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**PERSPECTIVES ON SUSTAINABILITY IN SHORT-TERM FACULTY-LED  
PROGRAMS**

Amanda Dacon Staton

A Capstone Paper submitted in partial fulfillment of the requirements for a Master of Sustainable  
Development at SIT Graduate Institute in Brattleboro, Vermont, USA.

August 2022

Advisor: Joseph Lanning, PhD, Assistant Professor/Chair of Development Practice

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## **Abstract**

Sustainability is a relatively new topic to the field of International Education. Despite this, its importance is tantamount for the continuation of the industry for future generations. The industry's significant negative environmental impacts from international student mobility poses a real barrier to the continuation of the industry due to climate change. This research emerged due to the lack of existing research on sustainability in Study Abroad, especially short-term faculty-led programs, which are currently the most popular modality of Study Abroad. Short-term faculty-led programs currently hold a reputation in existing literature for being the most unsustainable form of Study Aboard with very little data to support it. To unpack this assumption, this research collected data from faculty members that plan, design, and lead these short-term faculty-led programs to understand the realities of sustainability in the modality for future research and the improvement of sustainability in Study Abroad for future students.

## **Introduction**

This capstone research questions the sustainability of short-term faculty-led study abroad programs. Using an exploratory ethnographic perspective, this qualitative study examines how faculty members from higher education institutions (HEI's) in the United States consider environmental sustainability in the design and implementation of their short-term faculty-led programs. This research reveals the complexities of the statement and current assessment that short-term faculty-led programs are the most unsustainable modality of study abroad (Hammond, 2020).

Since the 1990s, with the exception of the COVID-19 pandemic, the number of American students studying abroad steadily increased due to an expansion in program modalities and themes, making study abroad more accessible to a wider variety of academic majors and student demographics (Redden, 2018). Shorter-term programs, particularly those led by faculty from students' home institutions, allow students of diverse socioeconomic backgrounds and majors to take part in a study abroad experience but are often targeted as the worst offender and the largest contributor to environmental impact (Hammond, 2020). For the purposes of this capstone, I define short-term faculty led programs as international academic programs led by faculty members at HEI's that are shorter than two months in duration. Short-term faculty-led programs have a reputation amongst leaders in international education as a significant contributor to the industry's environmental impact (Wit, H. D., & Altbach, P. G., 2020). These program's flights and tendency to travel between multiple destinations over a shorter duration of time than semester programs provide a greater contribution to carbon emissions that potential student impact in future environmental awareness cannot counteract (Dvorak et al., 2011; Hammond, 2020). Current literature assumes that without additional intensive sustainability design considerations, short-term programs will remain the most unsustainable (Dvorak et al.,

2011; Hammond, 2020). This underlying assumption is the basis for short-term programs often getting blamed as the most environmentally unfriendly. Yet despite this, there is limited academic literature on how environmental impact is being evaluated to support this claim. The aim of this research is to better understand the complexity of the statement that short-term faculty-led programs are the biggest contributors to negative environmental impact in the study abroad field.

Over the last two decades, the human impact on the planet caused severe environmental degradation from overpopulation, pollution, and deforestation forcing humankind to come to terms with how finite our natural resources are (Greenberg, 2017; Rumbley, 2020). To protect ecosystems and natural resources for future generations, it is necessary to counteract the effects of climate change by incorporating environmentally sustainable practices into our daily lives. Many organizations, HEI's, and leaders in the field of International Education, such as NAFSA and the Forum for Education Abroad, have begun to announce sustainability initiatives within the last four years (NAFSA, 2021) that align with the United Nations' Sustainable Development Goals to preserve the planet for future generations. This shift coincided with trends in greater interest by student populations in sustainable higher education experiences (Forum on Education Abroad, 2020). The existing research on sustainability in study abroad claims that short-term faculty-led programs are the most unsustainable model without sufficient data. This is problematic since this modality of programming, according to the 2020 Open Doors Report, was the modality of choice for 64.9% of all students in the United States participating in study abroad from the 2018-2019 Academic Year (2020 Fast Facts, 2020).

The idea that these programs are unsustainable is a blanket statement that fails to look at this multi-faceted issue holistically. Moreover, there is also very little research on how to

improve the sustainability of study abroad programs. The lack of consistency in modality types, requirements at an institutional and industry level, and the measurement tools available makes it challenging for leaders in Study Abroad and HEIs to make informed decisions towards implementing sustainability initiatives. Literature on the topic of the environmental impact of international student mobility suggests that higher education institutions (HEIs) are at a crossroads due to their implicit involvement in systems that rely on a carbon-based, capitalist economy and their status as centers of innovation, knowledge, and technology (Shields, 2019, p. 594). In reaction to these current practices, progress has been made on finding more sustainable considerations and options for program planning, logistics, and measurement tools. These advancements and solutions to mitigate the negative environmental impact range from focusing on carbon offsetting, which is a direct operational solution to address the high carbon footprint associated with the impact from air travel that the industry requires, to learning outcomes, or a way to produce “transformative learning experiences” and encourage institutions to “promote values of sustainability education” (Ayers, 2020, p. 3).

However, while these potential solutions may contribute to reducing environmental impacts, the industry is currently at a loss for how to adequately measure the environmental impact of each program and the effect that these solutions have on reducing the impact. Current tools, such as the AASHE Sustainability Tracking, Assessment, and Rating System have started to capture the larger scale impact that Study Abroad and International Education have on the environment by using a more holistic perspective to measure, assess and combat the negative impacts from a multiangle perspective. Despite this great work, the system is not widely used, and data is not being collected centrally to truly understand the impact on the industry and make evidence-based claims about the impact of specific modalities.

For this research, I conducted surveys of faculty members who have led short-term faculty-led programs from the top 40 Baccalaureate HEI's with the largest percentage of students studying abroad on undergraduate study abroad programs from 2018/2019 according to the 2020 Open Doors Report. These surveys were followed by semi-structured interviews with a smaller sample of those surveyed. These interviews were then used to conceptualize the complexity of the environmental impact of short-term faculty-led programs by gathering the perspectives of the key stakeholders that plan and run these programs. To frame the complexity, this research asked the following questions:

**Q1:** How do faculty members leading short-term faculty-led programs incorporate sustainability practices within their programs to offset the environmental impact?

**Q2:** How do faculty leaders of short-term faculty-led programs perceive the impact of their programs on their students to pursue lifestyle change and career paths in sustainability post program?

**Q3:** How do faculty leaders measure student impact and how can student impact be measured successfully?

**Q4:** How does the subject matter of different short-term faculty-led programs affect the incorporation of sustainability practices into the design and planning of a program?

The broader impact of this study is to provide evidence for decision-makers, senior leadership at HEI's, and faculty on the cost-benefit analysis of developing and offering short-term faculty-led study abroad programs to students. Through this research, I identify key variables to better assess the trade-offs of increasing study abroad options for students through offering short-term faculty-led programs with the potential impacts of study abroad on the

environment. Furthermore, this research proposes a better defined framework for assessing the potential environmental impacts and area where sustainability practices can be improved upon in short-term faculty led programs. This research enables future researchers in the field of International Education to identify further paths of inquiry to balance the need of reducing the carbon footprint of study abroad with the aspiration to provide students with life-changing and academically enriching experiences through fostering and providing global awareness, perspectives, and international exchange (Hopkins, 1999; NAFSA, 2021). Further research should next be conducted on the perspectives of students who attend these programs to make sure that solutions are aligned with the desires of the target audience and to expand perspectives into the long-term social impacts.

## **Literature Review**

### **History of Study Abroad & Short-term Faculty-led**

For thousands of years, humans have traveled the globe participating in cultural exchange and cross-cultural learning dating back to between 600 BC and 250 AD in India where centers of learning attracted “students from many different and distant cultural regions” (Hoffa, P 2, 2007) to explorers such as Marco Polo (Hoffa, 2007). However, Study Abroad and International Education is said to have begun in 1190 when Emo of Friesland traveled from northern Holland to study at Oxford University, an event that led the way for many students to follow (Lee, 2015). From there, it was not until 1851 that education was truly considered on an international level at the World’s Fair in London (Pearce, 2017). Throughout the 1800s international conferences were held among leading “developed” Western nations to bolster international relations and organize international education efforts (Pearce, 2017). This development allows many to believe that International Education and study abroad have a long past but a short history (Hoffa, 2007).

Study abroad came to the United States in the 1830s and over the next 100 years, evolved into a concept that fused the historical roots of European cultural exchange with a more liberal concept creating enlightened citizens (Hoffa, 2007). This concept of creating enlightened students is what has since transitioned again into the present concept of creating global minded citizens that drives most campuses' internationalization efforts today. It also holds the basis for the argument today that study abroad has the potential for creating significant student impact in future environmental awareness, through creating opportunities for enhanced global perspectives.

In the 20<sup>th</sup> century, in the aftermath of World War I, the United States emerged onto the world stage and began transitioning Study Abroad beyond U.S. borders, joining the greater international education field with a focus on language and cultural immersion for language majors led by the Institute of International Education (IIE) (Hoffa, 2007; Lee, 2015). This shift of moving Study Abroad to an international scale is what began the industry's significant environmental impact through international flights and mobility that has become its largest challenge towards sustainability today. It was also during this time that Study Abroad in the US was accepted as a model for academic credit, where students could use their international experience towards completing their degree back at their home institution, an effort that was led by the University of Delaware (Hoffa, 2007 & Lee, 2015). While this emerging effort mainly focused on language majors, there was one additional emerging focus that "fostered the notion of study abroad as a faculty-led "world issues study tour" (Hoffa, p. 21, 2007). As a result, the 1920s saw the development of three different programming designs to meet American academia's growing interest in internationalization: Junior year abroad, The faculty-led study tour, and Summer Study (Hoffa, 2007). In their original form, faculty-led study tours were:

“An extended, faculty-led group tour involving travel and often visits to many countries, offering coursework in English taught by accompanying faculty members and focusing on world issues. The Study tour also has procedures within the program and back on campus for students to demonstrate what they learned via examinations or required paper to Merit the awarding of academic credit” (Hoffa, p 70, 2007).

