Sustaining a Study Abroad Program at Scale: What Motivates Faculty Members to Engage in Such Programs?

Dr. David B. Knight, Virginia Tech

David Knight is Assistant Professor and Assistant Department Head for Graduate Programs in the Department of Engineering Education at Virginia Tech. He is also Director of International Engagement in Engineering Education and affiliate faculty with the Higher Education Program at Virginia Tech. His research tends to be at the macro-scale, focused on a systems-level perspective of how engineering education can become more effective, efficient, and inclusive.

Dr. Holly M. Matusovich, Virginia Tech

Dr. Matusovich is an Associate Professor in Virginia Tech’s Department of Engineering Education. She has her doctorate in Engineering Education and her strengths include qualitative and mixed methods research study design and implementation. She is/was PI/Co-PI on 10 funded research projects including a CAREER grant. She has won several Virginia Tech awards including a Dean’s Award for Outstanding New Faculty. Her research expertise includes using motivation and related frameworks to study student engagement in learning, recruitment and retention in engineering programs and careers, faculty teaching practices and intersections of motivation and learning strategies.

Ms. Mayra S. Artiles, Virginia Tech

Mayra S. Artiles is a Ph.D. Candidate in Engineering Education at Virginia Tech. She has a B.S. in Mechanical Engineering from the University of Puerto Rico at Mayaguez and a M.S. in Mechanical Engineering from Purdue University with a focus on nanotechnology. Prior to her current position, she worked at Ford Motor Company as an Electrified Vehicles Thermal Engineer. Her research interests are broadening participation in engineering higher education, higher education policy, and academic motivation.

Ms. Kirsten Davis, Virginia Tech

Kirsten Davis is a doctoral candidate in the Department of Engineering Education at Virginia Tech, where she also completed her master’s degree in Higher Education. She is the graduate assistant for the Rising Sophomore Abroad Program, a global engineering course and study abroad program for first year engineering students. Her primary research interests are engineering study abroad, developing intercultural competency in engineering students, and international higher education.

Mr. Timothy Kinoshita, Virginia Tech

Timothy Kinoshita is a Ph.D. candidate in the Department of Engineering Education at Virginia Tech. His research interests include graduate education, global engineering education, and education policy.

Dr. Diana Bairaktarova, Virginia Tech

Diana Bairaktarova is an Assistant Professor in the Department of Engineering Education at Virginia Tech and the Director of the Abilities, Creativity and Ethics in Design [ACE(D)]Lab. Bairaktarova’s ongoing research interest spans from engineering to psychology to learning sciences, as she uncovers how individual performance and professional decisions are influenced by aptitudes and abilities, interest, and manipulation of physical and virtual objects.

Kacie Hodges P.E., Virginia Tech

Kacie Hodges, PE is an Advanced Instructor in the Engineering Education department at Virginia Tech. She holds BS and Master’s degrees in Civil Engineering from Virginia Tech with a focus in Hydrology. Kacie is a licensed Professional Engineer in the State of Virginia and has worked in both the private and public sectors as an engineer prior to joining the faculty at Virginia Tech. She focuses on the teaching and implementation of Freshman Engineering courses.
Prof. Tamara Knott, Virginia Tech

Tamara Knott is Associate Professor of engineering education at Virginia Tech. She is the Course Coordinator for one of the three first-year engineering courses offered by the department and also teaches in the graduate program. Her interests include assessment and pedagogy. Within ASEE, she is a member of the First-year Programs Division, the Women in Engineering Division, the Educational Research and Methods Division, and the Design in Engineering Education Division. She is also a member of the Society of Women Engineers (SWE) and is the Faculty Adviser for SWE at VT.

Dr. Walter C. Lee, Virginia Tech

Dr. Walter Lee is an assistant professor in the Department of Engineering Education and the assistant director for research in the Center for the Enhancement of Engineering Diversity (CEED), both at Virginia Tech. His research interests include co-curricular support, student success and retention, and diversity. Lee received his Ph.D in engineering education from Virginia Tech, his M.S. in industrial & systems engineering from Virginia Tech, and his B.S. in industrial engineering from Clemson University.

