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Introduction

As global connectedness continues to expand, engineers will increasingly need to collaborate with colleagues and stakeholders from all over the world (Johri and Jesiek, 2014). As argued by Jesiek, Zhu, et al. (2014), engineers will benefit from global engineering competency, a set of skills that includes cultural sensitivity, intercultural communication, and consideration of contextual differences, to be successful in a global workforce. To help students develop such competencies, undergraduate engineering programs have offered experiences in a variety of different formats, including international enrollment, international projects, international work placements, international field trips, and integrated class experiences (Downey et al., 2006). As argued by Knight, Davis, Kinoshita, Twyman, and Ogilvie, (2019), intentionally designed, short-term, faculty-led study abroad experiences are becoming more popular and have the potential to expand the number of engineering students who have international experiences. Indeed, well-implemented short-term programs have been shown to increase students' global competency (Chieffo and Griffiths, 2009; Tarrant, Rubin, and Stoner 2013).

For such experiences to meet intended objectives, however, they need to be planned with intentionally designed program elements with actively involved program leaders. Program leaders accompany students during short-term study abroad programs and hold critical responsibilities: for example, they serve as authority figures and educators, and they troubleshoot logistical difficulties. Despite their importance, little research has focused on program leaders (e.g., Knight et al., 2018; Parkinson, 2007). Some of the few prior studies have considered the varied roles played by study abroad program leaders (e.g., Niehaus, Reading, Nelson, Wegener, and Arthur, 2018), and others have explored what program leaders learned through leading study abroad programs (e.g., Ellinghaus, Spinks, Moore, Hetherington, and Atherton, 2019). One of the few studies touching on this topic within an engineering context, conducted by Knight et al. (2018), sought to understand the factors that motivated faculty members to engage in a short-term program, and recommendations from that prior research focused mainly on the ways in which faculty members could be recruited as program leaders. That prior work also pointed to a need to understand misalignment between leaders' expectations and experiences, which ties into our current work.

The purpose of our study is to unpack engineering study abroad program leaders' (i.e., faculty members and graduate student leaders) perceptions of their

roles throughout a two-week study abroad program. More specifically, we address the following research questions:

RQ1: How did track leaders perceive their roles going into the program?

RQ2: How did track leaders' actual experiences align with those expectations?

Understanding how expectations and experiences are out of alignment could inform onboarding leaders for future short-term study so that the experience is enhanced for all participants, including both program leaders and students.

Data for this study are drawn from two rounds of data collection from the program leaders affiliated with an international engineering program for first-year engineering students (subsequently described). In the first round of data collection, we analyzed nine reflective journals from program leaders. We used insights from this analysis to develop an interview protocol with more targeted questions around program leaders' expectations and experiences. Interviews with ten program leaders provided more nuanced data related to the research questions. Our results inform the development of a guide that may be useful for facilitating leader-leader and student-leader conversations before and during a study abroad program so that expectations and experiences may become more closely aligned.

Relevant Literature

Study abroad programs disrupt traditional learning environments intentionally. Although there is a growing body of literature describing how programs can help students make this transition, there has been much less examination of how teachers transition into this different environment. The learning environments consist of informal interactions among teacher teams and between faculty members and students because of the increased amount of time in which they interact. Although informal interactions with faculty members have been shown to influence student learning positively (Komarraju, Musulkin, and Bhattacharya, 2010), these different learning environments oppose what both students and teachers have experienced structurally on campus with respect to power differentials. The different learning environments of study abroad also can change relationships among teacher teams, which can disrupt typical hierarchies across faculty ranks and graduate students, much like the co-teaching literature has shown (e.g., Morelock et al., 2017).

Prior research on faculty in study abroad programs is limited and often focuses on how faculty behaviors are related to student learning and experiences. For example, Niehaus et al. (2018) identified four types of cultural mentoring that faculty practiced while abroad: helping students set expectations, explaining the host culture, helping students explore themselves, and facilitating connections between study abroad experiences and prior knowledge and experiences. From the student perspective, Johnstone et al. (2020) found that some program leaders

were engaged in these types of behaviors, as well as mediating difficult conversations and managing group dynamics. On the other hand, some program leaders were described as "absent," choosing not to engage with students in these types of interactions. Similarly, Goode (2007) found that study abroad program leaders mostly discussed their roles in terms of responding to student needs and managing logistics with less emphasis on academic and intercultural learning. All of these studies suggest the significant role that faculty can play in a study abroad program, but also call for more intentional preparation of program leaders to be successful within this unusual teaching environment.

Fewer studies have explored learning outcomes for faculty leading study abroad programs or traveling abroad generally. There is some evidence that traveling abroad is a key predictor for faculty who will develop international research collaborations, suggesting that encouraging faculty to go abroad can benefit them professionally (Finkelstein et al., 2013). Similarly, a longitudinal study of a faculty study abroad program suggested that participants were most influenced to adjust their teaching strategies as a result of the experience (Dooley and Rouse, 2009). This result is mirrored in other studies of faculty leading short-term study abroad programs for students (Davis and Knight, 2020; Ellinghaus et al., 2019; Loebick, 2017). However, there is a conspicuous lack of studies focusing on the experiences of faculty leading study abroad programs to understand how their experiences align with expectations and how these experiences can lead to their learning and development as individuals, researchers, and educators.

Conceptual Framework

As a starting point to understand the transition experiences of a teaching team, we focus on comparing their expectations versus their experiences leading a short-term study abroad program. This notion of focusing on the gap between expectations and perceptions stems from the management literature. As Parasuraman, Zeithaml, and Berry (1985) note in their work developing a conceptual model of service quality, "The quality that a consumer perceives in a service is a function of the magnitude and direction of the gap between expected service and perceived service" (p. 46). In other words, the perceived quality of one's experience is related to their expectation of the experience. Applying that idea to the context of our study and to teaching teams, the quality that study abroad leaders, especially new leaders, perceive in a program may relate to the magnitude and direction of the gap between expected experiences and perceived experiences.

This conceptual framing of a gap analysis has been used in a variety of higher education contexts. For example, it has been used to explore perceptions of students and staff of university services to identify areas in need of focus

(Legčević, 2009; Yooyen, Pirani, and Mujtaba, 2011). Similarly, LaBay and Comm (2003) used gap analysis to explore differences between students' expectations and perceptions of distance learning and in-person course delivery, and Oliver and Moore (2008) focused on gaps among faculty members related to web-based tools. Extending that prior work more broadly to other student experiences during students' first academic year, including social engagement, academic engagement, and seeking academic support, Pather and Dorasamy (2018) suggested that a gap between expectations and perceptions during students' first year in postsecondary education could lead to poor performance and withdrawal from the institution. Awang and Ismail (2010) similarly explored gaps between students' perceptions and their experiences from the perspective of student retention. This gap analysis framing has also been used to explore faculty members' beliefs and experiences in professional development contexts, such as mentoring programs (Bruner, Dunbar, Higgins, and Martyn, 2016). Thus, the conceptual framing and approach has a wide variety of applications within higher education contexts, including those focused on faculty and students with the aims of enhancing satisfaction, retention, and professional development.

We apply this framework within the context of teachers in study abroad programs. As we noted at the outset, because study abroad programs represent unique educational environments that disrupt educational norms on traditional campuses, viewing this transition for teachers from the perspective of a gap analysis could pinpoint to specific ideas for closing gaps between expectations and experiences. The theory would suggest that doing so could enhance their perceptions of the quality of study abroad experiences, which should have a follow-on effect on students' experiences as well. In a study abroad program geared toward engineering students spanning just two weeks, the intentional design of all of its aspects are critical (Davis, 2020). As such, we use gap analysis as a continuous improvement practice to identify potential gaps to enhance the quality of the program for students and teachers.