At the point in their initial developments, much of study abroad and faculty-led study tours still focused on travel to Europe and were not considered as much more than a tourist opportunity during the summer. The modality’s successes came from the institutional sponsorship and involvement of faculty members which inclined students and parents to pay for the additional cost of international travel. However, it was Georgetown University that elevated this modality to a new level by offering the first short-term faculty-led and campus sponsored program for institutional credit (Hoffa, 2007). The establishment of short-term faculty-led programs for credit began its establishment as an accepted and effective educational tool for institutions in the U.S. and began its path towards today’s most popular modality of study abroad due to accessibility to a diverse number of students through the programs short term nature (Redden, 2018).

### **Expanding Out of Europe**

It was Dr. James Edwin Lough, the Dean of Arts and Science at New York University who, through observing the student impact of these study tours, concluded that foreign affairs was on the rise with including countries outside of a European focus and spearheaded the concept that American students should have the opportunity to be exposed to the world in a more global context (Hoffa, 2007). While strides were made, this concept and Study Abroad in general took a hiatus during the onset of World War II and transcended into post war, as student trends had changed in the years of the war creating a desire for domestic life after years of fighting overseas. However, in 1946, President Harry Truman established the Fulbright Program, a

partnership between the United States and more than 160 other countries worldwide, many of which were indebted to the United States from World War II. This program gave countries the opportunity to pay back their debt in the form of supporting the mutual exchange of students, scholars, and teachers while fostering the concept of reciprocity in Study Abroad (Bureau of Educational and Cultural Affairs, 2022). This program played a role in once again igniting a movement towards international education and international student mobility.

During the Cold War Era in the 1950s, and with the passing of the Mutual Security Act, education abroad expanded with a greater focus on world peace and development assistance (Lee, 2015). During that time, the National Defense Education Act passed as a result of Soviet Union technological advances, which pushed the US to think about international relationships in new ways and invest more in areas such as technology, economics, the environment, and politics (Lee, 2015). The US government as a result invested capital in US colleges to direct their students to pursue these areas and focus in studying languages beyond those from Western Europe, such as Chinese and Russian, including a focus in leaning abroad (Hoffa, 2007). This era, through vast governmental influence, intertwined Study Abroad with governmental initiatives of student diplomat, work abroad and general travel programs. One example of this was the development of the Peace Corps, which was a program created under the directive of President Kennedy. The Peace Corps centered similar concepts to Study Abroad such as increasing cultural awareness but added a development component and was not considered Study Abroad (Bennet, 2010). It is due to these developments that governmental support was apparent and that federal aid for Study Abroad was on the rise, it took many decades for the results to be shown in increasing Study Abroad numbers at US colleges and universities with the emergence of so many different modalities for international exchange, targeting the same demographics

without clarity on the differences. This governmental push for pursuing education that was beneficial to international relations for the future, began the shift of US colleges and universities towards strong internationalization plans, with one key element towards achieving this being encouraging Study Abroad (Hoffa, 2007).

### **Study Abroad Today**

Over the last forty years, student interest in study abroad grew through the support of the U.S Government and US colleges and universities (Hoffa, DePaul, 2010). By 2006 91% of American institutions offered some form of study abroad program (Hoffa, DePaul, 2010). Current reports have seen that the interest in short-term programs is climbing while interest in longer term programs is decreasing (Redden, 2018). Despite the historical initiatives for students to pursue study abroad outside of its European roots, “an overwhelming majority of US Study Abroad takes place in Europe with 44 percent of students studying in just five countries, Spain, Italy, the United Kingdom, France, and Ireland” (NAFSA, 2020). While much of US Study Abroad’s history had been situated in developing intercultural awareness and global knowledge, studying abroad has also been heavily influenced by Geo-politics and the theory of Globalization for the growth of the U.S. and the shift towards global development. Globalization theory “holds as its core notion that nations of the world are converging in terms of economic and political development and particularly in terms of social capital” (Hoffa, Depaul, 2010, p.40). US students, teachers, and education institutions, influenced by this changing mindset, began believing that “all nations had to pay attention to transnational issues like environmental pollution, disease control, water availability, and climate change” (Hoffa, Depaul, 2010, p. 41) despite being considered a developed nation. Inevitably, study abroad provides a reciprocal exchange of ideas and information as U.S. students not only take in information about the place

they are visiting, but also share information about themselves with local communities, allowing students to learn about transnational issues that they may not see in their own home country. This influence of globalization is what transitions the historical concept of creating enlightened citizens at the birth of US Study Abroad to the existing belief in literature of creating globally minded citizens. Current literature and students that partake in study abroad believe that a global citizen is:

“One who engages in activism; is open minded and accepting of other cultures in a respectful, tolerant and non-judgmental fashion; pursues knowledge and seeks understanding; feels part of the human community; and possesses a sense of awareness, which includes not only self-awareness, but also awareness of the interconnections between local and global issues and of the impact of one’s actions on the world” (Hendershot & Sperandio, p. 46, 2009).

It is though this idea of globally minded citizens that current literature believes that the potential student impact that study abroad can have could possibly outweigh the immediate negative impacts (Zhang, H.; Gibson, H.J., 2021). It is also this recognition of the potential benefits of globally minded citizens that the U.S. government continues to promote international education through initiatives such as the *100,00 Strong in the Americas Innovation Fund*, to this day (IIE, 2011). Despite the transition to transnational global issues in Study Abroad, there are still many improvements to be made around the impact of study abroad programs on the destinations U.S. students visit and a lack of data in understanding the impact.

### **Sustainability and Study Abroad**

“IHEs (Institutions of Higher Education) have long been at the forefront of sustainable discourse and practice” (Long et al, 2014, p.423). Today, many institutions have implemented “initiatives to decrease carbon footprints, conserve water resources, promote biodiversity, and reduce waste” (Silvia, 2008). Yet, despite these contributions, HEI’s consume vast amounts of resources at high amounts daily with “some universities produce[ing] greenhouse gas emissions

comparable with many small USA cities” (Knuth, Nagle, Steuer, & Yarnal, 2007) and have multiple ecological impacts on surrounding communities (Klein-Banai & Theis, 2011; Venetoulis, 2001)” (Joshua Long, Alison Vogelaar & Brack W. Hale, 2014, p. 423). In reaction to this contradiction HEI’s have taken strides to improve their negative environmental impact through increasing initiatives such as “the 1990 Talloires Declaration and the American College & University Presidents' ‘Climate Commitment’ (ACUPCC) (Association of University Leaders for a Sustainable Future, 2008; Presidents' Climate Commitment, 2007-2009)” by the Association of University Leaders for a Sustainable Future (Dvorak et al, p. 144).

Simultaneously, to this drive for HEI’s to make their campuses more sustainable, the last couple of decades have also seen an increase in HEI’s emphasis on initiatives toward internationalization to create global citizens, more prepared to deal with the complexities of a globalized world for the future as mentioned above. “Literature on global citizenship suggests that international experience provides students with a greater sense of intercultural understanding, social justice and equity, self-awareness, and environmental literacy (Bel-lamy & Weinberg, 2006; Lutterman-Aguilar & Gingrich, 2002; Parker, Wade, & Atkinson, 2004).” (Joshua Long, Alison Vogelaar & Brack W. Hale, 2014. p.423). One of the most significant ways HEI’s promote internationalization is through Study Abroad. The 2020 Open Doors Report states that since the early 1990s, the number of US students studying abroad has steadily increased with an estimated 347,099 US students studying abroad in 2018 – 2019 academic year (U.S. Study Abroad Data, 2020a) a number that has been encouraged by HEI initiatives.

Naturally, the COVID-19 pandemic had a negative impact on these numbers, resulting in a 53% decline in the number of students studying abroad for academic credit in the 2019 – 2020 academic year (Institute of International Education, 2021a). However, it is only in the last decade

that sustainability advocates at HEI's and leaders in the field of International Education have begun to look at the environmental impact of Study Abroad and the contradiction that pushing internationalization through Study Abroad can have against their growing initiatives on sustainability.

One commonly proposed solution to the detrimental environmental impacts of study abroad is the purchasing of carbon offsets. This solution has been identified as a way to continue to pursue their goals of internationalization and address the high carbon footprint associated with the large impact from air travel that the industry requires. While carbon offsetting seems to be an obvious way to allow the travel for Study Abroad to take place with minimal impact, carbon offsetting only leads to a "zero-sum game" rather than decreasing carbon emissions (Watch, 2019, p. 3). In addition, carbon offsets "have other drawbacks that are worthy of attention [...] [such as how it] doesn't discourage energy consumption; and this solution essentially allows faculty and students to "buy" their capacity to pollute" (Dvorak et al., 2011, p. 162). Moreover, due to "all the middle-men involved, some estimate as little as 30 cents on a dollar actually makes it to the projects" (Greenberg, 2010, p.39) begging the question of the ratio of cost to offsetting activities enacted. These reasons among others, put into questions the validity of carbon offsetting as a solution for any study abroad program at least on its own or without correction. Further, the issue of environmental impact is not just the carbon emissions produced from flights. Dvorak et al. state, "carbon use for study abroad has a negative impact on the stability of the earth's climate, and by extension, on the very cultures and people it seeks to illuminate" (2011, p. 3). Research on this topic therefore should not stop at the carbon emissions levels and large-scale carbon offsetting. It is important to also weigh the social benefits of study abroad experiences which may provide a counterbalance to the negative environmental impacts

in a world of “rising xenophobia, nationalism, and intolerance” (Shields, 2019, p. 595). This makes any research on the environmental impact more complex than simply stating that something is unsustainable due to its carbon emissions. And there is still a lot to this complexity that we must uncover before we can even begin to measure the true environmental impact of study abroad due to the research’s infancy in this field. For example, recent studies indicate that shifting patterns in student mobility trends from countries of origin to countries of destination could impact the total emissions, adding a layer of complexity, as there is an increase in regionalization (Shields, 2019).