Marlena McGlothlin Lester, Virginia Tech

Marlena McGlothlin Lester is the Director of Advising for the Department of Engineering Education at Virginia Tech. She leads the undergraduate advising team and oversees the advising process for all General Engineering students. She is responsible for the development of a hands-on, minds-on orientation model for all first-year engineering students, the creation of a comprehensive engineering major exploration tool, Explore Engineering, and enhancement of the academic planning resources available for first-year engineering students. Marlena strives to transform the advising experience for students and advisors through communication, collaboration, and consistency.

Dr. Lisa D. McNair, Virginia Tech

Lisa D. McNair is a Professor of Engineering Education at Virginia Tech, where she also serves as Director of the Center for Research in SEAD Education at the Institute for Creativity, Arts, and Technology (ICAT). Her research interests include interdisciplinary collaboration, design education, communication studies, identity theory and reflective practice. Projects supported by the National Science Foundation include exploring disciplines as cultures,liberatory maker spaces, and a RED grant to increase pathways in ECE for the professional formation of engineers.

Dr. Kenneth Reid, Virginia Tech

Kenneth Reid is the Assistant Department Head for Undergraduate Programs in Engineering Education at Virginia Tech. He is active in engineering within K-12, serving on the TSA Board of Directors. He and his coauthors were awarded the William Elgin Wickenden award for 2014, recognizing the best paper in the Journal of Engineering Education. He was awarded an IEEE-USA Professional Achievement Award in 2013 for designing the nation’s first BS degree in Engineering Education. He was named NETI Faculty Fellow for 2013-2014, and the Herbert F. Alter Chair of Engineering (Ohio Northern University) in 2010. His research interests include success in first-year engineering, engineering in K-12, introducing entrepreneurship into engineering, and international service and engineering. He has written two texts in Digital Electronics, including the text used by Project Lead the Way.

Dr. Denise Rutledge Simmons P.E., Virginia Tech

Denise R. Simmons, Ph.D., PE, LEED-AP, is an assistant professor in the Myers-Lawson School of Construction and in the Department of Civil & Environmental Engineering, and an affiliate faculty of the Department of Engineering Education at Virginia Tech. She holds a B.S., M.S., and Ph.D. in civil engineering and a graduate certificate in engineering education – all from Clemson University. She has over 10 years of experience working for energy companies and as a project management consultant. Her research contributes to the advancement of labor and personnel issues in engineering broadly and specifically in the
construction industry through two research areas: untangling the complex relationship between activities people become involved in — operationalized as engagement — and the technical and professional outcomes gained — operationalized as competencies. The broader impact of this work lies in achieving and sustaining productive, diverse and inclusive project organizations composed of engaged, competent people. Dr. Simmons’ research is supported by awards from NSF, including a CAREER award. She oversees the Simmons Research Lab (www.denisersimmons.com), which is home to a dynamic, interdisciplinary mix of undergraduate and graduate students and a post-doctoral researcher from various colleges and departments at Virginia Tech who work together to explore engineering and construction human centered issues with an emphasis on understanding difference and disparity.
Key words: Study abroad; Faculty motivation; Faculty engagement

Sustaining a Study Abroad Program at Scale: What Motivates Faculty Members to Engage in Such Programs?

As engineering work continues to become more globalized with multinational teams working on problems in an array of contexts, engineers will need to understand how to work across political and cultural boundaries (e.g., Jamieson and Lohmann 2009; National Academy of Engineering 2004). To prepare undergraduates to enter such an environment, colleges and universities have been seeking ways to expand students’ global competence through experiences at their home institutions as well as abroad (Johri and Jesiek 2014). As Downey et al. (2006) described, these institutional offerings within the undergraduate engineering context typically include international enrollment, international projects, international work placements, international field trips, and integrated class experiences. In this paper, we consider an international field trip, which is a highly structured short-term study abroad program organized by faculty members to provide students with a variety of intentionally selected experiences over the course of a few weeks. Although longer study abroad experiences may have greater impact (Dwyer 2004), well-implemented short-term programs also can increase students’ global competency (Chieffo & Griffiths, 2009; Tarrant, Rubin, and Stoner 2013).

Engineering students engage in few opportunities in which they actually travel abroad (Downey et al., 2006; Parkinson, 2007). Relative to humanities students, engineering undergraduates may enter college less interested in study abroad (Luo and Jamieson-Drake 2015; Niehaus and Inkelas 2016). Students—and their parents—often need to be educated about the value of an international experience for their career and personal development (Parkinson, 2007). Beyond potential gaps in interest, however, engineers face unique challenges to engaging in study abroad experiences. The engineering curriculum tends to be structured and sequential, and being away for an extended period may delay graduation, especially if credits do not transfer back to the home institution as engineering credits. Moreover, extended times abroad often can make it challenging to secure internships or extended co-op experiences, which are also highly valued within engineering (Parkinson, 2007). Thus, a short-term, focused international field trip for engineering students may be one of the few scalable opportunities in which engineering students actually travel abroad because it can fit within semester and internship scheduling pressures.

For such experiences to be possible and of value for students, they need to be planned intentionally and staffed with faculty members. Less studied, although equally important, is the challenge of recruiting faculty members into such programs (Parkinson, 2007), which is what we explore in this paper. We focus on a program that has successfully scaled-up faculty engagement to determine why faculty members chose to participate. This faculty-led, short-term study abroad program targeting first year engineering students has undergone rapid expansion over the past few years. In 2017, the program enrolled 135 students into one of six international tracks that, in total, involved 16 faculty members and graduate student leaders. Our paper meets multiple objectives. First, we describe the program’s structure, which details why we believe we successfully scaled up the program in size. Second, grounded in Eccles’ expectancy-value theory (Eccles, 2005), we describe a pilot analysis that focuses on uncovering the variety of reasons that faculty were motivated to engage in the program, both for their first time and in...
subsequent years. Third, we use our findings to point to a variety of mechanisms and strategies to boost faculty engagement in international experiences with undergraduates as well as enhance and extend this kind of data collection in the future.

**Literature Review and Theoretical Underpinning**

A broad literature focuses on the nature of faculty work and the influences on faculty members’ decision-making. As summarized by Lattuca and Stark (2009), faculty members are key actors in the development and offering of college students’ educational experiences, and understanding forces influencing such actors is essential for understanding the nature of students’ experiences. Forces might include external sources (e.g., accreditation demands and state assessment requirements), internal institutional influences (e.g., promotion and tenure policies or accepted institutional practices), or influences tied more directly to the individual faculty member (e.g., disciplinary background, demographics, or their own beliefs).

Many higher education researchers have compared the relative influence of these forces on faculty members’ decision-making processes. A strong body of evidence indicates that academic discipline is one of the strongest influences on faculty members’ attitudes and behaviors (Braxton & Hargens, 1996; Smart, Feldman, & Ethington, 2000), views of teaching (Stark, 1998), and curriculum (e.g., Dressel & Marcus, 1982; Einarson, 2001). Individuals tend to fall into line with the training, organization, and culture that they have experienced throughout their careers. Within the engineering education context, Knight, Cameron, Hadgraft, and Reidsema (2016) similarly found that individual forces (i.e., characteristics of faculty members as opposed to external or institutional policies) explain the greatest variability in faculty members’ teaching considerations and practices.

Although Blackburn and Lawrence (1995) also emphasize the importance of an individual’s characteristics and beliefs in understanding their faculty work processes, they point to institutional practices as being an important factor to consider as well. They found that faculty members’ decisions to engage in teaching, research, and service are affected “by interest, by self-knowledge concerning their competence and their chances of success, and by the social knowledge they trust with regard to what students, peers, and administrators value and reward” (p. 106). Empirical evidence shows that faculty reward systems have favored research over teaching, even in teaching-oriented colleges and universities (Fairweather, 1996), and as O’Meara, Terosky, and Neumann (2008) concluded, “although reward systems are not the only motivating forces worth considering, they are important shapers of faculty work priorities” (p. 95). Indeed, Parkinson (2007) pointed to promotion and tenure policies as one of the barriers for expanding engineering faculty members’ engagement in study abroad programs.

As we describe in the next section, the program under investigation is structured to alleviate these institutional barriers to faculty engagement by concentrating work time during the first two weeks of summer (directly after the semester ends). This structure prevents faculty members from having to choose between their typical within-semester work expectations and engaging in the international program. What the structure does not do, however, is capture the individual-level driving forces that led faculty members to engage in the program. Thus, to understand that
decision-making process, we selected a framework that considers social and cultural factors but from the perspective of the individual to guide our research.

We use Expectancy Value Theory (EVT) (Eccles, 2005) as a lens to interpret the process through which individual faculty and graduate student leaders decided to engage in the study abroad experience. EVT dictates that a person’s choice to engage in a task is mediated by the value they place on the task and their expectancy of success. This subjective task value, or an individual’s incentive for completing a task (Eccles, 2005), is described in the following four categories: attainment value, utility value, cost value, or interest value. Wigfield and Cambria (2010) describe these categories as follows:

- **Attainment value**: Personal importance of doing well on a task; tasks are important when individuals view them as central to their own sense of self.
- **Utility value**: How a task fits into future plans; a means to an end.
- **Cost value**: The anticipated effort and/or what one must give up to complete the task.
- **Interest value**: Enjoyment gained from doing a task.

Expectancy value theory has been previously used within engineering education research to investigate choices such as student persistence in engineering (Matusovich, Streveler, & Miller, 2010) and faculty engagement in research and teaching practices (Matusovich, Paretti, McNair, & Hixson, 2014). However, we do not believe it has been used to understand faculty motivations to engage in a global engineering program, although it is a framework well-suited to do so. The framework helps us systematically understand why participants were motivated to engage in the program.

**Structure of the Program**

The Rising Sophomore Abroad Program in Virginia Tech’s College of Engineering is geared toward first-year engineering undergraduates that has experienced rapid growth over the past few years (note: for a more complete program description, see Davis & Knight, 2017; Knight, Davis, Kinoshita, Soledad, & Grohs, 2017). The program integrates a 3-credit Spring global engineering course meeting general education requirements with multiple tracks of short-term international experiences that depart immediately following Spring semester exams. Across both the class and international experience, students have opportunities to expand their global competency while learning about differences in political, technological, social, cultural, educational, and environmental systems. Major objectives of the program include helping students recognize the importance of national context when addressing problems, how to navigate multicultural teams, and how to engage in an international professional environment. During the international tracks, students visit engineering firms and universities abroad to see engineering in action in a variety of international environments. Tracks for the 2017 program included UK/Ireland, Italy/Switzerland/Germany, New Zealand/Australia, China, Dominican Republic, and South Africa. During both the preparation tasks as well as post-trip reflective work, students consider their own international track as well as similarities and differences across tracks by learning from their peers. By equipping students with an international lens so early in their curricula, this program aims to lay a foundation for students’ perceptions and activities for the rest of their time in university and beyond.
The program has experienced considerable growth over the past few years, moving from a single international track of 24 students in 2014 to six tracks of 135 students in 2017 to seven tracks of 180 students in 2018. We focus on the 2017 program in this analysis but are continually collecting data with each new cohort. To scale the program up in a sustainable way, all students enroll in the same “umbrella” course but then engage in different international tracks, allowing each individual track to remain a reasonable size (25-30 students). Tracks meet individually one hour per week during the semester, and then travel together for two weeks in May. Rather than having each track as a separate program, using the umbrella format with multiple tracks in the same program helps consolidate administrative processes (e.g., one application process instead of multiple processes for each separate track). This model also enables faculty members to engage in the program without taking on insurmountable amounts of planning and administration time, which other researchers of large faculty-led programs point to as a common task for faculty (e.g., Goode, 2008). By having an overarching program, a single faculty member is responsible for running the Spring class and coordinating the travel logistics for all of the international tracks, with the assistance of interested graduate students. Those tasks comprise a major portion of that faculty member’s teaching load for the year.

Other faculty in the department then volunteer to lead the international tracks but do not have to develop curricula or plan the logistics of the program. In 2017, we had 12 faculty members and 3 graduate student leaders in addition to the overall program leader travel with students. Because the study abroad portion occurs following exams, the faculty members do not have to balance any additional teaching requirements. However, the faculty members still have to agree to engage in the program in a small way during the semester, volunteer for a portion of their Summer vacations, and travel with rising sophomore engineering students for approximately two weeks. Although we cover travel costs, we cannot cover additional salary within the program’s budget, yet we still have fantastic faculty engagement. The next sections of our paper uncover the driving forces motivating their engagement as well as some of the challenges that we continue to try to overcome so we can sustain faculty and graduate student engagement.

**Data and Methods**

The lead faculty member for the program invited all international track leaders from the 2017 program to participate in this study, which included 12 faculty members and 3 doctoral students in engineering education. The faculty members’ appointments included tenured research-and-teaching faculty, tenured teaching-focused faculty, tenure-track research-and-teaching faculty, full-time instructors, and professional academic advisors. The doctoral students were at various stages of degree completion and numbers of years in the doctoral program. Of these 15 individuals, 10 faculty members and all 3 doctoral students decided to engage in the study. Four of these individuals identify as men, and nine identify as women. Data were not collected from the program lead because engaging in the program was a part of that individual’s teaching appointment, and thus the motivations operated differently than for the other individuals. One graduate student was paid part-time as a teaching assistant during the semester, but engaging in the international track was not mandatory as part of that assistantship.

During the Fall semester after returning from the May 2017 program, the program leader sent an open-ended survey to the faculty and graduate student participants. The full list of survey
questions is shown in Table 1, which were written to elicit information mapping onto the subjective task value constructs from expectancy-value theory (Eccles, 2005). Faculty participants received multiple reminders to complete the survey, and all responses were returned by January 2017. Responses to this survey comprise the pilot data analyzed in this paper.

The responses were coded by one member of the research team using a priori and open-coding methods (Miles and Huberman, 1994). In the first pass through the data, the researcher categorized participants’ reasons for engaging with the program into the four broad subjective task value categories. In the second pass, the researcher used open-coding to operationalize these broader categories for the context of this study. Table 2 shows the most common codes and definitions as applied to this dataset.

Table 1. Open-ended survey distributed to faculty and graduate student leaders.

<table>
<thead>
<tr>
<th>Question</th>
<th>Positive factors:</th>
<th>Negative factors:</th>
<th>Other factors:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Thinking back to your choice to commit to being a faculty/graduate student leader for RSAP, what factors (e.g., personal costs and benefits) did you consider at that time?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. Ultimately, what motivated you to decide to engage with RSAP?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. How did the actual RSAP experience compare to your expectations?</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4. When you were making your decision to engage with RSAP, what did you think the role of a faculty leader entailed?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. When you were engaging in RSAP, what did you think the role of being a faculty leader entailed?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. If you participated for multiple years, why did you decide to participate again?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>7. If you participated for multiple years, what were some of the differences in your experiences serving as a faculty leader?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2. A priori and open-codes

<table>
<thead>
<tr>
<th>Construct</th>
<th>Literature Definition (Wigfield and Cambria, 2010)</th>
<th>Operationalized Definition (a priori codes)</th>
<th>Sample Sub-Codes (open-coding)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attainment Value</td>
<td>Personal importance of doing well on a task and tasks are important when individuals view them as central to their own sense of self (associated with identity)</td>
<td>Serving as a faculty leader is consistent with participant’s sense of self (i.e., how they see themselves)</td>
<td>Personally important to provide a specific experience (e.g., service or global travel) for students</td>
</tr>
<tr>
<td>Interest Value</td>
<td>Enjoyment gained from doing a task</td>
<td>Anticipated or perceived enjoyment from serving as a faculty leader for RSAP</td>
<td>Interest in travel itself or specifically traveling with students</td>
</tr>
<tr>
<td>Utility Value</td>
<td>How a task fits into future plans, a means to an end</td>
<td>How serving as a faculty leader fits into or meets future goals</td>
<td>Useful to career/promotion</td>
</tr>
<tr>
<td>Cost Value</td>
<td>The anticipated effort and/or what one must give up to completed the task</td>
<td>The effort it takes to be a faculty leader and what faculty leaders must give up to participate</td>
<td>Negative: Time away from family and friends</td>
</tr>
</tbody>
</table>

