must. It should also be pointed out that one can only be responsible for the things s/he can have an effect on, but s/he cannot and should not feel responsible for external discouraging factors, such as local political situations, change in leadership support, severe weather, pandemic, etc. The success of any change initiative requires time and a suitable environment to materialize, and hence patience is critical. As a matter of fact, due to the recent change in leadership and office rearrangement in our university that caused uncertainty in faculty-led travel policy and budgeting process, we have not been planning a trip in summer 2020. However, when the new policy and procedures are made clear, we will continue the efforts.

Development of the Interdisciplinary Collaborations

A faculty-led travel course often requires the faculty member to collaborate with many others such as (1) colleagues in their department for support and ideas, (2) a third-party provider to help arranging the logistics of a trip, especially to a new country, at an affordable rate, (3) students for peer recruitment and suggestions, (4) colleagues on campus who have led a travel course for advice, (5) international office and other administrators for guidance to navigate through the entire process, and (6) donors to supplement the trip financially [8]. All these collaboration modules are important no matter if the course is offered by itself or with extensive interdisciplinary collaborations.

On top of these needed collaborations, an intentional collaboration academically across disciplines that are more disparate than usual may often yield even bigger rewards. This is true for STEM education in general. For example, Debra Bourdeau and Beverly Wood [1] designed and implemented humanistic STEM initiatives that fuse humanistic and STEM disciplines into coherent teaching, and the students get to see how deeply connected everything truly is. The creation of art in modern days often involves the latest technology, and students from different

disciplines appreciate such interactions [10]. In general, there is no set rule on which discipline can collaborate with which. What matters is if the faculty members in collaboration see the value in their collaboration and if they can work together. Such relationships are typically formed organically, and it takes time.

In the planning of the Japan trip, there were five faculty members from engineering, business and management, and Japanese programs, who worked closely together for about a year with regular meetings. Two of them (one in business and one in the Japanese program) had collaborated and led students to Japan multiple times before. The other three faculty members (one in engineering, one in sport management, and one in Japanese program) had never led students to Japan, but two of them had led students to other countries and they had all visited Japan before. Eventually, the two faculty members who had led students to Japan passed the baton to the three other faculty members to take their students to Japan. Because of the different course contents between summer 2019 and the earlier Japan trips, many activities were newly arranged in summer 2019. The engineering and sport management professors (Dr. Yan and Dr. Tyler) taught two courses on a combined trip, while the Japanese professor taught a separate course. These two groups of students were able to share quite a few cultural activities in Japan. The theme of the trip for the engineering course was on automation, with itineraries ranging from seeing the mechanical robots of a few hundred years old, studying the maglev train mechanism, interacting with the humanoid robots, visiting the advanced automobile production sites, to witnessing the tradition of craftsmanship in superb knife forging, baseball bat making, and goldwork and pottery.

In the planning of the Costa Rica trip, another faculty member, Dr. Granda-Marulanda, from engineering and, Mrs. Bishop, the director of WCU Office of Sustainability and Energy Management, identified Costa Rica to be the destination because Costa Rica is ranked the second most environmentally sustainable country in the world in 2013, according to the World Energy Council [12]. 99.2% of the energy consumption in Costa Rica comes from renewable energy, out of which 78% is of hydroelectric sources and 18% come from geothermal and wind power [13]. It also contains more than 5% of the world's biodiversity [14]. They originally planned to work with a host institution that would take care of all logistics and excursions, but that institution changed policy and they had to arrange the excursions themselves, causing issues in the budget. In the end, Dr. Granda-Marulanda led students there by himself, but both course leaders have been instrumental in the course development. With experience gained from this planning, the sustainability center is in the process to arrange future trips during spring break.

Backward Course Design Driven by Learning Outcomes

According to Wiggins and McTighe's backward course design strategy revised by George Rehrey and his colleagues at Indiana University [9], faculty in any discipline can internationalize nearly any course, following the steps in Figure 2. Instead of starting from what content to cover in a course, the faculty can start from what changes we expect students to have through the course. Then naturally an assessment plan to evaluate the existence or amount of change follows. Detailed learning outcomes can then be defined to demonstrate the change, and lastly, the course activities that help achieve such changes will be designed and implemented. Course Activities

include lecturing, lab, quizzes, in-class exercises, homework, reading, exams, etc. for an on-campus course, as well as meeting with local professionals, touring factories, visiting museums, going to cultural attractions and events, and dining with local people, etc. in a faculty-led course.