When looking at the sustainability and environmental impact of short-term faculty-led study abroad programs, the complexities that apply to the greater field are tantamount. McLaughlin reports that most undergraduate-level study abroad experiences for US American students “are short-term, with 60% lasting from one to eight weeks” (2020, p. 1). Previously it was assumed that short-term programs are often significant contributors to the environmental impact due to long flights relative to program time and a tendency to travel between multiple destinations and do not provide sufficient time for carbon offsets or other measures to sustainably justify their impact (Hammond, 2020). However, limited research has been done on this assumption, not necessarily at the fault of those in the field but simply because research and the incorporation of sustainability practices into study abroad is a relatively recent phenomena (Joshua Long, Alison Vogelaar & Brack W. Hale, 2014). When discussing emissions over all in the field of study abroad, Robin Shields indicates that “while it seems likely that rising mobility levels would result in increasing levels of emissions, changes in the patterns of mobility could mean that Green House Gas (GHG) emissions do not increase with the growth in mobility” (2019, p 596). This concept can be applied to short-term faculty-led programs specifically. While

short-term faculty-led programs are shorter in duration, does not make them necessarily less sustainable. For example, if the program is traveling to more local destinations or incorporating sustainability practices, they could be more sustainable than semester long alternatives at further destinations. Small case studies, such as those provided in *A Necessary Partnership: Study Abroad and Sustainability in Higher Education* by Dvorak et al. (2011) show that this is possible. In addition, though in literature today “some studies indicate that the longer the study abroad program, the greater the benefits, other research suggests that there are clear positive outcomes of short-term study abroad, including increased global mindedness, cultural awareness, and appreciation for diversity” (Gaia, 2015, p.23-24).

Faculty members that lead Study Abroad programs have also begun looking at program design elements to counteract the negative environmental impacts of student mobility. These program design elements focus on logistics and operations such as using public transportation, walking whenever possible, eating locally sourced food during the program, and looking at alternative models such as domestic study abroad options which require less travel and virtual options to bring international exchange into a virtual space and prevent any travel at all (Dvorak et al., 2011). Yet, despite these initiatives and shifts in consideration, how to measure the true impact and the contribution that these potential solutions have remains a challenge. To tack this barrier, some leaders in the field have begun to develop tools for measuring and understanding the complex dynamics and impacts.

According to NAFSA, International Education is a tool that is fundamental to fostering peace, security, and well-being and work towards achieving sustainable development goals (NAFSA, 2021). To do this, The Forum on Education Abroad has devised a set of guidelines to recognize that sustainability is an important aspect of promoting social and economic well-being

around the world and counteracting climate change through their Standards of Good Practice for Education Abroad (The Forum on Education Abroad, 2020).

These guiding principles can be used as a tool to:

1. Guide program development
2. Evaluate program Quality
3. Advocate for resources and support
4. Train new professionals
5. Educate stakeholders
6. And establish and maintain respectful, sustainable relationships between partners (The Forum on Education Abroad, 2020)

These guidelines are said to be general and holistic to allow each user to choose which standards to focus on based on what is in their purview.

Another tool available to faculty and schools for measuring sustainability in International Education is AASHE and their Sustainability Tracking, Assessment, and Rating System. The AASHE system rates educational institutions on the following areas:

- a) Academics (AC): Curriculum, Research
- b) Engagement (EN): Campus Engagement, Public Engagement
- c) Operations (OP): Air & Climate, Buildings, Energy, Food & Dining, Grounds, Purchasing, Transportation, Waste, Water
- d) Planning & Administration (PA): Coordination & Planning, Diversity & Affordability, Investment & Finance, Wellbeing & Work
- e) Innovation & Leadership (IN) (AASHE, 2019)

The tools listed above begin to capture the larger scale impact that Study Abroad and International Education have on the environment by using a more holistic perspective to measure, assess and combat the negative impacts from a multiangle perspective. However, the guidelines do not provide specific tools on how to achieve these goals or provide a way to compare the data to standardize consistency in the field. As a result, other tools have been developed to measure different aspects of this larger picture such as student learning outcome by

focusing on the social benefits of study abroad experiences which may provide a counterbalance to the negative environmental impacts. Examples of these tools are:

1. Bevi: the Beliefs, events, values inventory which is a comparative tool to compare individual changes in thinking over time, individual results v. cohort comparison/trends, and the impact of events on individuals. (Roy, 2014).
2. IDI: the Intercultural Development Inventory which measures how people think and feel about cultural difference from diversity and human identity (Roy, 2014).
3. GPI: the Global Perspective Inventory which is a self-report test focused on the student experience through curriculum, co-curriculum, and community (Roy, 2014).

However, these tools are relatively new, and historic data has not been gathered to track trends over time, nor are these options utilized or widely known. Therefore, it is hard to know the true environmental impact of study abroad programs and the effect that incorporating sustainability practices has on negating it for the continuation of the industry.

## **Research Design & Methodology**

### **Research Site**

This research took place via the Internet which allowed access to participants around the United States, working at various HEI's. The primary physical location of this research was the United States due to the availability of current literature focused on the environmental impact of study abroad from the perspective of American institutions and students outbound to international destinations. According to the National Center for Education Statistics there were approximately 3,982 HEIs in the United States as of the 2019- 2020 academic year with most of them offering study abroad programs (U.S. Department of Education, 2021). Due to the vast number of HEIs across the United States, the methodology of virtual ethnography was chosen as the research site to provide a "venue to connect across physical borders" (Marshall & Rossman, 2016, p. 30). Virtual ethnography was also selected not only due to accessibility with physical distance limitations but due to the effects of COVID-19 for the consideration of the health, safety, and wellbeing of all participants. The current climate of the pandemic over the last three

years has allowed for technology to advance, greatly reaffirming that “contemporary society communicates, interacts, and lives more online” (Marshall & Rossman, 2016, p.30) and making the online platform a site that people are comfortable navigating.

### **Sampling and Methods**

This research received Institutional Review Board Approval prior to the initiation of the research. To determine how faculty leaders of short-term faculty-led programs were incorporating sustainability practices into their programs, how they perceive and measure the student impact of their programs, and how subject matter may affect these factors, this research was conducted as exploratory research using mixed method surveys followed by individual, topical, semi-structured virtual interviews. Participants were faculty members who led short-term programs in the United States. According to research done in 2012, more than 85% of higher education institutions in the United States offer some kind of short-term faculty-led program. With approximately 3,982 HEI’s in the United States as of the 2019- 2020 academic year (U.S. Department of Education, 2021) and 85% of them offering short-term faculty-led programs, participants were selected via a convenience sampling method. Online research was done to curate a list of faculty members that offer short-term faculty-led programs to students that are less than 2 months in duration from the top 40 leading Baccalaureate institutions sending students to study abroad programming for AY 2018/2019 according to the 2020 Open Doors report. As top senders to study abroad programs, these HEI’s represent some of the largest contributors to the field of study abroad in the United States and thus those most likely to be affected due to overall changes in the industry in reaction to research on sustainability in study abroad in reaction to the effects of climate change. Limiting the research to the list of the top 40 leading Baccalaureate institutions allowed for a sample size that was more feasible within the study’s allotted time frame. Through research utilizing the web pages and institution’s faculty

and staff directories of the top 40 leading Baccalaureate institutions sending students to study abroad programming for AY 2018/2019 according to the 2020 OpenDoors report, a list of 320 faculty members that led short-term faculty-led programs was created as the sample.

Once identified, all 320 participants were contacted via email (**Appendix A**) to request their participation in a short survey. Participants granted consent to take the survey after reading the request for participation email and clicking the survey link. The survey then employed a mixed methodology to incorporate both qualitative in quantitative data. The survey was used to collect data on the broader, more general subject matter such as variety in program topics, sustainability practices incorporated, length of time the program has recurringly run, etc. A copy of the Survey Instrument and Informed Consent can be found in **Appendix B**. Surveys were limited by willingness to participate, and each participant was sent one follow up reminder email a week before the deadline for the survey to be completed, to boost response numbers. At the time of planning, this research aimed to receive 40 survey responses from faculty members from the top 40 Baccalaureate HEI's with the largest percentage of students studying abroad on undergraduate study abroad programs from 2018/2019 according to the 2020 OpenDoors report. Upon completion, this research received 20 survey responses, achieving a 50 % success rate to the goal. In addition to the limitation noted above, this research encountered the limitation of faculty within the sample on sabbatical or leading programs internationally at the time of the research who were thus unable to participate.

The survey (**Appendix B**) that was sent to all 320 potential participants also included a question at the end asking for participant's willingness to participate in an additional voluntary in depth, semi-structured follow up interview. Participants were selected for the follow-up interview based on their willingness to participate. Due to a lack of responses, the researcher was

unable to evenly distribute the selection of interview candidates across short-term faculty-led program topics ranging across three key areas: humanities, social sciences, and natural sciences. The goal was to select four participants from each of these three main program topic areas listed above to gather more in-depth perspectives from the faculty members on the research questions presented. The full Interview Protocol for these interviews can be found in **Appendix C**. Since these interviews were limited by willingness to participate, and the time allotted for this study, the goal was to conduct 10-12 interviews in total, but this research was only able to achieve a total of 5 interviews.

To prevent any ethical violations as a professional working for an institution that partners with many of these organizations, both as a study abroad and custom faculty-led program provider, I made sure to state to each participant my position for research was as a student only and that the research would not be used for my professional career.

### **Data Analysis**

Data that was collected via virtual surveys was gathered through the use of Microsoft Forms. Data from Interviews was collected by recording and transcribing interviews for analysis. As a primarily qualitative research study, with the use of mixed methods for qualitative and quantitative questions in the survey, data results from the interviews and surveys were coded using Dedoose. Through Dedoose, coding was used to identify emergent themes around the topic of how faculty members leading short-term faculty-led programs incorporate sustainability practices within their programs to offset the environmental impact. Codes were also created to identify themes around the perceived impact of short-term faculty-led programs on students to pursue lifestyle changes and career paths in sustainability post-program. These themes helped to identify the current perspectives of faculty leaders of this modality of study abroad and the

complexities of environmental impact from short-term faculty-led programs to direct future research for the benefit of the longevity of the field. The codes were identified using existing literature to help focus on what is being done currently and identify the gaps in the literature and practice of what is happening in the field. These codes were sorted under five main categories: faculty demographics and perception, sustainability practices incorporated, measuring impact, The effects of subject matter, and barriers

### **Limitations to the Study**

As I mentioned above, this study was limited in the sample size due to the time required to complete the study and participants' willingness to participate, due partially to the overtaxed nature of many people today in the field of Education as a result of the COVID-19 pandemic. The timing of the research was also a barrier as surveys and requests for voluntary interviews were sent out in the midst of the academic year, when the sample group was busy; many identified participants were currently teaching, planning their own short-term-faculty led program or currently leading one in the field. If more time was available, surveys and interviews could have been conducted during the summer break, post May (a popular time for short-term faculty led programs). In addition, the timing of this study limited accessibility in my sample research as to what faculty at each university in the top 40 leading Bachelorette senders to study abroad, led short-term faculty-led programs. Approaching the close of the 2021-2022 academic year, many institutions' websites only had short-term faculty-led programs posted for the remainder of Spring 2022, a year that was still diminished in terms of study abroad offerings due to the COVID-19 pandemic, limiting my sample size. It is worth noting, that not only were the effects of COVID a limitation to the sample size, but so was the inconsistency of faculty leading short-term study abroad programs. For example, many faculty members are not required to lead short-term faculty-led programs and there are not always consistency in the same faculty

members leading programs year after year. Consequently, my sample size could have changed each year based on which faculty put in a request to lead a short-term faculty-led program, which program was accepted by the institution, and met enrollment in order to be able to run their program.

### **Research Qualifications and Positionality**

In 2015, I graduated from Framingham State University with a B.A. in Geography with a concentration in Environmental Studies. During these studies at Framingham State University, I participated in two study abroad programs focused on the environmental and social impacts of globalization through social justice movements, economics, and conservation practices, thus exposing me to alternative and sustainable practices to reduce these impacts.

In 2018, I began my career path in International Education as the University Relations Coordinator for School for International Training (SIT) Study Abroad, promoting and supporting the organization's study abroad programs to HEI's across the United States. In May of 2021, I began assisting the SIT Custom Programs Department in designing programs that fit with the curricula, desired learning outcomes, and specific academic goals of HEI's for faculty and undergraduate and graduate students. Since September of 2021 I have been a full time Custom Programs Manager with SIT where I design and implement a global portfolio of custom programs that includes both virtual and immersive custom and faculty-led programs.

It was a combination of my undergraduate study abroad experience, undergraduate degree focused on sustainability, and current career in international education that led me to pursue my Masters in Sustainable Development with the SIT Graduate Institute. Throughout the Sustainable Development program, I have worked on many projects and papers focusing on sustainability in study abroad which has allowed me to continue to fuse my interest in

sustainability, past education, and current career in international education. My most recent project, in the summer of 2021, allowed me to conduct a collaborative short-term research project focusing on environmental sustainability practices in SIT Study Abroad programs from the perspective of Academic Directors within the organization. This project and my other courses on monitoring and evaluation, regenerative leadership, and project planning and management, have formed the foundation of my capstone and prepared me to address this continued research.

As a university educated, white, middle-class citizen of the United States with a background in environmental studies, career in international education, and study abroad experience, I acknowledge that these factors impact my view on the topic. My previous experiences create inherent biases due to my personal connections with the topic of study and impact my desire to conduct research in this area.

## **Findings**

### **Demographics**

The findings of this research are based on the 20 completed surveys of faculty members that lead short-term faculty-led programs at the top 40 leading Baccalaureate colleges that sent students to study abroad from 2018/2019 according to the 2020 Open Doors report, as well as the five interviews from participants willing to participate in a voluntary follow-up interview. The survey responses gathered came from 15 different universities out of the list of top 40, with programs predominantly focused in either the Humanities or Social Sciences.

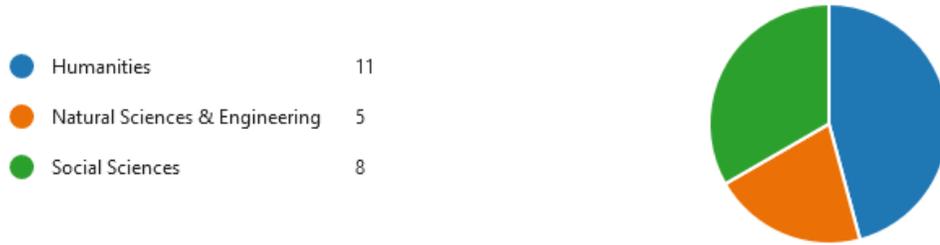


Figure 1

*Length of time*

The faculty surveyed primarily ran programs between two to four weeks in length. The second most common length of time reported to run a short-term faculty-led program was evenly matched between one to two weeks and one to two months.

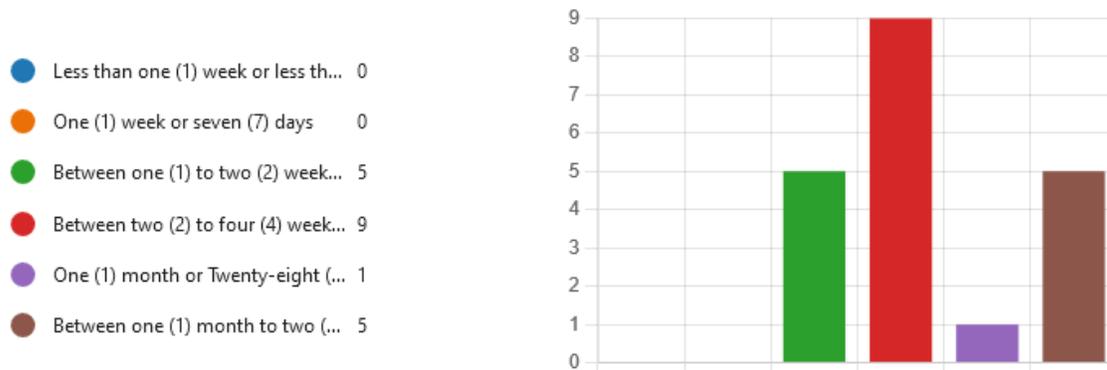


Figure 2



Figure 3

Out of the nine faculty that reported running a short-term faculty-led program from two to four weeks in length, five of them reported running these programs in the winter between December and January. Furthermore, four out of five that reported running a program between one to two weeks reported that they ran those programs during the Maymester (the month of May). This indicates the length of program can be influenced and correlated to time of year that a program is run. To emphasize this, the faculty that reported running their faculty-led program for one to two months, reported that they ran these programs during the longer Spring (between February 1<sup>st</sup> and May 1<sup>st</sup>) or Summer (Between May 25<sup>th</sup> and August 31<sup>st</sup>) semesters. The time of year that faculty are able to lead a short-term faculty-led program, based on their institutional structure has a significant impact on the length of the program. This could be a factor in the ability to incorporate sustainability practices and learning outcomes into a program effectively offsetting the carbon footprint from flights. In order to ascertain the impact, a cost-benefit analysis needs to be conducted. The variance in the length of time that a program runs from one week to two months will, most likely, have a significant impact on a faculty members ability to make their program more sustainable. In order for existing research on sustainability in Study Abroad to continue to claim that short-term faculty-led programs are the most unsustainable model, more research is needed regarding the impact of the length of a program runs, in order to

identify how to determine at what point and length of time a program needs to run to go from being unsustainable to sustainable, to prove current assumptions that the unsustainability of short-term faculty-led programs is based on the program's short nature.

### *Faculty's Perception*

Faculty are the key demographic whose perception of sustainability is needed to gather since they are the key stakeholders for planning and running the program on the ground. Of the five faculty interviewed, each claimed that they were in charge of designing their short-term faculty-led program, and if not alone, then in collaboration with their institution's Study Abroad department. To move forward, current research needs to focus and gather perspectives of the instrumental stakeholder that designs, plans, and leads these programs firsthand. If they are the current decision makers, then their perspectives and feedback is crucial, especially if data is going to be gathered to determine how this modality can proceed for future generations. As previously mentioned, short-term programing, according to the 2020 Open Doors Report, was the modality of choice for 64.9% of all students in the United States participating in Study Abroad from AY 18/19 (2020 Fast Facts, 2020). This is due to its variety in offerings and accessibility to more student demographics than full semester programs can offer (Redden, 2018).

When asked directly if faculty agreed with the statement the spurred this research that: *“Short-term faculty-led programs are the most unsustainable and environmentally unfriendly modality of study abroad”*, 17 out of 20 faculty reported that they did not agree with this statement or claimed they did not know. Only three faculty out of 20 claimed they actually agreed with this statement. In asking why those that did not know felt that way, many felt they had not seen the data to support this and asked “on what basis do we make such calculations?”

(Responder 14, March 2022) or stated “I have not seen data so I do not know” (Responder 7, February 2022).

Another common response was that this statement was dependent on context. The issue is to claim that short-term faculty-led programs are the most unsustainable puts a blanket statement over all programs without supporting data. This categorizes all variations within this modality as the same, a problematic application since some academics accredit the success of short-term faculty-led programs to the fact that “there is no ‘average’ short-term study abroad program” (Donnelly-Smith, 2009). One responder reported:

“I agree they CAN be some of the most unsustainable and environmentally unfriendly. But that depends on the program design and the curriculum. And of course, long-term programs can just be a 'vacation hub' for students to travel unsustainably every weekend for an entire semester” (Responder 11, March 2022)

Semester long Study Abroad programs, especially those in Europe, of which an overwhelming majority of programs still focus on as their destination of choice according to NAFSA, open up opportunities to travel more extensively throughout the semester than students would have on a short-term faculty-led program. Semester long programs often include free weekends, or weeklong breaks where students can travel farther distances and to other countries increasing their mobility and adding to the environmental impact of Study Abroad based on travel. Short-term faculty-led programs, due to their packed schedules and shortness in nature, often do not allow for these opportunities for students. If short-term faculty-led programs are planned and designed with reducing mobility in mind, and incorporating sustainability practices and learning outcomes, then these programs have a great advantage to being more sustainable than semester programs which give students the flexibility to travel more extensively and makes it difficult to accurately measure the environmental impact of the program accurately comparatively to short-term faculty-led programs.

