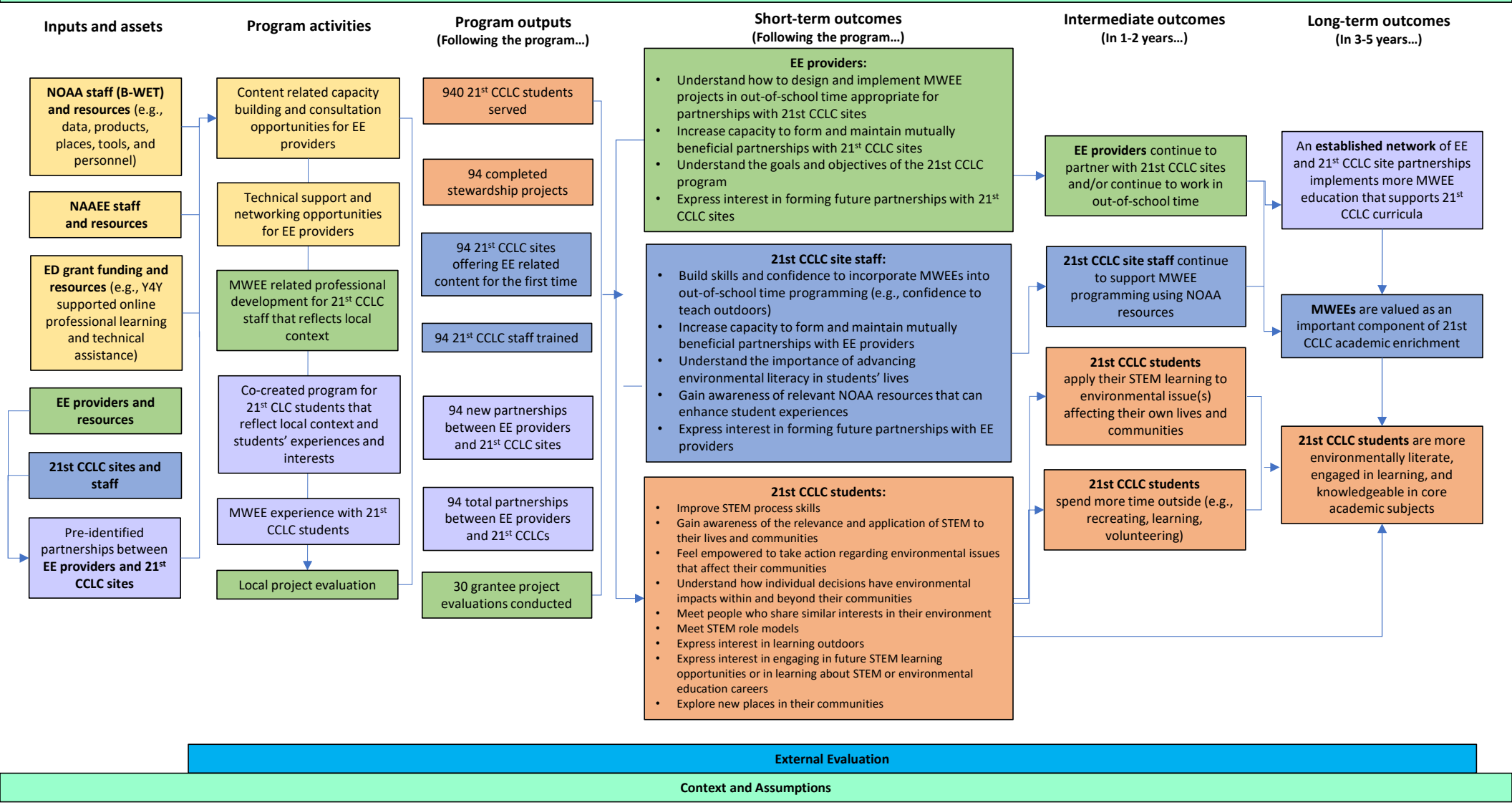
NOAA-21st CCLC Watershed STEM Education Partnership Grants Program Evaluation Report: Appendices

January 2023

The appendices in this addendum are as follows:

Appendix A. Logic Model

Program Goal: Aligning with the U.S. Department of Education's 21st CCLC program goals and objectives, the program will improve NOAA's ability to help students meet state and local learning standards in STEM and other core subjects and increase implementation of environmental education during non-school hours.



Context

- COVID-19 has altered implementation plans.
- Both student programs and professional development offered may be virtual.
- 21st CCLCs have different reopening policies across the U.S. due to COVID-19.
- The robustness of training/professional development offered for 21st CCLCs may vary by EE provider.
- EE providers may vary in their ability to implement virtual professional development or virtual student programs.
- EE providers have different capacities to implement evaluation activities of their grant project.
- Parents/caregivers may play a role in implementation.

Assumptions

- Meaningful Watershed Educational Experiences (MWEEs) are an approach for learning that incorporates best practices for environmental education and emphasizes STEM topics and skills.
- EE providers understand the MWEE approach.
- 21st CCLC staff reflect the students that they serve and understand local knowledge and contexts.
- Co-creation between EE providers and 21st CCLC sites will bridge gaps between STEM content knowledge, local knowledge, goals and practice of out-of-school time learning, and the context of the students' lives.
- EE providers feel comfortable and have the skills to train 21st CCLC staff on environmental education topics.
- There will be turnover among 21st CCLC staff, especially during COVID-19.
- Grantees will use evaluation data at their project level to make improvements in their implementation.

Appendix B. Short-term Outcomes by Audience

Environmental education organization staff will:

1. Understand how to design and implement MWEE projects in out-of-school time appropriate for partnerships with 21st CCLC sites
2. Increase capacity to form and maintain mutually beneficial partnerships with 21st CCLC sites
3. Understand the goals and objectives of the 21st CCLC sites
4. Express interest in forming future partnerships with 21st CCLC sites

21st CCLC site staff will:

1. Build skills and confidence to incorporate MWEEs into out-of-school time programming (e.g., confidence to teach outdoors)
2. Increase capacity to form and maintain mutually beneficial partnerships with EE providers
3. Understand the importance of advancing environmental literacy in students' lives
4. Gain awareness of relevant NOAA resources that can enhance student experiences
5. Express interest in forming future partnerships with EE providers

21st CCLC students will:

1. Improve STEM process skills
2. Gain awareness of the relevance and application of STEM to their lives and communities
3. Feel empowered to take action regarding environmental issues that affect their communities
4. Understand how individual decisions have environmental impacts within and beyond their communities
5. Meet people who share similar interests in their environment
6. Meet STEM role models
7. Explore new places in their communities
8. Express interest in learning outdoors
9. Express interest in engaging in future STEM learning opportunities or in learning about STEM or environmental education career

Appendix C: Revised Evaluation Questions

Original Evaluation Questions	Revised Evaluation Questions
1. Implementation: To what extent are MWEEs implemented as intended? a. How are MWEEs adapted to the 21st CCLC afterschool environment and what is learned from implementing adaptations? b. How do contextual factors (e.g., COVID-19) influence implementation? c. To what extent is STEM learning supported as part of the implementation of MWEEs?	**1. Implementation: In what ways are MWEEs implemented?** a) What is learned from implementing MWEEs during COVID? b) How are MWEEs adapted to the 21st CCLC afterschool environment? c) How do contextual factors (e.g., staffing, youth attendance) influence implementation? d) How is STEM learning supported as part of the implementation of MWEEs?
2. Student experience: What do 21st CCLC students take away from their experience participating in the program? a. What meaning are students deriving from the experience (to them or their community)? b. In what ways are students demonstrating STEM practices? c. How do students' interactions with environmental educators and/or scientists influence student's experiences in the program?	**2. Student experience: What do 21st CCLC students take away from their experience participating in the program?** a) What meaning are students deriving from their experience (to them or their community)? b) How do students' interactions with environmental educators and/or scientists influence student's experiences in the program?
3. Capacity building: To what extent are staff and organizational capacities developed through this program? a. What outcomes do environmental education organization and 21st CCLC staff demonstrate from their participation in the program? b. In what ways are 21st CCLC site and staff capacities developed through this program? c. What do environmental education organizations and 21st CCLC staff gain from working with each other?	**3. Capacity building: What outcomes emerge based on environmental education organization and 21st CCLC staff's participation in the program?** a) How does implementation during COVID influence staff capacities? b) What do environmental education organizations and 21st CCLC staff gain from working with each other?
4. Synergistic partnerships: What types of relationships and partnerships form because of this program? a. How do environmental education organizations and 21st CCLC sites collaborate? b. In what ways might these partnerships be sustained?	**4. Synergistic partnerships: What factors seem to contribute to a successful partnership?** a) How do environmental education organizations and 21st CCLC sites collaborate given the COVID context? b) In what ways might partnerships between 21st CCLCs and EEOs be sustained beyond the grant?

Appendix D. Evaluation Methods and Data Collection

Evaluation plan

EDC worked closely with NAAEE and NOAA to finalize an evaluation plan that guided data collection efforts over the course of the grant. This plan was submitted to NAAEE and NOAA in January 2021. However due to the pandemic, EDC revised the original January 2021 plan and submitted an updated plan in December 2021.

The revised plan sought to respond to the changing program timeline that shifted because of COVID-19 and the shifting implementation of the program. The key differences in these evaluation plans were twofold: (1) a shift evaluation question focus (see Appendix C); and (2) a shift in the planned data collection. Specifically, as noted in Table D1, fall and spring interviews with nine EEO staff and nine 21st CCLC staff were conducted in lieu of the 21st CCLC administrator survey to collect in-depth information about program implementation during the COVID-19 pandemic.

Table D1. Changes to data collection methods based on the January 2021 and December 2021 evaluation plans.

✘ = not included in the written plan
✓ = included in the written plan

Data collection activity	Eval plan January 2021	Eval plan December 2021
21st CCLC staff spring 2021 interview	✘	✓
EEO staff fall 2021 interview	✘	✓
21st CCLC administrator satisfaction survey	✓	✘
End of program satisfaction survey with EEO staff	✓	✓
End of program satisfaction survey with 21st CCLC staff	✓	✓
Satisfaction focus groups with youth	✓	✓
In-person program observations*	✓	✓
End of program 21st CCLC interviews	✓	✓
End of program EEO interviews	✓	✓
Secondary data review	✓	✓

** Twenty-six total program observations were conducted (two observations at 13 sites), instead of 36 observations (three observations at 12 sites).*

Data collection and analysis

Data were collected between spring 2021 and late summer 2022. Data were collected from all 30 EEO grantees. Five EEO grantees participated in all levels of data collection (EEO1 through EEO5, Table D2).

- Interview data were conducted virtually and recorded after receiving consent from adult participants. Youth focus groups were conducted in-person and recorded if parents/caregivers completed permission slips and youth consented. Interview and focus group transcripts were analyzed using emergent coding and then overarching themes were identified.
- Surveys were collected through EDC's Qualtrics© survey software and individuals received an invitation that was timed with the end of the program. Those who had not yet completed a survey after their initial invitation received reminders to complete their survey. Surveys were analyzed using descriptive statistics.

- Observation data were recorded in-person using the observation rubric. Each essential element and supporting practice were then individually summarized and analyzed using emergent coding and summarized by theme.

Table D2. All evaluation data collected organized by EEO.

EEO	Interim 21st CCLC staff interview	Interim EEO staff interview	Program observation	Youth focus group (# youth)	Summative EEO staff interview	Summative 21st CCLC staff program interview	EEO staff survey	21st CCLC staff survey
EEO1	1	1	2	5	1	1	2	2
EEO2	1	1	2	3	1	1	2	3
EEO3	1	1	2	4	1	1	1	3
EEO4	1	1	2	2	1	1	1	2
EEO5	1	1	2	2	1	1	1	2
EEO6	1	1	2	4	-	-	2	2
EEO7	1	1	2	4	1	-	2	
EEO8	-	-	2	4	1	1	1	1
EEO9	-	-	2	2	1	1	1	2
EEO10	-	-	2	-	1	1	1	2
EEO11	1	1	2	-	-	1	1	
EEO12	1	1	-	-	-	-	2	2
EEO13	-	-	2	2			2	
EEO14	-	-	-	-	-	-	2	3
EEO15	-	-	-	-	-	-	2	2
EEO16	-	-	2	-	-	-	2	
EEO17	-	-	-	-	-	-	2	2
EEO18	-	-	-	-	-	-	1	2
EEO19	-	-	-	-	-	-	1	1
EEO20	-	-	-	-	-	-	1	1
EEO21	-	-	-	-	-	-	1	1
EEO22	-	-	-	-	-	-	1	1
EEO23	-	-	-	-	-	-	2	
EEO24	-	-	-	-	-	-	2	
EEO25	-	-	-	-	-	-	1	
EEO26	-	-	-	-	-	-	1	
EEO27	-	-	-	-	-	-	1	
EEO28	-	-	-	-	-	-	1	
EEO29	-	-	-	-	-	-	1	
EEO30	-	-	-	-	-	-		1
Total	9	9	26	32	9	9	39	35

Sample

EEO and 21st CCLC staff who participated in interviews and sites selected for observations were drawn from a purposive sample of EEOs determined in collaboration with NAAEE and NOAA. All youth who were present during the observation were invited to participate in the youth focus group, and those who submitted signed parental/caregiver consent forms and who themselves consented, joined the focus group. The evaluation team did not expect to collect data from each implementing site which would have been time and cost prohibitive. To select EEOs, the following criteria was used to ensure a mix of sites represented in the sample:

- Geographic location
- Locale (urban, suburban, rural)
- Environmental education organization's experience with NOAA partnerships
- Programming format (i.e., implementation during the summer or academic school year)
- 21st CCLC youth's served age and/or grade level
- Program design and content focus
- Professional development implementation

All grantees were invited to participate in the survey. Two EEO staff from each EEO grantee were invited to participate in the survey. EEO staff were asked to select two 21st CCLC staff with whom they worked to be invited to participate in the survey. EEO staff were asked to select two 21st CCLC staff since they were most familiar with their 21st CCLC sites and had direct email addresses for those staff.

Limitations

There are several limitations to the evaluation:

- While observing the grantees' full program implementation would give the fullest picture of the program, timing and evaluation resources limited EDC's ability to do this.
- With the onset of COVID restrictions at 21st CCLC sites, EDC only observed two days of programming, instead of the originally planned three days of programming.
- Additionally, while EDC intended to observe an outdoor field experience and an environmental action project, we conducted observations when at the convenience of EEO and 21st CCLC staff, and as a result conducting observations of similar types of days across EEO sites was not always feasible.
- Furthermore, fewer youth than originally anticipated were included in focus groups as a result of the reduced observations and challenges collecting parent/caregiver permission slips.
- Additionally, EDC was limited to conducting nine interviews with EEO staff and nine interviews with 21st CCLC staff as interview protocols per PRA restrictions on data collection.
- Finally, regarding observations and end of program interviews with EEO and 21st CCLC staff, the intent was to conduct staff interviews with 21st CCLC and EEO staff representatives from nine out of the 12 EEOs observed. However, as interviews took place over the summer, EEOs and 21st CCLCs were not always able to find time to meet, given that summer is a busy season for educators.

As a result of these data collection limits, the data gives a picture of implementation, but readers should exercise caution in generalizing the findings across grantees and their 21st CCLC sites.

Appendix E. NOAA Watershed STEM Education Partnership Grants Program: Meaningful Watershed Educational Experiences Observation Rubric (Pilot Version)

Goals of the MWEE observation rubric:

- Understand the application of the MWEE framework in the 21st CCLC afterschool setting
- Learn about ways in which the COVID context influences implementation of a MWEE
- Document adaptations made for a MWEE to be implemented in the 21st CCLC afterschool setting
- Learn about student experience with the program

Protocol overview:[1] This protocol seeks to document observation data related to all four MWEE elements and three of the four MWEE supporting practices, in addition to notes about successes, challenges, adaptations, and the experience of youth and staff. [2]

Section 1. Background information

Observer name:	Date:	First/Second observation	EEO:	BWET region:
21st CCLC site name:	Community type: Urban/rural/Suburban	Start time:	Activity length: ___ minutes	Number EEO staff:
Number of 21st CCLC staff:	External scientist(s) present? Yes/No	Other staff or adults:	Number of other staff or adults:	Number of youth:
Grade(s) of youth:	Activity location (e.g., outside at the beach, inside at the 21st CCLC site):	Brief activity description: (e.g., content focus, materials used)		Lead facilitator: EEO partner/21st CCLC staff/co-facilitating

Section 2: MWEE Elements and Supporting Practices Documentation: Indicate which elements and supporting practices are present.

MWEE Element	Observed (X: Observed | NA: Absent)
Issue definition	

Supporting Practice	Observed (X: Observed | NA: Absent)
Teacher facilitation	

[1] This protocol is meant to capture observable MWEE elements and supporting practices.

[2] Learning integration, a MWEE supporting practice, is excluded from this observation rubric.

Outdoor field experiences	
Synthesis and conclusions	
Environmental action projects	

Learning integration	
Sustained experience	
Local context	

Section 3.1: Issue Definition

Component 1: Educators define an issue for investigation. Educators clearly articulate a locally relevant environmental issue, problem, or phenomenon and a driving question.

Evidence Observed:

Component 2: The driving issue or question is open-ended and relevant to youth. The driving question should be open-ended, relevant to the youth's lives, maintain continuity of activities, and meet learning objectives.

Evidence Observed & Driving Question Documented:

Component 3: Youth are actively involved in co-developing supporting questions. Youth are actively involved in co-developing supporting questions with educators. Youth plan and conduct background research and investigations to better understand the driving and supporting questions.

Evidence Observed:

Component 4: Youth reflect on values and perspectives related to the driving question. Youth reflect on personal, stakeholder and public values and perspectives, and on root causes related to the driving question.

Evidence Observed:

Other: Other notes that are relevant to Issue Definition.

Section 3.2: Outdoor Field Experiences

Component 1: Youth plan and conduct field investigations. Youth are actively involved in planning and conducting the field investigations, including developing supporting questions to explore the driving question in the field.

Evidence Observed:

Component 2: Youth use their senses to make observations and collect data. During field experiences, youth use their senses, scientific equipment, and technology to make observations, collect data or measurements, and conduct experiments necessary to answer their supporting questions and inform environmental action projects.

Evidence Observed:

Component 3: Partners and 21st CCLC sites co-facilitate. The activity is co-taught between the Environmental Education Organization staff and the 21st CCLC site staff.

Evidence Observed:

Component 4: Staff ensure an accessible learning environment. Educators and partners should ensure an accessible outdoor learning environment for all participants, including youth with a range of physical, cognitive, emotional, and social abilities.

Evidence Observed:

Component 5: Staff prepare youth so they feel comfortable in the field. Staff prepare youth by discussing and providing information about what youth can expect to see, feel, and experience during their time outdoors in order to ensure youth feel safe and comfortable during their field experiences.

Evidence Observed:

Other: Other notes that are relevant to Outdoor Field Experiences.

Section 3.3: Synthesis and Conclusions

Component 1: Youth draw conclusions about an issue. Youth identify, synthesize, and apply evidence from their investigations to make claims and draw conclusions about the issue.

Evidence Observed:

Component 2: Youth use their conclusions to create a plan for action. Claims are used by youth to create a plan for environmental action.

Evidence Observed:

Component 3: Staff allow time for reflection. Educators dedicate time regularly for youth to reflect on each experience and investigation in relation to the issue and facilitate youth sharing their claims and conclusions with each other.

Evidence Observed:

Component 4: Youth demonstrate understanding of their data and conclusions. Youth may demonstrate understanding of their investigations and conclusions through communication to a variety of audiences such as their peers, other classrooms, school leaders, parents, or the community.

Evidence Observed:

Other: Other notes that are relevant to Synthesis and Conclusions.

Section 3.4: Environmental Action Projects

Component 1: Environmental action project addresses the defined environmental issue. Youth identify and implement an environmental action project as a solution that directly addresses the defined issue within their school, neighborhood, town, or community.

Evidence Observed:

Component 2: Youth are actively engaged in the project. Youth are actively engaged in and, to the extent possible, drive the decision-making, planning, and implementation of the action project.

Evidence Observed:

Component 3: Educators act as facilitators. Educators play a facilitation role by, among other actions, forming groups, moderating, and answering questions.

Evidence Observed:

Component 4: Youth reflect on the project. Youth reflect on the value of the action and determine the extent to which it successfully addressed the issue.

Evidence Observed:

Component 5: Youth come to understand they can bring about change. Youth understand and believe that they personally have the power to bring about change by taking action to address environmental issues at the personal, community, or societal level.

Evidence Observed:

Other: Other notes that are relevant to Environmental Action Projects.

Section 4.1: Teacher facilitation

Component 1: Educators balance facilitating, instruction, and coaching. Educators balance roles of facilitation, direct instruction, and coaching to create a student-centered learning experience.

Evidence Observed:

Component 2: Educators leave space for youth choice and voice. Educators provide space for student choice and voice by creating learning experiences that center what youth value.

Evidence Observed:

Section 4.2: Sustained experience

Component 1: Youth are allowed time to reflect on how multiple activities over the course of multiple days come together. Educators actively and obviously provide adequate time and opportunities for youth to not only reflect on the individual lessons and experiences, but also on how all of the elements cohesively come together.

Evidence Observed:

Component 2: Individual activity of the day connects to a larger learning sequence. While an individual lesson may occur in one class period or field experience, educators ensure that lesson or experience should be explicitly connected to the larger learning sequence of the MWEE.

Evidence Observed:

Section 4.3: Local context

Component 1: Educators use youth's local environment and community as the learning context. Educators use the local environment and community as a context for learning that is relevant to youths' lives.

Evidence Observed:

Component 2: Educators incorporate local resources. To enrich MWEEs, local resources (e.g., partners; expertise; field sites) are sought out and clearly incorporated by the educator.

Evidence Observed:

Section 5. Site Visit Reflections and additional notes (to be completed by the observer)[3]

1. What were the successes during this visit?
2. What were the challenges during this visit?
3. Did this activity go as planned? Why or why not?
4. What adaptations did you notice?
5. What did you notice about the roles of EEO staff, 21st CCLC staff, and others?
6. What culturally responsive practices did you notice (i.e., youths' culture being recognized and incorporated)?
7. In what ways did COVID-19 impact the activity?
8. Notable youth quotes:
9. Notable educator/staff quotes:

Additional notes:

[3] Responses to these questions may be informed through observer takeaways and through informal conversations with the EEO or 21st CCLC staff following the activity.

Appendix F. Interview, Focus Group, and Survey Data Collection Protocols

The data collection protocols in this appendix are as follows:

1. Summative EEO Staff Interview Protocol
2. Summative 21st CCLC Staff Interview Protocol
3. Youth Focus Group Protocol
4. NOAA Watershed STEM Education Partnership Grants Program: Meaningful Watershed Educational Experiences (MWEE) Environmental Education Organization Staff Online Survey
5. NOAA Watershed STEM Education Partnership Grants Program: Meaningful Watershed Educational Experiences (MWEE) 21st Century Community Learning Center Staff Online Survey

1. Summative EEO Staff Interview Protocol

Interview goals

- Learn about ways grantees approached developing and/or adapting curricula to fit the afterschool context and youth's interests, backgrounds, and cultures.
- Understand the successes and complexities grantees experienced working with their 21st CCLC partners.
- Learn about ways partnerships between grantees and 21st CCLCs might be sustained beyond the grant.
- Learn about future supports and funding opportunities of interest to grantees.
- Understand what grantees have learned and gained from implementing MWEEs and environmental education programming with 21st CCLCs.

Introduction (2 minutes)

Thank you for taking the time to meet with me. As you know, I'm [Erin/Jen/Sara] and I work for Education Development Center (EDC), the external evaluators for the NOAA 21st CCLC Watershed STEM Education Partnership Grants program. We are interested in learning about cross-cutting takeaways across all 30 grantees and now that you've completed your program, we want to hear about your experiences with this program.

We're especially interested in hearing about your experience implementing the MWEE framework, working with your 21st CCLC partners, your experience with supports and resources offered by NAAEE and NOAA, and what you've learned throughout your time with the program. Because we're interested in your experience, we encourage you to be open and honest in your feedback.

This conversation will take no longer than 75 minutes. Your participation is completely voluntary, and your name, organization, or state won't be connected to your responses in our reporting. Additionally, we will not share your individual responses with your 21st CCLC sites. Any questions you don't want to answer we can skip, and we can end the interview at any time. To help with my note taking, would it be alright if I recorded our conversation today? [*Wait for response.]* Let's get started.

Section 1: Starter question (3 minutes)

- Has your role on this project changed since the last time we spoke in summer 2021?
    - (*If their role changed*) What have been your responsibilities in your new project role?

Section 2: MWEE implementation and youth experience (30 minutes)

Questions	**Pre-populated notes *(Interviewer to fill in observation notes and/or grantee report data that they want to follow-up on and/or probe on***
● I'm interested in learning about your perspective on environmental education. What is your approach to implementing environmental education programming with youth? o *Prompts* ▪ Is there anything that you feel is central to your approach to implementing environmental education with youth?	
● What were the formats you used to implement your program? For example, did you implement your program as a weeklong camp, twice a month, weekly, virtually, or did you use another model? [*Fill in what we know about their model based on past interviews and program reports*] o *Prompts* ▪ What are the benefits of different formats? ▪ What are the challenges of different formats? ▪ What would you change (if anything) about the format you chose?	
● We understand that you worked with [number] 21st CCLC sites. In what ways were those sites similar and different? *Prompt:* ▪ How did you adapt to address those differences?	

● As you likely know, the MWEE framework is made up of essential elements which are issue definition, outdoor field experiences, synthesis and conclusions, and action projects. Also, there are supporting practices which are instructor facilitation, learning integration, sustained experience, and local context. What was your approach to implementing the MWEE framework in the 21st CCLC context? ○ *Prompts* ▪ How have you adapted the framework to fit the different needs of your 21st CCLC sites? ▪ How did you represent learning integration through your program (i.e., how did you embed your MWEE into the afterschool curriculum and/or use the MWEE to support other afterschool programming)? ▪ From your perspective, what components of the MWEE framework are best suited for the 21st CCLC context? ▪ What, if any, components of the MWEE framework are less suited for the 21st CCLC context? ▪ What, if anything, is missing from the MWEE framework that should be included when using the framework in the 21st CCLC context?	
● In what ways, if any, did your program design allow you to incorporate youth's ideas or interests into the curriculum or activities? ○ *Prompts* ▪ How did your program design incorporate the local context? (e.g., specific connections to local environment, connections to youth's languages or cultural backgrounds, connections to youth's families or nearby communities) ▪ (*If it did not*) What influenced your curriculum content decisions? ▪ *(If it did not)* What barriers or hurdles did you find with trying to fold in youth's interests into the curriculum? ▪ (*If yes*) What was your process for incorporating youth's interests and ideas into the curriculum or activities?	

● From your perspective, what components of your program were the most engaging for youth? Why? ○ *Prompt* ▪ What components were the least engaging for youth? Why?	
● Did you implement outdoor field experiences with your program, or take youth outside as part of your MWEE program? [*If we know that they took youth outside, start with the first prompt below*] ○ (*If yes*) ▪ What did you notice about youth's level of comfort with being outside? ▪ What is a memorable moment you can share about youth interacting with nature? ▪ What did you notice about how youth's experience or interaction with the outdoors changed over the course of the MWEE? (e.g., making more observations about what they see outside) ○ (*If no*) ▪ What complicated efforts to implement outdoor field experiences or take youth outside?	
● What, if any barriers do you think youth face when participating in the program (e.g., physical, cognitive, emotional, cultural, and social)? ○ *Prompt* ▪ How did you approach ensuring all youth could participate at their own level?	
● If you had to shift back to virtual implementation of MWEEs, based on what you learned through this program, how would you approach implementing MWEEs virtually? ○ *Prompts* ▪ What, if anything, would you do differently from when you last virtually implemented this project?	

▪ (*If they say they <u>would not</u> implement a MWEE virtually*) Why would you choose not to implement a MWEE virtually?	

Section 3: Partnerships (25 minutes)

Now I'd like to ask you some questions about how you worked with your 21st CCLC sites and your experiences with your partners.

- Thinking back over the course of the grant, how would you characterize your partnership with your 21st CCLC sites (e.g., did you plan together, did they assist with activity design, did they assist with program facilitation, did they help coordinate activities with parents/caregivers, etc.?)

- Over the course of the program, in what ways did you collaborate or divvy responsibilities with your 21st CCLC partners?
    - *Prompt*
        - How, if at all, did your approaches to collaboration differ across your 21st CCLC sites?
        - How, if at all, were your collaboration approaches similar across your 21st CCLC sites?
        - What change, if any, did you notice about your level of collaboration with your 21st CCLC sites from when you were implementing virtually to when you were implementing in-person?

Now that you've had about two years to work together with your 21st CCLC partners, we want to better understand the nuances of establishing and implementing that relationship.

- What challenges or barriers did you experience in your 21st CCLC site partnerships?
    - *Prompt*
        - How did you approach overcoming or working around barriers with your partners?
        - What, if any, were persistent barriers or challenges that you feel you did not overcome?

- Thinking back, what would you change, if anything, about how you approached your partnership with your 21st CCLC sites?

- Overall, what were the most important factors in helping you have successful partnerships with your 21st CCLC sites?

- Have other collaborations or partnerships resulted from this program? If yes, please explain.

- Are you planning to continue your partnership with your 21st CCLC beyond the current grant?
    - *Prompt*
        - (*If yes*) What might a future partnership or continued work look like?
        - (*If no*) What, if anything, might be in the way of your organization continuing to work with your 21st CCLC partners?

Section 4: NAAEE/NOAA Support (5 minutes)

- Over the course of the grant, what supports from NAAEE and NOAA were most useful to you?
    - *Prompt*
        - How did they enable you to engage in and implement this program?

- What supports offered by NAAEE and NOAA did you use less often?
    - *Prompt*
        - What other resources could NAAEE and NOAA have offered that would have been more useful?

- If NOAA was to administer a similar grant program in the future, what recommendations would you offer?
    - *Prompt*
        - Specifically, what should or should not be a requirement of the grant (e.g., require PD, etc.)?

Section 5: Takeaways and Sustainability (10 minutes)

- Now that you have two years of implementation experience behind you, what are the key factors environmental educators should keep in mind when implementing a MWEE in the 21st CCLC context?

- What are your biggest takeaways from implementing environmental education in the 21st CCLC context?
    - *Prompt*
        - How, if at all, has this program changed how you approach designing or implementing environmental education programs?

- What are your biggest takeaways about partnering with 21st CCLC sites?

2. Summative 21st CCLC Staff Interview Protocol

Interview goals

- Learn about 21st CCLC staffs' overall experience with the program.
- Understand the successes and complexities 21st CCLC staff experienced working with their EEO partners.
- Learn about ways partnerships between 21st CCLCs and EEOs might be sustained beyond the grant.
- Gather 21st CCLC staffs' perspectives on how youth experienced and benefitted from the program.
- Understand what 21st CCLC staff have learned and gained from implementing environmental education programming with EEOS.

Introduction (2 minutes)

Thank you for taking the time to meet with me. As you know, I'm [Erin/Jen/Sara] and I work for Education Development Center (EDC), the external evaluators for the NOAA 21st CCLC Watershed STEM Education Partnership Grants program. Now that you've completed your program, we want to hear about your experience.

We're especially interested in hearing about your experience implementing the program, working with your environmental education organization partner, your experience with the supports and resources offered by your partner, and what you've learned throughout your time with the program. Because we're interested in your experience, we encourage you to be open and honest in your feedback.

This conversation will take no longer than 60 minutes. Your participation is completely voluntary, and your name, organization, or state won't be connected to your responses in our reporting. Additionally, we will not share your individual responses with your environmental education organization partner. Any questions you don't want to answer we can skip, and we can end the interview at any time. To help with my note taking, would it be alright if I recorded our conversation today? [*Wait for response.]* Let's get started.

Section 1: Starter question (3 minutes)

- What has been your role on this project?
    - *Prompt*
        - How, if at all, has your role on this project changed over time?

- Who else did you work with at your 21st CCLC site to implement this program and how did you work together?

Section 2: Program implementation and youth experience (20 minutes)

Questions	**Pre-populated notes *(Interviewer to fill in observation notes and/or grantee report data that they want to follow-up on and/or probe on***
● We know that you implemented the program [*weekly, biweekly, **virtually**, etc. – fill in what we know about their 21st CCLC program format].* What are the benefits of that format for this program? ○ *Prompts* ▪ What are the challenges of that program format? ▪ What would you change (if anything) about the program format?	
● [If they DID virtual implementation] If you had to shift back to virtual implementation, based on what you learned through this program, how would you approach virtually implementing or supporting implementation of the program? ○ *Prompts* ▪ What, if anything, would you do differently from when you last virtually implemented this program? ▪ (*If they say they <u>would not</u> implement the program virtually*) Why would you choose not to implement the program virtually? ● [If they did NOT do virtual implementation] Why did you not do virtual implementation?	
● From your perspective, what components of the program were the most engaging for youth? Why?	

● What components were the least engaging for youth? Why?	
● How is this program different from other types of programs offered through your 21st CCLC program? ○ *Prompts* ▪ In what ways do you typically incorporate the local environment or community into your afterschool programs? ▪ Outside of this program, how often do youth typically go outside during after school programs at your site? What types of things do they typically do outside?	
● One essential component of this program is using the local environment and community as a context for learning that is relevant to the lives of youth. In what ways were the local environment and youths' cultures incorporated into this program? ○ *Prompt* ▪ From your perspective, what did including these elements add to the program and to youths' experience in the program?	
● In what ways do you see the content in this program connecting to what youth experience or learn about in after school or during the school day?	
● Did your youth participate in outdoor field experiences with your program, or go outside in any way as part of the program? [*If we know that they took youth outside, start with the first prompt below*] ○ (*If yes*)	

▪ In what ways did you notice youth responding differently to being outside during this program compared to other outdoor activities they have done in afterschool? ▪ What did you notice about youths' level of comfort with being outside? ▪ What did you notice about how youths' experience or interaction with the outdoors changed over the course of the program (e.g., making more observations about what they see outside)? ▪ What is a memorable moment you can share about youth interacting with nature? ○ *(If not)* ▪ What barriers prevented you and your staff from taking youth outside?	
● In what ways did youth benefit from the involvement of science experts in the program (e.g., EEO staff, other experts)?	
● What barriers to full participation did youth face when participating in the program (e.g., physical, cognitive, emotional, social, cultural)? ○ *Prompts* ▪ How did you work with your EEO partner to ensure that all youth could participate at their own level? ▪ In what ways did you assess whether or not youth would be able to do an activity?	

▪ What considerations about the youth went into planning activities (e.g., accommodations for youth)?	

Section 3: EEO and 21st CCLC Partnerships (20 minutes)

Now I'd like to ask you some questions about how you worked with your environmental education organization (EEO) partner. Since you've had about two years to work together with your EEO partner, we want to better understand the nuances of establishing and implementing that relationship.

- Over the course of the program, in what ways did you collaborate with your EEO partner?
    - *Prompt*
        - How, if at all, did you divvy responsibilities between you and your EEO partner?
        - What change, if any, did you notice about your level of collaboration with your EEO partner from when you were implementing virtually to when you were implementing in-person?

- What was complex about your partnership with your EEO partner?
    - *Prompt*
        - How did you approach overcoming or working around hurdles you faced with your partner?
        - What, if any, were persistent barriers or challenges to working with your EEO partner that you feel you did not overcome?

- Overall, what were the most important factors in helping you have a successful relationship with your EEO partner?

- Thinking back, what would you change, if anything, about how you approached working with your EEO partner?

- Thinking back, what do you wish your EEO partner would have known about working with 21st CCLCs at the start of your partnership?
    - *Prompt*
        - What do you wish you would have known about working with EEOs at the start of your partnership?

- Are you planning to continue collaborating with your EEO partner beyond the current grant?
    - *Prompts*
        - (*If yes or maybe*) What might a future partnership or continued work look like?
        - (*If no*) What, if anything, might be in the way of your 21st CCLC site continuing to work with your EEO partner?

Section 4: Professional Development and Capacity Building (5 minutes)

- Over the course of the grant, what professional development, supports, or resources provided by your EEO partner were most useful to you?
    - *Prompt*
        - How did those supports enable you to engage in and implement this program?
        - How were those supports useful to you outside of this grant?
        - What additional supports do you wish you had from your EEO partner?

- What do you feel that you, personally, have learned or gained from participating in the program (e.g., knowledge of environmental education, capacity in developing or facilitating environmental education programs)?

Section 5: Takeaways and Sustainability (10 minutes)

- In what ways did this program complement or enhance overall programming at your 21st CCLC site?

- What are your biggest takeaways from implementing environmental education in your 21st CCLC program?

- In what ways, if at all, can you see environmental education continuing at your site? What might that look like?
    - What barriers may be in the way of implementing environmental education programming at your site?

- Based on your experience working with EEOs, either during this grant or other past experiences, what are your biggest takeaways about partnering with EEOs?

3. Youth Focus Group Protocol

OMB Control No. 0690-0030
Expiration Date: 07/31/2023

Introduction

Hi. My name is Jen/Sara/Erin. Thanks for speaking with me. Programs like this are happening all over the country and I work with the people who came up with the idea for this program. The reason I'm here today is to learn what you thought about this program. I take your thoughts and ideas seriously so we can help make these types of programs better for others like you.

Today we'll all be talking together as one group. We have gotten your parent or guardian's permission to speak with you, but you do not need to answer any questions if you don't want to.[1] Anything you say will be helpful for us in understanding your experiences. I hope you will share your honest opinions and I want you to know that there are no right or wrong answers. I'd really like to hear from all of you because all your ideas are important, so feel free to jump in and share your ideas.

We'll talk for about 30 minutes. I won't ask you to share your names, but if you do, we won't share them or any other identifying information. For example, when we write a summary of what we hear, we will say something like, "A youth participant in the program said…" or "One of the participants told us…"

Do you have any questions before we get started? [*If yes, evaluators will address youth's questions.*]

So that I can make sure to capture everything we're talking about, is it ok if I record just our voices?

[*If yes*] Great, I'll start recording now.

[*If one person says no, evaluators will take written notes*] That's okay, I'll jot down notes throughout our conversation.

1. [*Framing language*] First, I'd like to learn a little bit about you.
    a. What grade are you in/going into?
    b. Have long have you been joining these activities with [*fill in the name of the EEO staff person*]?
    c. Using fist to five, where a closed fist means "No way!" and a five means "YES!", how much would you like to have these foods as an afterschool snack?
        - Cookies
        - Pizza
        - Brussel sprouts
        - Hot dog
        - Ice cream

Framing language] Great, thanks. Now I'm going to ask all of you some questions about this program.

2. If you had to explain this program to a parent or a friend who isn't in the program, how would you describe it?

[1] We will gather official parental/legal guardian consent from all participating youth prior to the session.

3. What (if anything) did you like best about this program?
    a. What was one activity that you liked the most and why?
    b. [*If field experience is mentioned*] What did you learn from doing that?

4. What (if anything) did you like least about the program?
    a. Were there any activities that you like least? If so, what didn't you like about them?
    b. [*If field experience is mentioned*] What did you not like about that?

5. Did you ever do any activities to help the environment as part of this program? [*If no, move to next question. If yes, see sub questions below*]
    a. How did you come up with the idea for your environmental action project/stewardship project?
    b. What activities did you do?
    c. What role did you play?
    d. What was it like to do a project like this?

6. Did you ever do any virtual/Zoom or at-home activities that were part of this program? [*If no, move to next question*]
    a. *[If yes]* What was it like to do the activities at home/virtually?

7. During this program, did you talk to any scientists or do an activity with any scientists? [*If no, move to next question. If yes, see sub questions below*]
    a. How did you like doing activities with them?
    b. How was it different from learning from your usual instructor?

8. Based on your experience in this program, do you feel like you, on your own or with your friends, can help protect your community's natural environment?
    a. [*If yes*] Do you think you'll try to help your community's natural environment in the future? How might you help?
    b. [*If no*] Why not?

9. What would you say was the most important thing you'll take away from your experience in this program?

10. If you were going to make this program better for your peers, what would you do?

11. Is there anything else you want to say about the program or any of the activities that you did?

[*Closing language*] Those are my questions for you. Thanks to all of you for sharing your thoughts with me!

4. NOAA Watershed STEM Education Partnership Grants Program: Meaningful Watershed Educational Experiences (MWEE) Environmental Education Organization Staff Online Survey

National Oceanic and Atmospheric Administration (NOAA), North American Association for Environmental Education (NAAEE), and Education Development Center (EDC) invite you to complete this survey for Environmental Education Organization staff. The survey questions will ask about your satisfaction and experience with implementing the NOAA Watershed STEM Education Partnership Grants Program with your 21st Century Community Learning Center (21st CCLC) partners. The following questions will also ask about your experience implementing Meaningful Watershed Education Experiences (MWEEs), NOAA's learner-centered environmental education framework. The survey will take approximately 15 minutes to complete.

The information you provide will be used by NAAEE and NOAA to better understand your experience with the grant so we can improve future programs like the NOAA Watershed STEM Education Partnership Grants Program.

The survey is voluntary and you may skip any questions you do not want to answer. Your responses will remain strictly confidential and only the EDC evaluators will see your individual responses. You may quit the survey at any time. We ask that you provide honest feedback. Neither your name nor organization will be shared with NOAA, NAAEE staff, or 21st CCLC staff.

If you have questions about this survey, please contact Sara Greller at sgreller@edc.org. We sincerely appreciate your time and willingness to participate.

By clicking "I agree" below you are indicating that you have read and understood this consent form and agree to participate in this survey. You may print a copy of this page for your records.

- I agree
- I do not agree [If selected, respondent will be skipped to end of survey]

1. How long have you been involved with the NOAA Watershed STEM Program?
    a. Less than 6 months
    b. 6-12 months
    c. Over 12 months
2. Which of the following best describes your role(s) in the NOAA Watershed STEM Program? Select all that apply.
    a. Liaison with 21st CCLC partners
    b. Finance manager
    c. Curriculum designer
    d. Instructor/educator
    e. Administrator
    f. Other; please describe:_____
3. Overall, how satisfied were you with your experience in this program?
    a. Very satisfied

OMB Control No. 0690-0030
Expiration Date: 07/31/2023

b. Satisfied
c. Somewhat satisfied
d. Somewhat dissatisfied
e. Dissatisfied
f. Very dissatisfied

4. [If the respondent chooses “Very satisfied,” “Satisfied,” or “Somewhat satisfied”] Please explain why you were satisfied with your experience in this program.
   a. Open-ended text entry

5. [If the respondent chooses “Somewhat dissatisfied,” “Dissatisfied,” or “Very dissatisfied”] Please explain why you were dissatisfied with your experience in this program.
   a. Open-ended text entry

6. Please tell us the extent to which you agree or disagree with the following statements.

   My participation in this program…

   a. Increased my understanding of the goals and objectives of 21st CCLC programs.
      i. Strongly agree
      ii. Agree
      iii. Somewhat agree
      iv. Somewhat disagree
      v. Disagree
      vi. Strongly disagree

   b. Increased my organization’s capacity to implement environmental education programming in the 21st CCLC context.
      i. Strongly agree
      ii. Agree
      iii. Somewhat agree
      iv. Somewhat disagree
      v. Disagree
      vi. Strongly disagree

   c. Increased my organization’s capacity to partner with 21st CCLC sites.
      i. Strongly agree
      ii. Agree
      iii. Somewhat agree
      iv. Somewhat disagree
      v. Disagree
      vi. Strongly disagree

   d. Increased my individual capacity to implement environmental education programming in the 21st CCLC context.
      i. Strongly agree
      ii. Agree
      iii. Somewhat agree
      iv. Somewhat disagree
      v. Disagree

vi. Strongly disagree

e. Increased my organization's capacity to offer professional development opportunities to 21st CCLC staff.
    i. Strongly agree
    ii. Agree
    iii. Somewhat agree
    iv. Somewhat disagree
    v. Disagree
    vi. Strongly disagree

f. Increased my confidence to incorporate Meaningful Watershed Educational Experiences (MWEEs) into the afterschool context.
    i. Strongly agree
    ii. Agree
    iii. Somewhat agree
    iv. Somewhat disagree
    v. Disagree
    vi. Strongly disagree
    vii. I do not know what a MWEE is

7. Overall, how successful were your partnerships with your 21st CCLC sites?
    a. Very successful
    b. Successful
    c. Somewhat successful
    d. Somewhat unsuccessful
    e. Unsuccessful
    f. Very unsuccessful

8. What could have improved your experience in your partnership with your 21st CCLC sites?
    a. Open-ended text entry

9. Please describe one or more main successes of your partnership with your 21st CCLC sites.
    a. Open-ended text entry

10. Please describe one or more main challenges of your partnership with your 21st CCLC sites.
    a. Open-ended text entry

11. How likely is it that your organization will pursue future partnership opportunities with 21st CCLC sites?
    a. Very likely
    b. Likely
    c. Somewhat likely
    d. Somewhat unlikely
    e. Unlikely
    f. Very unlikely

12. [If the respondent chooses "Very likely," "Likely", or "Somewhat likely"] How might your organization partner with 21st CCLC sites in the future?

a. Open-ended text entry

13. [If the respondent chooses “Somewhat unlikely,” “Unlikely,” or “Very unlikely”] Why is your organization unlikely to partner with 21st CCLC sites in the future?
    b. Open-ended text entry

14. How likely is it that your organization will continue to implement MWEEs in the afterschool context in the future? [If the respondent selected “I do not know what a MWEE is” for question 6f, the phrase “implement MWEEs” will instead read “implement environmental education.”]
    a. Very likely
    b. Likely
    c. Somewhat likely
    d. Somewhat unlikely
    e. Unlikely
    f. Very unlikely

15. [If the respondent chooses “Very likely,” “Likely”, or “Somewhat likely”] Why is it likely that your organization will continue to implement MWEEs in the afterschool context in the future? [If the respondent selected “I do not know what a MWEE is” for question 6f, the phrase “implement MWEEs” will instead read “implement environmental education.”]

16. [If the respondent chooses “Somewhat unlikely,” “Unlikely,” or “Very unlikely”] Why is it unlikely that your organization will continue to implement MWEEs in the afterschool context in the future? [If the respondent selected “I do not know what a MWEE is” for question 6f, the phrase “implement MWEEs” will instead read “implement environmental education.”]

17. How would you improve or adapt the MWEE framework to work better in the afterschool context in the future? [If the respondent selected “I do not know what a MWEE is” for question 6f, that respondent will not view this question]
    a. Open-ended text entry

18. What advice would you share with an organization who wanted to participate in a grant like this in the future?
    a. Open-ended text entry

19. What additional support, if any, would you like from NOAA or NAAEE to continue implementing programs like this (e.g., training, data collection tools, implementation guides)?
    a. Open-ended text entry

5. NOAA Watershed STEM Education Partnership Grants Program: Meaningful Watershed Educational Experiences (MWEE) 21st Century Community Learning Center Staff Online Survey

National Oceanic and Atmospheric Administration (NOAA), North American Association for Environmental Education (NAAEE), and Education Development Center (EDC) invite you to complete this survey for 21st Century Community Learning Center (21st CCLC) staff. The survey questions will ask about your experience with implementing the NOAA Watershed STEM Education Partnership Grants Program with your environmental education organization (EEO) partner and satisfaction with the program. The following questions will also ask about your experience implementing environmental education programming at your 21st CCLC site. The survey will take approximately 15 minutes to complete.

The information you provide will be used by NAAEE and NOAA to better understand your experience with the grant so we can improve future programs like the NOAA Watershed STEM Education Partnership Grants Program.

The survey is voluntary and you may skip any questions you do not want to answer. Your responses will remain strictly confidential and only the EDC evaluators will see your individual responses. You may quit the survey at any time. We ask that you provide honest feedback. Neither your name nor organization will be shared with NOAA, NAAEE staff, or EEO staff.

If you have questions about this survey, please contact Sara Greller at sgreller@edc.org. We sincerely appreciate your time and willingness to participate.

By clicking "I agree" below you are indicating that you have read and understood this consent form and agree to participate in this survey. You may print a copy of this page for your records.

- I agree
- I do not agree [If selected, respondent will be skipped to end of survey]

1. How long have you been involved with the NOAA Watershed STEM Program?
    a. Less than 6 months
    b. 6-12 months
    c. Over 12 months
2. Which of the following best describes your role(s) in the NOAA 21st CCLC Watershed STEM Program Watershed? Select all that apply.
    a. Instructor/educator
    b. Finance Manager
    c. Supervisor
    d. Administrator
    e. Other; please describe:_____
3. Overall, how satisfied were you with your experience in this program?
    a. Very satisfied
    b. Satisfied

OMB Control No. 0690-0030
Expiration Date: 07/31/2023

c. Somewhat satisfied
d. Somewhat dissatisfied
e. Dissatisfied
f. Very dissatisfied

4. [If the respondent chooses "Very satisfied," "Satisfied," or "Somewhat satisfied"] Please explain why you were satisfied with your experience in this program.
   a. Open-ended text entry

5. [If the respondent chooses "Somewhat dissatisfied," "Dissatisfied," or "Very dissatisfied"] Please explain why you were dissatisfied with your experience in this program.
   a. Open-ended text entry

6. Please tell us the extent to which you agree or disagree with the following statement.

   Overall, youth enjoyed their experience in the program.
   i. Strongly agree
   ii. Agree
   iii. Somewhat agree
   iv. Somewhat disagree
   v. Disagree
   vi. Strongly disagree

7. Please tell us the extent to which you agree or disagree with the following statements.

   Participation in this program…

   b. Increased my 21st CCLC site's capacity to implement environmental education programming.
      i. Strongly agree
      ii. Agree
      iii. Somewhat agree
      iv. Somewhat disagree
      v. Disagree
      vi. Strongly disagree

   c. Increased my 21st CCLC site's capacity to partner with environmental education organizations.
      i. Strongly agree
      ii. Agree
      iii. Somewhat agree
      iv. Somewhat disagree
      v. Disagree
      vi. Strongly disagree

   d. Increased my awareness of NOAA resources that can be used in instruction with youth.
      i. Strongly agree
      ii. Agree
      iii. Somewhat agree
      iv. Somewhat disagree

v. Disagree
vi. Strongly disagree

e. Increased my confidence to incorporate environmental education programming into my afterschool context.
    vii. Strongly agree
    viii. Agree
    ix. Somewhat agree
    x. Somewhat disagree
    xi. Disagree
    xii. Strongly disagree

8. Overall, how satisfied were you with your partnership with your environmental education organization?
    a. Very satisfied
    b. Satisfied
    c. Somewhat satisfied
    d. Somewhat dissatisfied
    e. Dissatisfied
    f. Very dissatisfied

9. What could have improved your partnership with your environmental education organization?
    a. Open-ended text entry

10. Please describe one or more main successes of your partnership with your environmental education organization.
    a. Open-ended text entry

11. Please describe one or more main challenges of your partnership with your environmental education organization.
    a. Open-ended text entry

12. How likely is it that your 21st CCLC site will pursue future partnership opportunities with an environmental education organization?
    a. Very likely
    b. Likely
    c. Somewhat likely
    d. Somewhat unlikely
    e. Unlikely
    f. Very unlikely

13. [If the respondent chooses “Very likely,” “Likely”, or “Somewhat likely”] How might your 21st CCLC site partner with an environmental education organization in the future?
    a. Open-ended text entry

14. [If the respondent chooses “Somewhat unlikely,” “Unlikely,” or “Very unlikely”] Why is your 21st CCLC site unlikely to partner with an environmental education organization in the future?
    b. Open-ended text entry

15. How likely is it that your 21st CCLC site will continue to implement environmental education programming in the future?
    a. Very likely
    b. Likely
    c. Somewhat likely
    d. Somewhat unlikely
    e. Unlikely
    f. Very unlikely
16. [If the respondent chooses “Very likely,” “Likely”, or “Somewhat likely”] Why is it likely that your 21st CCLC site will continue to implement environmental education programming in the future?
17. [If the respondent chooses “Somewhat unlikely,” “Unlikely,” or “Very unlikely”] Why is it unlikely that your 21st CCLC site will continue to implement environmental education programming in the future?
18. What advice would you give to a 21st CCLC site who wanted to participate in a grant like this in the future?
    a. Open-ended text entry
19. What additional support, if any, would you like from NOAA or NAAEE to continue implementing programs like this (e.g., training, data collection tools, implementation guides)?
    a. Open-ended text entry

Appendix G. Summary of Observations

This appendix summarizes the data collected at 26 observations at 13 grantee sites (2 observations per site) across 12 states in 7 BWET regions. The purpose of this appendix is to understand the bigger picture of what was observed across the sites observed and consider potential patterns in the observation data.

Below we present tables outlining the aspects of the essential elements and supporting practices observed. Observations conducted intended to focus on days when youth were engaged in active learning such as outdoor field experiences and environmental action projects; however, observations were scheduled at a time most convenient for EEO and 21st CCLC staff. As a result, observed sessions benefited from a broader view of program implementation.

Limitations and use of this data: Since only two sessions were observed per site, the absence of an element or supporting practice from the observation does not mean it was not present at all in the project. Instead, this appendix summarizes a snapshot of the types of activities that were done across the observed sites and is not meant as a comprehensive examination of whether MWEE essential elements or supporting practices occurred over the course of an individual grantee project.

Development of the pilot observation rubric: The observation instrument was designed to collect data about MWEE implementation in out-of-school time (OST) contexts (e.g., afterschool programs, summer programs). Since the MWEE framework was originally designed for formal K-12 contexts, EEO and 21st CCLC staff adapted the framework to fit various OST settings in which the program was conducted.

Therefore, to document data about each essential element and supporting practice, EDC worked closely with NOAA and NAAEE to articulate components of each element and practice. Then, EDC specifically looked for evidence of these components during observations. In consultation with NOAA and NAAEE, we purposefully chose not to use a validated observation instrument (e.g., the Dimensions of Success tool) to maintain flexibility to document MWEE essential elements and supporting practices and capture ways in which grantees applied the MWEE framework in a variety of OST settings. With these goals in mind, the pilot observation rubric was not designed for observers to rate or score sites, staff, or activities, or document fidelity of implementation.

The following sections summarize components of the essential elements and supporting practices that were noted and those that were absent on the days EDC conducted observations.

Section 1: Essential Elements

Issue Definition – We observed components of this element at 8 of 13 sites

We observed some component of Issue Definition at eight of thirteen sites. Although we observed only eight sites where specific environmental issues were being investigated, many had driving questions guiding the activities. Issues and driving questions ranged from broad topics (e.g., "What is a watershed?") to specific issues (e.g., "What can be done with the sargassum that is causing problems on the beach?"). EEO staff developed and defined the issues youth investigated with minimal youth involvement or input.

Issue Definition	Observation Site												
	A	B	C	D	E	F	G	H	I	J	K	L	M
Educators define an issue for investigation. Although there was not always a specific issue being investigated, most sites had a driving question such as "What is a watershed?"		X		X	X		X	X	X	X			X
The driving issue or question is open-ended and relevant to youth. Examples of locally relevant questions included: • What is causing decline in salmon population? • What happens when hurricanes hit the region? • What can be done with the sargassum that is causing problems on the beach? • What can we do locally to protect river and ocean animals? • What is the connection between coral reef health and its distance from shore?		X		X	X		X		X	X			X
Youth are actively involved in co-developing supporting questions. Youth were not observed co-developing supporting questions. Agendas were set by the EEOs and, although youth asked questions about what they were learning, they did not come up with questions to explore.													
Youth reflect on values and perspectives related to the driving question. Youth had the opportunity to reflect on how what they were learning related to the driving question, for example, by discussing what might be causing the issue and ways they and other can help address the problem.		X		X	X		X		X				X

Outdoor Field Experience – We observed components of this element at 11 of 13 sites

Eleven of the 13 sites offered an experience where youth were able to directly examine local nature during the times evaluators were present to observe. These experiences included outdoor and indoor experiences such as field trips, activities outside in the school yard, or EEO staff bringing locally collected samples into the classroom. Youth often used their senses to examine the natural environment either as part of data collection (e.g., macroinvertebrate identification to examine water quality) or unrelated to data collection (e.g., noticing other things they see outside). With the exception of two sites, activities were entirely led by EEO staff. 21st CCLC staff often helped monitor youth to ensure they were on-task and had what they needed. When field experiences occurred, observers noted that EEO staff prepared youth by letting them know what to expect and reviewed relevant safety information.

Outdoor Field Experience[1]	Observation Site												
	A	B	C	D	E	F	G	H	I	J	K	L	M
Youth plan and conduct field investigations In many instances, youth conduced field investigations (e.g., water quality testing) but do not plan them. Activities are determined ahead of time by EEO staff. Additionally, not all investigations take place in the field. At times, EEOs conducted investigations in the school yard (e.g., collecting weather data) or inside the classroom (e.g., identifying macroinvertebrates in water samples brought in from a local creek). This was due to factors such as inclement weather or logistical challenges taking youth on a field trip.									X				
Youth use their senses to make observations and collect data. Youth frequently made observations (either outdoors or indoors) related to a driving question. For example, macroinvertebrate identification was a commonly observed activity that allowed youth to use their senses to make	X	X			X	X	X	X	X	X	X	X	X

[1] The component, "Staff ensure an accessible learning environment" was excluded from this table at it was especially challenging to document during observations and was subsequently not noted either because there was no field experience or no accessibility challenges were observed.

observations and collect data about water quality. At some sites, youth made observations, but this was not the main point of the activity and was not for the purpose of data collection (e.g., youth noticing things in nature while outside).													
Partners and 21st CCLC sites co-facilitate.[2] Activities were rarely co-facilitated. At some sites, 21st CCLC staff were observed standing off to the side, minimally engaged in watching the activities. At other sites, 21st CCLC staff participated in activities alongside youth. 21st CCLC staff often managed behavior and sometimes asked questions to prompt youth engagement (e.g., asking youth about what they are noticing) or provided assistance to the EEO staff (e.g., helping to distribute materials). In rare instances, 21st CCLC staff led program implementation.				X					N/A			X	
Staff prepare youth so they feel comfortable in the field. *(N/A indicates not applicable because there was no field experience)* Staff prepare youth by going over safety-related matters (e.g., what not to touch, how to be safe in the water) or talking about proper interactions with the environment (e.g., how to handle macroinvertebrates). EEO staff also prepare students by telling them about what they will be doing that day.	X	X	N/A	X		X	X		X	X		X	X

[2] One site is excluded as their EEO and 21st CCLC staff were one in the same.

Synthesis and Conclusions – We observed components of this element at 9 of 13 sites

We observed nine of the thirteen sites incorporating some component of synthesis and conclusions. We observed youth reflecting on what they did or learned about that day. Although this was never observed to be directly related to creating an action plan, occasionally youth discussed ways they could address the issue presented in the session (e.g., brainstorming ways to protect the water where the salmon live). Reflection time and meaning making was often limited due to the program context (e.g., limited time to do the activities, youth needed to get on the bus to leave). This led to brief discussions where youth demonstrated a more surface-level understanding of the issue or topic of the day.

Synthesis and Conclusions	Observation Site												
	A	B	C	D	E	F	G	H	I	J	K	L	M
Youth draw conclusions about an issue. For example, youth use the pollution tolerance index to look at their macroinvertebrate data and draw conclusions about water quality. At times, youth worked in groups to look at their data. In other instances, it was a whole-group activity led by EEO staff.	X	X			X		X		X				X
Youth use their conclusions to create a plan for action. Youth were not observed using their conclusions to create action plans. In some locations, they discussed ways to take action (e.g., they discussed ways they could protect the main body of water when salmon live in their area); however, a formal plan was not created.									X				X
Staff allow time for reflection. Reflection opportunities varied. Timing and location of the program sometimes affected the ability to reflect. For example, when out in the field, youth needed to get back on the bus and back to school so did not have time to reflect. Even when data was not collected, youth were often given a little time to share about their experience and what they learned. This was typically brief. Occasionally, youth were asked to reflect back on past activities at the beginning of the session.	X	X			X	X	X	X	X	X			X
Youth demonstrate understanding of their data and conclusions. Although not always tied to data and conclusions, youth did typically demonstrate some understanding of the content covered that day. This was typically brief and more surface level (e.g., youth mention that their data indicates that the water quality is pretty good because things aren't dying).	X	X			X	X	X		X	X			

Environmental Action Project – We observed components of this element at 5 of 13 sites

Environmental action projects were observed at five of the thirteen sites, either as a sustained project (e.g., planting pollinator gardens) or one-day activities not tied to a larger learning sequence (e.g., painting rain barrels as one optional activity for the day). Youth were observed to be actively engaged in these activities with educators often serving as a facilitation role. There was little time for reflection or demonstration of understanding observed. However, when the program involved developing a presentation for others it offered the opportunity for youth to reflect on, synthesize, and communicate what they did and learned.

Environmental Action Project	Observation Site												
	A	B	C	D	E	F	G	H	I	J	K	L	M
Environmental action project addresses the defined environmental issue. Action projects were observed at some sites. There were sometimes one-off activities not related to a central driving issue (e.g., creating a composting PSA or painting rain barrels). Often, these were not observed to be referred to explicitly as action projects. In other instances, they were sustained projects addressing an overarching issue (e.g., youth synthesize what they learned about human impact on the environment and present this to elders in their community).			X	X			X		X		X		
Youth are actively engaged in the project. When an action project was observed, youth appeared to be engaged. For example, youth planned and took care of a pollinator garden.			X	X			X		X		X		
Educators act as facilitators. When youth were carrying out action projects, educators were often observed serving a facilitator role (e.g., circulating around to groups and asking questions or engaging youth in discussion about what they were doing). Occasionally, educators took more of a leading role, directing students step-by-step through the activity.			X	X					X		X		
Youth reflect on the project. Reflection related to the action project was rarely observed and tended to occur when youth needed to synthesis their learning to present it to others. Otherwise, reflection was limited and mainly focused on a brief discussion of that day's activities.							X		X				
Youth come to understand they can bring about change. Youth demonstrated the understanding that they can bring about change when they presented what they learned to others or when they were given a concrete task to do on their own (e.g., youth were given a native plant and discussed where they would plant them at home).							X		X		X		

Section 2: Supporting Practices

Educator Facilitation – We observed components of this practice at 10 of 13 sites

Educators at most sites balanced direct instruction and indirect facilitation where youth explored on their own. This offered youth the opportunity to explore their interests (e.g., looking at what macroinvertebrates are of interest to them) and have choice in how they carry out activities (e.g., they choose their role on a project or make choices about how they design their pollinator gardens). Presentations also offered a mechanism for youth to share their voice. Educators at a few sites focused on leading youth step-by-step through activities which limited their ability for choice.

Educator Facilitation	Observation Site												
	A	B	C	D	E	F	G	H	I	J	K	L	M
Educators balance facilitating, instructing, and coaching. Educators at most sites balanced providing direct instruction while also offering youth time to explore and work on their own. At a few sites, EEO staff leaned heavily towards direct instruction, leading youth step-by-step through the activities. Conversely, at one site, there was very little formal instruction with youth mainly exploring the environment under the supervision of educators.	X	X	X	X		X	X		X	X	X		X
Educators leave space for youth choice and voice. Youth were often provided with limited choices such as choosing their own groups, their role in their group, or choosing which activity station they wanted to participate in. When exploring nature (e.g., during a macroinvertebrate identification activity) youth are often given the freedom to look at what interests them. Additionally, youth typically had some freedom to experiment and make choices when carrying out activities (e.g., creating hurricane models or designing a pollinator garden) except in instances where educators led youth step-by-step through the activity. Finally, at some sites, youth were also able to share their voice and perspectives through the development of presentations.	X	X	X	X		X	X		X	X	X	X	

Sustained Experience – We observed components of this practice at 8 of 13 sites

Connection to a larger learning experience was observed at eight sites. Although youth rarely reflected on how these activities connected over the course of multiple days, educators sometimes referenced earlier activities and how they connected to what would be done that day. The development of presentations provided a scaffold at a few sites for youth to think about connections between activities across multiple days.

Sustained Experience	Observation Site												
	A	B	C	D	E	F	G	H	I	J	K	L	M
Youth are allowed time to reflect on how multiple activities over the course of multiple days come together. