



Museums Empowered

Sample Application ME-251640-OMS-22
Project Category: Evaluation

Fairchild Tropical Botanic Garden

Amount awarded by IMLS:	\$219,986
Amount of cost share:	\$226,995

The Fairchild Tropical Botanic Garden will improve the design and outcomes of its programs by developing an institution-wide approach to evaluation. Project activities include creating an evaluation strategic plan, which will identify shared outcomes; staff trainings; and developing a resource library with evaluation tools to better understand visitor attitudes and dispositions. Trainings, which will be co-developed by staff and a consultant, will give staff the knowledge and skills to conduct evaluations that are appropriate for the ages, diversity, and experiences of visitors. The project will increase the staff's ability to design evaluation plans, implement studies, analyze data, and utilize those findings to continually improve the visitor experience.

Attached are the following components excerpted from the original application.

- Narrative
- Schedule of Completion

When preparing an application for the next deadline, be sure to follow the instructions in the current Notice of Funding Opportunity for the grant program and project category to which you are applying.

Fairchild Tropical Botanic Garden: Growing Capacity: Building an Evaluation Framework

1. Project Justification

A. Addressing IMLS Museums Empowered Goal 3: Evaluation

Fairchild Tropical Botanic Garden (Fairchild) is requesting funds to support *Growing capacity: Building an evaluation framework*, a two-year initiative that will provide staff with the knowledge, skills, and tools to build evaluation capacity. As a botanical garden that serves a diverse and robust multiethnic community, we have a responsibility to continuously improve how we build positive environmental attitudes and dispositions, as well as a sense of STEM identity within our community. In partnership with the Institute for Learning Innovation, Fairchild will create an evaluation strategic plan and utilize evaluation results to direct, shape, and improve outcomes.

Our goals are:

1. Train staff to have the knowledge and skills to successfully conduct evaluations to use shared tools and outcomes that are appropriate for the ages, diversity, and experiences of visitors who participate in our programs. Training sessions and tools will be co-developed so all participating staff gain a sense of ownership and efficacy in the uses of evaluation.
2. Develop an evaluation strategic plan for Fairchild's Education department using shared outcomes and tools.
3. Create evaluation capacity building and community collaboration, to (A) understand the depth of participant experiences, (B) learn about the many ways visitors (particularly youth) participate over an extended period, and (C) create opportunities for learning how the visitor's experience fits into the larger landscape of STEM experiences in the South Florida community.
4. Utilize evaluation findings to continuously improve programs, enrich the current visitor experience, and connect new and diverse communities.

To achieve the outlined goals, this project will provide cross-department training of Fairchild staff over a two-year period of time. This proposal is one initiative in Fairchild's strategic plan to address how we can better understand and meet the needs of our diverse community.

B. Advancing the Institution's Strategic Plan

Fairchild recently implemented a 5-year strategic plan to focus on evaluation capacity building as a key target for increasing the diversity of educational program participants and improving impacts. This is a critical time in Fairchild's development to undertake this level of training, given where we are in rolling out our overall strategic plan.

Fairchild seeks to inspire a greater knowledge and love for plants so that all can enjoy the beauty and bounty of the tropical world. Fairchild is committed to: (A) connecting plants and people to inspire a love of plants, gardening, and the beauty of nature; (B) inspiring and training a new generation of botanists and explorers; (C) positively impacting the community by supporting future environmental stewards by creating experiential learning through formal and informal engagement for students, teachers, and public through wide-reaching programming; and (D) creating a culture of learning and engagement at all. Each of these initiatives have interpretation outputs embedded within and professional development is explicitly a part of strategic initiative 3.

C. Need, Problem or Challenge

To account for programs' impact on visitors, historically museums relied on participation numbers to measure success. Within the last decade, museums have focused efforts on developing assessment tools to verify programs' achievements, determine if institutions are serving their communities, and provide stakeholders data to justify financial support. Evaluations are a powerful tool for museums that guide the programming needs of departments and confirm alignment with the organization's mission and strategic plan. However, museum staff may lack time, resources, knowledge, and skills to develop quality evaluations and to collect and analyze data (Hyoung Han & Jeong Noh, 2014; Steele-Iama, 2015; Kubarek, 2015). There is a heightened interest within the botanic gardens community to develop evaluation tools to measure impact, relevancy of programming, and consider different backgrounds of visitors (See [Impact: Botanic Gardens and the quest for evidencing change](#)). Quality evaluations require properly trained staff and institutional support. Bequette

et al. (2019) argued that targeted strategies and investments in evaluation capacity building are critical for developing an understanding of the impact of the informal STEM education field.

Fairchild Tropical Botanic Garden is located in Miami-Dade County, providing educational opportunities and spaces for community well-being for the 2.7 million people who call it home. Fairchild is uniquely positioned within Miami to meet the growing need for green spaces in urban areas, while also educating and inspiring its community to take conservation action. Since its inception, the program has engaged well over 1,250,000 South Florida students and has provided \$250,000 in school garden funding to under-resourced schools, in addition to a host of other public activities. Recently, Miami was declared the “Most Vulnerable” coastal city worldwide (Cusick, 2020), as it faces threats from rising coastal waters, increased storm surges, and accompanying species degradation. It is vital, now more than ever, for environmentally engaged communities to find creative solutions to current and future challenges. Fairchild, with its work in the heart of Miami, has a critical role in connecting the community with nature through environmental education. While most environmental education focuses on knowledge and skill-building aspects of environmental literacy, equally important, but often under-evaluated are the individual attitudes, dispositions, and identities that contribute to the foundation of environmental action. Fairchild has identified three main dimensions to gather data to inform our work and impact our participants: *environmental attitudes and dispositions*, *STEM identity*, and *environmental literacy*.

Along with many environmental professionals and organizations, we are concerned about the growing disconnect between communities, particularly youth, and an unaltered natural world (Louv, 2008). We know that for youth, and adults alike, the development and sustainment of positive environmental attitudes and dispositions towards the environment requires accessible green spaces in which they can engage (D’Amore & Chawla, 2020). In order for youth to develop positive attitudes, dispositions, and identity they need the opportunity to connect with their local ecosystems (Miller, 2005; Steg & Vlek, 2009). Yet, researchers point to the problems of these assertions for urban minority youth, particularly those from low-income neighborhoods (Dowdell et. al., 2011; Duhn et. al., 2017). The development of these STEM identities is a process of enhancing the way students participate in the STEM community and the development of this dimension of identity can empower students to feel knowledgeable and comfortable in the STEM environment (Rodriquez et al., 2019). Unfortunately, Latine/x students often face difficulties in developing their STEM identities and seeing themselves as potential scientists, due to their lack of exposure to role models and negative media stereotypes (Sorge et al., 2000). The community we serve in Miami has the highest percentage of immigrants calling it home of any large city in the U.S. (Florida et al, 2018) and Miami-Dade County Public Schools (MDCPS) serves an international community with one of the highest poverty rates of large U.S. cities (U.S. Census, 2020).

Fairchild is committed to the development of the local community and cultivating the next generation of thoughtful, sustainably-minded scientific thinkers. We have the unique opportunity and responsibility to reflect on our programming to ensure we are creating opportunities and spaces for the fostering of STEM identities for all. A critical dimension of program development and implementation in this community is cultural competency: We question how we can best understand, collaborate with, and serve this diverse and unique community.

This project will provide the necessary framework to strengthen our organizational capacity to (1) gain a better understanding of the community’s needs; (2) assess how we are currently meeting the needs of the community; (3) identify tools and training required to continuously improve our programming to meet the community’s needs; and (4) receive support as we implement these processes and apply our findings. Understanding how our programming can foster positive environmental impact will have a direct influence on the future environmental quality of Miami and the communities in which people live. The Fairchild team does not currently possess the skills necessary to conduct cross-program, collaborative evaluations needed to continually improve how we conduct programming and who we primarily serve. In the past, our team has utilized external evaluators to examine the impacts of our programming. These studies have resulted in reports generally framed in favorable terms, suggesting our department is meeting all of our outcomes. However, these reports are not always useful in providing an action plan on how to improve and expand our programming. Navigating the range of education evaluation techniques and literature without properly trained in-house staff has made interpretation and implementation of the findings difficult.