Negative: Proximity to the end of the semester

Negative: Uncertainty of “being in charge”

Positive: Low/no cost to participants
Results

Analyzing the data revealed several patterns that we believe can inform the design and implementation of study abroad programs to support faculty engagement. First, utility value and cost value were the two most prominent categories of values. Within these two value categories, many of the costs cited were common across participants, whereas the utility values were more unique and varied. Second, we found attainment value to be limited in the dataset though it seemed highly salient for the individuals when it did appear. Third, interest was the least represented subjective task value. Fourth, we noted one difference between men and women: women were more likely to mention costs related to family concerns. Finally, patterns were similar for graduate students and faculty, so we have combined their data in the reporting of our results.

Cost Value

Recall that cost value is defined as what one must give up to engage in an activity (Wigfield & Cambria, 2010). Consistent with this definition, we found that prior to participating in the program, there were several potential costs that were commonly identified by participants associated with program participation. These included: the timing of the trip (close to the end of the semester), concerns over “being in charge” of student welfare and/or schedules and activities, and for most of the women but few of the men, being away from family. One of the men, however, did acknowledge that not having a spouse or family made his participation easier. Examples of each follows:

“The end of the semester chaos was the largest negative...With the departure only a day or two away I was scrambling to finish.” (male)

“One area that was a concern was being in charge of a group of students for their food restrictions, medications, and potential risk of having an emergency.”
(female)

“Leaving family behind.” (female)

Notably, when asked about how the actual experience matched expectations, few of the negative cost items were mentioned other than generally being pleased that the logistics were all well-handled in advance so there was little need to worry about activities or student welfare. As one faculty member responded:

“The details for flights, reimbursement for expenses, and itinerary were handled completely by the program leader. Flights were booked early with plenty of time to arrange staying out of country at the end of the program. The project’s itinerary was clearly and carefully planned through an in-country tour group. The program leader even worked with the department’s budget staff so that I received an accurate estimate of my reimbursable costs well before departure.” (male)
“I thought it would be more work than it turned out to be. The trips I have taken have been very well organized and easy. I did attend many of the classes prior (and wish more faculty would). I think this is a valuable part of the experience and it makes it easier to connect with the students on the trip. Knowing the students a bit before the trip is helpful, but they do really come out of their shells on the actual trip experience in a way that is very difficult to predict, but fun to watch! I did a lot of just counting and reminding, but the students were amazingly self-sufficient and prepared for the trip and how to handle themselves.” (female)

Atypical to research on cost value which often focuses on negatives, participants noted the low financial cost as a positive factor in their choices. For example, a female faculty member simply stated, “No out of pocket expense” as a positive reason for participating.

**Utility Value**

Utility value, defined as the perceived current or future usefulness of engaging in an activity (Wigfield & Cambria, 2010), was also a common value category among participants in this study. Nearly every participant identified something useful about the program to him or her. Commonly cited examples include having the opportunity to get to know students outside the classroom, visit a place he or she might never visit otherwise, and interact with colleagues outside of the academic setting. For example, participants noted:

“The trip seemed to be a great opportunity to know both students and faculty in a different way through shared experiences.” (male)

“At first it was hard to be around so many students all the time but I really got to know a few of them and appreciated the frank and candid conversations we had. I really got to see how smart and capable undergraduate students are in a way that I don’t see in larger classroom settings. Perhaps it was getting to see them navigate real-life situations rather than problem sets but I was so impressed with the people they are and the plans they have for the future.” (female)

