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Robotics in Japan: A Program Design for The Experiment in International Living

PIM 74

Allison Barnes

A capstone paper submitted in partial fulfillment of the requirements for a Master of Arts in International Education at SIT Graduate Institute in Brattleboro, Vermont, USA. August 2019

Advisor: Lynée Connelly

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Abstract

"Robotics in Japan" is a science, technology, engineering, and math (STEM) based program design for The Experiment in International Living (The Experiment). This design is for a four-week program for high school students. It is grounded in The Experiment's mission and basic program structure. The purpose of Robotics in Japan is to add a STEM-based program to The Experiment's portfolio in one of The Experiment's most popular and marketable countries. In addition, this design adds a computer and technology theme, an area within STEM that has even less representation in The Experiment's portfolio. In this paper, all necessary aspects to run this program are addressed. This includes pre-program aspects such as recruitment, marketing, staffing, and health and safety as well as on and after program information such as a basic program itinerary, goals and objectives, curriculum, crisis management, budget, and evaluation plan.

This program design is informed by research and literature on study abroad, adolescent development, STEM, robotics, and curriculum design. It is also informed by two needs assessment surveys, one completed by former Experiment Group Leaders and one completed by former Experiment participants. These assessments were anonymously completed online with no incentives for participation. The surveys showed successful student growth outcomes in a variety of identity development areas. The surveys also showed a primary participant interest in program destination and a perceived parent interest in computer and technology-themed programs. Robotics in Japan aims to capitalize on the student interest in Japan and the parent interest in computers and technology to add a STEM program grounded in theory to The Experiment's 2021 catalog.

Introduction

Background

The Experiment in International Living is the flagship program of World Learning, sending its first group of students abroad in 1932. Currently, The Experiment focuses on running summer, outbound programs for primarily United States' youth. The Experiment also works closely with and shares staff with the World Learning Youth Programs, which primarily run inbound programs for internationally-based youth. The Experiment sends about 600 high school students abroad every year, and over 50% of those students receive some form of financial support (The Experiment, 2017b; World Learning, 2017).

The Experiment prides itself on its long history, on its immersive and experiential programs, and on its diverse student groups. More recently, The Experiment focused on the strong global themes of its programs. The closest thing to a mission statement currently on The Experiment's website is this descriptor,

The Experiment in International Living is the nation's most experienced and respected provider of international education and experiential learning for high school students. For 85 years, our summer study abroad programs have allowed participants to explore the world in a personal, meaningful way, and to develop new, enduring friendships through hands-on cultural experiences and homestays in 28 countries. (The Experiment, 2017b)

This descriptor is both on the main page of the website as a full statement, and on the History &

Mission page as the first half of the first paragraph.

As for on the ground approach, The Experiment still works to follow the five principles named by the founder, Donald B. Watt:

Go to learn, not to teach Expect the unexpected. Turn a crisis into an adventure. Learn to live together by living together. Be quick to observe, slow to judge. (The Experiment, 2017d) The Experiment works to integrate these principles, from how the admission's officers present the programs to students and parents to how the Group Leaders are trained to lead them. These principles play out in programmatic decisions like including at least one homestay in every program so Experimenters can "Learn to live together by living together." They also play out in small phrasings like asking leaders to encourage students to use the word different instead of weird in group discussions to emphasize being "quick to observe, slow to judge."

This Robotics in Japan program design was made in an effort to add to The Experiment's strong portfolio and grow the strength of its global themes while staying true to the organization's mission and principles. This four-week program will add a new science, technology, engineering, and math (STEM) thematic focus to The Experiment's catalog while utilizing an existing in-country partnership in one of its most popular destinations. Robotics in Japan follows the existing Experiment program structure of orientation, thematic focus, homestay, and reflection. Robotics in Japan will also use existing Experiment supports such as its admissions, operations, and on-call teams.

Rationale

In 2013, the only Experiment STEM programming was in environmental and marine sciences. These focus easily integrated outdoor activities that are often on all programs regardless of STEM focus, such as hiking, boating, and swimming. Since 2013, The Experiment gained a public health program in India outside of the environmental sciences field, but still in the 'S' of STEM. Next, The Experiment gained a STEM program in Spain, focusing on technology and urban innovation related to sustainability. While these programs are both still running, The Experiment has not added any STEM programming in the last few years, while the Institute of International Education's (IIE) research shows an increasing interest and need for

programming every year (IIE 2018). Another STEM program is a necessity for The Experiment if they want to keep relevant to the changing interests of parents and students.

Theoretical Foundations

Rationale

Within the International Education field, as seen at SIT Graduate Institute, NAFSA conferences, and academic literature; higher education work defines the field. Applying theories and best practices to work with high school-aged participants often requires adapting the materials to meet high school students' unique challenges, interests, availability for programming, and developmental stages. Approaching research through the field of international education requires adapting the literature to fit younger participants who are in earlier stages of development; standards involving minors; and greater parent involvement. While conducting research in the experiential or outdoor education fields requires adaption to the international context in terms of norms in other cultures; lack of campus space; and activity content.

For the theoretical foundations for this capstone, literature will be reviewed written about Study Abroad at the college level; domestic high school development and curriculum; and STEM programming, both at the domestic secondary level and the college level abroad. There are limitations in direct application, as there is a lack of adequate research on high school abroad programs.

Adolescent Development

In designing a program for adolescents and in adapting academic literature aimed at college students, it is crucial to understand adolescent development and how that differs from late adolescent or emerging adulthood development.

According to Erikson, Experiment participants are in adolescence, the fifth stage of life development that occurs between the ages of twelve and eighteen years old. During this stage, Erikson postulates that adolescents are primarily concerned with identity vs. role confusion; the teenagers must reach a sense of identity in vocational direction, sexual orientation, and values and ideals. The majority of study abroad academia written concerns participants who are already embarking into the intimacy vs. isolation stage (as cited in Evans, 2011). Some later theorists also argue that identity development can continue past adolescence, and identity statuses can be revisited (Torres, 2011, p. 189). Even if this theory is the case, an organization such as The Experiment is more likely to have an entire group still in the psychosocial stage of achieving their sense of identity, making identity development a more integral part of the experience for all participants.

Marcia (1966,1980) adds to Erikson's work, theorizing that there are four stages of identity development: diffusion, foreclosure, moratorium, and achievement. In each of these stages, an individual has or has not experienced a crisis related to an identity area and has or has not made a commitment regarding an identity area. In diffusion there has been no crisis and no commitment; in foreclosure there has been no crisis, but there has been a commitment; in moratorium there is a current crisis, but a commitment has not yet been solidified; and in achievement there has been both a crisis and a commitment (as cited in Evans, 2011, p. 170).

Several longitudinal studies such as the work done by Meilman (1977) and Stark and Traxler (1974) have caused theorists such as Marica (1980) to postulate the ages of eighteen to twenty-one to be the most critical period in reaching identity stability for white males attending college. Studies of females and black high school students are less abundant and offer different results (Marcia, 1980, p. 119-120) Marcia's and Erikson's studies suggest that the move away

from an individuals' parents and into college is a crisis leading to identity commitments. If this type of independence can lead to a crisis, then an Experiment program offering both temporary independence from parents and new perspectives is likely to spark an identity crisis in participants. An identity crisis is especially likely because of their early stage of identify formation; Experimenters are less likely to be in identity achievement than college study abroad students.

Also, unlike college students, adolescents are still more tied to their relationships with parents and family, according to Arnett (2004). Experimenters are more likely to interpret their experiences in terms of their peer, community, and familial relationships. They are even likely to use their Group Leaders as a substitute for the parent-adolescent or mentor-adolescent relationship to help them explore an identity crisis like the participants in the Duerden et al. (2018) case study of two adolescent study abroad programs.

Another variable in this research is social identities, particularly minority identities. These are not personality choices made by an individual, rather how one is seen by a social group in relation to their identities and especially in relation to their oppressed identities. Hardiman and Jackson theorize five stages for social identity development: "naive or no social consciousness, acceptance, resistance, redefinition, and internalization" (as cited in Torres, 2011, p. 189). There exist individual theories regarding different races, sexual orientations, and genders social identity development stages; but they primarily follow this structure with alterations.

In the first stage of all of these identity theories, individuals gain awareness. Individuals who belong to one or more identity groups that are oppressed are forced by society to gain awareness or their identities earlier in life, thus beginning this process earlier. Some Experimenters may not gain awareness of their social identities before the program, but a new

culture may make them grapple with their race, sexual orientation or identity, gender, social class, religion, language, abilities, or age (Torres, 2011, p. 189).

Finally, the stages of cognitive-structural theories are not as tied to age periods, but experience can help an individual move along the stages. As adolescents have less experience than college students, they are more likely to be in lower stages of development than college students. Baxter Magolda (1992) and King and Kitchener (1994) both looked at ways of knowing and thinking. Both theories move from a stage of viewing knowledge as sure, something an instructor can easily provide to stages of complex thinking and knowing. In Baxter Magolda's (1992) stages, students move from knowledge is certain to understanding that "knowledge is sometimes uncertain and that authorities may not have the answers" to being able to "engage in independent thinking and sharing their opinions" (as cited in Evans, 2011, p. 178). There is a final step of contextual knowledge, but it is achieved post-college, making it irrelevant for our examples. King and Kitchener (1994) move from knowledge as certain to recognizing that knowledge is uncertain to finally being able to use context and evidence to support a sound judgment. As provided practice and encouragement helps individuals continue to move in these stages and not circle back, Experiment participants' experiences could lead to a wide range of stages in their intellectual and epistemological development (Evans, 2011).

STEM and Robotics

In college study abroad, STEM is the fastest-growing field of study. Growing from 17.5 percent of all U.S. study abroad students in 2006/2007 to 25.8 percent in 2016/2017, making it the number one field of study for U.S. study abroad by percentage. While Physical or Life Sciences and Health Professions make up a healthy portion of those numbers, 8 percent and 7.1 percent respectively, Engineering and Math or Computer Science fall behind with 5.3 percent

and 2.8 percent respectively (IIE, 2018). The Experiment lags behind these numbers with estimates that 31, 2019 summer programs will run; 5 of them will be in STEM (16 percent) while only one will be in Engineering and Math or Computer Sciences (3.2 percent).

The computer science and engineering aspect of robotics adds another iteration of STEM to The Experiment's portfolio, while the problem-based learning with which robotics is often taught shares many similarities with experiential education. In problem-based learning, learners, "cope with authentic assignments and learn through doing design and problem solving while applying knowledge in mathematics, physics, and programming." (Barak and Assal, 2018) The doing corresponds to the concrete experience of Kolb's (2014) learning cycle while applying knowledge applies to the process of abstract conceptualization and active experimentation.

In Barak and Assal's (2018) case study, they researched a 15-week course of two, ninetyminute sessions a week with junior high students. The program time in their case study totaled 45 hours. Accounting for high school students and fewer transitions in and out of the program sessions, a similar course of study would take fewer total hours. Setting 45 hours as a generous time precedent easily allows for two weeks of complete robotics programs and site visits within the four-week Experiment program.