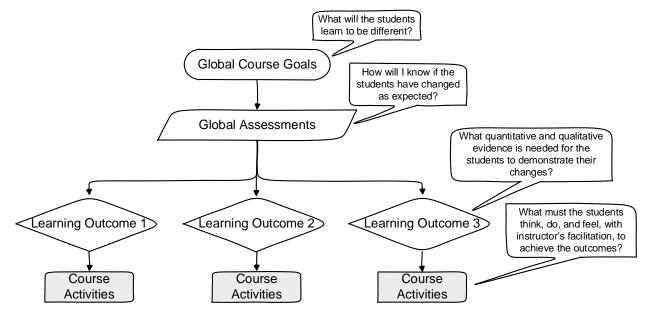


Figure 2. Backward Course Design

For consistency in a course offering, some instructors may inherit a set of learning outcomes from another instructor, or the learning outcomes are required by program accreditation. Then the assessment plan and the course activities can be designed together.

Take the faculty-led course to Japan as an example, the instructors did the backward course design and identified the activities we would want our students to experience before the students were even recruited. We tried our best to establish the connections in Japan to make such activities happen. After the students were recruited, we met with them as a group multiple times prior to the trip. The students got familiar with each other, reported their research on the companies and teams that we would visit, and participated in culture and academic orientations so that they were mentally prepared for the activities that would happen.

At WCU, there is a list of predefined learning objectives and learning outcomes as shown in Table 1 required for all students on campus. We encouraged the students to pick the learning outcomes from the approved list to be their own focus and choose the format of deliverable that they wanted to submit for assessment. The learning objective of "Awareness of Cultural Diversity" is a given and will be incorporated and evaluated in a faculty-led course, and hence the students were encouraged to pick one other learning outcome to be their individual focus.

Our experience was that initially the students were unfamiliar with the concept of learning outcomes, and they had no idea that the activities were linked to achieving an objective instead of just being checked off with a grade. However, after we explained the purpose and goals of the course and gave them the freedom to choose the most significant change that they wanted to

make in themselves, they came up with their individual learning contract to achieve that goal.

Table 1. Approved Learning Objectives and Learning Outcomes At WCU

Objectives	Outcomes
	Students will formulate focused questions and hypotheses that address
	appropriately the topic at hand, as well as identify and explain a method of
Inquiry	inquiry.
	Students will identify appropriate information sources and evaluate
Information Literacy	critically the credibility of those sources for relevance, legitimacy, and bias.
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Cutation 1 Till to 1 to 1	Students will evaluate evidence, context, and multiple perspectives as a
Critical Thinking	means of analyzing complex issues.
	Students will apply appropriate disciplinary methodologies to answer
D 11 G 1 :	questions and propose solutions to problems within the human and natural
Problem Solving	worlds.
	Students will craft written and/or oral communication demonstrating
Means of Expression	organization, clarity, logic, and skill for various audiences.
Wealts of Expression	organization, crafity, logic, and skin for various audiences.
	Students will recognize behaviors and define choices that affect their
Awareness of Self	lifelong well-being.
	Students will examine critically various cultures through historical and
Awareness of Cultural Diversity	contemporary contexts at the local, national, and/or global levels.
	Students will evaluate the impact of their own and others' actions on the
Awareness of Impact	human and/or natural worlds.

Out of the seven students who went on the trip to Japan, Problem Solving and Critical Thinking were the most popular choices of learning objectives, as shown in Table 2. Some students were initially unsure of their choices, so they checked a few. During the trip, the students further revised their plan, and we worked with each student to help them achieve their goals.

Table 2. Student Choices of Learning Objectives Prior to the Japan Trip

Objectives	S1	S2	S3	S4	S5	S6	S7
Inquiry							
Information Literacy				X			
Critical Thinking	X	X	X				
Problem Solving		X	X	X	X	X	X
Means of Expression							
Awareness of Self							
Awareness of Cultural Diversity	default	default	default	default	default	default	default
Awareness of Impact		X			X		

After the trip, the students were encouraged to write up their deliverables based on their experiences in Japan but extend it beyond Japan and investigate how things were done globally. Five students delivered written reports, one with a PowerPoint presentation, and one with a Sway presentation. Their report titles are listed in Table 3. One student did an extra honors contract report, indicated by an asterisk in Table 3.