“Meet, interact and learn about the lived experiences of first year students especially as they recently made/were making decisions about which engineering discipline to pursue.” (female)

“Spending two weeks together also helped me establish great relationships with undergraduate students that otherwise I wouldn’t interact or know them as our Department only engages with first-year engineering students . . . I offer peer-learning opportunities for some of the RSAP students I have traveled with in my class [that I teach].” (female)

Other less common examples of utility value included meeting promotion and tenure or degree requirements and learning about global cultures or contexts. When asked how the actual experience lined up, expectations were generally met though a few participants mentioned challenges in interpersonal relationships with colleagues (not students) in addition to the benefits of building relationships with them.
Attainment Value

Attainment value means engaging in an activity because it is personally important (Wigfield & Cambria, 2010). Few people mentioned this, although it seemed highly salient for those who did. The most common example were faculty members who chose to participate in the program because they are a person who travels. The service component of one of the tracks was also important to some participants with one faculty member calling it a “Chance to help make a life-changing difference for students.” As with other categories, the actual experience seemed to match the participants’ initial values. Another example within this category is as follows:

“Global experiences have made a big difference in my own life and career, and I believe that in an ideal world everyone would get the chance to travel and learn about other cultures. I believe that interacting people with different perspectives and seeing the different ways people can approach the same problems is an important part of learning to understand, appreciate, and learn from perspectives different from your own. Given the political climate in our country at the moment, I can think of few things that are more important to be teaching students.” (female)

Interest Value

Interest value is the perceived enjoyment one gets from participating in a task or activity (Wigfield & Cambria, 2010). Within this study’s context, for example, a female faculty member said, “To travel with young people is energizing.” Interest was the least commonly cited motivator for participating in the program, yet many participants reported that they enjoyed the experience afterwards.

“I enjoy traveling to new places and this experience allowed me to opportunity to travel to new countries that I had not visited prior . . . I was extremely excited about the ability to learn about new cultures and gain an appreciation of how others view education, engineering, politics, and economics of other locations.” (female)

“From the trip/travel standpoint, all the motivation was there. I have a lot of interest in global topics and draw value from experiencing those themes firsthand.” (male)

Discussion

Our study yields several important findings. First, despite the many potential costs noted by participants, they chose to be faculty leaders anyway. Second, interest value was not frequently reported as a reason for choosing to participate, yet many people enjoyed the experience. Third, despite structuring the program to fall after semester obligations, some faculty still pointed to institutional forces as being motivating factors (falling within utility value). Finally, we saw a difference between women and men noting a concern relative to being away from home and family.

We think it is remarkable that at the surface, costs would seem high (as every participant mentioned some costs), yet faculty choose to engage anyway. We believe this demonstrates the
importance of having a well-organized program and a solid reputation as such. Although participants expressed the concerns from the outset, they still chose to participate. From a theoretical perspective, cost is the least well-understood of the subjective task values (e.g., Flake, Barron, Hulleman, McCoach, & Welsh, 2015) with regard to how it functions in choices. Our research identifies a unique finding in that we found a positive aspect of cost (i.e., no out of pocket expenses).

We noted that women were more likely than men to mention time away from family as a cost. Note that we cannot say that time away from family did not matter to men, but rather they did not mention it unprompted. If we asked men about family explicitly, they might say it was a factor. We found no research directly about women and international travel related to work, although we know family influences engineering career choices in complex ways (e.g., Winters, Matusovich, & Brunhaver, 2014). As written responses, it is likely that our data are simply not rich enough to explain this difference.

From a practical perspective, we were surprised that interest value was cited least frequently, though from a research perspective, Matusovich, Paretti, McNair and Hixson (2014) similarly found that interest was not commonly noted among faculty as a reason to engage in a particular activity. For our dataset, we can think of two possible explanations. First, it may just seem so obvious to participants that such an experience will be fun that they did not feel compelled to list it explicitly as a motivating factor. Second, other values might truly be more salient for participants so they do not mention interest. Similar findings have been found in other studies using EVT. For example, Matusovich et al (2010) found that attainment value was most important in students’ choices to pursue engineering degrees.