Although prior research has focused on the initial motivations that drew teachers to leadership roles on this specific study abroad program (Knight et al., 2018), this new research targets leaders' expectations and experiences of the program. In years past, program leaders highlighted issues in dealing with the uncertainty of leading and teaching abroad in their post-program debriefs. Because engaging in study abroad programs is often done on a voluntary basis, understanding and reducing these gaps between expectations and experiences is critical for retaining faculty in study abroad programs so that they are more likely to remain engaged for multiple years.

Program Context

Our study focused on study abroad track leaders within a global engineering program known as the Rising Sophomore Abroad Program (RSAP). A thorough description of the program structure, educational goals, and assessment mechanisms can be found in Knight et al., (2019); we cover the relevant information here. RSAP combines a 15-week semester course entitled *Global STEM Practice: Leadership and Culture* with a two-week international module immediately following final exams. The course, which meets a general education curricular requirement, has three primary objectives: 1) help students recognize how and why context matters for the kinds of problems addressed by engineers, ways in which engineering takes place, and the viability of different kinds of solutions; 2) help students identify strategies for navigating and succeeding within multicultural environments; 3) prepare students for engaging in a professional international environment. All students in RSAP complete the same coursework during the semester. They are divided into smaller tracks (20-40 students) for the concurrent two-week international modules. These modules include visits to universities, engineering companies, and cultural sites as well as intentionally scheduled free time for students to explore the international environment in smaller groups.

Our study considered the experiences of program leaders during the 2018 version of RSAP. In 2018, 180 undergraduates participated on RSAP tracks including to Australia, China, Ecuador/Peru/Chile, Italy/Switzerland/Germany, South Africa, New Zealand, and the United Kingdom/Ireland. One faculty member was responsible for teaching the course as well as all administrative aspects of the program (e.g., recruitment, application processing, liaising with university offices, scholarship disbursement), including working with third-party providers to make logistical arrangements for each international track. During the international modules, each track was accompanied by two to four leaders from the home institution. In 2018, these leaders included graduate students and several kinds of faculty: tenure-track, professors of practice (teaching-focused instructors with industry experience), and academic advisors (administrative faculty who advise first-year engineering students). These track leaders participated on a voluntary basis. Their travel expenses were covered by the program, but they were not otherwise compensated for their roles.

The responsibilities of the track leaders vary between the domestic and international modules. During the domestic component, the graduate students coordinate weekly semester recitation sections that are split by their regional destination track. Many faculty choose to engage during those sessions to build a rapport with students prior to travel. During the international portion of the program, the track leader team is responsible for activities such as monitoring logistics as the group moves between activities, facilitating educational conversations with students, communicating with students about their reflective

assignments, and taking disciplinary actions as necessary. On most of the international tracks, an in-country guide provided by a third-party provider is responsible for day-to-day logistics. Track leaders are responsible for coordinating with the in-country guide and ensuring that the program proceeds in accordance to expectations.

Data and Methods

This project combines data from two streams: program leaders' journals and interviews with program leaders. The journals were written during the study abroad program, and the interviews occurred after return to the United States, providing two perspectives in time on the leaders' experiences. We began our study by seeking to understand program leaders' perceptions of their roles in the study abroad program and the themes identified in the data led to our subsequent analysis looking for alignment between expectations and experiences. These modes are only two ways of collecting information from participants that allow us to address these research questions, but, as we discuss in our Limitations and Implications sections, there are other approaches through which data could have been collected in similar ways and may have revealed different kinds of information. However, these modes were ways to collect data while working within constraints of the program and participants' available time.

Data Stream 1: Program Leaders' Journals

Based on our research questions and our prior experiences with RSAP, we prepared reflection prompts for the track leaders focused on their expected roles, goals, perceptions of students, and overall experiences on the program. Track leaders answered these questions during their time abroad. We suggested that they answer some prompts at the beginning, middle, and end of the travel period. This limited the risk of hindsight bias for their expectations, and ensured we received a broad perspective on their experiences.

Out of the twenty leaders of the seven tracks, nine of the leaders from four of the tracks consented to participate by sharing their journals (following IRB-approved protocols). Six of those nine leaders became authors on this paper. The nine journals ranged in length from two to twelve pages, with a median of five. Most of the journals included entries at the beginning (usually on the plane), at one or more midpoints, and at the end. All but the shortest journal had entries from the beginning and the end of the program, while the shortest journal contained a single end-of-program entry.

Three of the authors employed an iterative inductive analysis of the nine travel journals (Merriam, 1998). These coders began by open coding the journals to identify initial descriptive categories and then conducted a second cycle of coding to cluster across themes (Miles, Huberman, and Saldana, 2014). To

generate the second cycle, the three coders discussed and grouped first cycle codes into a unified codebook, which was refined further by the entire author team. The participants' journals reflected a wide variety of journaling practices, so this unified codebook contained many codes and higher-order themes (75 unique codes within 13 themes). In the next stage, two members of the coding team re-coded the journals to refine the characteristics of each category and focus on codes related to the research questions.

Data Stream 2: Interviews with Program Leaders

Seven months after the program, we sent an invitation to all program leaders to participate in 30-minute interviews about their RSAP experiences. Ten out of the twenty program leaders volunteered, five of whom had also completed journals as part of Data Stream 1. Leaders were interviewed on topics ranging from their roles while traveling to what they taught in their recitation sections. Although we considered the entire interview in this study, most of the data relevant to our research questions were responses to the following interview questions:

- *What were your expectations going into the RSAP trip?[1] What were you concerned about? What were you excited about?*
- *What were the interactions between students and track leaders like on your RSAP program?*
- *How would you describe your role while traveling? Was this what you expected? What roles did the other track leaders have?*

The interviews were conducted by one author on the paper. Three of the other authors were participants. The interview participants included both graduate students (n=6) and faculty members (n=4). The interviews were coded by all five authors through two rounds of coding. In the first round, we used the themes from Data Stream 1 to code for related comments in the interview transcripts. In the second round, we identified categories within each theme, both confirming categories from Data Stream 1 and identifying new categories.

Limitations

The track leaders who participated in our study might bias our analysis in several ways. First, RSAP track leaders volunteer to participate in the program and may do so for a variety of personal or professional motives (Knight et al., 2018). Next, some track leaders may have had pre-existing relationships with their co-leaders that may have influenced their experiences. Additionally, not all track leaders completed a travel journal and/or consented to participate in the study. Further, not all participants' thoughts may have been committed to paper;

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[1] The term, trip, was used in the interview questions and by study participants to refer to the study abroad program and has been kept in italics or quotes throughout the text.

at least one participant redacted their journal before sharing it. Lastly, although we asked participants to write about their expectations in their journal on the first day of the program, it is possible that they may have completed their journal later during or after the program and thus their experiences could have influenced what they remembered about their expectations. This limitation also applies to the interview data, where participants were asked to report their expectations long after having completed the program.

Author Positionality

As authors, we acknowledge our own roles as the designers and interpreters of the research. Specifically, our own subjectivities and experiences have implicitly and explicitly shaped this line of research, which must be reflected upon and interrogated in this study (Luttrell, 2010). Primarily, we hold dual roles as researchers and participants in this study. Each of the authors was a track leader on the RSAP program. Our journal and interview data were collected and analyzed in this study, along with data from other track leaders. We acknowledge that our dual roles as participants and authors influence our analysis (e.g., towards identifying outcomes that mirror our own experiences). However, this overlap also enriched the coding process because we were able to better interpret the relevant journal and interview data.

As the RSAP program is made up of volunteer track leaders, clearly each of the authors has a special interest in cross-cultural education. Two of our authors have international backgrounds, one with Turkish nationality and the other with Venezuelan. The other three authors are from the United States and have lived or traveled extensively abroad. The authors all support the value of study abroad learning experiences that are rooted in their own experiences. Lastly, each of the authors has experience in teaching undergraduate engineering students in physical classroom settings. These experiences gave rise to the attention given to informal learning environments or learning outside of a physical classroom. Over the course of the research design and analysis, we continued to reflect on our positionality as participants, teachers, and researchers to promote trustworthiness of the study (Walther, Sochacka, and Kellam, 2013).