Topics of Students' Final Deliverables

Power sources, the trend in using renewable energy with excess energy disposal, around the world

* How is the 2020 Tokyo Olympics becoming more sustainable and using renewable power sources Global railroading

Quality to the max: A reflection on Japan's strive for perfecting the manufacturing

The importance of audio engineering in sports and the equipment behind it

Use of technology to solve problems in companies in a timely and efficient manner

Technology in sport: How Xenoma e-skin is helping athletes

Application of stats to decision making

The final deliverables were graded based on the originality of their ideas, the depth of their analysis, and the presentation of their reports. The reports were evidence on if the students have either understood or applied problem solving and critical thinking, to achieve their learning objectives.

After the trip, there was also a common assignment with multiple questions related to their experiences in Japan and our local area in the US. These exercises helped the students to reinforce problem solving and critical thinking learning objectives. The grades of these exercises were also factored into their course grading. After the grades were posted, we compiled the answers to the common questions from all the students and shared the answers with all the students as one more opportunity for them to learn from each other.

Transferrable Strategies to Overcome the Challenges

We summarized the common challenges in establishing and offering a faculty-led course and presented them in a Fishbone (Ishikawa) Diagram in Figure 3.

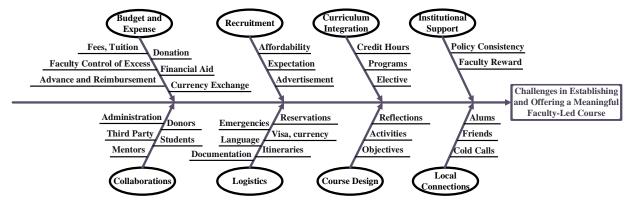


Figure 3. Fishbone (Ishikawa) Diagram of the Challenges in Establishing and Offering a Faculty-led Course

For anyone who has led students abroad before, s/he will sympathize that every single phrase on the diagram could mean months of work, years of development, and loads of frustration and even anger. However, the excitement and learning we saw in students made it all worthwhile, and we faculty grow in this process, too. For anyone who is planning to embark on this journey, this diagram will be a roadmap on what to prepare. To colleagues who don't appreciate the efforts in leading a faculty-led travel course, this diagram can be a tool to show the efforts and debunk the myth that leading a faculty-led travel course is like a vacation. Leading a faculty-led travel course is far from a vacation with family, and we travel without family to be able to focus on students. On the other hand, although there will be substantial efforts, things are doable, especially with collaborations.

The coping strategies to address the common challenges are to be flexible, patient, and collaborative. A new initiative is destined to create changes, which will disturb the existing system and cause reactions. First-order change deals with the existing structure and improves upon it but not to alter it, while second-order change destructs and discontinues the existing structure [12][15]. We cannot solve a second-order problem with a first-order approach [16], and we do not need to solve a first-order problem with a second-order approach.

- When situations arise that are not structural, in other words, they are the first-order problems, we can be **flexible** to work around them. Some examples are listed below:
 - o Comply with policies and procedures.
 - o Rearrange itineraries based on student interest, local providers, and weather.
 - o Be culturally responsive and learn from mistakes.
- When the environment is not conducive to offering a faculty-led course, or there are second-order problems, we can be **patient** to create the desired environment first. Some examples are listed below:
 - o Propose a course suitable for faculty-led trips.
 - o Communicate with the administration on what matters to faculty and students.
 - o Foster relationships for collaboration.
- During the entire process, being **collaborative** helps one to grow and improve. Some examples are listed below:
 - o Reach out to others for advice and suggestions.
 - o Share information & resources with like-minded colleagues without being asked.
 - o Offer two distinct courses in one trip to motivate interdisciplinary learning.

Corroborated by other faculty's experiences in the literature [17], we found the interdisciplinary collaboration to be very beneficial for both faculty and students. For faculty, the support for each other and the sharing of the load makes things easier. For students, the academic interactions on content that they might not be familiar with initially stimulated questions and discussions, and ultimately learning from brand new angles.

One way to further deepen the collaboration is to do service-learning projects in the faculty-led trips, as our colleagues in health, education, etc. have done, with benefits stated in [18], although we have not implemented any service-learning project yet, because our trips so far have been in multiple cities without enough time at one place to finish a project. However, the incorporation of a service-learning project is expected to deepen the interdisciplinary collaboration and enhance student learning, and hopefully to materialize in a future trip.