As for outcomes from robotics, Sahin, Ayar, and Adiguzel (2014) explored afterschool STEM programs for acquisition of 21st Century Skills, which The Partnership for 21st Century Skills (2011) defined as *critical thinking, problem-solving, communication, collaboration, creativity, and innovation*. Many of these overlap with The Experiment's self-defined learning goals. For instance, communication skills involved ongoing interactions between students and mentors, just like Experimenters and Group Leaders. Students also had to share their problems and ideas to create goals and design their project, like an Experiment group sets norms, reflects, and experiences their program together (Sahin, Ayar, and Adiguzel, 2014). This trend demonstrates the parallels between the Experiment goals and goals of a robotic themed program.

Curriculum Design

Backward Design as coined by McTighe and Wiggins (2005) is a curriculum design process that evolves from a program's goals and objectives to its assessment evidence and ends in designing the actual curriculum and lesson plans. When focusing on the goals and objectives and then how those goals and objectives can be measured, a designer can be more assured that the curriculum is being constructed to achieve its goals. Since this program does not yet have participants, one can only make educated guesses as to their existing knowledge. Therefore, it is logical to focus the program's goals and objectives on research done about The Experiment, Japan, adolescence, robotics, and study abroad.

The other major factor in designing the goals and objectives is time. Short term study abroad is the most common type of study abroad (IIE, 2018), but it still gets criticized by strict academics who believe the only way to have substantial study abroad outcomes is from a more extended program. Sarah Spencer (2002) argues that if a program is intentional and follows best practices, a short-term program can have significant outcomes. Her best practices are

1. Start with strong, clear academic content.

- 2. Make certain faculty are comfortable and competent with Experiential Learning
- 3. Ensure Integration with the local community
- 4. Bring in lectures from the host country
- 5. Require ongoing reflection for both individual students and the group as a whole. (as cited in Donnelly-Smith, 2009, p. 13)

These best practices relate to the programs' goals and objectives, curriculum, itinerary, and staffing.

Needs Assessment

The needs assessment was conducted in the form of two Surveys on Survey Monkey, one for former Experiment Group Leaders and one for former Experiment participants, aged 18 or older. Survey completion requests were posted in four different years of Experiment Group Leader Facebook groups with requests that they also send the participant survey link onto their former Experimenters. Surveys were anonymously gathered, and no incentives were given for survey completion. Survey respondents may be biased based on which former group leaders chose to follow-up on my request.

The questions were focused on two specific areas. First, why did respondents choose The Experiment and why did Experimenters choose their particular programs (although Group Leaders can state preferences, they do not choose their own programs). Secondly, what growth was seen in participants? The questions in this area were focused on issues of identity since stages of identity development are one of the biggest remaining questions between adolescent development and college student development in the literature.

In total, forty-three surveys were completed. Twenty-one from former Experimenters and twenty-two from former Group Leaders (see Appendix A for complete survey responses). Overall the Group Leader responses came from a greater variety of program themes and countries; this difference can at least partially be attributed to many leaders having led two or more programs. The responses from the former Experimenters showed a better gender balance (Survey, 2019). International Education as a field has more female staff and participants. While The Experiment seeks to help balance participant groups with scholarships, gender balance is harder to achieve when looking for interested and qualified staff due to the overwhelmingly female candidate pool that applies for the positions. Therefore, this balance and imbalance also seem logical.

Why The Experiment?

In asking about the reasons Experimenters chose The Experiment, the most common answer was they wanted to travel. Those answers ranged from those that indicated travel experience, "I love learning about different cultures and traveling" (Experimenter L) to those who wanted the experience of something they had not tried, "It was just something I've always wanted to try even though I had no idea what it was (Experimenter O)" (Survey, 2019).

In terms of Experiment specific answers, a few people mentioned the quality of the program, commenting on the "promising itinerary and small group size (Experimenter C)," "homestay (Experimenter M)," and "mission (Experimenter P)." Many people responded with the specific country or theme with many people specifically noting drawing, Japan, and Cuba. A few people wrote that they received a recommendation or a scholarship (Survey, 2019).

The Group Leaders most common answer was about working with students with one teacher noting, "I love working with high school students (Leader N)." As for Experiment specific answers, six people mentioned the quality of the immersion or learning experience; five received a recommendation; five liked that The Experiment offered scholarships; and three had connections with World Learning; and four liked that The Experiment provides scholarships (Survey, 2019).

In their reasoning for choosing The Experiment, seven Experimenters mentioned the country of their program, and five Experimenters said the theme of their program. When asked more specifically why they chose their program, eighteen of The Experimenters answered that they chose their program for the country; while only fourteen Experimenters responded that they choose their program for the theme. These responses show that more Experimenters have a

greater significant interest in the programs' destination and a bit more flexibility on the programs' theme (Survey, 2019).

When asked what themes they were interested in the former participant, respondents were most interested in art or language themes while they were in high school. However, when asked what themes their parents would have agreed to the answers became broader and the choice 'Technology and Computer Science' jumped from sixth place to second place; with just two respondents stating they would have sought that theme in high school while eleven participants answered that their parents would have most approved of that theme. These responses show a potential market for the Robotics in Japan program through the combination of parent thematic buy-in and participant interest in Japan as one of The Experiment's most popular destinations (Survey, 2019).

Participant Growth

On the topic of participant growth, five questions in different areas were asked along a Likert scale from 'Strongly Agree' to 'Strongly Disagree' than a general question on student growth. The Experimenters and Group Leaders agreed that they saw strong growth in participants' strength of their own values; views on race; friendship formation; and general personal growth. The Experimenters also agreed that The Experiment influenced their decisions about careers or fields of study while the Group Leaders were undecided in this area (Survey, 2019).

In all of the above questions on student growth, the Experimenters leaned more strongly towards 'Strongly Agree' while the Group Leaders averaged more modestly toward 'Agree'. In these questions, the participants' greater conviction is shown by a total of forty-eight strongly agrees and thirty-eight agrees, compared to thirty-two strongly agree and forty-five agrees from

the Group Leaders. Possible explanations for this difference include youthful exuberance, longer reflection time on these answers for The Experimenters, and lack of outward evidence of these answers for the Group Leaders (Survey, 2019).

The one area where both Group Leaders and Experimenters averaged more towards 'undecided' was growth in how Experimenters see gender roles. Both groups responded the same to this question with three strongly agree, four agrees, ten undecideds, and four disagrees. These results were surprising since The Experiment has used several scenarios (pulled from real programs) involving cultural gender differences in its interview process and leader training (Survey, 2019).

The responses to the open-ended question about student growth from both the Experimenters and the Group Leaders highlighted social interactions or communication as the number one area of growth. One participant wrote, "I used to be very shy and insecure, and now I feel confident that I can handle myself well and interact with people in a positive way no matter what their background is (Experimenter F)." Similarly, two other participants wrote, "courage in social relationships (Experimenter I)," and "I learned how to be more extrovert[ed] (Experimenter N)." Group Leaders noted "socialization and... a much higher social IQ (Leader B)" and "interpersonal relationships (Leader H)" concerning their Experimenters' social skills (Survey, 2019).

The Experimenters next most common responses include independence, confidence, and problem-solving. With one Experimenter stating, "I learned to be more confident in myself. I realized that if I put my mind to something, I can...figure out a way to achieve my goals (Experimenter Q)." Showing growth in all three areas. While another participant wrote, "I

learned more about myself and how to interact with the world around me (Experimenter R)" (Survey, 2019).

The Group Leaders other frequent responses included independence and risk-taking or stepping outside of their comfort zone. One Group Leader also pointed out that they saw a significant difference between the growth in students' independence between leading a program in India and Japan; stating that the students in India, "were not as independent and had a lot more structure on their program. For example, while in Delhi they are confined to a small area of the city (Leader T)." Leader A and K also mentioned specific student growth in relation to South African race and social class, which is very specific growth geared towards the program's country and thematic goals. Leader A talked about how student growth in the above areas was more prominent in their South African program than in their Spain program for this reason. This shows that even between Experient programs the itinerary, curriculum, and theme of a program have a huge effect on the participants' personal growth (Survey, 2019).

Goals and Objectives

Program Goals and Objectives

Robotics in Japan aims to add a technology STEM program to The Experiment catalog; increase enrollment through new channels of participant and parent interest; promote student growth through its curriculum; and stay true to the Experiment's mission and program structure.

The program will achieve its STEM goal by focusing its theme and curriculum on robotics. It will achieve the new channels of interest by seeking schools and partnerships with a focus on STEM to find new leads and programs that can offer scholarships to different types of participants. The curriculum will promote student growth through building on the existing

Experiment structures of orientation, homestay, and reflection in addition to adding an experiential education thematic component featuring a robotics program. Finally, this program will stay true to the mission and structure by using the four-part Experiment structure and adding experiential and cross-cultural components to the robotics portion.

Participant Goals and Objectives

In The Experiment's Group Leader Handbook, The Experiment lays out the general program goals for all programs in each of the four program components. During the orientation, the goals are on team building, leadership skills, and introduction to the thematic content. During the thematic focus, the goals are investigation, leadership skills, global issue awareness, and learning through experiential contact. During the homestay, the goals for language learning, cultural immersion, intercultural communication, leadership skills, and exploration of the community. Finally, during the reflection, the goals are personal growth, re-entry, group adjourning, and celebration (The Experiment, 2016).

The Experiment has done well in including more detailed goals and suggestions of how to get there in the leader trainings and leader handbooks, including pieces from theory such as the Tuckman and Jensen's (1977) group stages of forming, norming, storming, and adjourning. Experiment groups aim to advance through the forming stage during orientation giving safe space and activities for the group to set group norms, expectations, and goals as well as activities for the group to begin to work together. During the thematic component and homestay components the groups cycle through norming and storming stages, often working productively with each other with coaching from the Group Leaders and cycling back to storming when interpersonal struggles arise or previously-developed norms are challenged. Finally, groups are given time for adjourning in the reflection period focusing on how to move forward with their

experiences, continue their relationships, and celebrate what they have done (as cited in Halverson, 2008, p. 84-86).

For the Robotics in Japan program, the following goals are for the thematic focus and are to be circled back to for the remainder of the program by the Group Leaders. These goals and objectives are all achievable through the program's curriculum and the Group Leader's facilitation.

Participant Goals and Objectives

- Participants will gain skills and knowledge in building and programming robots.
 - Participants will construct a basic robot.
 - Participants will program a robot to complete a specific task, such as following a taped line.
 - Participants will work in a group to solve a project-based problem using robotics.
- Participants will gain knowledge about careers and areas of study related to robotics.
 - Participants will discuss or journal about observations from site visits to businesses using and developing robots.
 - Participants will read written information and listen to presentations on areas of study at Tokyo Tech.
 - Participants will journal about personal reactions to the jobs and areas of study presented.
- Participants will be able to articulate observed differences and similarities in United States and Japanese culture.