Findings and Discussion

We organize results into three prominent themes that summarize our analyses of the two data streams: 1) *Track Leader Roles*, 2) *Interactions within the Program*, and 3) *Track Leader Personal and Professional Development*. In the following subsections, we highlight track leaders' descriptions of their expectations for the program as well as their experiences in the program and also discuss the gaps between expectations and experiences against the broader literature, using the notion of gap analysis as our conceptual framing

(Parasuraman, Zeithaml, and Berry, 1985). We denote participants indicating the data stream, the participant identifier, and the role (e.g., DS1-P2-Student indicates a quote from Data Stream 1, Participant 2, who is a graduate student). Figure 1 provides an overview of the findings by visually showing the four themes and how track leader experiences differed from their expectations in each theme.

Figure 1. Findings Visual Draft 1

Theme	Expectations	Experiences	Gaps
Roles	Traditional educator	Supporting student reflection	Unusual context
	Mediator Disciplinarian	Rare	
	Not expected	Co-managing logistics	Track leaders and trip guides share responsibility
Interactions within the Program	Relationships with leaders	Good working relationships	Trip demands
	Relationships with students	Meaningful interactions, but harder than expected	+ Comfort with informality − Age, personality, power
Personal and Professional Development	Learning about students	Pedagogical insights Encountering engineering practice Seeing alternate curricula	Richer experience than expected

1. Track Leader Roles

In the theme *track leader roles*, track leaders discussed the types of activities they anticipated engaging in during the program and compared those to their actual experiences. This theme reveals some of the strongest contrasts between track leaders' expectations and actual experiences.

Expectations for Track Leader Roles

The track leaders' most common expectation for their roles during their study abroad program was that they would act as educators, but the particular type of educational activities they anticipated engaging in varied across track leaders. A professor of practice expected to "answer students' questions as they arise" [DS1-P8-Faculty], whereas an advisor likened their expected role to "advising: holding the tool box, but letting the students use the tools" [DS1-P1-Advisor]. One graduate student expected to help "students tie what [they] hear to the course objectives" [DS1-P5-Student], and another looked forward to "being that bridge between what we were seeing and doing, like the engineering aspects, kind of helping them see what that was going to look like in their careers" [DS2-P9-Student]. The expected educational activities of track leaders were often tied to their institutional roles (i.e., varying for professional academic advisors, graduate students, and instructors).

Some track leaders anticipated additional roles beyond serving as an educator. For example, one graduate student felt that their age and student status might lead them to serve as a mediator between the students and faculty, saying:

> "I saw one of the roles as mediator between the students and the faculty and staff, because I thought I'm closer in age, and I work with them most closely in the course. And so I thought I knew them a little bit more and would be able to mediate any issues that might arise like alcohol or whatever, and nip those before they escalated." [DS2-P7-Student]

Other track leaders also mentioned anticipating roles such as being a better facilitator and helping students connect with each other. For facilitating connections, one faculty member stated "I probably should be actually paying attention to group dynamics. I can make sure that people are not being left alone" [DS2-P8-Faculty]. Similarly, another faculty member mentioned that before leaving they were "just wondering how the group would mesh together. So, that was the biggest unknown" [DS2-P5-Faculty]. Overall, track leaders anticipated that their roles would be facilitating students' experiences both with the educational content and with each other. Generally, track leaders also expected that these roles would be distributed across the multiple track leaders on each track, as described by one faculty member saying, "I went in assuming that kind of lack of hierarchy, I don't know that I was ever explicit with [track leader] ahead of time that that's just how I would approach things" [DS2-P5-Faculty].

In addition to the expectations above, many of the leaders also expressed concerns about what might go wrong while they were abroad. In particular, several track leaders discussed worries regarding unsafe situations or emergencies that they would have to mediate. For example, one leader noted that they were "nervous that there would be some kind of extreme emergency" [DS2-P2-Student] and another described other worries regarding students:

> "I was worried that they would [...] Especially in some of the places we were going, the security isn't quite the same as the United States. They're 18 and 19 years old for the most part and a lot of them just have no clue […] We learned pretty quickly and suspected pretty quickly they have no city sense at all. [...] That was something that worried me. I worried that they would lose their passports and we would have to go visit the embassy as a non-scheduled trip visit" [DS2-P1-Faculty].

It is worth noting that these types of expectations tended to be expressed by track leaders who had not traveled with students before and may have been influenced by hearing about such experiences in their study abroad program leader training.

Experiences with Track Leader Roles

In reflecting on their roles during the program, track leaders discussed a variety of roles that expanded beyond those they had anticipated before the program, including managing logistics, supporting student reflection, working through unanticipated challenges, and managing emergency situations. The two roles discussed most frequently were managing logistics and facilitating student reflection.

Managing Logistics. One unanticipated role that many track leaders experienced while traveling was the need to take care of different logistical tasks to support the program running smoothly. Several leaders described "working with [travel guides] to clarify what we were doing at any time" [DS1-P8-Faculty] and complained of being "too preoccupied with trip logistics" [DS1-P7-Faculty] to engage with the scheduled program activities. Several track leaders spent a lot more time on program logistics than they expected. Although the tracks were planned in advance and most tracks were accompanied by a travel guide, "the best laid (travel) plans go oft awry" [DS1-P3-Student] and required track leader engagement. For example, one track leader described how having a guide necessitated a conversation with the track leaders on guidance:

> "One of the problems that we had was that the guide kept trying to do things for them [the students] and we had to stop him like four or five times . . . We had to have the conversation like it's part of the class for them to do it on their own. And so, for some of them they got [their free time] facilitated. And so, we think of it as like okay, you guys cheated a little bit" [DS2-P7-Faculty].

Track leaders viewed these pop-up logistics duties as necessary to the success of the program, a responsibility to ensure that students experienced the short-term program to its fullest potential. These duties proved more disruptive for some leaders than others. As one of the leaders noted, "I felt like the students actually had a little more opportunity than the leaders to really look around them and see what was going on. I felt like I was distracted by them the whole time. I wasn't really paying attention to all the cultural differences and the richness of where we were....I was more like okay, make sure that there's twenty-two of them here" [DS2-P1-Faculty]. Different tracks distributed their on-the-ground logistics duties differently. In some cases, one track leader became the primary logistics person: "I think my role became the logistics person, that was my thing, to keep everything moving" [DS2-P7-Student]. On other tracks, leaders chose to distribute such responsibilities more evenly, as described by another graduate student:

"We were all facilitating [...] there were a couple of occasions where [...] [track leader #1] had some other activities that he had to engage in on engineering education. And then the student came out with the allergy. And so, I had to go and take care of that. So, [track leader #2] became the facilitator for everybody else at that point in time. And so, our roles did shift depending on location and what was going on" [DS2-P6-Student].

Supporting Student Reflection. After the program, track leaders emphasized that a main role they played was to facilitate student reflection. One track leader described the role this way:

"There was a lot of reflecting after the [site] visits, not always on engineering but also on art, cultural differences, how language is more than words, and a whole host of other topics that surfaced naturally that we got to unpack together" [DS1-P2-Student].

Several track leaders described how a particular visit or experience led to meaningful conversations with students. For example, one graduate student mentioned that a visit to a local university "did spark some interesting conversations with students…[they] hadn't considered that there could be alternative approaches [to curricula and pedagogy]" [DS1-P4-Student]. Similarly, another graduate student described using a frustrating experience to discuss cultural differences, saying:

"Our tour was supposed to be at 10:00 AM with him, but we didn't get there until 11:00. He ended up talking to us, it was supposed to be an hour trip, but till 2:00 PM. And the students were getting so cranky. [...] The staff member and I were trying to mitigate that and not let this leader who was giving so much of his time, see that the students were really grumpy about it. And so when we got back on the bus, we had this really great conversation linking back to Hofstede's Dimensions of Culture. Talked about this element of time and we sort of posed questions like, 'What do you gather about time in [country]?'" [DS2-P7-Student].

In addition to discussing culture, several of the track leaders also found that they were able to bring their own educational and engineering expertise to conversations with students. One faculty member discussed how:

"I think the varied expertise of the people, like the adults in the group [...] I think because our group, everyone was interested in something different, my guess would be the conversations we're having with students are going to be influenced by that. [...] So when we're going to visit companies, if

one of the leaders actually understands the context they're going to ask different questions or they're going to talk to students about different things afterwards" [DS2-P8-Faculty].

This line of thinking was echoed by one of the graduate students who stated

"Somehow I remembered a lot of engineering things, which was nice because we went to a water plant and a concrete plant, and I'm like, 'Oh, I learned this in chemical engineering class.' So, it was kind of nice to be like, 'Oh, I sort of know what I'm talking about when I explain this.' And I wasn't expecting that but I was kind of cautious that I might have to do that but then I was relieved that it was fine and interesting to me to be able to do that" [DS2-P9-Student].

Challenges in Leadership. Track leaders also reported some challenging leadership situations that they had not anticipated. For example, one track leader reported trying to adjust activities in the moment when a university visit did not go as planned, saying:

"The 'tour' here was just one graduate student walking us around campus and labs and providing no information. On the fly, [co-leader] and I decided to give students time to wander around [the campus] on their own and grab lunch at the food court or get souvenirs from the bookstore. This made it seem like a little more substantial of a visit" [DS1-P4-Student].

On another track, the track leaders expressed concerns about their tour guide and having to decide how to respond when they were uncomfortable with the guide's behavior. One said:

"For example, the bus driver in [country] was sleeping on the bus. It was unclear whether that was his choice or because he wasn't getting paid or because our guide wasn't paying him in time or how all that was working. We did end up paying for his dinner a couple times because we weren't sure if he was eating. It was like, that was a role that I totally didn't expect to be playing on the trip" [DS2-P1-Faculty].

In other cases, track leaders discussed needing to address situations where students were not being included in the group. One track leader described a situation where:

"I think all the students identified one student as a very strange person. [...] it's not like they didn't like this person. They just didn't understand

him. And so, it was hard for them to hang out with him, and it was hard for him to hang out with them. He often ended up on his own or a bit isolated as a result" [DS2-P4-Student].

In each of these examples, track leaders were required to make leadership decisions as challenging situations arose on their track.

Emergency Situations. Most track leaders did not experience emergency situations during their time abroad. A few track leaders reported dealing with medical situations; for example, one track leader described their role as, "A good chunk of it was health stuff. So, I had an allergy or 'I'm not sure if I can eat this'" [DS2-P6-Student]. Others discussed a few cases where discipline was necessary, although typically less than the track leaders had anticipated:

"I had also expected to be doing a little bit more disciplinary action. Thankfully, there was only one incident that involved anything of that form. There was less of that required than I expected from some of the [...] horror stories I'd heard" [DS2-P4-Student].

Only one track leader reported dealing with an emergency situation and surprising themself at how they were able to handle it, saying:

"We had an emergency situation where there was a student rushed in an ambulance. I think in that moment I learned I can be [...] I'm normally really squeamish about things, and I was the one who was there trying to do the EpiPen, because no one else was comfortable with it. Those things surprised me about myself, I would say, too. Being able to keep a level head, as you know, I tend to be a little high energy, high emotion, I would say, but be pretty logical in those moments" [DS2-P7-Student].

Largely, track leaders noted how their roles changed over the duration of the abroad program. One leader described juggling a traditional educational role with the roles of "[tour] guide, university representative, negotiator, parent, and counselor" [DS1-P6-Faculty]. A different leader described her role(s) in this manner:

"My role has morphed...I am the 'student well-being coordinator', the 'informer,' the 'troubleshooter,' the 'positive listener,' and while also the 'story-teller,' and sometimes the 'behavioural management specialist'" [DS1-P1-Advisor].

Overall, track leaders found that they had a wide array of roles over the course of the study abroad program, which included not only educating students but also providing logistical oversight of the program activities. The roles described by the track leaders were far more varied and shifted more than they anticipated going into the program.

Gaps Identified in Track Leader Roles

In comparing track leaders' expectations and experiences of their roles during the international module, there were clear points of misalignment. Sometimes leaders simply did not anticipate certain roles. Other misalignments were because roles took unexpected forms in the study abroad context.

Few of the track leaders anticipated logistics as a central part of their role, but several found it to be a significant aspect of what they did on the program. This misalignment is likely because most of the tracks traveled with a guide whom track leaders expected to handle all of the logistics. For some track leaders, this disconnect led to frustration because the logistics tasks limited their ability to engage in program activities and interact with students as they had hoped. Perhaps because the logistics tasks were less anticipated, they sometimes resulted in unequal distribution within track leader teams.

Beyond managing logistics, track leaders also discussed their role in student learning as being different than what they had expected. Their expectations of filling an educator role (relating to "tying experiences to student learning outcomes" or "answering student questions") seem reminiscent of their experiences in traditional classrooms. However, their experiences focused more on facilitating reflection and responding to events in the moment to create a learning environment wherever they were. In this sense, the role of "educator" shifted and was deconstructed -- from helping students learn, to first learning about the students and context before helping them through their learning process. Track leaders helped students reflect on their experiences and also used reflection themselves to help students better reflect and engage in rich discussions.

In these experiences, faculty members take on the role of learners in which they engage in a collaborative learning experience alongside the students rather than being an authority on student learning (King and Kitchener, 2004). Without the "contexts of power" of a university structure that prescribes institutional roles, teacher experiences can be based more on the experiences of the study abroad program (Trilokekar and Kukar, 2011, p. 1149). In this different setting of study abroad, faculty members may be quicker to adopt a stance of facilitator or organizer rather than an expert or source of knowledge (King and Kitchener, 2004). These changes require faculty members to relinquish some control over how and what students learn, which can be daunting especially for novice teachers (Ozkan,

McNair, and Bairaktarova, 2019) or for teachers who have spent their careers teaching in a different mode.

In a learning environment based on emergent situational experiences, the track leaders expressed how they and the students were able to reflect collectively to deconstruct their experiences together. On study abroad, when track leaders and students openly engage in a learning process that is interrelated, the institutionally imposed power differences familiar in formal educational environments are reduced. Addressing this shift in structure explicitly with leaders prior to a study abroad experience could help bring expectations and experiences into greater alignment.

2. *Interactions within the Program*

The second theme in both the journals and interviews was that of leader interactions with students and fellow track leaders. Much like the roles, interactions were an area where track leaders experienced gaps between their expectations and experiences while traveling.

Expectations for Interactions within the Program

Track leaders had expectations for interactions with both students and other track leaders going into the program. Several track leaders looked forward to developing relationships with their co-leaders. An academic advisor mentioned this expectation this way:

> "Forming those authentic relationships outside the classroom ... [as] the chance to build relationships with people in the department that you don't normally interact with like staff and faculty and grad students. That is kind of a neat chance to be in a really neat environment with them" [DS2-P7-Advisor].

For graduate student leaders, the program was an opportunity to interact with faculty members in a different role where they could demonstrate leadership skills. As mentioned by a graduate student, "I thought it was a good opportunity to get to know some of our colleagues better, with grad students and faculty. That's why I was kind of excited to travel with [names] and get to know them a little bit better too" [DS2-P1-Student]. A different graduate student commented on this expectation as well,

> "I guess also a piece of that is, like [names of faculty leaders], I didn't really know them that well. They were very supportive during that class but we never really like bonded I guess. And so it was nice to be able to kind of step into a different role in that team, that leadership team and like

be more of a friend or a teammate rather than, hi, I'm a grad student in the department" [DS2-P8-Student].

In addition to seeking authentic relationships with their co-leaders, track leaders noted expectations for having meaningful interactions with the students. One graduate student said, "I don't get a lot of interaction with undergraduates" and looked forward to "a chance to explore what [they're like]" [DS1-P3-Student]. Another shared that "I really just expected to have a really great time abroad and to get to know some current students just because my assistantship is as a [Graduate Research Assistant]" [DS2-P2-Student]. Having a chance to provide mentorship for students was also an expectation for some of the faculty track leaders, as one expressed it "I was excited to travel with the students. [...] I've always enjoyed doing things where I was the mentor type figure for students" [DS2-P3-Faculty]. Overall, track leaders anticipated that the close proximity provided by the study abroad program would allow them to have meaningful interactions with both co-leaders and students.

Additionally, graduate student leaders were intimidated by the unknown experience of leading a group of students. Inexperience with this type of leadership was reported as a foundation for these concerns, as one leader noted, "I hadn't led a large group on a trip like this before [...] So, I wasn't really used to the faculty/student relationship" [DS2-P4-Student]. This concern was shared by a graduate student leader who wrote, "I think my biggest concern is figuring out the right tone to set with the students" [DS1-P3-Student] and another who added that their "main concern is...alcohol" [DS1-P2-Student]. One track leader wondered if they had enough cultural knowledge to be able to handle the activities students might get into, saying:

> "Because we were going to [country 1] I was nervous about that culture, like the differences in the culture. Because I've been to a lot of places, like I grew up a lot in [country 2]. I can do that, but [country 1] was either the opposite or just something completely foreign so I was nervous about kind of my safety and just what students would get into on that trip" [DS2-P9-Student].

Overall, track leaders anticipated challenges during the program related to emergency situations and needing to take an authority role in a large group of students.

Experiences with Interactions within the Program

Many track leaders reported positive relationships with their co-leaders, although descriptions of these relationships tended to focus on their ability to work together effectively. For example, one graduate student described their track

leader team this way: "I think the division of roles with the leaders was really nice [...] I had a lot of faith in who I was working with and so that made me feel stronger about our students" [DS2-P9-Student]. In contrast, the places where discomfort or conflict arose between track leaders occurred when there was confusion about roles or one of the track leaders felt that the roles were not equally distributed. One track leader described how they felt clearer communication up front could have resolved some of these issues on their team, saying:

> "I could be better at not trying to be the superhero and saying, 'Hey, actually it would be better if we delegate all of this, rather than me trying to do all of it.' Because I felt like, sometimes I was really stressed out with all of it. And, looking back, it probably wasn't meant for one person to do all of that. It would have been better split" [DS2-P7-Student].

Overall, however, track leaders spent less time discussing experiences of interacting with each other and tended to focus on their interactions with students.

In interactions with students, track leaders pointed to realizations they had about the students. One of the leaders expressed how learning about students led them to:

> "be more aware of the importance for our students to get to know us at a different level and to minimize the barriers that we pose sometimes as instructors." [DSX-PY-Faculty]

Many leaders noted that the informal nature of a study abroad program (e.g., shared meals) created opportunities for meaningful interactions with students. For example, a track leader reflected, "[A meal] was one place where I did, even if it wasn't a direct conversation, hear more of the students' opinions on things. They were very open about things they like and don't like about their classes, to the point where I'm like, 'You realize you're talking about my colleagues?'" [DS2-P1-Faculty]. Some track leaders needed to set boundaries for these interactions:

> "Yeah, I would say that we were very merged with the students. In fact, we had to almost tell them by the time we got to [the second country], we love you all but you need to try to do some things on your own. Because they just really enjoyed spending time with us" [DS2-P6-Student].

In addition to meals, track leaders also reported other settings where casual conversations were easier, such as walking to activities, bus rides, and hanging out in hotel lobbies. One faculty member described these experiences this way:

"The [Country 3] set-up was really good. And actually, the one in [Country 4] too, where there was a lobby and people would just kind of convene there. So we got to know a lot of students that way too" [DS2-P5-Faculty].

Nevertheless, some track leaders experienced fewer meaningful interactions with students than they were expecting. Some of them identified students having some barriers to connect with track leaders, especially with faculty members. As one participant reflected:

"The one role that I had expected to play a little more of was just the personal interaction with the students and that did exist, but not quite. I don't know why I just had this idea that there were gonna be all these deep conversations and mentoring and all these warm, fuzzy feelings and there wasn't too much of that. There was a little bit but ... It might have been just the physical set up of where we were staying. When we were on the buses, and this is maybe something I would do different next year, most of the time the leaders sat in the front of the bus and the students all sat in the back, whereas if I had actually sat with the students, maybe they would have been a little more conversational about that type of thing" [DS2-P1-Faculty].

Some track leaders felt that the age gap between track leaders and the students might influence how those interactions were developed. For example, a graduate student explained:

"I became the automatic filter for them. So, whenever they had a concern they first came to me and then they would then talk to [faculty leaders] after they had told me. And so, it was good to see them develop that rapport with me. On the other hand, it was also a little bit exhausting. Because then everything got filtered through me" [DS2-P6-Student].

A faculty member had a similar perception on how students could relate more easily to someone closer to their age:

"I think in prior years, there's probably been a little more of a divide between the leaders and the students. And that's probably a function of it just being I'm on the younger side of faculty, [Leader X] is a grad student. Whereas, prior years I had traveled with colleagues who were older than me, and so it wasn't as natural of a connection. So, I did start thinking about age in ways that I hadn't. And it's partly because [some students on my track] were older and they made that a clear point" [DS2-P5-Faculty].

Meaningful interactions were something that track leaders experienced at different levels. Some leaders pointed to their age, student status, or cultural background as reasons for experiencing different interactions and taking on different roles. In sum, most participants described meaningful interactions with students as a key aspect of their experience abroad.

Gaps in Interactions within the Program

Track leaders anticipated that traveling together would provide opportunities for meaningful interactions with their co-leaders and the students. Although many track leaders reported enjoying traveling with their co-leaders and developing effective working relationships, they did not discuss leader-leader relationship development as much in their final reflections as they seemed to have expected up front. This observation does not mean that such relationships were not developed, but may suggest that in reflecting on the program, the track leaders primarily focused on the interactions they had with students.

Several track leaders found that the casual environment provided by traveling together offered many opportunities for interacting meaningfully with students. Leaders who were satisfied with their interactions with students tended to focus on non-organized opportunities to chat with students. Back on campus, such informal interactions can be rare in the organizational culture of higher education (National Survey of Student Engagement, 2015), which can increase the social and power distance between teachers and students. The track leaders of this study pointed to the less-formal educational environments (i.e., meals and lobbies) as the place they had many of their meaningful interactions with students.

According to Godfrey and Parker, students are "clearly aware of the power and sometimes generational differences" between themselves and academics (2010, p. 17), which students learn by internalizing the campus norms prevalent in a university's culture (National Survey of Student Engagement, 2015). However, in environments that bolster more informal interactions in these teacher teams and with their students, the signaled roles may be different. A study abroad experience can reduce these barriers that exist in the classroom or university culture so that track leaders learn about students and educate them in more than technical instruction.

The informal learning environments were not uniformly beneficial for all track leaders, however. We found that increased informal interactions and reduced power differences between track leaders and between track leaders and students can have some unintended consequences. In the case of the graduate student who saw her role quickly become student liaison (DS2-P6-Student), the factors contributing to this development may be more than an increase in informal student-leader interactions. Although this graduate student was of a similar age to the faculty leaders on the program and had comparable years of industry experience, the social distance between her and the students manifested as less

than it was for the male leaders, possibly because she was the only female track leader and this track had a majority female students. Her experience reminds us of reports on U.S. campuses of female academics and academics of color being inundated with students seeking mentoring and guidance (Turner, 2014), although this imbalance might be heightened on a study abroad experience because of the higher degree of student-leader interaction. We do not, however, intend to claim that this observation be a general experience for women and people of color leading study abroad programs, but such dynamics should be explored in further research on non-traditional learning environments, in particular those that involve team teaching across academic ranks.