Looking at another level of context, some faculty in this research also felt that their program was more sustainable than some semester long programs that travels extensively to multiple locations. “At first glance, this [statement] definitely seems to be true” (Responder 13, March 2022) that *short-term faculty-led programs are the most unsustainable and environmentally unfriendly modality of study abroad*. The claim that the same carbon emissions from two trans-Atlantic flights are used to send students abroad for a shorter period of time on short-term faculty-led program than a semester program sounds like it should be a no brainer to be more unstainable, but as noted above, grouping all variations of short-term faculty-led programs into this statement is problematic. This is first due to the variety of length of time that this modality can house, ranging from one week to two months and second being that this assumes that all short-term faculty-led programs are not incorporating enough other sustainable practices to counteract the impact compared to what semester programs are doing. Additionally, semester long programs that travel extensively to multiple locations pose the same issue as the opportunities for increased student mobility has during student free time. Comparative Study Abroad programs often incorporate more than just two international flights, adding to the carbon emissions and environmental impact more so than a short-term program only going to one international country.

Another factor that responders claimed added complexity to the statement that *short-term faculty-led programs are the most unsustainable and environmentally unfriendly modality of study abroad* focuses on each individual programs design and curriculum. One responder noted:

“I might argue that short-term programs are faculty-designed and faculty-led (at least mine is), which means I refuse to use bus tours, we do all our local travel by ordinary public transportation, and we hold students accountable for their use of non-recyclable water bottles or other such small (but ultimately consciousness-changing) habits” (Responder 13, March 2022)

If literature and research on sustainability in Study Abroad continues to claim that short-term faculty-led programs long flights and tendency to travel between multiple destinations over a shorter duration of time provide a greater contribution to carbon emissions that potential student impact in future environmental awareness cannot counteract (Dvorak et al., 2011; Hammond, 2020), then we need to unpack the design and curriculum elements that faculty are already incorporating across short-term faculty led programs to determine if they are already doing more than semester programs or if there is the potential for them to do so to improve their unsustainability in the future.

### **Sustainability Practices Incorporated**

15 of 20 faculty surveyed claimed that including environmental practices into their programs was important with 14 out of 20 reporting that they do in fact already consider environmental sustainability practices when planning and designing their program. However, only 10 out of 20 of those faculty felt as though they had flexibility to incorporate sustainability practices freely. The struggle with faculty implementing environmental sustainability practices goes deeper when you compare that there was no consistency between those that reported considering environmental sustainability practices when planning their program with those that felt they had the flexibility to implement them. For most short-term faculty-led programs the inclusion of sustainability practices in their programing does not face a barrier from faculty values and willingness to incorporate sustainable program elements into their program design and curriculum, but rather a lack of flexibility and support to do so. Even one responder that remained neutral on the subject about the importance of including environmental sustainability practices in their programs, claimed that while it was not their highest priority with the effects of Covid-19, they would be happy to learn more about how to incorporate them (Responder 7, February 2022).

Similarly, those that do not consider environmental practices in their planning currently, primarily claimed that it was due to a lack of knowledge in how to do so or that it was not a concern raised when planning. The lack of knowledge on sustainability in current literature today is reflected in the reality that some faculty are facing. By giving faculty the support and knowledge, they are lacking and giving them full flexibility to freely incorporate those practices, it would improve sustainability in short-term faculty led programs to elevate them from being known as the least sustainable modality. Despite this gap for some faculty, the 14 out of 20 faculty that reported considering environmental sustainability practices when they were planning their program claiming a wide variety of considerations and practices implemented, mostly falling under three categories: Logistics & Program Design, Learning Outcomes & Curriculum, and Location.

#### *Logistics & Program Design*

The easiest way to incorporate sustainability practices into a short-term faculty-led program is by planning logistically. This is perhaps from the fact that logistical sustainable practices have been researched and utilized outside of the field of International Education for longer than International Education has been looking at sustainability, and thus logistical practices were easily converted into this sphere. This research found that most faculty focus on designing their programs so that participants can walk between their daily activities or take public transportation whenever possible. This minimizes the need for travel upon arrival in country, sometimes even noting that excursions were removed which were originally planned to reduce the carbon footprint of the program in country (Interviewee 4, March 2022). This aligns with current research on student mobility and global climate change, which notes that growth in international student mobility does not directly correlate to equal amounts of increased GHG emissions since other factors such as location and planning can affect the total emissions

(Shields, 2019). The choices that faculty make in planning on where to base their programs and how to travel once in-country reduces the impact of short-term faculty-led programs in areas that semester programs do not have as much control over as students have the opportunities to make those choices independently.

In addition to choices of mobility, faculty designed their programs to stay in more sustainable and local accommodations, such as hostels that use less water by not changing sheets daily like a hotel, or even going as far as having students' camp. This also overlapped with faculty opting to find locally sourced food options for their programs, which was sometime a key factor in deciding the accommodation choices when meals were included, or they made conscious choices for where students should have meals locally as a group. Similar to practices found in the U.S today, some faculty reported ensuring that any packaging that was bought for food was recycled, if local infrastructure allowed, and had students use reusable water bottles whenever possible. In the end, the research found that many of the faculty that reported incorporating these logistical and program design sustainability practices into their programs often incorporated a combination of those discussed above. One faculty even reported that they also "look for volunteer opportunities that help the sustainability efforts in the [region they were traveling to]" (Responder 8, February 2022). However, overall, those that incorporated logistical practices focused on transportation in country as something they felt like they could control and minimize where they could not minimize the transportation and carbon footprint it takes to get to the location, they were bringing students in the first place, as is the struggle with all study abroad.

### *Learning Outcomes & Curriculum*

The other common way faculty incorporate environmental sustainability practices into their short-term faculty-led programs according to this research and current literature is through

learning outcomes and program goals in their curriculum. Incorporating these elements in program design, is more difficult to define, implement, and quantify than the logistical practices discussed above. This could be from the fact that it is a unique concept to the industry of Education and a new concept to the International Education field, that is less commonly applicable to other industries. Yet, leaders in the field claim that “the greatest potential for change does not actually lie within effective programme administration – it lies in effective student learning” (McBride, 2022). Current literature firmly believes that graduate students will make the biggest changes towards sustainability through their lifestyle and career choices post graduation and so International Education experiences such as short-term faculty-led programs should offer them experiences that expose them to sustainable related topics through cultural immersion and learning outcomes to be effective changemakers.

This research found that 9 out of 20 faculty surveyed already incorporate learning outcomes focused on environmental and sustainability topics into their programs. These faculty found ways to incorporate learning practices on site while on program and connect what students were seeing back to life at home. One faculty reported that for their program they " look at the impact of religion and other cultural forces on the environment” (Responder 14, March 2022) fusing sustainable learning outcomes into their program topic of a different subject. Another faculty reported that they included sustainable learning outcomes not just in the onsite program itself, but they included “sustainability work/lessons in the post-travel reflection class to help students see how they can incorporate new learning from their experience” (Responder 11, March 2022).

However, the struggle is that even with these examples of those that incorporate sustainable learning outcomes, 11 out of 20 faculty do not incorporate sustainability learning outcomes when

designing the curriculum of their course. This is a significant, missed opportunity for sustainability in short-term faculty-led programs with current literature and research claiming that student impact on sustainability to make lifestyle and career choices as the greatest potential towards counteracting the current negative environmental impacts. Those that reported not including sustainability learning outcomes claimed that it was either not related to their program topic or that they didn't think about it or know how when planning their programs. Though regardless of program topic one faculty demonstrated from their program that almost any topic can be connected back to some component of environmental sustainability. It is just about finding the intersections "so that the question is always in there somewhere" (Interviewee 2, 2022). The reasons the faculty provided for not incorporating sustainable learning outcomes in their programs could easily be rectified through trainings and directive standards when planning a program from an institutional level.

### *Location*

It is important to note that location of these programs can often make sustainability choices easier or more difficult for the faculty. As noted above, the choice of location of short-term faculty-led programs can reduce mobility and GHG emissions by picking locations closer to home (Shields, 2019). However, some locations also make it easier to incorporate sustainable practices into their program due to the location's infrastructure; as one faculty mentioned a country's focus on utilizing renewable energy in country makes the students' time in country have a smaller carbon footprint than other locations (Interviewee 2, 2022). One faculty described how conducting a personal carbon footprint of themselves changed drastically in the total number of planets everyone would need to live, simply by changing location. This is because the carbon footprint of the location you are in and the infrastructure in play can have serious implications on the environmental impact (Interviewee 3, 2022). So, the choices of location of a

program can affect the programs overall impact for once students are on program. Current research has begun to identify this as a key factor while focusing on student mobility and the GHG emissions.

“If students leave their home country to study in a country in which per capita emissions are lower, their personal GHG emissions (i.e., from consumption of food, goods and energy) may decrease during their period of study compared to the counterfactual of what they would have been if the student did not go abroad” (Shields, p 595, 2019).

While some faculty in this research did consider the infrastructure of the country they were traveling to as one that has less impact than the impact students would have had back at home, this was not a deciding factor for choosing locations, but rather a bonus of circumstance that made them feel better about the impact of flying internationally.

Location can also affect the ease in which faculty can incorporate sustainability learning outcomes in the program based on the environmental issues relevant to the culture. For example, one faculty talked about studying areas of impact specific to the region including: deforestation, human waste, litter, clean water, reef and rainforest preservation (Responder 19, March 2022). For some faculty, their choice of location is key, and provides significant reductions in their programs impact claiming “I think it’s safe to say that my students lead a less environmentally-degrading life than they do back at home” (Responder 13, March 2022). However, faculty need to consistently consider location as a key factor towards improving sustainability as location can affect ease to incorporate logistical sustainability practices based on available options and infrastructure and can affect the ease in which faculty can incorporate sustainability learning outcomes.

### *Sustainability Practices Conclusion*

Returning to the original statement that short-term faculty-led programs due to their flight impact and short nature provide a greater contribution to carbon emissions that potential student

impact in future environmental awareness cannot counteract without additional intensive sustainability design considerations (Dvorak et al., 2011; Hammond, 2020). I argue that according to this research 70 % or 14 out of 20 faculty do incorporate a wide variety of sustainability design considerations already. While not all do, this research indicates a trend that this modality of Study Abroad is already proceeding in the right direction toward sustainability through logistical design. The better question is how we are measuring and reporting the effects that these existing practices have when counteracting the negative environmental impacts, considering existing research assumes that faculty are not already incorporating these practices with any type of regularity. This research found that a majority of faculty are currently making these choices and considerations, and that we need to supply the trainings, knowledge and support for those faculty that are not able to do so and encourage existing faculty to improve what they are already doing. The biggest gaps that should be addressed through knowledge, training and support, are considerations of program location, consistency in applying multiple practices, and increasing the use of learning outcomes.

Following the current trend in literature today in a shift towards learning outcomes and student impact, this research showed that the unsustainability of short-term faculty-led programs does not primarily come from the lack of logistical design considerations with 14 out of 20 faculty already incorporating them, but rather a lack of considering sustainability through the curricular and learning outcomes. With only 9 out of 20 faculty including sustainable learning outcomes in their programing, a large shift must happen to make sustainable learning outcomes a part of every program regardless of topic and location. Faculty need more direction and guidance on incorporating sustainability focused learning outcomes, especially for those whose program topics or not on the environment or sustainability.

## **Measuring Impact**

While the impacts discussed above are happening to various degrees across short-term faculty led programs and other modalities of study abroad, the question becomes how faculty are measuring the effects that these practices have when counteracting the negative environmental impacts of the program to discover the true nature of sustainability in each program. This research found that 19 out of 20 faculty did not measure the environmental impact/sustainability of their programs. The one faculty that indicated that they measured the environmental impact of their program reported that it was their campus sustainability office that measures the impact on an annual basis for the “entire campus study abroad program. At least in terms of mileage and carbon use for the travel piece of it. But that's about it.” (Responder 11, March 2022)

While most faculty reported awareness of their program having an environmental impact and could list many areas that the environmental impact came from, none could quantify the total impact of their program specifically with any data points to support it or claim any kind of mechanism utilized to measure the impact. This is not to say that no measurements were done at all. Some faculty mentioned measuring components of the impact of their program which increased their awareness of the greater impact through Carbon footprinting, but most of this was simply used to calculate the program’s flight impacts or to build awareness at an individual level (Interviewee 2, March 2022). 12 out of 20 faculty in this research felt that there was not currently a good way to measure the environmental impact of the program or the effects of the sustainability practices they incorporate. Additionally, the system of Carbon footprinting does not account for how curricular and learning outcomes could come into play with counteracting the negative environmental impact.

### *Student Impact*

This research also found that in addition to the struggle faculty face with measuring logistical based impacts above, measuring student impact poses a real challenge to understanding the sustainability of short-term faculty-led programs. If current leaders in the field are going to continue to advocate that student impact toward sustainability could counteract the negative environmental impact of programs, then we need to be able to properly assess student impact and determine how to interpret if this is sufficient for the continuation of these programs in their existing forms. Some in the field of International Education have begun to delve into this issue, when after researching they discovered that “the impact of study abroad on participants’ sustainability-related attitudes and behaviors years after their programs is scarce” (Zhang, H.; Gibson, H.J, 2022). And while there are some tools that have been developed to assess student impact such as Bevi and GPI, these tools are not commonly known yet in the field.

According to this research, there is a lack of knowledge on how impactful the environmental and sustainability learning outcomes are on your students to pursue lifestyle changes and career paths in sustainability post-program. Only nine out of 20 faculty responded to this question, with only two perceiving that their outcomes were highly impactful. Of those that responded, only four could actually answer how they measure or evaluate the environmental and sustainability learning outcome impact of their short-term faculty-led program on their students. The most commonly reported ways that faculty reported measuring student impact was through final program presentations and end of program assessments. Assessment of student impact tends to mostly happen right after a program ends or within six months if the program is associated with a course. Long term impact is rarely measured to determine if these programs have long term impacts on students’ career and lifestyle changes as current literature is claiming could outweigh the immediate impact.

Faculty need to have mechanisms through which to measure the short-term through long-term impacts of these programs on students. This research found that key stakeholders such as faculty are unsure of even how to measure student impact of these programs, so mechanisms need to be widely known about and standardized giving faculty the tools they require to measure student impact and assess if sustainability learning outcomes are effective to negate the negative environmental impacts of running these programs today. This research identified that some faculty had thoughts on how to potentially improve the measurement of student impact in a short-term capacity yet gathering the data to measure the long-term impact remains the biggest obstacle. Regardless, it is clear that faculty leaders of short-term faculty-led programs are not consistently measuring the student impact of their programs. Additionally, even fewer faculty incorporating sustainability learning outcomes into their programs, it is clear that sustainability learning outcomes for student impact as an effective sustainability practice to counteract the negative environmental impact is not being used in this modality of Study Abroad.

### **The Effects of Subject Matter**

Current literature on sustainability is split between focusing on sustainability in programs with an environmental minded program topic, while the second group focuses on the concepts of improving sustainability more broadly. Incorporating sustainability practices into programs poses more of a challenge for some more than others, not only based on location as discussed above, but on the topics of their programs themselves. This factor became apparent when talking to faculty on infusing sustainable minded learning outcomes into their programs. Of 11 faculty that reported not including sustainable learning outcomes in their programs, five reported that this was due to the inclusion of sustainability related learning outcomes in their programs even though sustainability was not relevant to the topic.

While program topic may affect some in not including sustainable learning outcomes into their programs, other faculty consider the subject matter of their program as a sustainability practice in itself. Sustainably focused programs often make it easier to weave sustainability practices throughout their programs and into the learning outcomes. For example, one faculty reported that the emphasis of their program was on the impact of “deforestation, human waste, litter, clean water, reef and rainforest preservation” (Responder 19, March 2022), all key environmental issues of which they are exposing students to explore the intricacies of the climate crisis firsthand from a cross-cultural perspective.

However, the topic of a program focused on sustainability does not guarantee that other avenues of sustainability practices are currently being incorporated into the program or that those faculty have the knowledge and flexibility to incorporate sustainability practices into those programs elsewhere outside of learning objectives and curriculum. On average, this research showed that it was more likely for environmental programs to focus on incorporating sustainability practices across both logistical and leaning outcomes or through curricular infusion: the choice of program location can often affect what logistical proactive options are available as determined by this research. Certain locations that may be key for studying the environmental issues of today, may not have sustainable logistical options such as accessible public transportation or recycling infrastructure to utilize. Therefore, the problem with sustainability in Study Abroad is so complex and difficult to make assumptions on without looking at things holistically.

### **Barriers**

Only 12 out of 20 faculty surveyed identified barriers that they encountered when trying to incorporate sustainable practices into their short-term faculty-led programs, all of which had

indicated that they consider environmental sustainability practices when they plan and design their short-term faculty-led program. Two of those surveyed consider environmental sustainability practices in their program and did not report encountering a barrier of any kind. Both expressed that they felt they had complete flexibility to incorporate sustainability practices. This research concluded that there is only a small margin of programs that can implement sustainability freely without facing any barriers, preventing short-term-faculty-led programs from being the most sustainable that they can be as a modality.

### *Flights*

As current literature notes, flights are the biggest barrier to the sustainability of study abroad and short-term faculty-led programs (Zhang, H.; Gibson, H.J., 2021). As a way of negating the impacts to keep sustainability going for future generations, leaders in the field and academics have posed carbon offsetting as a forerunning possible solution to this problem. Despite this fact, only one faculty member in this research reported actually using carbon offsetting as an environmental sustainability practice that they had implemented into their program. Doubts or uncertainty about the effectiveness of carbon offsetting is apparent. The inability of faculty to effectively comment on carbon offsetting appeared to be due to faculty's lack of knowledge on the subject or their doubts that a change in practice would make a difference overall. This research proved that the doubts in literature on the effectiveness of carbon offsetting as a solution were felt at the faculty level and with those that plan short-term faculty-led programs. 12 out of 20 faculty in this research reported possibly recommending carbon offsetting as an effective practice, while two responded they would not recommend it at all. These doubts and negative responses will make it hard for the field of International Education to proceed with carbon offsetting as the leading solution to the carbon footprint of an industry dependent on flights. Future positive research will be needed to instill more confidence

in order for faculty to consider carbon offsetting as a viable part of program planning. With only 5 out of 20 faculty having confidence in carbon offsetting, this is an area that needs improvement, or another solution identified for short-term faculty-led programs for the modality to become more sustainable and directly address the field's biggest barrier. As one interviewee put it, the feeling from most faculty is that the "carbon footprint of the program [with flights] can't be changed. That's just there." (Interviewee 1, March 2022) and so faculty have begun looking at what other things they can do to mitigate some of the impact, since tackling the total impact of flights appears to be a variable that cannot be changed at this time.

### *Assessment & Measuring*

Another significant barrier to understanding sustainability in short-term faculty-led programs is assessment and measuring. This is a barrier to both the physical impact of the program itself and the student impact for the future. Standardized long-term assessment is needed to gather the data for making informed sustainable choices for the field in the future. However, with short-term faculty-led programs taking place often in the second to final year of a 4-year degree, it is challenging to measure the long-term impact of these programs on students effectively, which is why most assessment is currently limited to before, during, right after, and six months after a program.

In addition, this research found that many faculty do not include any environmental or sustainability focused learning outcomes in their initial program design. Subsequently, any assessment they are conducting or hope to conduct will not incorporate their student impact on these topics. The additional layer of the variations in which these assessments are conducted offers a secondary level of complexity. For example, while some faculty include assessment asking questions on behavior and attitude impacts from the cross-cultural experience, such as the

Bevi tool does (Roy, 2014), or include targeted questions on the professional development students intend, these are not centralized factors, therefore faculty have not started to gather long term data on trends and cross compare what works for the entirety of the International Education field. The successes and achievements of programs that find high student impact on changes in career paths or lifestyles towards environmental topics and issues is kept within a silo within each institution and with each faculty, instead of being accessible for the whole industry. Because there is no central data gathering, there is a great barrier to the sharing of knowledge and data of programs' sustainability, and with current research to properly reflect the true impact of programs to assess the cost benefit analysis of the different modalities of Study Abroad.