- Participants will discuss observations from working in project groups with Japanese students. Participants will compare these observations to group work with United States' students.
- Participants will discuss Japanese and United States citizens' vision of robotics role in current society based on experiences gained at Tokyo Tech and on-site visits.
- Participants will gain experience working and communicating with others.
 - Participants will work in a multicultural group to accomplish a task.
 - Participants will navigate their Tokyo commute in groups of three.
 - Participants will take turns introducing The Experiment group and giving thanks to instructors, Japanese student partners, and site visit hosts.

Gaining awareness is a hard goal to measure, but all of the other goals listed should be demonstrable during the thematic focus portion of the program.

Program Description

Robotics in Japan will begin June 30th, 2021. The program will follow the basic structure of orientation, thematic focus, homestay, and reflection. This can be seen in the descriptive short itinerary in Appendix B, which will be given to participants and parents. It can also be seen in the visual calendar in Appendix C, which shows the key activity or two of each day of program.

The orientation will take place in Tokyo with accommodations at Tougenaya Hotel, which is an easy train ride from the most popular and iconic Tokyo areas. During this time Experimenters will begin getting to know Japan and their group.

Next students will transfer to accommodations at the YMCA Asian Youth Center in Tokyo. This more affordable accommodation is an easy train ride from Tokyo Technical Institute and its sister high school where the majority of thematic focus will occur. For the next two

weeks, participants will take robotics lessons from Tokyo Tech's instructors, focusing on completing project-based robotics problems. Participants will also work on projects with Japanese Tokyo Tech High School students, working on their intercultural communication competencies as well as their robotics.

Tokyo Tech stands out as a perfect partner for this program for its amazing reputation, robotics program, magnet high school, summer international undergraduate program in English, and its robotics club which runs workshops for middle and high school students who know nothing about robotics. In addition, the undergraduate program features survival Japanese lessons and Japanese history of technology Japan Studies classes. Finally, the school has partnerships with robotics companies and research institutes, which is a perfect opportunity for site visits and real-world examples.

These site visits will include visiting a nursing home or senior citizen's center using therapeutic robots; visiting a research and development company; and attending NHK's robotics competition where Tokyo Tech undergraduate students compete each year.

After the thematic focus Experimenters will take an airplane to Hokkaido for a rural homestay. During the homestay, participants will spend time with their families as well as meet in a group to engage in cultural activities such as cooking classes or wearing kimono.

Finally, the program will end in the reflection component at Tougenaya Hotel in Tokyo for a full circle experience for participants. The group will reflect on the program, say goodbye, and complete any last souvenir shopping.

In order to make the catalog deadline; avoid the 2020 Tokyo Olympics; and allow time for partnership agreements with Tokyo Tech, the first Robotics in Japan program will take place in 2021 for four weeks during the month of July. The program will accommodate twelve to fourteen students and two Group Leaders.

Curriculum

Robotics in Japan will follow the existing Experiment program structure of orientation, thematic focus, homestay, and reflection. For each distinct component, participant's activities will differ to fit with the participant goals and objectives for that particular component. For the backward design plan derived from participant goals see Appendix D: Backward Design Curriculum Plan.

Orientation

The orientation goals are for the group to work through the forming stage; the participants to gain familiarity with Tokyo and Japanese culture; and the participants to gain independence in small groups. This stage of the group sets the expectations and norms that the group will build on all program.

In the mornings each day, participants will take survival Japanese lessons from a local instructor. During these lessons, Experimenters will practice basic greetings and phrases. They will also discuss Japanese cultural 'dos and don'ts'. In addition, they will role-play small conversations such as those that would happen with a cashier.

On the first afternoon, the group leaders will lead a group orientation. For the purposes of relationship building and behavior management, the group will set group norms. They will also play team building games and engage in group discussions/activities. These are all guided to set expectations and begin building the group culture.

The next afternoon, participants will practice buying train tickets and navigating the group to a Tokyo neighborhood which they will then explore in small groups. Finally, on the last

day of the orientation, the Experimenters will work on their independence, leadership skills, and new Tokyo knowledge by completing a scavenger hunt around Tokyo in groups of three using the train system.

Thematic Focus

Participants will spend twelve days in Tokyo for the thematic component portion of the program. Two of these days will be breaks from the robotics curriculum to pursue cultural daylong excursions to sites such as Kamakura, a historical town, or Hakone, a volcanic mountain area, based on group choice. The remaining ten days will be spent pursuing the robotics theme. Experimenters will spend the morning until early to mid-afternoon in classes at Tokyo Tech. Some afternoons will be spent doing site-visits, some will be spent in small groups with Tokyo Tech students for cultural exchange, and others will be free time to be spent as the Group Leaders decide. Each evening, a half hour to an hour will be spent journaling or in group discussion facilitated by the Group Leaders (see Appendix C for a brief calendar view of the program).

The first day at Tokyo Tech will be used as an orientation to the school, what programs are offered there, and what partnerships they have with robotics programs. This day will also be used to informally assess students' existing knowledge and skills in robotics and programming. Students with existing skills will then be paired together on the overarching project for the thematic component; they will be given a similar problem with added complexity.

The second-day students will learn basic skills needed to complete their project and the overarching project for eight of the ten Tokyo Tech days will be presented. An example project would be to build a robot that can lift a small object, follow a taped path, and drop the object at

the end. Many similar robotics projects exist; the project assigned will depend on participant level and Tokyo Tech's available materials. The project should be difficult enough that students will have to cycle through the experiential education cycle several times with failed attempts, but easy enough that participants can comfortably complete the project in the days allotted. Projects will be presented by completing the task in front of the rest of their group on the last day of class.

For the example robotics project students would be required to assemble a robot out of parts from robotics kits such as Legos, wheels, plastic arms, and very basic computer chips. Students would also have to write lines of basic code to raise and lower robotic arms or a basket and move the robot forward and around curves. A slightly more advanced course would involve stairs, obstacles, or more tasks for the robot to complete other than simple lifting and lowering. Robot builds and code will be tried by each team, then with the help of the instructor they will look at any errors, reason out what happened, and decide on a new plan of action. This follows the experiential cycle of concrete experience, reflective observation, abstract conceptualization, and active experimentation (Kolb 2014).

For the other two Tokyo Tech days, Experimenters will work on smaller or mostlycomplete problem-solving projects with Tokyo Tech students. Experimenters will have the chance to work on multicultural teams and Tokyo Tech students will have a chance to practice their English. These multicultural student interactions and English practice are already two of the main reasons Tokyo Tech invites international students to study and do research on their campuses during the summer. This goal is another reason the school is likely amenable to helping arrange interactive activities with Experiment participants.

In addition, Experimenters in groups of three will match with groups of three Tokyo Tech students for cultural exchange for three afternoons after classes. Groups will cook together at a students' apartment, go to an arcade together, go out to eat, or walk around a popular Japanese district. Tokyo Tech students will get a chance to practice their English, while Experimenters will engage more with Japanese culture before the upcoming homestay.

Finally, the participants will engage in site visits for two to three afternoons after class. At least one site visit will be to an organization using therapeutic robots. This site visit will highlight an accepted Japanese use of robots that is very different from the United States' accepted use of robotics. Nursing homes or senior centers, in particular, will likely be amenable to site visits for engagement for their clients. While this engagement will also give Experiment participants a glimpse of the older generations, many of whom hold onto traditional Japanese culture the tightest. In addition, at least one site visit will be to a robotics research and design company. This site visit will be easy to arrange since Tokyo Tech partners with several.

As previously stated, evening Group Leader reflection facilitation is essential. During this time students can reflect on the robotics project, their cultural exchange groups, the site visits, and anything else they have observed. Through intentionally reflecting, participants can dive deeper into their learning as the program progresses. Group Leaders must also allow their participants to express independence and agency surrounding choices during free time, leading the group to and from activities, and taking on group responsibilities.

Homestay

The evening before the homestay Group Leaders should have a brief homestay orientation reiterating health and safety rules, uncomfortable versus unsafe, cultural 'dos and don'ts,' how to communicate with your host family, and how to talk about homestay experiences without negatively and positively comparing them to each other's. Like for all Experiment programs, this homestay orientation should follow the guidelines given in The Experiment's staff training.

For the homestay orientation, Group Leaders will gather the group in a meeting room at the YMCA Asia Center. There they will use a mix of delivering information, role play, journaling, and dialogue to cover the above topics. Leaders will explain the health and safety norms for the homestay such as having their own bed, not being left alone, and having at least two family members so Experimenters can evaluate their homestay for real problems themselves. They will also role play about cultural 'dos and don'ts' and communication. An example of this is a group leader playing the host mom while Experimenters are prompted to ask how to do their laundry or politely express that they are full. Finally, Leaders will facilitate Experimenters journaling and/or dialoguing about expectations, positive ways to share good and bad homestay experiences with each other, and ways to engage with their families.

The next morning participants will take a flight to Sapporo and a train to their rural homestay community. The in-country partner has several community connections in this area including Tomokomai and Nanae.

Homestay goals include intercultural communication, language learning, and cultural immersion. Most of these goals are accomplished by participants engaging during the time they spend with the host families. Most days the group will meet to engage in a cultural activity and to have time to reflect on their experiences as a group. Group Leaders will visit all homestays within the first twenty-four hours.

Reflection

The Reflection will take place back in Tokyo at the first hotel for a full-circle experience. During this time the group will work on the group stage of adjourning, celebrate the program,

and discuss re-entry and personal growth. Activities facilitated by the Group Leaders will focus on each of these goals. More specific topics include culture shock, how to talk to your friends about your summer, how to use your experience in college admissions essays, and appreciating specific group members.

The group will be able to meet in a meeting room at the Tougenaya Hotel where they will be staying for this portion. For the first two-days of reflection, leaders will explore Tokyo and a day-trip from Tokyo with group members during the day. During this time, leaders will start oneon-one check-ins with each group member. This is also a good chance for the Experimenters to have some final moments in the culture as a group. In the evenings of each of these days, leaders will begin intentional reflection activities in the hotel meeting room. The third day will mostly be focused on reflection interspersed with final shopping and a final group dinner. This reflection may be done around Tokyo in a conducive place such as a park.

The reflection should be a mixture of activities, writing, and dialogue using examples of each shown a Staff Training before program. Sample reflection questions or prompts to use include:

- What experiences related to learning about Japanese culture, funny moments, and favorite memories would make good thirty-second stories? (are these playing into stereotypes?)
- What will you miss the most?
- \circ What did you learn about on program that you want to learn more about or continue?
- Who in this group helped you? Made you laugh? Surprised you in a good way? Was there for you when you were struggling?
- How can you keep connected with each other?

Staffing Plan

Experiment employees work from World Learning's Vermont campus and World Learning's DC office with regionally based admissions officers. Robotics in Japan has budgeted twenty-five percent overhead to cover work time of full-time staff members. Staffing needed for this program includes a minimum of five office-based and six regional recruitment and admissions staff. The program will also need one program officer to be the primary contact for the in-country partners. In addition, Robotics in Japan requires one staff member to hire, onboard, and support the program's two group leaders. It also requires an operations coordinator to arrange group flights, Group Leader travel, and other logistics. During program, it will require an on-call team of at least ten members. Finally, it requires management staff to lead these staff members; to help coordinate and run leader training week; and to make executive decisions on any problems that arise.