Fairchild ultimately seeks to understand how our team is impacting our community within the three dimensions listed above and how we can continuously improve our work in the community. This project will develop and empower

Fairchild staff to utilize evaluation tools that are both programmatically and culturally appropriate, so we can continuously adapt our programming to meet the needs of our diverse community. We have the unique opportunity to learn in action through the development of shared standards across our programs. Our programs represent various points along the spectrum of informal and formal STEM education, including our award-winning informal environmental science competition program, the Fairchild Challenge (FC), to the first Conservation Biology High School, BioTECH Senior High School, with a botanic science magnet program with an official campus at Fairchild. Together they present an opportunity to develop a robust evaluation plan, with shared measures, to understand the breadth and depth of current and future programs (See Supplement Document 2 for Education Program Overview). Without an internal evaluation skillset and associated resources, we will remain unable to wield the potential of our expansive network. We seek to leverage the vast network of participants our programs have cultivated to reflect on and improve upon our impact.

D. Target Group(s)

Fairchild Education and Volunteer Department staff will be the main participants and collaborators in this project. The total number of staff participating in this project is 13. Five key staff have been involved in the development of this proposal and upon funding, all staff will collaborate in the development of an evaluation strategic plan. Following the development of the strategic plan, all staff will participate in focused training sessions to strengthen their ability to design appropriate evaluation tools and how to implement these tools to shape our programs and improve our desired outcomes. Staff will become versed in a suite of evaluation techniques, protocols, and strategies for evaluation based on unique program characteristics. Fairchild staff are emerging leaders in various fields, representing diverse social and academic backgrounds (Education, Botany, Museum Studies). This project will serve as both a professional learning opportunity for Fairchild staff as well as an investment into the next generation of museum education leaders. **Graduate Fellows** funded through this project will gain valuable knowledge about evaluation theories and strategies, as well as being able to incorporate evaluation studies into their graduate thesis work.

E. Ultimate Beneficiaries

In strengthening our programs and the desired outcomes for our students through evaluation, Fairchild Education staff will be positioning **youth participants** to become more involved in their local community as gardeners, environmental stewards, informed residents and voters, and possibly future science educators and scientists. The Fairchild Challenge currently reaches 125,000 youth between the ages of 5-18 every year, while Fairchild's Botany Magnet School Program hosts over 600 youth annually. Each successive wave of student participants will be the next generation of garden supporters and visitors, fostering a love of plants and gardening in their own networks. **Fairchild Tropical Botanical Garden** will benefit from an evaluation strategic plan, which will include trainings, a resource library, and instruments to be utilized in the education department and across departments at Fairchild. Through the implementation of evaluations into the fabric of our program maintenance and development process, **visitors and education program participants from the Greater Miami community** will benefit from a more personalized educational experience, tailored to the needs of our local community.

2. Project Work Plan

A. Activities

The evaluation training and tool development will be based on ILI's extensive experience in training informal learning professionals to develop evaluation capacity, particularly in utilizing evaluation for equity and inclusion purposes, and for providing support that helps informal learning professionals learn new material and develop novel skills. This established, evidence-based process will be modified to support Fairchild Tropical Botanic Garden's learning initiatives. Training and development will follow this format:

Year 1:

Step 1: September 2022 – November 2022

Assessment of Baseline: For this training to be successful, Fairchild must be fully committed to and able to meet the project goals. Dr. Verbeke (ILI) will begin by assessing the current state of the evaluation knowledge and capacity through staff surveys, staff interviews, evaluation capacity checklist (VSA's evaluation competencies), and secondary data analysis. Each staff member will fill out a baseline survey and participate in a one hour one-on-one interview. The

organization's strengths, challenges, and barriers to adopting shared evaluation outcomes and practices will be identified on a group level (i.e. we will develop an asset-based approach to understanding what skills already exist at Fairchild). Utilizing these results, ILI will offer feedback and design steps to help Fairchild improve where necessary and a plan for improvement will be implemented.