Resoundingly, all faculty expressed that they do not know the long-term student impacts of their programs, the true environmental impact of their programs, or how to effectively measure it. Institutions and leaders in the field have not provided any standards for assessing and measuring these concepts or have made the tools being developed widely accessible so the data is not there, and the information needed currently does not get tracked and reported back to the faculty. This poses a real problem and breakdown of communications as those that design programs do not understand the impacts to adjust their future iterations accordingly to improve impact and learn outcome achievement results.

#### *Time and Cost*

With these barriers and their complexity confronting faculty, the idea of approaching sustainability while planning and designing a program can seem overwhelming and daunting. The sheer thought of incorporating enough environmentally conscious decisions, and practices into their program in addition to the other considerations they have to make just to counteract the flights it takes to get there is a big enough barrier on its own, but that does not stop faculty from

having ideas on how program sustainability could improve. On a short-term program it is not always possible to choose the more environmentally friendly transportation option due to the amount of time it can take to travel by a slower public transportation method than a plane or a private bus. Furthermore, sustainable choices can sometimes come at a cost from time invested in research, to the cost of providing carbon offsetting. Currently, most faculty are designing these programs outside of their normal teaching duties and the time it takes can be exhausting, so faculty focus on the requirements set forth by their institution to run a program. As one Interviewee put it, “we are all stretched really thin” (Interviewee 1, March 2022) and so capacity to take on more time-consuming efforts seems daunting.

## **Recommendations and Future Research**

### **Future Research**

Given the significant limitations to this study and the lack of research on the topic within the field of International Education, there are many areas that need future research, including areas I have mentioned above. Another area for future research is the role of Colleges, Universities, and leaders in the field of International Education in Study Abroad. Every program can incorporate logistical planning and intentionality in program design towards making a program more sustainable, from planning travel to minimize programs mobility and utilizing more walking or public transportation methods, to making conscious and informed choices about accommodations. Yet the resounding results show that a lack of institutional requirements to do this and/or the lack of standards for what faculty should consider are real barriers to implementation. One faculty in this study noted how some institutions’ current policies conflict with supporting sustainability initiatives. For example, the institutions existing prioritization and policies on accessibility often conflicted with picking the most sustainable options when designing a program (Interviewee 5, 2022). On the other hand, some faculty mentioned how

departments within their institution focused on sustainability allowed more practices to be incorporated. More research should be conducted on how institutions can make positive changes towards sustainability choice in short-term Study Abroad programs, as the current most popular modality for students.

Future research also needs to be conducted on the perspective of students. As major stakeholders in the future of short-term faculty-led programs, more research on the sustainability choices and direction of the future should have student input. Any modality of Study Abroad will not be able to happen without the support of its target audience; our solutions towards future choices and directions of sustainability need to work for the students. Their perspective will be crucial as to how effectively student impact of the programs is measured. This has been noted as one of the most significant barriers to the shift towards sustainable learning outcomes as an effective strategy.

### **Recommendations**

Based on this research, I recommend that Institutions and leaders in International Education supply faculty with opportunities for gaining knowledge of sustainability practices through trainings and providing resources. Faculty need to be provided with the support and flexibility to design their programs with sustainable considerations once they have been provided with the knowledge they need. Their Institutions need to align their requirements and departmental goals with promoting sustainability in Study Abroad to encourage faculty to consider and insert these elements into their programs during the planning and approval processes. This research found that short-term faculty-led programs struggle the most with incorporating sustainability learning outcomes into their programs. As the leading current solution to improving the industries sustainability, faculty need more direction and guidance on

incorporating these learning outcomes into their programs, especially for those faculty that run programs with topics not directly connected to the environment and sustainability. I recommend that Institutions develop policies or requirements on incorporating these sustainability outcomes, an initiative that will also align with any institutions' Internationalization policies. Without taking these steps to ensure that study abroad can continue and that we improve the sustainability of the most popular modality of study abroad, existing Internationalization plans at Institutions will suffer. In addition, I recommend that standardization be enacted by leaders in the field on measuring student impact and environmental impact to collect better data and further uncover the true sustainability of short-term faculty-led programs and all of Study Abroad. These standardized methods should be highly accessible and free to use.

## **Conclusion**

The purpose of this research was to unravel the complexity behind the statement in current literature that short-term faculty-led programs are the most unsustainable modality of Study Abroad in order to identify gaps in the research that needs to be pursued in the future. The current information available is not sufficient to determine if this statement is actually true or false with what is known. This research concludes that there are significant indicators that lead to a conclusion that short-term faculty-led programs are the most unsustainable modality as this research found that there is a serious lack of incorporating sustainability learning outcomes into short-term faculty-led programs for student impact, which currently holds the biggest potential for improving the sustainability in Study Abroad according to current literature. This research found that another indication is that there is no solution being used in short-term faculty-led programs to counteract the environmental impact of flights. It appears faculty as a whole are currently not considering location when planning programs in terms of reducing mobility and

carbon offsetting is rarely being used in this modality. However, this researcher concluded that the statement that short-term faculty-led programs are the most unsustainable modality is flawed. There is currently not sufficient data to suggest that short-term faculty-led programs are any less sustainable than a summer program of equal length of time, and the research has indicated many examples where some short-term faculty-led programs may be more sustainable than semester programs based on a programs subject matter and design towards sustainability. The statement in current literature is a broad generalization based on an assumption that might be true, but without the data it is a generalization of a modality that showcases a lot of variety in offerings. Currently the key factor to some of the successes of short-term faculty-led programs is that “there is no ‘average’ short-term study abroad program; the variations are as numerous as the institutions that host them” (Donnelly-Smith, 2009). So, generalizing them all together is a major flaw in current research.

However, this research has shown that there are a lot of ideas as to how to improve sustainability in short-term faculty-led Study Abroad programs to allow it to continue into the future if these potential solutions are implemented using some kind of standardization from Institutions and leaders in the field. Further research into the areas I have identified can improve the unsustainability of short-term faculty-led programs, to allow for the benefits of the accessibility of this modality to continue to create globally minded citizens for the future.

Many faculty leaders do in fact incorporate sustainability practices into their short-term faculty-led program to some degree, primarily focusing on logistics and program design. Further, subject matter can often make it easier for faculty to incorporate sustainability practices into their programs from logistics and design to incorporating learning outcomes. However, faculty do not know how these practices currently offset the environmental impact due to a lack of

understanding and measurement system to gauge the impacts that the program and the solutions have overall. Additionally, faculty do not know the impact that their programs are having on their students to pursue lifestyle changes and career paths in sustainability post-program. While they hope that they make a positive impact, current practices do not measure the long-term impacts of success or sustainability topics specifically. While many faculty hope that their programs are sustainably impactful, they do not have any way of knowing the actual impact of their efforts and most faculty feel that there is not yet an ideal way to measure the student impact. The recommendations that I have provided should be useful to the field of Study Abroad as well as the faculty and institutions that provide these opportunities to improve sustainability throughout the most popular modality of current study abroad for future generations.

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## Appendix

### APPENDIX A: Recruitment Email

Dear...

I hope this email finds you well. My name is Amanda Staton, and I am a student in the Sustainable Development Master's program at the School for International Training (SIT) Graduate Institute. I am reaching out to request your participation in a study I am conducting for my Capstone research project. This research will investigate to what degree faculty members from higher education institutions in the United States consider environmental sustainability in the design and implementation of their short-term faculty-led programs.

To gather quantitative and qualitative data to guide this research, I am requesting your participation in a voluntary 20-minute survey, followed by an optional 30-minute interview for which you may note your interest at the end of your survey submission. I will be surveying faculty with the goal of investigating the consideration and implementation of environmental sustainability initiatives in short-term faculty-led programs. As you may know, these types of programs are very popular among students but are often noted as the least environmentally friendly program modality. This study aims to dig deeper into this claim and serve as the basis for future research needed on this topic.

Your decision to participate in this study is completely voluntary. If you agree to participate, you may choose to forgo any survey questions, and you may withdraw your consent to participate at any time. To protect your anonymity and identity, all individual responses will be anonymous aside from institution type and program subject area to those outside this research project. The results of this study will be presented in a capstone research presentation and the paper will be published on the SIT library website. Your name and any other identifying information beyond institution type will not be used or included in shared results.

If you are willing to participate in this study, please use the link below to complete the survey at any time between now and INSERT DATE.



If you have any questions about this study or your requested participation, please feel free to reach out to me via email at [Amanda.Staton@mail.sit.edu](mailto:Amanda.Staton@mail.sit.edu).

Thank you,

Amanda Staton

## **APPENDIX B: Survey Instrument including Informed Consent**

This research study will include an electronic survey of up to 40 faculty members that lead short-term faculty-led programs from the top 40 leading Baccalaureate institutions sending students to study abroad programming for AY 2018/2019 according to the 2020 OpenDoors report.

Participants will receive an email requesting their voluntary participation in this survey. All data received through this survey will be anonymized in the final research findings.

**Title:** Perspectives on sustainability in short-term faculty-led programs

**Description:** Thank you for taking the time to participate in this brief survey for research on “perspectives on sustainability in short-term faculty-led programs”. In recent literature on the environmental impact of study abroad, short-term faculty-led programs have a reputation amongst leaders in international education as the most environmentally unfriendly modality and a significant contributor to the industry’s overall environmental impact. These program’s long flights and tendency to travel between multiple destinations over a shorter duration of time are seen to provide a greater contribution to carbon emissions that potential student impact in future environmental awareness cannot counteract comparatively to semester long immersive programs without additional intensive sustainability design considerations (Dvorak et al., 2011; Hammond, 2020). Yet despite this, there is very little research in the literature on how this impact is being measured and assessed to support this claim. The aim of this research is to better understand the complexity of the statement that short-term faculty-led programs are the biggest contributors to negative environmental impact in the study abroad field.

### **Introduction:**

Thank you again for taking the time to participate in this survey. The results of this survey will be used to provide evidence for decision-makers, senior leadership at HEI’s, and faculty in the cost-benefit analysis of developing and offering short-term faculty-led study abroad programs to students.