On the ground in Japan, The Experiment needs staff members in the in-country partner organization, World Youth Japan, who are able to meet with the group periodically and within twelve hours in any crisis. The Experiment also requires a Homestay coordinator to meet with the host families and visit all host families' houses pre-program.

With the program at all times, Robotics in Japan will have two Group Leaders. These leaders will need to meet basic requirements including having a bachelor's degree, youth experience, facilitation skills, having worked or studied abroad, and having enough identity and diversity awareness to do no emotional harm to participants.

For this program specifically, leaders also need to have Japanese cultural knowledge and advanced Japanese language skills. At least one of the co-leaders is preferred to have robotics and/or coding knowledge. However, this knowledge could be sacrificed for better facilitators with a greater level of identity and diversity work, especially because the robotics curriculum will be delivered by Tokyo Tech staff. Japanese language skills can be difficult to find in candidates who meet the basic requirements, so being aware of priorities in the job description is important.

Program Marketing

The Experiment Program Catalog is finalized in summer to early fall, so the partnership pieces would have to be agreed upon by summer 2020 in order for marketing to advertise the program for 2021. Fall 2020 is the perfect time to market this program. The program will have missed the increased crowds and safety risks of the 2020 Olympics while being just in time to capitalize on the increased interest in Japan following the Olympics.

Photos in The Experiment catalogue will focus on the 2020 Olympics and recent international robotics conferences that occurred in Japan. Focus will be drawn to the popular country of Japan in addition to the theme. As noted in the needs assessment, the country is the number one draw for students, while the theme of computers and technology is popular with parents. The program will be placed in the Japan section, and the theme will be indicated through iconography and writing in the catalogue.

In addition, The Experiment will offer a program certificate upon program completion listing the skills and knowledge gained at Tokyo Tech. This sort of activity is a selling point for college admissions, and marketing to parents should focus on that angle.

This program will also need to be actively placed on relevant websites such as goabrorad.com since it will have no alumni to post reviews. Ad space should be bought on these study abroad review websites focused on high school programs. Google search terms should also be researched to be sure the online posting of this program is easily found through searches for Japan, STEM, computers, and robotics.

Student Recruitment and Admissions

The Experiment admissions team conducts outreach all over the country and in the last few years has begun international outreach efforts. In addition to the staff's regular efforts, the STEM focus of this program will open some doors to Experiment admissions officers to table or give presentations at STEM-focused magnet schools and STEM-based summer activity fairs.

In selecting students, The Experiment should continue to follow its "Commitment to Diversity":

The Experiment is committed to diversity. In 2017, The Experiment awarded \$2 million in scholarship funding to 73% percent of our participants. We work with approximately 60 partner organizations to recruit diverse participants. (The Experiment, 2017a, para 17)

Having this diversity on Robotics in Japan will help participants grow in social interactions and communication skills like the needs assessments showed. New avenues to achieve this diversity include partnering with STEM, robotics, and computer-based programs to share in providing scholarships for chosen candidates from each program. Example organizations The Experiment could partner with include STEM for HER, National Girls Collaborative Project, National Science and Math Initiative, and FIRST Global.

Many of these organizations are for high school girls because of their underrepresentation in STEM. As mentioned in my needs assessment, more women pursue study abroad activities and the international education professional field than men. In this area, the number of female students interested in the Experiment's programs may be to The Experiment's advantage in seeking out partners that hope to increase the number of women in STEM.

Logistics

The Robotics in Japan program will begin in the heart of Tokyo for its orientation including forming group norms, learning to navigate the city, and survival Japanese language and cultural lessons. The students will then transfer to a different area of the large city to stay at the comfortable and affordable YMCA youth center. From this accommodation, students can take an easy twenty-minute train ride to Tokyo Institute of Technology's (Tokyo Tech's) Tamachi campus.

After the thematic focus and completion of student projects, the group will fly to Hokkaido for their homestay in a rural city. Since the in-country office is located in Hokkaido, their connections with communities is strongest on this island. The homestay portion of the program involves spending time with the families as well as meeting as a group for small excursions and visits to the local sites. There will also be cultural activities such as a cooking class, flower arranging, or wearing kimono.

Finally, the group will return to the hotel they first stayed in during orientation. The reflection period is for reflection and re-entry discussions; group time to celebrate and say goodbye; and final souvenir buying.

Health and Safety Plan

The health and safety plan for Robotics in Japan will follow the general best practices The Experiment uses for all its participants. These best practices include preparation before program through site visits; homestay visits; careful itinerary review; participant and Group Leader health history review by the medical risk officer and subsequent management plans as needed; purchasing of International SOS international medical assistance for participants and Group Leaders; and contracting of mental health support. It will also follow the specific precedents set by the other Japan programs. These precedents include following the CDC and other United States government warnings regarding travel to Japan. It also includes providing information about Japanese laws that could affect our participants including avoiding interaction if they see a political demonstration.

In addition, Japan has a high risk of earthquakes and tsunamis compared to many other countries. The long itinerary will include meeting points for each portion of the program, should one of these natural disasters occur. Group Leaders will convey this information before Experimenters leave each new accommodation for the first time. Each Experimenter will also be given a card at each accommodation with the Group Leaders' and In-country partners' cell phone numbers on one side and the name, phone number, and a small map of the hotel on the other.

All participants will complete the health form and if necessary complete an individual health plan with an Experiment staff member to manage any individual issues on program. Participants and parents will also receive the Japan-specific health and safety guidelines set out by the CDC and International SOS. For mental health issues The Experiment contracts professionals who help The Experiment advise Group Leaders and evaluate a participant's ability to go on and remain on program.

To help mitigate and manage behavioral issues, The Experiment has all students sign The Experiment's policies before they go on program. These policies include health and safety rules around things such as drugs and alcohol, tattoos, swimming, and motorcycles.

The Experiment arranges cell phone communication for all Group Leaders and offers multiple ways for Group Leaders to get in touch with the on-call team. These are explained and demonstrated at Leader Training Week. Leaders are also required to be CPR and First Aid

trained and leaders receive additional training on subjects such as mental health first aid at Leader Training Week.

Before a program runs, The Experiment program team also conducts site visits, before the first summer and as needed. The Experiment also requires all in-country partners to know and follow their policies. In addition, The Experiment has specific host-family standards including participants needing their own bed or sleeping bag; the host family needing two or more people; and the accommodations needing to be clean and safe. In-country partners must also arrange a host family orientation and home visits for all host families (The Experiment, 2016).

Crisis Management Plan

Should an incident occur leaders are to respond as noted in their handbook and taught at leader training, taking any immediate action needed right away and then contacting the 24/7 oncall team according to the seriousness of the situation. With near misses or non-incidents needing to be reported within one business day during business hours, while crisis require a call to the oncall team immediately after any necessary emergency response is called, no matter the hour. The near miss is considered a threshold 0 while the crisis is a threshold five (The Experiment, 2016).

The on-call team itself is arranged like a phone tree with callers calling an answering service that will keep calling on-call staff until someone picks up. At all times of day, there will be a frontline staff member with a special on-call phone who will be ready to take the calls. This frontline staff will also have a laptop and Wi-Fi to log all incidents for continuity and postprogram evaluation. There will also always be a second-line staff member and an escalation contact should a situation be more serious than the front-line staff member is authorized to make decisions about. During normal business hours, all frontline staff will respond to calls as

available in addition to responding to the on-call e-mail and What's App (see Appendix E for an example on-call chart).

All calls are logged in an online system so that staff members can keep continuity through a situation even when shifts change. All calls are also logged so that the summers' data can be used in evaluation for where the program needs to improve, or what near misses could have been disasters and what the team needs to do next cycle to reduce or eliminate that risk. These scenarios are also used with altered names and specifics as training tools for The Experiment's Group Leaders in an effort to better prepare leaders and prevent future crises.

Japan specifically has high instances of participants with neurodiversity on program. In addition to the escalation staff The Experiment has mental health professionals and student affairs professionals on retainer to counsel on-call staff members and/or Group Leaders on the best ways to handle specific situations.

Budget and Budget Notes

Budget Notes

As this program will take place in Japan, many of the costs were researched in Japanese Yen and then converted to United States Dollars in the budget. For this exchange rate I have used the 2018 yearly average exchange rate as calculated by the IRS (2019).

For the costs of meals and transportation, I estimated based on previous Experiment budgets from when I was a Group Leader in Japan. For hotels, hostels, cell phones, and specific transportation I used posted prices online. This method of research may result in cheaper group or student prices that can only be found upon contacting the company.

As with all Experiment programs I did not price out the international flights since those fees will be charged separately.

For the assumed Tokyo Technical Institute of Technology class and activity fee, it was

estimated based on international undergraduate summer programs posted online.

For the in-country partner contract, Experiment overhead, and revenue fees I estimated

based on knowledge gained during my SIT classes since this information is proprietary.

As the current Japan programs have program fees in the seven-thousands this program

can easily be added to, be sold as a cheaper option, or gain more overhead/revenue.

Budget

The Experiment in International Living					
Robotics in Japan					
Budget (Summer 2021)					
Orientation	3 days	Total Participants	12 to	14 people	
Robotics	12 days	Total Group Leaders		2 people	
Homestay	8 days	Total People on	14 to	16 people	
Wrap-Up	4 days	Program			
STAFF SALARY and COSTS			\$	25,300	
SAFETY & RISK MANAGEMENT		\$	2,324		
SUPPLIES		\$	300		
TOKYO ORIENTATION			\$	4,419	
ROBOTICS THEMATIC COMPONENT		\$	21,537		
HOMESTAY		\$	6,883		
TOKYO PROGRAM WRAP-UP		\$	3,912		
OVERHEAD 25%		\$	16,169		
TOTAL		\$	80,845		
REVENUE (Program Fee Per Participant)		\$	1,000		
Total Program Fee per Participant		\$	6,775		

Below is a budget summary, for the detailed budget please see Appendix F.

Evaluation Plan

Robotics in Japan will use the existing evaluation templates for the participants, parents,

in-country partner, and Group Leaders. Since The Experiment follows a regular program

structure of orientation, thematic focus, homestay, and reflection this standard template will be useful in gathering evaluation data. The program structure to be evaluated includes two group leaders, in-country staff, orientation, homestay, thematic component, excursions, reflection, and general questions.

For the propose of evaluating the Robotics thematic component without adding too much to the existing evaluations, six Likert scale questions will be added to the participant surveys. The assumption being that less participants will complete the survey if they judge it overly long. These questions will also have open spaces for comments under each question. The Likert scale will range from strongly agree to strongly disagree:

- 1. I learned from the Robotics portion of the program.
- 2. I had enough time to complete the Robotics project.
- 3. The Robotics project was at the right level for me, or I was given options to make it the right level for me.
- I was able to learn about Robotics in a way that connected it to Japan and/or Japanese culture.
- 5. I am more interested in a STEM (science, technology, engineering, or math) career after this program.
- 6. I am better able to work in multicultural teams.