Track leaders reported a variety of leadership decisions that were required of them while they were abroad. These situations varied across programs and contexts, but often required track leaders to monitor ongoing situations and make decisions about how to adjust the itinerary or speak to individuals in trying to address concerns. Track leaders in these situations often described working with their co-leaders to understand and try to address the situations. Thus, although the track leaders anticipated the need to address challenges during the program, the challenges were less likely to be emergencies and more likely to be related to relationships or programming. In helping program leaders avoid potential conflict-laden situations in the future, our findings suggest that some pre-departure intentionality focused on student-leader and leader-leader interactions could be helpful for aligning expectations with experiences.

3. *Track Leader Personal and Professional Development*

As suggested in previous research, serving as a leader for a study abroad program can provide personal and professional development opportunities for leaders (Ellinghaus, et al., 2019). Several track leaders expected these opportunities, and most leaders experienced them.

Expectations for Track Leader Personal and Professional Development

Track leaders described how they expected what they learned about students during the international module to influence their future teaching, advising, and research. As described by one faculty member, "There was the professional side. I wanted to get to know the students better so that hopefully I could bring something back into the classroom that was useful in the next year" [DS2-P1-Faculty]. Even track leaders in student-facing educational roles expected study abroad interactions to afford new perspectives on students. For example, an academic advisor said, "I...want to learn...from just being with [the students]" [DS1-P1-Advisor], while a faculty member noted "I believe RSAP will give me the opportunity to better understand first-year engineering students" [DS1-P6-Faculty]. Similarly, another faculty member expressed that, "as a teacher...[I]

hope to gain insight into what motivates and excites students to learn" [DS1-P7-Faculty]. In general, expectations for professional development tended to center around interacting with students and learning more about them.

Beyond potential influences on their teaching, track leaders also discussed expecting to experience personal and professional development in other areas, albeit less prominently than the expectations focused on students. One graduate student leader noted that "understanding engineering practice could be useful for [their] framing of engineering education research" [DS1-P5-Student]. One of the faculty members mentioned that "On the personal side, I like to travel and I've been learning [language] so I wanted to work on my [language]" [DS2-P1-Faculty]. Similarly, one of the graduate students shared that "One of my main reasons to participate in RSAP as a track leader was so that I would have the opportunity to travel abroad. That's something I really enjoy doing" [DS2-P4-Student] and another faculty member who had been part of the program before stated "I would say the most exciting part of the new track is that we were going to a city that I hadn't been to on this one" [DS2-P5-Faculty]. Thus, in addition to learning about students, track leaders also anticipated other personal and professional benefits.

Experiences for Track Leader Personal and Professional Development

Within this theme, track leaders' experiences aligned fairly well with their expectations. Several track leaders shared insights that they gained through traveling with and interacting with the students on their tracks. Track leaders most commonly described how their perceptions of students changed over the course of the program. One leader was surprised by how socially sensitive their students were:

> "Probably the biggest impact on my teaching is the realization that the students pick up on everything...they are extremely cognizant of events, relationships between group members, and what the group leaders are thinking" [DS1-P7-Faculty].

Another track leader realized that their country of origin had affected their assumptions about what constitutes normal behavior:

> "I'm sure that people raised in [my country of origin] would see this as something normal, however for [American students] this was something special and impressive...I need to be more aware" [DS1-P6-Faculty].

Seeing students outside of the classroom led another leader to write "I need to remember that my [classroom] students are...capable…[they] may lack willingness rather than ability" [DS1-P8-Faculty]. Similarly, another track leader

explained how interactions with students reminded them to check their assumptions about students:

> "One lofty reflection is just about myself more as an educator. I think that I learned a lot about students in a much deeper way. Even when we say we don't want to make assumptions about students, we do. And we think that we know them based on interactions in class, and [...] a few different times we went to dinner with them and the chance to have a burger and hear what they want to do in the future was really something that I value" [DS2-P7-Student].

> Beyond understanding students, traveling also caused one leader to think more deeply about the field of engineering as a whole, noting that "these conversations made me think about how the current structure of engineering [...] attracts certain types of students" [DS1-P4-Student]. Several of the track leaders discussed ideas for how they would change their teaching approaches as a result of their experiences, such as one graduate students who shared:

> "So, I think that seeing the default engagement or disengagement of the students was helpful for me in un-reflection. The default student is not super engaged and not super reflective. And seeing both of those things will help me in the future think carefully about how do I help them engage here, and then how do I help them reflect afterwards. I think that beforehand you should be actively helping them, and afterwards you should be actively probing them" [DS2-P4-Student].

Many of the track leaders felt that they had gained new insights about students during their time abroad and that these insights could influence their work going forward.

Another finding for leaders was the opportunity afforded through the study abroad program to learn more about industry practices and international education systems through the visits included within their tracks. For example, one leader with a professional background in talent management "had a great conversation with [the talent management specialist] and [updated himself] on the latest practices in talent management" [DS1-P6-Faculty]. Another faculty member also gained from the company visits, saying:

> "The company visits were interesting [...] because I have not worked as an engineer. So every time you engage with people who work with engineers, it also gives you a little nugget of like oh, this is an anecdote or something that I can think about if I have students who are interested in this type of stuff" [DS2-P8-Faculty].

Similarly, one faculty member gained insights into differences in educational approaches across countries from the university visits included in their track, commenting:

> "I realized how different the educational systems are. On the surface, they don't look that different but because we're more [...] I don't consider [home university] a liberal arts school but I'm pretty sure if we took our program and put it in any university where we visited, it would be super liberal artsy compared to their programs" [DS2-P1-Faculty].

Although the visits were designed for the students' benefit, the track leaders also learned through participating in these activities.

Further, track leaders also gained new perspectives through participating in the study abroad program that led to personal and professional growth. For example, some track leaders saw opportunities for research through their interactions with students on the program, including one graduate student who stated: "the open ended/flexibility that we talk about in ill-structured design problem literature has a long way to go until we can meet these students where they are" [DS1-P2-Student]. Other track leaders discussed changing perspectives on poverty that they observed during their time abroad, for example:

> "There certainly are areas with abject poverty here but they're not to that extent. It's not like all the suburbs are abject poverty. There's a couple houses here and there that are in that condition. There's a little bit of, I don't know if guilt is the right word, but realization that it's just sort of the world that's there and that there was nothing I could do to change it...That was sort of a personal thing I was and still grapple with" [DS2-P1-Faculty]

Another track leader described reflecting on the last day of the program and realizing the importance that it had for their own development and that of the students, saying:

> "It made me check myself and remind myself of where I was and the opportunity that I had and just being appreciative of that opportunity and acknowledging what this meant for the students and [...] it just made me really grateful for the trip and the opportunity and what [the program] can do for myself and for students" [DS2-P2-Student].

Overall, track leaders experienced a variety of personal and professional development opportunities while traveling, beyond those that they had initially expected.

Gaps for Track Leader Professional Development

Unlike the first two themes, track leaders' expectations for learning about students appear to have been generally met during their time abroad. Many track leaders discussed such expectations and most cited learning something that could inform their future teaching or advising work. Fewer track leaders anticipated other forms of personal and professional development, but several were identified, including learning about engineering work, identifying new research ideas, and reflecting on poverty in both the United States and abroad. The gaps here serve to highlight the various types of learning that track leaders can take from experiences in leading study abroad programs.

The track leaders expressed expectations and experiences in their professional development frequently in their journals. The expectations related to understanding students better in relation to their institutional role as teacher, advisor, and researcher. In the experiences, track leaders noted a variety of personal learning outcomes that related to students, industry practices, research, and cultural differences. For the teachers to move away from a learning environment in which they are deemed authorities on knowledge (King and Kitchener, 2004), students and track leaders were able to learn from each other and their surroundings in ways that were not prescribed by institutional hierarchies.