Despite our efforts to move the program outside of participating faculty members’ normal semester work schedule and reduce internal institutional influences on their decision-making (Lattuca & Stark, 2009), some participants still pointed to utility values tied to those internal influences, such as opportunities to interact with students and colleagues outside of the classroom. One might presume that going into summer when many students and faculty are not around campus would be preferred; connections to these groups might not be top priority at that time of year. However, this finding supports assertions by Blackburn and Lawrence (1995) that institutional influences still must be considered when understanding faculty decision-making. We were surprised to see that, in contrast to findings by Parkinson (2007), that faculty members suggested that engaging in the program could be beneficial for promotion and tenure positioning for faculty (and synonymously meeting degree requirements for graduate students). It is possible that this education-focused department values different kinds of faculty and graduate student activities relative to other departments. Moreover, the institution does have a section on international activities on dossiers and faculty members’ annual work reporting, so perhaps such mechanisms may actually work to influence faculty decision-making.

**Limitations, Recommendations and Future Work**

Through our data analysis and reporting, we have identified several limitations. We do not believe they diminish the findings of this pilot work but should be recognized as we continue to evolve our own data collection. First, our interview protocol was reflective. We collected data
after the travel experiences only and asked faculty to recall their thoughts before participating in
the program. It is likely that the responses were impacted by the experience despite our
instructions. In the future, we would use a true pre- and post- design. Second, our analysis was
emergent in that we did not ask about specific factors nor was there a chance to seek
clarification. For example, one man wrote “time away” as a cost. It is possible that he meant
time away from family or time away from work, but without follow-up we cannot know. To
combat this, a future study will employ a focus group so that we may follow-up on the collective
analysis of individual responses.

This research yields several important recommendations for recruiting faculty to engage in
international experiences with students. First, it is important to clearly communicate the degree
to which logistics are handled. In this case, they were well-handled so initial concerns were
alleviated. Where possible, global program leaders should address the costs that were identified
in this study head-on while recruiting faculty members. Second, consider timing of the trip. In
this case, the trip was intentionally at the end of the semester to prevent faculty from having to
choose between serving as a faculty leader and the normal work duties of the semester.
However, being so close to the end of the semester was a considerable cost for many participants
as it added stress to wrapping up final academic year tasks. It could be important to identify an
ideal gap between the semester and when the trip happens. Third, when marketing faculty leader
opportunities, recognize that faculty members may experience various levels of utility and
attainment value and make a variety of appeals. Tell faculty about benefits to students and about
potential personal benefits to them, such as the chance to get to know other faculty outside of the
classroom or departmental context. At the same time, faculty may need help managing the
interpersonal relationships between faculty and with graduate students. Opportunities to
socialize and engage with each other and students could be important prior to the trip departure.
At the very least, holding pre-departure meetings with participating faculty for each track during
which they can set their own expectations for how they may handle in-country logistics or
decision-making could mitigate some of the issues leading to conflict. We often focus on setting
up a common understanding of ground rules with students on these programs, but similar
conversations should happen among faculty leaders. Moreover, while faculty often think such
study abroad opportunities may not be valued in promotion and tenure decisions, especially for
tenure-track faculty at research institutions, helping them understand how to talk about the
experience in dossiers may be an effective recruitment strategy (i.e., in terms of student
interaction while not taking time away from research activities).

In conclusion, we point to this study abroad program as an example of an international field trip
that has successfully scaled up in terms of both student numbers as well as faculty and graduate
student numbers in a short period of time. With the program already surpassing prior projections
of the percentage of engineers likely to study abroad made by Downey et al. (2006) and
overcoming common barriers cited by Parkinson (2007), we believe our program serves as a
model from which we can continue to learn. We certainly do not claim to have all of the answers
for how to structure such programs, but we plan to continue to collect data from both students
and faculty members so we can continuously improve and so we can better understand how to
sustain the program size into the future while ensuring an enriching educational experience for
students and faculty leaders alike.
References