A variation of these questions will be added to the Group Leader evaluations, simply changing I or me to "The Experimenters"

These questions can add robotics component-specific knowledge to the evaluations, which can aid in revising the program as well as marketing it to the next summer of participants.

Conclusions/Implications

The Experiment in International Living is a successful organization with great programs. The Experiment runs immersive programs where participants demonstrate growth and learning, as shown in Experimenter program evaluations and my needs assessment. The Experiment also values diversity and in particular socio-economic diversity which is also tied to racial diversity. This value is shown in my needs assessment through the focus on scholarships. The Experiment can also tout a long history through which it has evolved and changed as it needed to in order to stay a successful organization. Statistics on study abroad fields of study and the fastest growing career areas show that it is time for The Experiment to evolve again before it is left behind.

The Robotics in Japan program brings a new area of STEM thematic focus to The Experiment's catalog. This program embraces The Experiment's foundation in Experiential Education by utilizing the parallel project-based approach. It also stays true to The Experiment's program structure. Robotics in Japan uses the popularity of Japan to Experimenters in order to launch a new theme. It also piggybacks on the excitement of the 2020 Olympics to make this program stand out. Robotics in Japan is a program that will add quality and variety to The Experiment portfolio while being able to sell and bring in revenue.

References

- Arnett, J. (2007). Emerging Adulthood: What is it, and what is it good for? Society for Research in Child Development, 1(2), 68-73.
- Barak, M., & Assal, M. (2018). Robotics and STEM Learning: Students' Achievements in Assignments According to the P3 Task Taxonomy--Practice, Problem Solving, and Projects. International Journal of Technology and Design Education, 28(1), 121–144.
- Donnelly-Smith, L. (2009). Global Learning Through Short-Term Study Abroad. Association of American Colleges and Universities, 12-15.
- Duerden, M. D., Layland, E., Petriello, M., Stronza, A., Dunn, M., & Adams, S. (2018).
 Understanding the unique nature of the adolescent study abroad experience. Journal of Hospitality, Leisure, Sport & Tourism Education, 23, 18-28.
 doi:10.1016/j.jhlste.2018.04.004
- Eguchi, A. (2014). Educational Robotics for Promoting 21St Century Skills. Journal of Automation, Mobile Robotics & Intelligent Systems, 8(1), 5–11.
- Evans, N.J. (2011). Psychosocial, cognitive-structural perspectives on student development. In
 J.H. Schuh, S.R. Jones, S.R. Harper, & Associates (Eds.), *Student services: A handbook for the profession* (5th ed., pp.168-186) (Jossey-Bass Higher and Adult Education Series)
 San Francisco, CA: Jossey-Bass, A Wiley Imprint.

The Experiment. (2017a). Experimenters.

https://www.experiment.org/about-the-experiment/experimenters/

The Experiment. (2017b). *History & Mission*. Retrieved from <u>https://www.experiment.org/about-the-experiment/history-mission/</u>

The Experiment (2017c). Our Educational Philosophy.

https://www.experiment.org/experiment-difference/our-educational-philosophy/

The Experiment. (2017d). Why We Are Different.

https://www.experiment.org/experiment-difference/why-we-are-different/

The Experiment in International Living. (2016). 2016 On-Call Handbook.

- The Experiment in International Living. *The Experiment in International Living Program Catalog.* World Learning Inc., 2018.
- Halverson, C. (2008). Team Development. In Halverson & Tirmizi (Eds.). Effective Multicultural Teams. New York: Springer.

Institute of International Education. (2018). "Fields of Study of U.S. Study Abroad Students,

2006/07-2016/17"

Open Doors Report on International Educational Exchange. Retrieved from http://www.iie.org/opendoors.

- IRS. (2019, January 30). Yearly Average Currency Exchange Rates. Retrieved from https://www.irs.gov/individuals/international-taxpayers/yearly-average-currency-exchange-rates
- Kolb, D. A. (2014). Experiential learning: Experience as the source of learning and development. FT Press.
- Marcia, J. E. (1980). Identity in adolescence. In J. Adelson (Ed.), Handbook of adolescent psychology (pp. 159–187). New York: Wiley.
- Oguntoyinbo, L. (2015, July 15). STEM Students Leading Charge to Study Abroad. Retrieved from https://diverseeducation.com/article/73887/
- Robertson, J. (2014). Human Rights Vs. Robot Rights: Forecasts from Japan. Critical Asian Studies, 46(4), 571–598.

- Sahin, A., Ayar, M. C., & Adiguzel, T. (2013). STEM Related After-School Program Activities and Associated Outcomes on Student Learning. Educational Sciences: Theory & Practice, 14(1), 309-322. doi:10.12738/estp.2014.1.1876
- Shiomi, M., & Hagita, N. (2017). Social acceptance toward a childcare support robot system: web-based cultural differences investigation and a field study in Japan. Advanced Robotics, 31(14), 727–738.
- Torres, V. (2011). Perspectives on Identity Development. In J. Schuh, S. Jones, & S.Harper (Eds.), *Student services: A handbook for the profession* (5th ed., pp. 187-206).San Francisco, CA: Jossey-Bass, A Wiley Imprint.
- Wiggins, G. P., & McTighe, J. (2005). Understanding by design (pp. 13-33; 254-264; 267-271). Alexandria, VA: Association for Supervision and Curriculum Development.
- Who Studies Abroad and Who Does Not. (2012). ASHE Higher Education Report, 38(4), 37-65.

World Learning, Inc. (2017) History.

http://www.worldlearninginc.org/who-we-are/history/

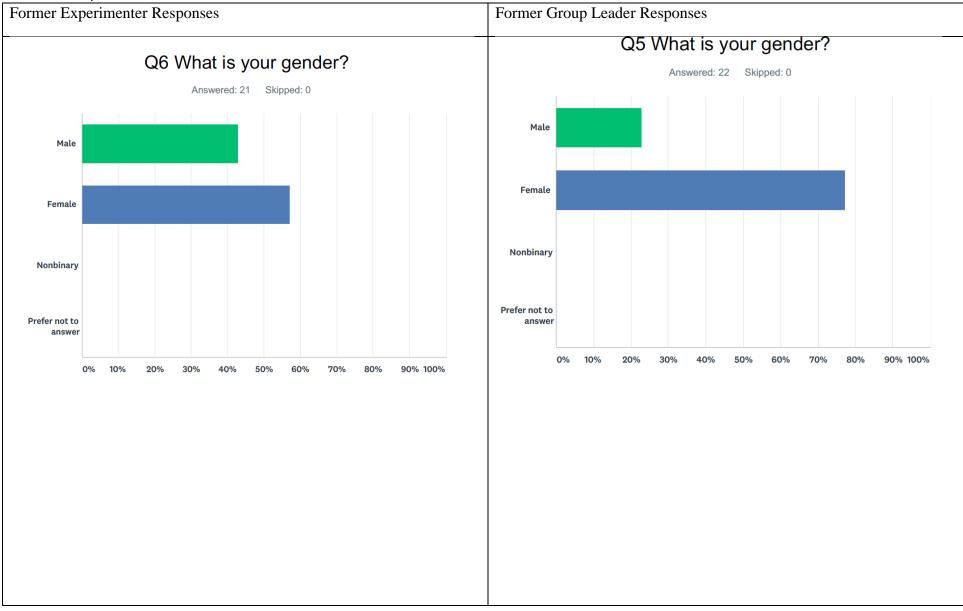
APPENDICES

Appendix A: Needs Assessment

ormer Experimenter Responses (Experimenter A-U, spectively)	Former Group Leader Responses (Leader A-V, respec	ctively
RESPONSES	RESPONSES	
2016	2018 2017 2016	
2017Japan	2015 and 2016	
2014	2015, 2016, 2017	
2015	2015, 2017	
2014	Maybe 2013,2014,2015?	
2015	2016	
2018	2013, 2014	
2014	2015	
2015	2015	
	2017	
2016	2017	
2016	2017	
2016	2014, 2015, 2016	
2015	2015	
Summer 2017	2017	
2017	2016 and 2017	
2014	2015, 2016 & 2017	
2015	2015	
I participated in The Experiment in International Living the summer of 2015	2017	
Summer of 2017	2013, 2014, 2016, 2018	
2015	2014	
2017	2012, 2016 and 2017	

ba and Nicaragua ba and Nicaragua ban ban ban ban ban ban ban ban ban ba	RESPONSES Spain and South Africa Vietnam and Thailand Costa Rica, Vietnam, Spain Spain, Mongolia Costa Rica, Argentina Argentina France, Argentina Ecuador	
ba and Nicalagua V ban ban ban ban ban ban ban ban ban ban	Vietnam and Thailand Costa Rica, Vietnam, Spain Spain, Mongolia Costa Rica, Argentina Argentina France, Argentina	
ban Coan Coan Coan Coan Coan Coan Coan Co	Costa Rica, Vietnam, Spain Spain, Mongolia Costa Rica, Argentina Argentina France, Argentina	
ailand S ban C ban C ban A ban F gentina E	Spain, Mongolia Costa Rica, Argentina Argentina France, Argentina	
pan and pan A A A A A A A A A A A A A A A A A A A	Costa Rica, Argentina Argentina France, Argentina	
pan A pan F gentina E	Argentina France, Argentina	
pan F gentina E	France, Argentina	
gentina	-	
	Faundar	
	Ecuador	
ain	Japan	
aragua and Cuba	India	
caragua and Cuba	South Africa	
aragua and Cuba	Japan	
ain	Argentina, Nicaragua/Cuba, South Africa	
pan F	France & Spain	
ban J	Japan	
gentina F	France and Italy	
ban S	Spain, Nicaragua/Cuba, Brazil	
aveled to Nicaragua and Cuba J	Japan	
ban J	Japan	
ban J	Japan and India	
ban J	Japan	
s	Spain, France and Belgium	

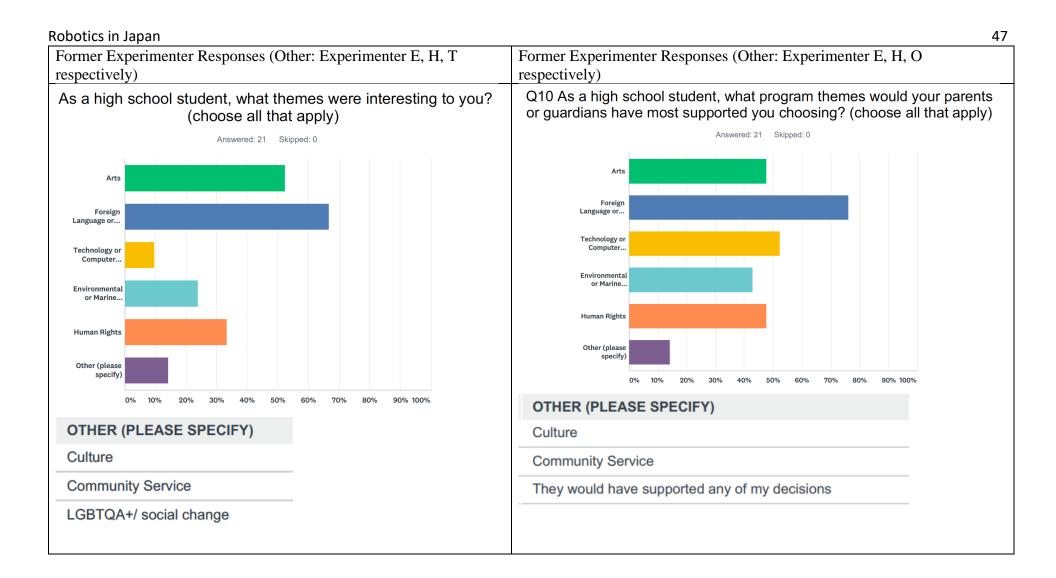
Former Experimenter Responses (Experimenter A-U, espectively)	Former Group Leader Responses (Leader A-V, respectively)		
RESPONSES	RESPONSES		
Arts and social change	Arts and Culture, Leadership		
Manga	Conservation & Ecology; Cultural Appreciation		
Cultural Exploration and Language	Biodiversity, ecology, sustainability in Costa Rica and Vietnam. Urban planning in Spain.		
Buddhism and contemporary culture	Language and Cultural Discovery		
Cultural	Biodiversity and Sustainability, Photography		
Anime and Manga	Community service and the great outdoors		
Language and Culture	Cultural immersion, outdoor adventure		
Community Service & The Great Outdoors	Sustainability and the environment		
Language and culture	Japanimation		
Arts and Social change	Public health and alternative medicine		
-	Youth leadership and social change		
Arts and Social Change (I think?)	Anime/Manga		
Arts and Social Change	Community Service & The Great Outdoors, Arts and Social Change, Leadership Development		
Culture and Language I think?	Regional Identities		
Japanese language and Animation	language and culture		
Anime	Regional and cultural discovery, culinary		
Community service and the outdoors	Culture & language, Arts & social change, Culture & environment (I think)		
Animation and Pop culture	Japanimation		
Arts and Social Change	Anime and Manga		
anime and manga	Anime and Manga, Japanese Language and Culture and Public Health in India		
Animation	Anime/Manga		
Japanimation- Anime and Manga	Chocolate, language and culture and the culinary and language program		

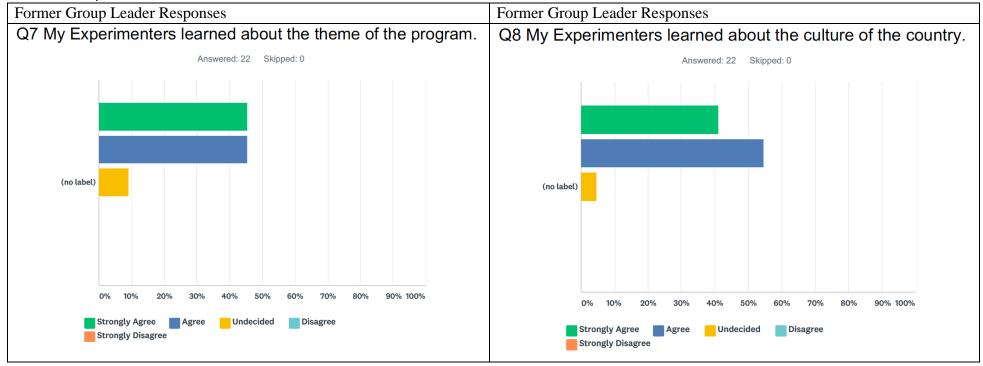


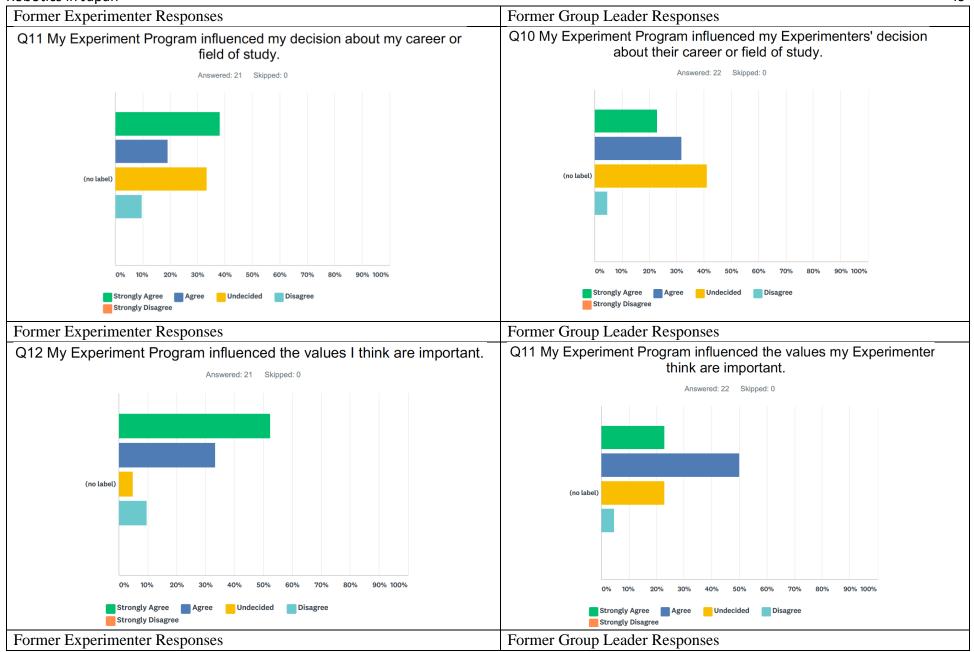
Why did you choose The Experiment?			
Former Experimenter Responses (Experimenter A-J, respectively)	(Experimenters K-U, respectively)		
RESPONSES	Only program that went to both Nicaragua and Cuba.		
I was interested in learning about both cultures/ history and how they have paralleled.	I love learning about different cultures and traveling, and EIL allowed me venture abroad away from home which helped me prepare for moving away from home for college that Fall.		
Passion for manga and Japanese culture	The right amount of time abroad, in combination of a homestay, and in the right area of Spain I		
Seemed to offer the most promising itinerary and small group sizing.	wanted to be in		
My school had a partnership with the organization so I was able to receive substantial aide to attend.	All honestly my mom signed me up without me knowing, but I decided to go because i know it's good to dive into other cultures outside of America		
I heard good things from other people who reviewed it online and it seemed very organized as well	It was just something I've always wanted to try even though I had no idea what it was.		
as selective.	I really wanted to travel and I had a presentation at my school. I really liked the mission of the		
My mother's friend recommended it to us	experiment and the program seemed perfect for me		
It provided an excellent way to travel.	It looked like fun, and I wanted to go to japan. My mother's acquaintance recommended the program to her.		
I wanted an experience abroad that would help me grow as an adolescent, who was ready to go to college in a year. The Experiment provides all of those lessons and more. It was great for growing my self-dependence, moral values, acknowledging how big this world truly is and the different	I chose the program to be able to visit Cuba, as my father was born in Cuba, and I had never been to Cuba.		
ways we can have an influence in it.	To further my drawing experience while learning of a new culture		
Was rewarded a scholarship	It was an opportunity to leave the country coordinated by my school and relatively easy to apply		
To learn about different cultures	to, with a program theme that interested me.		
	I wanted to learn about my love of animation and Japanese culture		

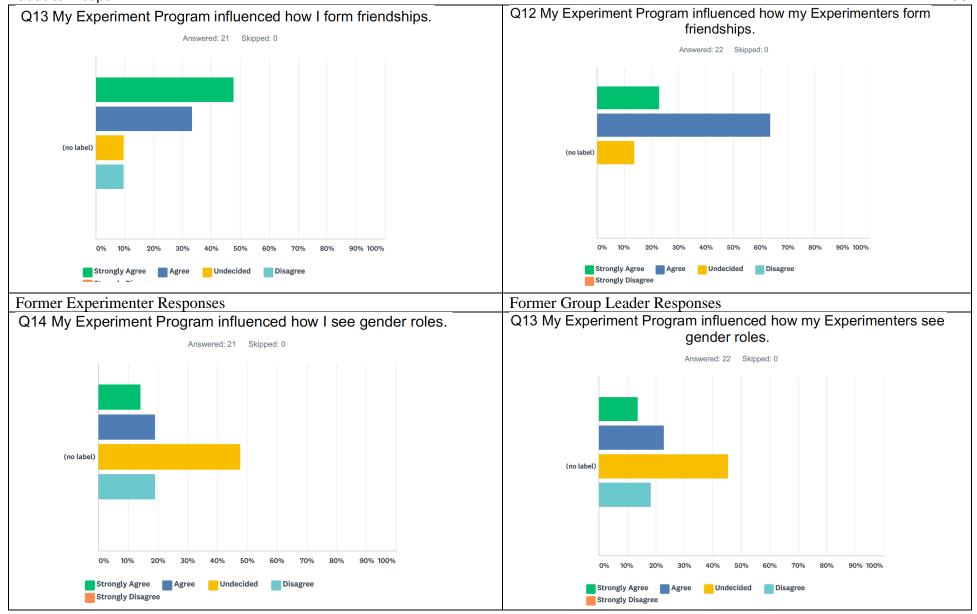
(Leader L-V, respectively)		
I chose the Experiment because of my connections to World Learning and the emphasis on Experiential Education.		
It was associated with my graduate school and I had heard great things!		
I am a world language teacher and I love working with high school students.		
The opportunity for students to make real connections with the culture they are exploring		
I liked the idea of traveling and working with students, and I like the Experiment's focus on identity and cultural exploration as well as their dedication to being more than just a tourist in a country		
and culture.		
I met someone while traveling who shared the opportunity with me. When I saw the Experiment's website, their mission resonated with my personal goals and I felt excited about the work they were doing.		
		My mom happened to meet someone while she was our shopping who mentioned The Experiment to her and asked if I wanted to participate in the Japanimation program since I was and still a hardcore fan of anime, manga, LNs, WNs, JRPGs and the like
I choose the Experiment because of my familiarity with World Learning.		
I chose The Experiment because I wanted to work with the demographic of students that they were offering programs to. Many students have scholarships and it is their first time abroad. It is such a rewarding experience to watch a student come on a program so nervous and leave with so		
		much confidence. A great chance to provide high school students with an opportunity to see the world at a young
age		
I was recommended by a friend the first time I did it, to fill in a position last minute and I really like my first experience and thus continued doing it after that.		
-		