Overall, the academics who self-select into the track leader role are those who are generally interested in interacting with students outside of the classroom. The experiences described by the leaders are not reflective of any academic who would find themselves in similar positions. With that said, the traditional training of university instructors is confined to a classroom environment if there is training at all. By bringing these academics on a study abroad experience in which learning is not confined nor separated by discipline, our findings show that the structures of student learning and education roles are quite different than that of traditional class environments.

Implications

One of the concrete deliverables from this research is a guide (see Appendix A) that can be adapted for other short-term study abroad settings. Results from our analyses informed the development of this guide, which seeks to ameliorate several of the problems or misalignments between expectations and experiences that we uncovered in this study. As Parasuraman, Zeithaml, and Berry's (1985) original framing and follow-on studies applying this framework would suggest, reducing these gaps should result in higher perceptions of quality, which should have follow-on effects for students' experiences as well as the likelihood of track leaders seeking subsequent opportunities to engage in study abroad programs. The first section of the guide outlines all of the potential roles

that track leaders may play during the international program. Next, the guide describes some of the conversation topics that are recommended before the travel so that the track leader team can be on the same page before the program. These points seek to respond to some of the different power dynamics that can emerge from the transition from a formal learning environment to an informal learning environment. The final sections of the guide turn the focus toward interacting with students and offer ideas for when leaders may consider connecting with students as well as the topics around which leaders may consider engaging students. We deployed a preliminary version of this guide with the program leaders in the 2019 RSAP program. Anecdotal feedback was positive: one leader said "The list [of potential roles] was really eye-opening and helpful," and others agreed.

This guide could be applied more generally for informal learning environments wherein traditional roles are disrupted, as universities also seek to grow non-traditional experiential learning experiences. Study abroad learning experiences are one form of non-traditional learning that requires teachers and students to adopt different roles than they normally do in the classroom. Additionally, learning experiences that are different from those traditionally used in conventional classrooms can further disrupt conventional power differentials. As such, our findings have implications for broader university efforts seeking to expand experiential learning. We hope this guide can be a useful starting point for other programs seeking to enhance their onboarding processes to help teachers transition from a formal to an informal learning environment.

Our results also have implications for research within study abroad and informal learning environments. First, we demonstrate the power of following a multi-method data collection approach at multiple time points. Track leaders did not always feel comfortable including certain thoughts within their journals yet often talked through such topics during interviews. By drawing on two different data sources, we believe we have a more comprehensive understanding of track leaders' experiences. The written reflections provided thoughts in real-time, and the post-program interviews provided a more comprehensive set of reflections, perhaps because not having "written documentation" made participants feel a bit "safer" to speak their minds. For the subsequent year, we decided to blend these two approaches to take advantage of the benefits of each strategy. We provided each track leader team with an audio recorder and had each team conduct their own focus group at multiple time points during their travels. This new approach to data collection sought to capture real-time reflections, minimized the problems that were raised with written journals, and provided a chance for track leaders to talk about their observations with one another. Although we may not have surfaced conflicts between track leaders with this method, we hoped the forced group conversation and reflection could act as a way to avoid conflicts and help

the team focus on enhancing their interactions with students throughout the program.

Conclusions

In this study we unpacked engineering study abroad program leaders' (i.e., faculty members and graduate student leaders) perceptions of their roles before and during a short-term study abroad program. By understanding how expectations and experiences are out of alignment (i.e., conducting a gap analysis), our results can inform onboarding leaders for future short-term study so that the experience is enhanced for all participants. Using data from track leaders' journals and post-program interviews, we found that most track leaders' primary expectations were that they would act as an educator, get to know their students better, and improve themselves professionally. Many track leaders also expected things to go wrong, as expressed by specific concerns and fears. Overall, however, we found that the leaders' expectations did not always match their experiences. Areas in misalignment included the need to balance roles, manage certain logistics, and help maintain student morale; leaders also did not have to respond to a crisis which was a major point of concern prior to the program. Based on these findings we developed a guide for facilitating leader-leader and student-leader conversations before and during a short-term study abroad program that seeks to align expectations and experiences and preempt uncomfortable situations in which power dynamics may manifest themselves among leaders or between students and leaders in this informal learning environment.

References

Davis, K. A. (2020). Pursuing Intentional Design of Global Engineering Programs: Understanding Student Experiences and Learning Outcomes [Dissertation]. Virginia Polytechnic Institute and State University.

Knight, D. B., Matusovich, H. M., Artiles, M. S., Davis, K. A., Kinoshita, T., Bairaktarova, D., ... and McNair, L. D. (2018). Sustaining a Study Abroad Program at Scale: What Motivates Faculty Members to Engage in Such Programs?. In 2018 ASEE Annual Conference and Exposition, Salt Lake City, UT.

Davis, K. A., and Knight, D. B. (2020). Studying abroad as professional development: Learning outcomes for program leaders. NAFSA Research Symposium Series, 4, 11–23.

Knight, D. B., Davis, K. A., Kinoshita, T. J., Twyman, C. A., and Ogilvie, A. M. (2019). The Rising Sophomore Abroad Program: Early experiential learning in global engineering. *Advances in Engineering Education,* 7(3).

Awang, H., and Ismail, N. (2010). Undergraduate education: A gap analysis of students' expectations and satisfaction. *Problems of Education in the 21st Century,* 21, 21.

Bruner, D. W., Dunbar, S., Higgins, M., and Martyn, K. (2016). Benchmarking and gap analysis of faculty mentorship priorities and how well they are met. *Nursing outlook,* 64(4), 321-331.

Chieffo, L., and Griffiths, L. (2009). Here to stay: Increasing acceptance of short-term study abroad programs. In R. Lewin (Ed.), *The handbook of practice and research in study abroad: Higher education and the quest for global citizenship* (pp. 365-380). New York, NY: Routledge.

Dooley, K. E., and Rouse, L. A. (2009, May). Longitudinal impacts of a faculty abroad program: 1994-2007. Proceedings of the 25th Annual Meeting of the Association for International Agricultural and Extension Education.

Downey, G. L., Lucena, J. C., Moskal, B. M., Parkhurst, R., Bigley, T., Hays, C., ... and Lehr, J. L. (2006). The globally competent engineer: Working effectively with people who define problems differently. *Journal of Engineering Education*, *95*(2), 107-122.

Ellinghaus, K., Spinks, J., Moore, G., Hetherington, P., and Atherton, C. (2019). Learning to teach in the field: Five professors tell how running an overseas study tour improved their classroom teaching. *Frontiers: The Interdisciplinary Journal of Study Abroad,* 31(1), 163–183.

Finkelstein, M. J., Walker, E., and Chen, R. (2013). The American faculty in an age of globalization: Predictors of internationalization of research content and professional networks. *Higher Education*, 66, 325–340.

Godfrey, E., and Parker, L. (2010). Mapping the cultural landscape in engineering education. *Journal of Engineering Education*, *99*(1), 5-22.

Goode, M. L. (2007). The role of faculty study abroad directors: A case study. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 15(1), 149–172. https://doi.org/10.36366/frontiers.v15i1.224

Jesiek, B. K., Zhu, Q., Woo, S. E., Thompson, J., and Mazzurco, A. (2014). Global engineering competency in context: Situations and behaviors. *Online Journal for Global Engineering Education*, *8*(1), 1.

Johnstone, C., Smith, T. L., and Malmgren, J. (2020). Academics as arbiters: Promoting equity and cultural responsibility in group-based study abroad. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 32(2), 120–144.

Johri, A., and Jesiek, B. K. (2014). Global and international issues in engineering education. *Cambridge handbook of engineering education research*, 655-672.

Hofstede, G. (1983). National cultures in four dimensions: A research-based theory of cultural differences among nations. *International Studies of Management and Organization,* 13(1/2), 46–74.

Hofstede, G., Hofstede, G. J., and Minkov, M. (2010). *Cultures and organizations: Intercultural cooperation and its importance for survival* (Third Edition). New York, NY: McGraw Hill.