Step 2: December 2022 – March 2023

Development of Strategic Plan and Shared Outcomes: Prior to the development of the shared outcomes and measures, all staff will participate in two workshops on the basics of informal learning evaluation (why evaluation, how to develop outcomes, etc.). These two workshops will include an overview of basic knowledge of outcomes and the functions of different evaluation tools. ILI will provide Fairchild with a description of a broad range of evaluation tools, including a discussion on how certain outcomes relate to particular tools and how to use tools that are both culturally responsive and age-appropriate. These sessions will be essential for staff so they have appropriate expectations about the tools they utilize and understand why the approaches they employ will be effective. Following these sessions, the participating staff will collaborate through a series of workdays to develop a strategic plan for evaluation, which will include a series of shared outcomes. Clear and measurable outcomes will be established as part of the process, by also establishing a shared evaluation mission and vision (i.e. what and why are they doing this process). In addition, the strategic plan will create a roadmap for how and when the evaluation work will happen over the 2 years. This work will support organizational culture shift and integration of new practices across the museum.

Step 3: April 2023 – July 2023

Development of Tools and Pilot: Immediately after Step 2, the project team will come together to build tools needed to achieve the outcomes identified through the development of the evaluation strategic plan. This process will be guided by the ILI, utilizing the tools developed by ILI over the last 40 years. Then Fairchild will receive customized evaluation training both on-site and online, as appropriate, over the four months of this phase. Utilizing the results from Steps 1 & 2, will allow ILI to embed the organization's current skill sets and goals to build a unique training program. This rigorous, customized approach to instruction in context is a hallmark of ILI's practice and success in professional learning. The process will also develop deep knowledge and experience in key staff members to build a 'train the trainer' program for Fairchild, ensuring that Fairchild has the internal capability to train new staff as needed. Following the development of the tools and initial training on the use and implementation of those tools, we will then move into the pilot phase for those tools. The piloting of the tools will be undertaken by the project staff through up to 3 of the education programs. Tools will be assessed for their ease of use, their efficacy, and accuracy. Through this process, we will adjust each tool to better meet the needs of the projects they serve, with the goal of being able to easily use tools across programs, as appropriate.

Step 4: August 2023 – January 2024

Implementation, Level 1: In Step 4, implementation of the evaluation strategic plan will begin. All education programs (See Supplement Document 2 for Education Program Overview) will be evaluated according to the shared and project specific outcomes identified by the project team. This process will be led by ILI, with support given by the project PI team. The project PI team will be the leads for the 'train-the-trainer' program at Fairchild. During this period, they will specifically receive training on how to coach and train their staff in carrying out evaluation studies. In addition, all staff will continue to receive training evaluation each month (6 sessions). Training during this time will focus on data cleansing, validation, and analysis, receiving deep and varied training on both qualitative and quantitative methods. In addition, ILI will evaluate the staff's ability to carry out the evaluation work through observations, which will give the team the necessary data to improve their practice. An observation protocol will be developed with goals of the measurements listed below in mind. We will also utilize this time to develop a shared repository for data collected. This is an essential step so knowledge can be gained from across Fairchild's programming.

Step 5: February 2024 – August 2024

Implementation, Level 2: During the last step of the process, Fairchild will be working towards independently carrying out their evaluation strategic plan. The PI team will manage the day-to-day evaluation activities. ILI will be available to assist the team, as needed and through bi-weekly meetings. Three final quarterly training sessions will take place to address how to communicate and utilize their evaluation findings. Staff will be assisted in writing up their results for both internal and external communication. The post-project survey will be delivered to all staff to measure changes in staff's attitudes about and understanding of Fairchild's current and potential audience, evaluation methodologies, and visitor-centered practices. At the end of the year, ILI will work with Fairchild to write the final report for IMLS.

B. What are the risks to the project and how will you mitigate them?

The Institute for Learning Innovation, including Dr. Verbeke, has developed mechanisms for tracking progress, responding to feedback, and asynchronous collaboration through the use of in-person and online training resources and tools. Given the staff's commitment to take their prior evaluation findings to develop shared outcomes and tools across their programs, the risk of the staff misunderstanding or losing their drive to implement evaluation training and tools systematically is unlikely. And, while there is always the risk of potential staff turnover. To mitigate the impacts of turnover, trainings and workshops will be recorded or documented and kept as part of the resource library to train new staff during the onboarding process. The strategic plan will become a foundation piece of the resource library, to include how, when, and in what order trainings occur. The development of these items will also empower the Fairchild leadership team to extend the trainings beyond the initial departments involved. It may also be that the iterative and collaborative approach to the evaluation strategic plan development may go in unanticipated directions and yield final evaluation resource products that look different than what we initially imagined. Nevertheless, we look forward to the evaluation process and are confident that whatever results yielded will be for the benefit of our organization and our guests.

Risks to projects such as this often also include the ability to successfully recruit and ensure that all study subjects are able to participate in the evaluation process. This is certainly a challenge when conducting evaluation with communities where English is not their first language and/or when communities are unclear how their data will be used - this can be exacerbated by the need to collect data outside of the Garden. Having staff who are both from the communities, as well as Spanish speakers, will help to mitigate these issues. As well, instruments will be designed in such a way that they are age-appropriate, culturally responsive, and can be opted out of at any time.

C. Who will plan, implement, and manage your project?

The project will be led by PI's Dr. Brian Sidoti and Brenna Kays of the Fairchild Garden's Education Team in partnership with Dr. Monae Verbeke, Institute for Learning Innovation. The team from the Institute for Learning Innovation will implement the first part of the plan [leading observation sessions, professional development workshops and providing progress monitoring]. Fairchild will lead the implementation phase. Project management will be the responsibility of Fairchild Education staff with the guidance of Institute for Learning Innovation. **Fairchild Personnel:** Dr. Sidoti and Ms. Kays will be responsible for coordinating workshops and workdays with Fairchild staff being trained, ongoing performance monitoring, executing assessments and evaluations in the Fairchild Challenge program, and day-to-day operations of the project. Director of Education at Fairchild, Amy Padolf, will be responsible for the finances and reporting of the project. Jamie Anderson will oversee the implementation of assessments and evaluations into the Magnet school programs at Fairchild. Cynthia Toledo will coordinate the implementation of assessments and evaluations for the Fairchild Challenge. **ILI Personnel:** Dr. Monae Verbeke, Director of Evaluation, brings expertise in evaluation methodology and professional learning to this project. Dr. Verbeke has over a decade of experience working in evaluation with zoos, environmental education organizations, and other informal spaces, often in partnership with schools, universities, and other learning institutions. She will lead the facilitation of initial staff knowledge assessments, goal setting, and iterative training. Dr. Verbeke will be responsible for collaborating with the PI's on the development of the evaluation strategic plan and resource library, workshop content planning and facilitation, as well as overseeing ongoing progress of the project. Nicole Claudio, Junior Research Associate at ILI, will bring her expertise in informal professional learning and resource library development to the project, in aid of Dr. Verbeke.

D. How is the project team organized and structured to support engagement of all participants?

The project and project team are organized to ensure that all participants feel engaged throughout the process. For the project team, we will implement bi-weekly meetings for the project team. Through these collaborative meetings, team members will take on tasks as part of the evaluation of strategic planning and tool development. The PI team will manage these meetings, ensuring the named project staff fulfill their obligations and have the capacity to engage in the team meetings. The evaluation team will ensure all of the target group have equal opportunities to participate in the evaluation of the project and space to inform the development of the training materials. The evaluation team will do regular check-ins with the entire target group to ensure they are feeling engaged, satisfied, and have equitable space in the project to participate.

E. What time, financial, personnel, and other resources will you need to carry out the activities?

Fairchild staff will require the expertise of the evaluation professionals at the Institute for Learning Innovation to successfully complete this project. The project requests \$218,509 to support this initiative; the project budget totals \$437,824. Grant funds would directly support the consulting costs for ILI, as well as supplies, materials, staff travel, evaluation costs, and some indirect costs. Fairchild will demonstrate its commitment to the project by providing a cost share of \$219,315. Given the collaborative nature of the evaluation strategic plan, and resulting resource library, exact costs associated with the need for analytical software is yet to be determined. We anticipate needing a license for digital survey delivery as necessary, given the range at which we will be operating.

F. How will you track your progress toward achieving your intended results?

Project evaluation will be central to the project's success. Dr. Verbeke, in coordination with the PI team, will employ ongoing developmental evaluation, focusing on the efficacy and skillset development of the target group, as well as gauging the impact upon the institution. The Institute of Learning Innovation has a track record of success in utilizing a number of tools to ensure we are thorough in our evaluation of these processes. First, The impact of the project will be examined at five levels (Gusky, 2002): **Level 1: Participant Reaction:** How do staff members react to the training workshops and monthly meetings – particularly which learning experiences are believed to be most relevant and useful? Observation protocols, embedded assessment, and L10 meeting framework (EOS, 2021) will assist us in capturing this data. **Level 2: Participant Learning:** In what ways and to what extent do staff members' attitudes about and understandings of Fairchild's current and potential audience, evaluation methodologies, and visitor-centered practices change – particularly in relation to the project learning outcomes? Same tools as at Level 1, as well as pre/post interviews. **Level 3: Organizational Support:** In what ways does the organization support or inhibit changes in the design and implementation of evaluation studies by staff members? This data will be gathered through individual interviews at the start of and end of the project. **Level 4 – Participant Practice:** In what ways do staff members' practices change – particularly in support of the mission to utilize evaluation to continuously improve programming and expand who and how they visit? **Level 5 – Impact on Visitors:** How do visitors' experiences with key areas of Fairchild's programs and services change? (Note: While a full investigation of this question is outside the scope of the current project, the evaluation is designed to establish a foundation for future work. Staff will be asked to identify "pockets of promise," areas in which they believe changes may be positively influencing visitors' experiences; there is also an option to conduct visitor studies at the start of the project to gather baseline data, which can then be compared against studies conducted one to two years following the conclusion of the project.)

The methods for the evaluation include **observations** conducted during each of the workshops, and an embedded **questionnaire** will be administered to participants before, during, and at the end of each workshop. **Staff will participate in interviews** at the beginning and end of the project to measure changes in staff members' attitudes and understandings and perspectives on both their own and the organization's readiness for undertaking this work. **Document analysis** will be conducted of the biweekly L10 meeting notes and of evaluation planning documents to determine where successes were achieved and where challenges that need to be addressed continue to persist. Biweekly L10 meeting notes documents will be used to track the project on a more minute level. Quarterly reports will be utilized to update the organization on the broader themes identified during that period, including suggestions for the next quarter. A summative evaluation report exploring detailed findings and suggested next steps will incorporate reflections by all participating groups.

Project Results

A. What are your project's intended results and how will they address your need, problem, or challenge?

As identified in the project justification section, the results of this project will create opportunities for staff to develop evaluation skills and efficacy in order to: (1) increase staff's knowledge of education program evaluation methods and the usefulness of evaluation reports, tools, data and metrics; (2) gain the tools and strategies to adapt evaluation methods to continuously improve educational programming and outreach strategies to address audience or institutional needs; (3) develop an evaluation strategic plan, to include information on the intended outcomes of education programming and related evaluation methods, that will guide future iterations of education programming.

Meeting these intended results will lead to a new strategic plan for ongoing, long-term evaluation of our programs. The target group will gain practical knowledge about how to develop and deploy evaluations tools and methods. They will

utilize data and findings garnered during evaluations to inform the creation of new programs and exhibits while improving upon existing programs. Practical knowledge gained through this project will be particularly valuable as we continue to employ evaluations across the breadth of our education programming. And while the outcomes, goals, and tools identified in the collaborative evaluation strategic planning phase may be unknown at this time, we will employ evaluation methods that connect with the community (including youth, formal educators, visitors both off and on-site) to learn from their perspectives, expertise, and perceived as we continue to expand and diversify our programming. With these findings, the project will build an empirically informed knowledge base that will optimize environmental learning and engagement experiences for the South Florida community, particularly those from marginalized groups. This work will also provide the staff with the tools and strategies needed to adapt evaluation methods to address a specific audience or institutional needs.

B. What products will result from your project?

Through this project, we will develop a suite of products that will live on past the end of this project. Most importantly, the evaluation strategic plan. The **evaluation strategic plan (1)** will be the directive for all evaluation plans that come about following this process, beginning with visitor-centered studies and eventually being adapted by other departments at Fairchild. The strategic plan will lead to the following products: **(2) an evaluation resource library**, that will include **(3) evaluation tools** (surveys, etc.), to better understand the development of visitors' environmental attitudes, dispositions, and STEM identity, and **(4) evaluation training materials**, including recordings from workshops and other training sessions. The evaluation resource library will serve as a tool for the development of future visitor-centered programs and modified as needed to suit organizational needs. Using the training received from Institute for Learning Innovation, Fairchild Education staff will work with other staff in other visitor-facing departments to design and implement evaluation studies. In addition, project leads will create **(5) two annual reports** measuring the impact of the project on staff efficacy and skills, **(6) a conference session** for the Visitor Studies Association and/or the North American Association of Environmental Education to share findings and overall strategy for embedding evaluation plans into our organization and programming. Finally, project leads will compose a **(7) manuscript for peer review** about the progress of creating and sustaining this cultural shift within our organization.

C. How will the knowledge, skills, and/or attitudes of the target group change as a result of your project?

The target group will gain knowledge about developing and implementing evaluation plans for the constant improvement of our existing programs as well as the development of future education programming. Currently, staff primarily rely on external evaluators for specific project evaluation - or anecdotal evidence gained while carrying out projects. The staff wishes to be more intentional about their evaluation strategies and would like to embed evaluation at the front-end, formative, and summative stages. As well, the staff would like to be better equipped to choose appropriate evaluation tools based on the community they are engaging (e.g., drawings for young children, focus groups for some teen activities). The results of this project will give staff both the tools and efficacy to design these evaluation plans, implement those studies, analyze the data, and utilize those findings to continuously improve their work.

D. What is the plan to sustain the benefits of the project beyond the conclusion of the period of performance?

Fairchild is uniquely positioned to undertake this work, as we have the support of all of the staff to engage in this process. We also have a robust, well-established compendium of education programming, that will give us the space and diversity of programs necessary to develop a resource library of tools and training that is shared across programs. The initiative will provide a set of resources that provide all current staff and future staff with the knowledge and skills needed to continually improve the visitor experience for years to come. The evaluation strategic plan will guide this work and ensure that even as time passes staff are able to remain on course and have clear messaging as it relates to developing evaluation plans. As well, we are well-versed in raising funds for ongoing visitor programs, which following this project will have evaluation embedded as a means to continually monitor, and hold accountable the institution's efforts to evaluate visitor experiences. In addition, this initiative is a strategic priority that is supported from the top down and as importantly, from the bottom up, ensuring that it will become an integrated part of our culture.

Fairchild Tropical Botanic Garden									
Growing Capacity: Build an Evaluation Framework									
SCHEDULE OF COMPLETION									
Project Year	Year 1					Year 2			
Calendar Year	2022	2023			2024				
Quarter	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
STEP I: Assessment of baseline									
ILI will begin assessing the current state of staff knowledge and capacity through staff surveys, interviews, evaluation capacity checklist, and secondary data analysis. ILI will offer feedback and design steps to help Fairchild improve where necessary and a plan for improvement will be implemented.									
STEP II: Development of Shared Outcomes and Measures									
Development of shared outcomes and measures: ILI will facilitate two workshops to cover basic knowledge of outcomes, and the functions of different evaluation tools									
Staff collaborates in a series of workdays to develop strategic plan for evaluation based on skills learned in previous workshops									
STEP III: Development of Tools and Pilot									
Online and in-person evaluation training for Fairchild staff to address goals set in first two steps. ILI will embed the organization's current skill sets and goals to build a unique training program. The process will also develop deep knowledge and experience in key staff members to build a 'train the trainer' program for Fairchild, ensuring that each organization has the internal capability to train new staff as needed.									
Initial development and implementation of training and tools. Pilot phase for evaluation tools deployed through up to 3 FTBG Education programs. Tools will be assessed for their ease of use, efficacy, and accuracy. Adjustments to tools will be made as needed to suit the goals of each program.									
STEP IV: Implementation, Level 1									
Implementation of evaluation strategic plan will begin. All education programs will be evaluated according to shared outcomes identified by project team. Project PI Team will receive training on coaching and training staff in evaluation studies. All staff will receive training focused on data cleansing, validation, and analysis utilizing qualitative and quantitative methods. A shared repository for data collection will be developed.									
STEP V: Implementation, Level 2									
Fairchild Education staff will independently carry out evaluation strategic plan, managing day to day evaluation activities. ILI will assist the team as needed with bi-weekly check in meetings. Three final quarterly trainings will take place to address how to communicate and utilize evaluation findings.									