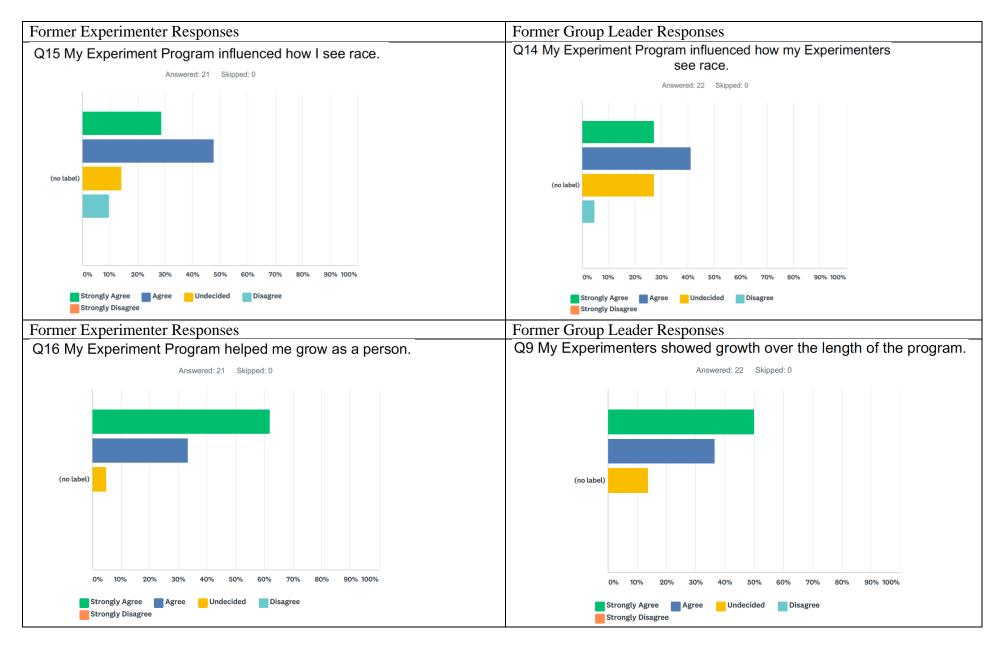
rmer Experimenter Responses (Other: Experimenter L)	Former Group Leader Response	
8 I chose my program based on: (choose all that apply)	N/A	
Answered: 21 Skipped: 0		
Theme		
Country		
Price		
Specify)		
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%		
OTHER (PLEASE SPECIFY)		
Γhe scholarship I was given applied to that region.		











In what area did you grow the most as a person during or from your Experiment program?				
Former Experimenter Responses (Experimenter A, C-K respectively)	(Experimenter L-U respectively)			
RESPONSES	Being more independent and more aware of the world and different customs around me.			
I feel that it made me become more aware of social issues that other countries are facing and it made more independent.	Meeting diverse people made me realize the individuality of my own upbringing. I began to be able to distinguish what was unique to my upbringing and what I shared in common across both state and national lines			
Expanded my horizons on friendships and got me out of my "bubble".				
I learned how to problem solve and be prepared for any situation. I also learned to take things slow and really enjoy experiences.	 I learned how to be more extrovert and expand on my knowledge of the world around me, as was learning about the Japanese art style of anime. 			
	Just being open to trying new things more			
It really was a culture shock for me seeing how life is lived in a completely different way than what I'm used to. I was taught respect and how to be more aware/considerate of differences within the	Independence			
world.	I learned to be more confident in myself. I realized that if I put my mind to something, I can do			
I used to be very shy and insecure, and now I feel confident that I can handle myself well and	figure out a way to achieve my goals.			
interact with people in a positive and helpful way no matter what their background is.	I learned more about myself and how to interact with the world around me.			
Social Interactions	I opened out of my shell i get along with people alot simpler now			
Self-dependence	World perspective and self confidence			
Courage in social relationships, both with other Americans and with people in my host country.	Leadership and Drawing			
Seeing the different cultures and value our every day life				
Independence				

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In what area did you see the most significant growth from your Experi	menters?		
Former Group Leader Responses (Leader A-N respectively)	(Leader O, Q-V respectively)		
RESPONSES	They learned confidence to be independent. They gained confidence to form friendships with both		
I think throughout the programs I saw the most growth in expanding one's comfort zone trying	Americans and Japanese.		
new things, feeling new things or engaging with emotions and reactions to experiences in new ways, being open to individuals with different backgrounds and perspectives.	In their ability to stretch their comfort zone, to try new foods/experiences and to build friendship		
Socialization and self confidence. Many of them had never been away from home before and never	with people who they may not have reached out to at home or in other familiar settings		
had to make all new friends. They came out of the Experiment with a much higher social IQ and confidence in their ability to connect with people from other places	I think our acceptance of one another. Personally at the time I never had many friends who were like me so I kept to myself a lot. Meeting everyone and getting to know them over a course of a		
I think a lot of them gain confidence in their abilities to connect with others and make new friends, and to generally try new activities.	month I found myself with people I would call some of the greatest friends I've made. We didn't really warm up to another in the beginning but in the end I still remember the sitdown we had all together as a group getting emotional (myself included) over our time together ending. I think speak for all us when I say our time together felt so much longer than a month.		
Independence; openness to new things; respect for people from different backgrounds.			
Risk taking	An area in which I saw the most significant growth from my Experimenters was in their communication with each other, the host community, and with leaders.		
Risk taking and communication skills			
Personal responsibility/ independence/ facing fears	Students always grow so much in Homestay. They have some time to be alone with a local		
Their interpersonal relationships, and their relationship with the environment!	member of the country and community that they are in. This dynamic helps student grow in Independence and in the ability of embracing awkward and uncomfortable situations. They really grow into a more confident and able student during this time.		
A lot of them formed friendships that none saw possible at first. Most of them also gained self- confidence, self respect and learned to dispel any stereotypes they had. They still speak to each			
other nearly four years later.	Willingness to be flexible in a group setting		
Resilience and cultural awareness	In terms of being independent, problem solvers and being more open, as well as assertive.		
In their growth of race and social classes in SA.			
I saw my Experimenters find balance in navigating difficult social situations with a fellow Experimenter who did not understand social norms and expectations within the group.			
Overcoming personal challenge/stepping out of their comfort zones.			
My experimenters became much more independant over the course of the month and became active observers of the cultural nuances around them.			

Robotics in Japan	54
Other Comments	
Former Experimenter Responses (Experimenter E, G, N, O, R, S respectively)	Former Group Leader Responses (Leader A, E, Q, R, T respectively)
RESPONSES	RESPONSES
I enjoyed the survey No.	Something that came up for me while rating the programs was how different my students' experiences were from year to year and, even more so, from program to program. For example, my South Africa program (leadership institute) was so specifically designed to inform students on
N/A	issues such as race, gender, values, relationships, etc. However the Spain program was not, and depending on the group dynamic and our experiences together, these issues were or weren't a particularly formative part of our program.
No I hope my answers help	Relationships with coleaders and with local leaders were key in the success of any of these areas. For example, one local guide believed strongly in group cohesion but wanted to sweep any cultural differences under the rug for the sake of unity. Coleaders also had different values.
I had fun wish i could do it again	The Experiment is a highly effective program that I continue to recommend to those interested in leading and traveling. I find that students learn more about themselves through the lens of another culture. I am forever grateful to the Experiment for the opportunities granted to me and the people it brought into my life.
	Question 13 I didn't really understand what it was asking me
	It is hard to look back on all my programs and rate them equally. I do believe that the programs in Japan allow students to find Independence. I do believe this is just the way the programs in Japan specifically are structured. India was a lot more difficult. Students were not as independent and had a lot more structure on their program. For example while in Delhi they are confined to a very small area of the city. I do believe this changes how much students grow and learn.

Appendix B: Short Itinerary



Program Itinerary

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Robotics in Japar	1			
Experiment 2021	(SUBJECT TO CHANGE) JRO-21			
DATES	MEETING PLACE - HOLIDAY INN LOS ANGELES INTERNATIONAL AIRPORT			
JUNE 29	Your group will meet at the Holiday Inn, Los Angeles International Airport hotel on June 29 by 5:00PM , the night before the departure day, June 30.			
JUNE 30 - JULY 1	Flight: United Airlines flight will arrive in Tokyo Narita at 3:00 pm on July 1.			
	ORIENTATION - TOKYO			
JULY 1 – JULY 3	Spend your first three days acclimating to Japanese language and culture. You and your group will explore diverse neighborhoods, navigate the city using public transportation, sample Japanese cuisine, visit famous sites such as Sky Tree, Hachiko, and the 100-yen shop, and get to know each other and Japanese culture during group discussions, intercultural activities and a scavenger hunt with in-country Japanese staff. Accommodations: Touganeya Hotel, Higashi Ueno 3-17-5, Taito-ku, Tokyo			
	ROBOTICS THEMATIC FOCUS - Tokyo			
JULY 4 – JULY 16	Transfer to the YMCA Asia Youth Center. You will spend the next two weeks completing Robotics projects at Tokyo Tech (Tokyo Institute of Technology), and working on your Japanese skills. Also meet with local high school and college students to participate in language and cultural exchanges or work on projects together. Go on site visits to see robotics being researched and utilized in real life. Continue to explore Tokyo after class including a day trip to a nearby cultural site such as Kamakura.			
	Accommodations: YMCA Asia Youth Center 2 Chome-5-5 Sarugakucho, Chiyoda City, Tokyo 101-0064, Japan			
JULY 17 – JULY 25	Take an airplane to Sapporo to meet your Japanese hosts. For the next week you will live with a host family in the town of Nanae. The homestay allows you an opportunity to become fully immersed in the daily life of a Japanese family and community. During your homestay you will get together on most weekdays with your group to explore the local culture and region. Activities may include visits to the Kelp Museum and Harin Temple, learning about Nanae traditional lifestyle (including dressing in kimonos) and how it is sustained, interacting with local high school students, participating in a traditional tea ceremony, learning how to make Soba, and canoeing on Lake Quuma. Accommodations: Homestay			
	REFLECTION & DEPARTURE - TOKYO			
JULY 26 - JULY 29	Take an airplane back to Tokyo. You and your group will enjoy some last-minute <u>shopping</u> , <u>final</u> Japanese meals, and discussions about your experiences and re-entry before the journey home. Accommodations: <u>Touganeya</u> Hotel Higashi Ueno 3-17-5, Taito-ku, Tokyo			
JULY 30	Flight: United Airlines flight UA33 will arrive in Los Angeles LAX at 11:00 am on July 29.			

July 2021

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	29 International Flight	30 Arrive Begin Orientation	1 Survival Japanese Group Orientation	2 Survival Japanese Group Tokyo Exploration	3 Survival Japanese Scavenger Hunt	4 Excursion from Tokyo (Example: Kamakura)
5 Tokyo Tech (TT) Intro Robotics Assessment	6 TT Project Explanation Basic Skills Explained Free Afternoon	7 TT Students Group Workshop with Experimenters Free Afternoon	8 TT Project Workday Robotics Company Site Visit	9 TT Project Workday Afternoon Cultural Exchange	10 TT Project Workday Evening Cultural Exchange; Cooking at Students' Apt.	11 Excursion from Tokyo (Example: Hakone)
TT Project Workday Senior Citizen Site Visit	13 TT Students Group Workshop with Experimenters Free Evening	14 TT Project Workday Free Afternoon	15 TT Project Workday Afternoon Cultural Exchange	16 Present Tokyo Tech Project End Celebration	17 Meet Homestays Leaders check in with each family	18 Homestay Day with Families
19 Homestay Day with Families	20 Group Reflection Time Cultural Activity Eve. with Families	21 Visit Local School Eve. with Families	22 Visit Local School Eve. with Families	23 Cultural Activity Eve. with Families	24 Farewell Party Prepared by Experimenters Eve. with Families	25 Last Morning with Families Afternoon Departure
26 Group Leader Planned Tokyo Exploration Reflection Begins	27 Excursion from Tokyo (Example: Euiigoko) Evening Reflection	28 Final Shopping Time Reflection Activities Final Group Dinner	29 Morning reflection and last shopping International Flight	30 Arrive at LAX		

Appendix D: Backward Design Curriculum Plan

Desired Results

Goal: Participants will gain skills and knowledge in building and programming robots.