Komarraju, M., Musulkin, S., and Bhattacharya, G. (2010). Role of student–faculty interactions in developing college students' academic self-concept, motivation, and achievement. *Journal of college student development*, *51*(3), 332-342.

LaBay, D. G., and Comm, C. L. (2003). A case study using gap analysis to assess distance learning versus traditional course delivery. *International Journal of Educational Management.*

Legčević, J. (2009). Quality gap of educational services in viewpoints of students. Ekonomska misao i praksa, (2), 279-298.

Loebick, K. (2017). Internationalizing graduate education through education abroad: The pedagogy of short-term, faculty-led, education abroad experiences [Dissertation]. Michigan State University.

Luttrell, W. (2010). Introduction: The promise of qualitative research in education. In W. Luttrell (Ed.), *Qualitative educational research: Readings in reflexive methodology and transformative practice* (pp. 1–17). New York, NY: Routledge

Merriam, S. B. (1998). *Qualitative Research and Case Study Applications in Education*. Revised and Expanded from "Case Study Research in Education." Jossey-Bass Publishers, San Francisco, CA.

Miles, M. B., Huberman, A. M., and Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook*. 3rd. SAGE Publications

Morelock, J. R., Lester, M. M., Klopfer, M. D., Jardon, A. M., Mullins, R. D., Nicholas, E. L., and Alfaydi, A. S. (2017). Power, perceptions, and relationships: A model of co-teaching in higher education. *College Teaching,* 65(4), 182-191.

National Survey of Student Engagement. (2015). Engagement insights: Survey findings on the quality of undergraduate education. *Bloomington, Indiana: Center for Postsecondary Research, Indiana University, Annual Results*, *2015*, 16p

Niehaus, E., Reading, J., Nelson, M. J., Wegener, A., and Arthur, A. (2018). Faculty engagement in cultural mentoring as instructors of short-term study abroad courses. Frontiers: *The Interdisciplinary Journal of Study Abroad,* 30(2), 77–91.

Oliver, K., and Moore, J. (2008). Faculty recommendations for web tools: Implications for course management systems. *Journal of Computing in Higher Education*, 19(2), 3-24.

Ozkan, D. S., McNair, L. D., and Bairaktarova, D. (2019). Teacher Learner, Learner Teacher: Parallels and Dissonance in an Interdisciplinary Design Education Minor. *IEEE Transactions on Education*, 62(3), 226-235.

Parasuraman, A., Zeithaml, V. A., and Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of marketing*, 49(4), 41-50.

Parkinson, A. (2007). Engineering study abroad programs: Formats, challenges, best practices. *Online journal for global engineering education*, *2*(2), 2.

Pather, S., and Dorasamy, N. (2018). The mismatch between first-year students' expectations and experience alongside university access and success: A South African university case study. *Journal of Student Affairs in Africa*, 6(1), 49-64.

Tarrant, M. A., Rubin, D. L., and Stoner, L. (2014). The added value of study abroad: Fostering a global citizenry. *Journal of Studies in International Education*, *18*(2), 141-161.

Trilokekar, R. D., and Kukar, P. (2011). Disorienting experiences during study abroad: Reflections of pre-service teacher candidates. *Teaching and Teacher Education*, *27*(7), 1141-1150.

Turner, C. S. V. (2002). Women of color in academe: Living with multiple marginality. *The Journal of Higher Education*, *73*(1), 74-93.

Walther, J., Sochacka, N. W., and Kellam, N. N. (2013). Quality in interpretive engineering education research: Reflections on an example study. *Journal of Engineering Education*,102(4), 626–659.

Yooyen, A., Pirani, M., and Mujtaba, B. G. (2011). Expectations versus Realities of Higher Education: Gap Analysis and University Service Examination. *Contemporary Issues in Education Research*, 4(10), 25-36.

Appendix A: RSAP Track Leader Guide

Track Leader Roles

Track leader responsibilities can vary somewhat from year to year and trip to trip, but here are some of the most common activities reported by track leaders in previous years:

Education
- Ensure that students are engaging during planned visits (e.g., encourage asking questions)
- Facilitate conversations with students in groups or individually about the activities or experiences the group is having
- Communicate with students about their journal assignment

Communication and Logistics
- Communicate group activities (e.g., via social media or a track GroupMe)
- Communicate with the travel guide to ensure everyone is on the same page
- Support the guide as needed (e.g., in handing out room keys, loading the bus, etc.)
- Hold the travel company accountable to providing the agreed-upon program (within reason)

Health and Safety
- Count the students – ensure everyone is accounted for when the group moves
- Support students in homesick/culture shock or other emotional situations
- Handle student health situations (e.g., take to hospital, doctor, pharmacy)
- Make disciplinary decisions (e.g., leaving students behind when late)

Based on suggestions from previous track leaders, we suggest that these responsibilities not be assigned to specific track leaders. This can lead individual leaders to take on more of the work/responsibility than is fair. Rather, it can be helpful to share all responsibilities and take turns with each activity. This also communicates to the students that the track leaders are a team, which can lead them to bring their questions and concerns to all of the leaders instead of just one.

Before the Trip
1. Meet as a track leader team for your track. Suggested discussion topics include:
   - Expectations for the trip
   - The list of responsibilities above and how you feel about them
   - A plan for communication among track leaders (e.g., check-in daily or every few days)
   - Decision making process and preferences

- ○ Your understanding of how the guidelines for discipline should be interpreted
- ○ How you anticipate spending your free time during the trip

Note about free time: Some track leaders have had meaningful conversations with students by joining them for dinner or activities during free time. Others prefer to take a break from students during this time. Either is fine, but if you are engaging with students during free time, make sure at least two track leaders are present (to avoid liability). Partaking of alcohol in a limited fashion during a meal with students is fine, but it is important to leave before the activity shifts from a meal to a party.

2. Meet as a track leader team with your travel guide(s) via Skype or phone.
   - ○ Expected roles for track leaders vs. travel guide.
   - ○ Expectations to treat students as adults (sometimes guides have experience with high school students and need to be told this)
   - ○ Expectations for decision making process
   - ○ Communication plan (e.g., check-in frequency)

During the Trip
Some track leaders from previous years have suggested that they wished they had engaged in more educational conversations with students during their trip. Here are some suggestions based on feedback from track leaders who felt they did have a good amount of educational conversations.

Times/Locations for Conversations:
- ● On the bus before a visit (get them talking about the visit, questions to ask)
- ● On the bus after a visit (think-pair-share about what they saw/learned)
- ● As you walk between activities, try to talk to different students
- ● If your hotel has a lobby, sitting there in the evening as students come and go can encourage them to come talk to you about the trip
  - ○ Be explicit in inviting them to talk! Students often want this kind of interaction, but may not feel comfortable approaching you on their own.
- ● At group meals (we suggest track leaders split up and talk to different groups of students)
  - ○ At the group meal the first night, could have students discuss their goals (they will all set them in their first journal entry)

- At the group meal the last night, it can be good to have students reflect on the trip as a whole, maybe refer back to their goals or their other journal entries
- As you are leaving a city (via bus, train, plane), could have a discussion about key events in that location before you remind them about their journal entry for that city
  - This may help students get started thinking about the journal prompt

Possible Discussion Questions:

Pre Visits
- What do we know about this organization?
- What questions could we ask them?
- What can we learn from them? (even if this isn't an engineering visit / even if this company doesn't seem related to your major)

Post Visits
- What did you observe that was interesting or surprising to you?
- What did you learn about engineering?
- What did you learn about culture?
- Did anything relate to prior experiences you have had?
- How does this relate to what you learned in RSAP class or first year engineering class?

In general
- What is something that you've noticed about [country]'s culture?
- What has been your favorite part of the trip so far?
- What is one thing that is done differently here than at home?
- What is something that you have found uncomfortable while traveling here?
- Have you talked to anyone interesting? What did you learn from them?
- What are you planning to do/did do during free time? What was that like?

Last Group Meal
- What are you going to remember about this trip in 5 years?