The purpose of this study as stated above is to investigate to what degree faculty members from higher education institutions in the United States consider environmental sustainability in the design and implementation of their short-term faculty-led programs. Existing research has found that the customary model used for short-term, faculty-led study abroad programs is the most environmentally unsustainable model in the field of study abroad. This reality is especially problematic given that 64.9% of study abroad students from the U.S. participated in short-term, faculty-led programs during the 2018-2019 school year. This study aims to uncover the complexity of this above claim and serve as the basis for future research needed on this topic. Your participation in this study is completely voluntary, but should you choose to participate your participation will consist of a 15-20-minute anonymous survey (linked below) followed by an optional 30-minute virtual interview for which you may note your interest in participating at the end of your survey submission. There are no foreseeable risks to participating in this study and no penalties should you choose not to participate. During the interview you have the right not to answer any questions or to discontinue participation at any time. Any identifiable information obtained in connection with this study will remain confidential. Several steps will be

taken to protect your anonymity and identity. All individual responses will be completely anonymous to those outside of this research. The results for this study will be shared internally within the SIT Graduate institute and available to all participants however, no identifiable information will be used.

### **Consent for Survey Participation:**

*Please mark the check box below for each question to signify your consent to participate in this study.*

I have read the information in the email invitation for this research study on sustainability in short-term faculty-led programs. I consent to participate in this study and understand that my participation is completely voluntary. I understand that I may choose to forgo any questions and may withdraw my consent to participate at any time. (Check Box)

Checking the following box indicates that you understand the above statement and information in the invitation email and are at least 18 years of age and you agree to participate. (Check Box)

I understand the potential risks associated with participation in this study. I also realize that while the researcher will keep responses confidential, e-mail surveys are not secure. (Check Box)

### **Demographics:**

1. What is your full name? *\*Not to be included in final results*
2. What is the name of the College/University/Institution that you work for?
3. What is the title of your short-term faculty-led program? *\*Not to be included in final results*
4. What is the title of the course that your short-term faculty-led program is associated with? *\*Not to be included in final results*
5. Please select which subject area your program is focused on (select all that apply):
  - a. Humanities
  - b. Natural Sciences
  - c. Social Sciences
6. How many years have you run your short-term faculty-led program?
7. How long is your short-term faculty led program?
  - a. Less than one (1) week or less than seven (7) days
  - b. One (1) week or seven (7) days
  - c. Between one (1) to two (2) weeks or eight (8) to fourteen (14) days
  - d. Between two (2) to four (4) weeks or fifteen (15) to twenty-seven (27) days
  - e. One (1) month or Twenty-eight (28) days
  - f. Between one (1) month to two (2) months or twenty- nine (29) to fifty-six (56) days
8. What time of year does your program typically run: (select all that apply)
  - a. Fall semester (between September 1<sup>st</sup> and December 15<sup>th</sup>)

- b. Winter Semester (between December 15<sup>th</sup> and January 31<sup>st</sup>)
- c. Spring Semester (between February 1<sup>st</sup> and May 1<sup>st</sup>)
- d. Maymester (the month of May)
- e. Summer semester (between May 25<sup>th</sup> and August 31<sup>st</sup>)

**Values:**

1. As a leader of a short-term faculty-led study abroad program do you agree with the statement: *short-term faculty-led programs are the most unsustainable and environmentally unfriendly modality of study abroad?*
  - a. Yes
  - b. No
  - c. Maybe
    - i. Please explain your answer:
2. Please rate the Level of importance for the following statement:  
*In your opinion, how important is including environmental sustainability practices into your program?*  
[Not important, slightly important, moderately important, important, very important]
  - a. Please explain.
3. Do you think that carbon offsetting is a recommended practice for combating the environmental impact of study abroad?  
<https://www.offsetguide.org/understanding-carbon-offsets/what-is-a-carbon-offset/>
  - a. Yes
  - b. No
  - c. Maybe
    - i. Please explain:
4. Do you think there are other environmental sustainability practices that are good for combatting the environmental impact of study abroad?
5. What are the other environmental sustainability practices that are sufficient for combatting the environmental impact of study abroad?

**Program Design & Implementation:**

1. Please answer the following questions in terms of your short-term faculty-led program:
  - a. How much flexibility do you have to incorporate environmental sustainability practices into your programs?  
[no flexibility, very little flexibility, moderate flexibility, nearly complete flexibility, complete flexibility]
  - b. Do you consider environmental sustainability practices when you are planning and designing your short-term faculty-led program?
    - i. Yes
    - ii. No
2. Why don't you consider environmental sustainability practices when you are planning and designing your short-term faculty-led program?
3. What environmental sustainability practices have you implemented into your program?

4. What barriers (if any) do you encounter when trying to incorporate sustainable practices into your short-term faculty-led program? (Select as many as apply)
  - a. Cost
  - b. Lack of institutional support
  - c. Lack of knowledge on what to incorporate
  - d. Lack of interest from student participants
  - e. General lack of feasibility
  - f. Lack of infrastructure
  - g. Time
  - h. Other (please explain)
5. If you did not face any barriers, are there environmental sustainability practices that you would seek to incorporate into your short-term faculty-led program?

### **Measuring & Reporting:**

1. Do you measure the environmental impact/sustainability of your short-term faculty-led program?
  - a. If yes, how do you measure the environmental impact/sustainability of your short-term faculty-led program?
  - b. If yes, who requires you to measure the environmental impact/sustainability of your short-term faculty-led program?
2. In your opinion, is there a good way to measure environmental impact/sustainability practices in study abroad programs?
  - a. If yes, what do you think those methods are?
3. Rate your level of agreement with this statement: *There should be standards set at an institutional level for measuring environmental impact and incorporating sustainability practices into study abroad programs.*  
[strongly disagree, disagree, neutral, agree, strongly agree]

### **Student Impact:**

1. Do you incorporate learning outcomes on environmental and sustainability topics into your short-term faculty-led study abroad program?
  - A. If yes:
    - a. What environmental and sustainability learning outcomes do you incorporate?
    - b. How impactful do you perceive these learning outcomes to be on your students to pursue lifestyle changes and career paths in sustainability post program  
[not impactful, barely impactful, impactful, moderately impactful, highly impactful]
    - c. How do you measure or evaluate the environmental and sustainability learning outcome impact of your short-term faculty-led program on your students?

- B. If no, Why don't you incorporate learning outcomes on environmental and sustainability topics into your short-term faculty-led study abroad program?
- 2. In your opinion, is there an ideal way to measure the impact of your learning outcomes on students from study abroad programs?
  - A. If yes, what do you think those methods are for measuring:
    - a. Short term impact
    - b. Medium term impact
    - c. Long term impact

**Conclusion:**

- 1. Please provide any additional comments, thoughts, or information about the topic of sustainability in short-term faculty-led programs in the box below.
- 2. Please provide your email to participate in a 30-minute supplemental virtual interview following the completion of this survey. Once submitted I will reach out to you within one week of completion. Please note that your email address as provided here will not be tied to your survey answers in the final report.  
[email address]

Thank you for participating in this survey.

## **APPENDIX C: Interview Protocol**

### **Research Questions:**

**Q1:** How do faculty members leading short-term faculty-led programs incorporate sustainability practices within their programs to offset the environmental impact?

**Q2:** How do faculty leaders of short-term faculty-led programs perceive the impact of their programs on their students to pursue lifestyle changes and career paths in sustainability post program?

**Q3:** How do faculty leaders measure student impact and how can student impact be measured successfully?

**Q4:** How does the subject matter of different short-term faculty-led programs affect the incorporation of sustainability practices into the design and planning of a program?

### **Semi-Structured Interview:**

This research study will include a semi-structured interview of up to 10 – 12 faculty members that lead short-term faculty-led programs from the top 40 leading Baccalaureate institutions sending students to study abroad programming for AY 2018/2019 according to the 2020 OpenDoors report. Participants will volunteer to participate in the 40 minutes interview following their completion of the electronic survey. This interview will be semi-structured using a prepared list of questions that complement the survey questions and the answers received. The questions will allow for flexibility between interviewed participants and during individual conversations in case additional topics or questions develop (Marshall & Rossman, 2016, p. 150).

### **Introduction:**

*Interviewers will start the conversation by introducing themselves and then the research:*

Thank you for agreeing to participate in this interview and completing my initial survey.

As you are aware, the aim of this research is to better understand the complexity of the statement that short-term faculty-led programs are the biggest contributors to negative environmental impacts in the study abroad field. To do this, I am facilitating these interviews to conceptualize the complexity of the environmental impact of short-term faculty-led programs for further research on the topic by gathering the perspectives from faculty members that design, implement, and lead these programs.

So, for this interview, I will ask a series of questions regarding your background, values, program, and opinion on student impact.

### **Interview:**

*Interviewers will then start by asking basic questions about the interviewee's academic background, history with short-term faculty-led programs, and values. Following these*

*questions, the interviewee will be asked more in-depth questions about the environmental impact and sustainability practices in their programs planning and implementation as well as their environmentally focused student learning outcomes and perceived impacts.*

**Academic Background, History, and Values:**

1. To help gauge your understanding of the topics of environmental impact and sustainability practices, please tell me about your academic background.
  - a. In your academic or professional history, have you done any work in the realm of sustainability or the environment?
2. How long have you led a short-term faculty-led program?
3. Who designed your short-term faculty-led program? (Yourself, a third party, the study abroad office at your institution, a combination, etc.?)
4. Why did you decide to lead a short term-faculty-led program?
5. Can you elaborate on what environmental impact and sustainability practices means to you personally in terms of study abroad?
6. Please explain why it is or isn't important to incorporate sustainability practices into study abroad programs

**Program Implementation & Design:**

1. In your opinion, what is the environmental impact of your short-term faculty-led program?
2. What environmental sustainability practices have you sought to implement into your short-term faculty-led program (if any)?
3. How successful are these sustainability practices in counteracting the environmental impact of your program?
4. What could be done to improve the environmental impact of short-term faculty-led programs?
5. How do you measure the environmental impact of your short-term faculty led program?

**Student impact:**

1. What learning outcomes about sustainability or environmental impact are a part of your short-term study abroad program?
  - a. How impactful do you perceive these learning outcomes to be on your students to pursue lifestyle changes and career paths in sustainability post program?
2. How could faculty leaders of short-term faculty-led programs improve their learning outcomes to incorporate sustainability and environmental impact?
3. How do you measure and evaluate student impact and learning outcome success post-program?
4. How could short-term faculty-led programs improve measuring student impact?