Goal: Participants will gain knowledge about the careers and areas of study related to robotics.

Goal: Participants will be able to articulate observed differences and similarities in United

States and Japanese culture.

Goal: Participants will gain experience working and communicating with others.

Assessment Evidence

- Completion of robotics projects at Tokyo Tech.
- Class and project group participation.
- Participation in group discussions guided by group leaders.
- One on one check-ins with group leaders.
- End of program evaluation answers.

	Learning Plan
In Tokyo	• Construct a basic robot.
Tech Classes	• Program a robot to complete a specific task, such as following a taped
	line.
	• Work in a group to solve a project-based problem using robotics.
	• Read written information and listen to presentations on areas of study at
	Tokyo Tech.
	• Work in a mixed group of Japanese students and Experimenters to
	accomplish a task.

Guided by	• Discuss or journal about observations from site visits to businesses
Group	using and developing robots.
Leaders	• Journal about personal reactions to the jobs and areas of study
	presented.
	• Discuss observations from working in project groups with Japanese
	students. Compare these observations to group work with United States'
	students.
	• Discuss Japanese and United States citizens' vision of robotics role in
	current society based on experiences gained at Tokyo Tech and on-site
	visits.
	• Navigate the Tokyo commute in groups of three.
	• Take turns introducing The Experiment group and giving thanks to
	instructors, Japanese student partners, and site visit hosts.
Site Visits	• Visit a business using therapeutic robots such as a nursing home or
	senior center.
	• Visit a Robotics research and development country.

		MONDAY			TUESDAY		V	VEDNESDA	Y		THURSDA	Y	
TIME	Frontline	Overflow	Escalation	Frontline	Overflow	Escalation	Frontline	Overflow Escalation		Frontline	Overflow	Escalation	
8 AM - 5 PM*	Staff A Staff B Staff C Staff D Staff E Staff F Staff G Staff H	B During work hours, reach out to the Sr. Staff member most available and/or applicable.		Staff D			Staff AStaff BStaff CStaff CStaff DStaff DStaff EStaff FStaff GStaff H			Staff A Staff B Staff C Staff D Staff E Staff F Staff G Staff H	During work hours, reach out to the Sr. Staff member most available and/or applicable.		
5 PM - 9 PM	Staff B	Staff C	Sr. Staff B	Staff C	Staff D Sr. Staff C Staff E Sr. Staff B		Staff D	Staff E	Staff E Sr. Staff D		Staff F	Sr. Staff A	
9 PM - 8 AM	Staff A	Staff D	Sr. Staff A	Staff B			Staff C	Staff F Sr. Staff C		Staff D	Staff G Sr. Staff D		
	ATIONS OF DLES	OVER	NTLINE RFLOW ATION	Carries an on-call cell phone. Stays within earshot of an on-call cell phone, and has laptop ready with wifi to log all calls at all times. Stays within cell phone reception areas with personal cell phone on and easily audible. Stays within cell phone reception areas with personal cell phone on and easily audible.									

Appendix E: Sample Week of On-Call Response Chart	Appendix	E: Sample	Week of	On-Call Res	ponse Chart
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*Any staff who experience an eventful overnight shift may arrange with their supervisor to take the morning OR afternoon off. Any ongoing situtations must be communicated to continuing on-call staff before time is taken, and the on-call cell phone must be passed on to the next shift before 5 PM.

	FRIDAY			SATURDA	1						
Frontline Overflow Escalation			Frontline	Overflow	Escalation	Frontline	Overflow	Escalation			
Staff A Staff B Staff C Staff D Staff E Staff F Staff G Staff H	During work hours, reach out to the Sr. Staff member most available and/or applicable.		out to the Sr. Tember most Staff A able and/or		Sr. Staff B	Staff D	1.Staff E 2.Staff F	Sr. Staff D			
Staff F	Staff G	Sr. Staff B	Staff B	Staff C	Sr. Staff C	Staff E	Staff F	Sr. Staff E			
Staff E	Staff H	Sr. Staff A	Starre		Shi Starr e	Staff E	Starr				
Staff may trade shifts. All trades must be clearly emailed with an updated schedule to the on-call email list serve.											

Appendix F: Budget

The Exp	beri <u>mer</u>	nt in	Internatio	ona <u>l Li</u>	ving		
			s in Japan				
			ummer 2021)				
rientation	3 days						
obotics	12 days		Total Participan	ts	1	2 to 14	4 people
omestay	8 days		Total Program L				2 people
/rap-Up	4 days		Total People on	Program	1	4 to 1	6 people
Detail	Price in Foreign Currency	# of Units	Unit Type	USD Cost/ Unit	Cost Share	Tota	al
TAFF SALARY							
New Group Leader		4	Weekly stipend	\$ 250		\$	1,000
Veteran Return Group Leader		4	Weekly stipend	\$ 325		\$	1,300
In-Country Partner Admin. Costs		1	Contract	\$ 20,000		\$	20,000
Total					\$ -	\$	22,300
TAFF COSTS				1	1	<u> </u>	
Training on SIT Campus		2	Leaders	\$ 500		\$	1,000
Domestic Travel for Group Leaders		2	Group Leaders	\$ 1,000		\$	2,000
Total					\$ -	\$	3,000
AFETY & RISK MANAGEME	NT						
International SOS medical assistance Insurance		16	Participants & Group Leaders	\$ 100		\$	1,600
Cell Phone for Group Leaders	¥ 40,000	2				\$	
Total			2.549 2044010		\$ -	\$	724 2,324
UPPLIES		•					,
Miscelaneous Leader Budget		1	Miscelaneous	\$ 250		\$	250
First Aid Kit		1		\$ 50		\$	50
Total		- ·		φ 30	\$ -	\$	300

Tokyo Orientation							
Narita Express Train from				Participants &			
Airport	¥	2,000	16	Group Leaders	\$ 18		\$ 290
Orientation: Room and				Participants			
Classroom (3 nights,				diveded by 2 &			
double occupancy)	¥	12,000	9	Group Leaders	\$ 109	\$ 135	\$ 978
				Participants &			
Transportation Budget	¥	2,000	16	Group Leaders	\$ 18		\$ 290
				Participants &			
Activity Budget	¥	3,000	16	·	\$ 27		\$ 435
				Participants &			
Breakfast (3 days)	¥	1,500	16	Group Leaders	\$ 14	 	\$ 217
				Participants &			
Lunch (3 days)	¥	2,250	16		\$ 20		\$ 326
Dinner (3 days)				Participants &			
	¥	3,000	16	Group Leaders	\$ 27		\$ 435
Japanese instructor and				Participants &			
materials	¥	10,000	16	Group Leaders	\$ 91		\$ 1,449
Total						\$ 135	\$ 4,419

	-		·		i		• • •		
obotics Thematic Compone	ent								
YMCA Hostel Student Room (12 nights, double occupancy) Breakfast				Participants					
included	¥	108,000	7	diveded by 2	\$	978	\$1,175	\$	6,846
YMCA Hostel Single Adult Room Rate (12 nights) Breakfast Included									
nights) bleaklast included	¥	80,400	2		\$	728		\$	1,456
Lunch (12 days)	¥	9,000	16	Participants & Group Leaders	\$	82		\$	1,304
Dinner (12 days)	¥	12,000	16	Participants & Group Leaders	\$	109		\$	1,739
Tokyo Tech Classes and Activities Fee	¥	40,000	14	Participants	\$	362		\$	5,07 ⁻
YMCA to Tokyo Tech round trip (11 days)	¥	4,840	16	Participants & Group Leaders	\$	44		\$	70 ⁻
Everyday Transportation and Activity	¥	12,000	16	Participants & Group Leaders	\$	109		\$	1,739
2 Excursions, Transportation and Activity	¥	6,000		Participants & Group Leaders	\$	54		\$	869
Airplane to Sapporo	¥	9,000		Participants & Group Leaders	\$	82		\$	1,304
Trains to and from Airports				Participants &					
Total	¥	3,500	16	Group Leaders	\$	32	\$1,175	\$ \$	507 21,537

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Ho	omestay							
	Homestay Stipend for				Participants &			
	Families (8 days)	¥	22,000	16	Group Leaders	\$ 199		\$ 3,188
1	Group Homestay Activity				Participants &			
	Budget (1000 per day)	¥	8,000	16	Group Leaders	\$ 72		\$ 1,159
	Farewell Party				Participants &			
			5,000	16	Group Leaders	\$ 45		\$ 724
	Aimlana ta Takua				Participants &			
	Airplane to Tokyo		9,000	16	Group Leaders	\$ 82		\$ 1,304
	Trains to and From				Participants &			
	Airport	¥	3,500	16	Group Leaders	\$ 32		\$ 507
	Total						\$ -	\$ 6,883

Т	okyo Program Wrap-up										
					Deutiein eute						
	Wrap-Up: Room and				Participants						
	Classroom (4 nights,		16 000		diveded by 2 &	\$	145	\$	180	\$	1,304
	double occupancy)	¥	16,000	9	Group Leaders	Φ	143	Ð	160	•	1,304
	Transportation and				Participants &						
	Activity Budget	¥	4,000	16	Group Leaders	\$	36			\$	580
	Excursion Transportation				Participants &						
	and Activity	¥	3,000	16	Group Leaders	\$	27			\$	435
1					•						
					Participants &						
	Breakfast (4 days)	¥	2,000	16	Group Leaders	\$	18			\$	290
	Dicakiast (+ days)	-	2,000	10	Participants &	Ψ	10			Ψ	200
	Lunch (4 days)	¥	3,000	16	Group Leaders	\$	27			\$	435
		-	0,000	10	Participants &	Ψ	21			Ψ	400
	Dinner (4 days)	¥	4,000	16	Group Leaders	\$	36			\$	580
	Narita Express Train to	-	4,000	10	Participants &	Ψ				Ψ	000
	Airport	¥	2,000	16	Group Leaders	\$	18			\$	290
	Total	-	2,000	10	Cloup Leaders	Ψ	10	\$	180	\$	3,912
S	UBTOTAL							•		Ť	0,012
										\$	64,676
0	VERHEAD										
	25% Overhead									\$	16,169
Т	DTAL	1									
	Total							\$1	,490	\$	80,845
	Per Participant Cost			14	Paricipants					\$	5,774.63
	Revenue (Program Fee										
	per participant)									\$	1,000.00
	Total Paricipant Fee									\$	6,775