Student Reflection

An established and widely accepted practical approach to critical reflection was developed by Ash and Clayton [5] and is referred to as the **DEAL** Model within the service-learning experience. According to Ash, Clayton, and Moses [6] and Ash and Clayton [2], the DEAL Model consists of three sequential steps following a student's engagement in a service experience.

- 1. **D**escription of experiences in an objective and detailed manner (to answer who, what, where, when, how and why) to gain insight;
- 2. Examination of those experiences in light of reflection prompts according to a course's learning goals (such as academic learning, civic learning, personal growth);
- 3. Articulation of Learning, including goals for future action that can then be taken forward into the next experience for improved practice and further refinement of learning, and for disseminating the experience and learning so that someone else not in the experience can also understand it.

The DEAL model is adapted for reflection in our travel course, as shown in Figure 4. The reflection time was when students could articulate their feelings and observations, get validated and supported, and find answers to their questions. Besides feeling excited and inspired, some students might also feel hurt and sad when conflicts arose. It is critical for the instructors to create a neutral and empathetic environment to convert every occasion into a learning opportunity. During an interdisciplinary trip, the students could each become an instructor on topics that they knew a lot about and be the student to learn from others. The reflection time was also a time for students to connect the dots between multiple experiences to be able to draw some conclusions.

During the trips to China and Costa Rica, the students and faculty had enough common time together and the reflection was done daily, which was often regarded as the culmination of the day, no matter how exciting the day had been. We emphasized to students that learning is through understanding and extension from the experiences and is not just experiencing.

During the trip to Japan, some hotels were without a big lobby, and the restaurants were typically small that could not serve the whole class, so we often split at mealtimes. The group reflection could not be done as frequently, although the students were encouraged to keep a journal to do a daily reflection. The group reflection was carried out on bullet trains between cities, in the form of oral discussions and journaling.

After the trip, students wrote a detailed reflection with common prompts using the DEAL Model.

CRITERIA	Beginning	Developing	Accomplished	
Grammar/Format: Proper grammar is used consistently throughout the paper. Daily reflection orally and on paper. Each city's reflection is written on paper with a word count of at least 100-200. Final essay's word count is at least 1500-2000.	Sentence structure is limited; sentences need to flow. Needs more nouns and verbs. (10 pts)	Sentence structure is evident; sentences mostly flow. Nouns and verbs make essay informative. (15 pts)	Sentence structure enhances meaning; flows throughout piece. Sophisticated use of nouns and verbs make essay very informative. (20 pts)	
<u>Description</u> of experience: Content is consistent with a reflective paper giving insight into the experience of the student, addresses who, what, where, when, how & why.	Description is inadequate for a reader to fully understand the experience. (10 pts)	The essay is somewhat organized, with a beginning paragraph, middle part, and an ending. (15 pts)	The essay is well organized, with strong and organized beginning, middle, and ending. (20 pts)	
Examination of experience: Content appropriately addresses each of these areas: 1) academic learning, 2) civic learning, 3) personal growth	Description is inadequate for a reader to fully understand the experience. (10 pts)	The essay has adequately examined each of the 3 content areas. (15 pts)	The essay has thoroughly examined each of the 3 content areas. (20 pts)	
Articulated Learning: The intent of the reflection is not only a narrative of an experience, but also conveys the story clearly and concisely to the reader as to depict a clear picture of the experience so that someone not in the experience could understand it.	Description is inadequate for a reader to fully understand the value of the learning experience. (10 pts)	Writing shows clear development of learning, expresses important learning (not just facts), connects learning to the activities that gave rise to it (context). (15 pts)	Writing shows strong development of learning. Expresses important learning (not just facts), connects learning to the activities that gave rise to it (context). Considers how the learning has value both in its situation and in broader terms. (20 pts)	
Pay It Forward: Content contained within the reflection is relevant to future development as a person and engineer and shows evidence that the experience has influenced the thought-processes of the student.	Description is inadequate for a reader to fully understand the holistic value of the experience. (10 pts)	The student adequately considers with relevance and logic the future significance of the experience. (15 pts)	The essay analyzes with depth, breadth, relevance and logic the future significance of the experience. Not just the what, but so what and now what (20 pts)	
		Total Score:	/100 pts	

 $Figure\ 4.\ Reflection\ Rubrics\ in\ an\ Adapted\ DEAL\ Model\ for\ a\ Travel\ Course$

Effect of Interdisciplinary Collaboration

Academically, the students have gained first-hand experiences in automation, sustainability, manufacturing, energy, environment, etc. They have successfully answered questions on how things work and how things differ at a different time and in different countries.

Moreover, culturally, all the students, no matter where they travel, have found valuable experiences that could be taken back to the U.S. and they have consciously chosen to implement some of those changes. The interdisciplinary and holistic learning proved to be more effective than in either discipline alone.

A student who went to Costa Rica said,

"My hope going on this trip, was to gain exposure to things that would have taken large amounts of time, research, and communication to otherwise gain access to. During this trip I found myself asking many times, why can we not do this in the U.S.? Why do I not see these systems in place in my home country?"

Some students who went to Japan said,

"In America, it's all based on the "what can you do for me?" mentality whereas Japan is about "what can we do for each other?" or "how will this reflect on my company?" I would like to take this mentality into account going further in my career when I create new connections, in business as well as life. For example, after I graduate, I would like to create my own practice and invite others in my industry to help me grow. When I meet with the heads of companies who would supply me, I will approach them with the collective mentality that the Japanese company would when they form a connection. However, I would still maintain elements of the more forward approaches that we as Americans use in order to make sure that conversations stay familiar."

"I want to be able to understand the situations people are in better. ... I want to be more understanding when they feel left out or confused because of a language barrier or cultural differences. ... I now know what it is like to be somewhere I have never been and having to "just figure it out" and it is hard. I want to be able to gain that respect and cultural awareness that everything in the world is not like it is within the US. ... Understand and experience the different way people live and to be able to take that knowledge with me to allow for a more diverse and comfortable workplace."

"America is too dirty, and littering is accepted here. I want to be able to have the drive to pick up after other people even if it isn't my own to be able to benefit my town and community to make it look nicer. ... I've already started cleaning up after my fellow interns on race nights when they just throw water bottles down on the ground so I would pick them up. I did this partially because I remembered how clean Japan was and I wanted us to be more like them."

"Many people believe that the Japanese take their shoes off to avoid dragging in dirt and mud, and while that is true to a certain extent, there is actually more to it. It is considered an honor to

be invited into another's home and taking your shoes off is a way of showing respect to the home and the people in it. ... A possible scenario in which I could apply this to my life would be when I'm about to go into a job interview, I take a moment before entering the building to remember that it's an honor to be there and it's important to show respect to my host. Another would be before entering the classroom I stop and remind myself to respect my professor and fellow peers and remember to honor myself and family by putting my best efforts into my schoolwork."

Concluding Thoughts

This paper presented three successful faculty-led travel courses (one to China in 2018 and two to Japan and Costa Rica, respectively, in 2019) that we started from scratch. The earliest efforts started in summer 2015 while we pursued a CIEE (The Council on International Educational Exchange) grant to co-sponsor a trip to Germany in summer 2016. Although the Germany trip did not happen due to slightly less than expected enrollment, that temporary setback motivated us to propose a course for the faculty-led trip during the 2016-2017 academic year. The course is in the world culture category and hence opened the door for interdisciplinary collaboration. The later trips have been fruitful results from interdisciplinary collocations among faculty, staff and students.

The common challenges in establishing and offering a faculty-led travel course are presented in a fishbone (Ishikawa) diagram, and mitigation strategies are to be flexible, patient and collaborative. We offered the faculty-led travel courses, despite all the challenges, because of our firm belief in the benefits of studying abroad through our own experiences and/or witnessing our students transform during the travel.

There are many variables in a faculty-led travel course. The backward course design approach helps one achieve the course goal without being distracted. With the learning outcomes in mind, the students were given the freedom to choose a learning outcome that they would focus on, besides being aware of cultural diversity, and they got to decide the topic and format of their final deliverable. The students demonstrated that they could go beyond their travel experiences and consider the issues on a global scale.

Using the DEAL model (Description, Elaboration, and Articulation of Learning) for student reflection, the students have demonstrated their learning both professionally and culturally. The students reflected on the one thing they could learn from their trip and many of them have already incorporated such practices into their daily lives back in the U.S.

In the future, the authors would like to continue the efforts to offer faculty-led courses, as well as attempting the internationalized curriculum on campus, and doing a service-learning project during a faculty-led travel course.

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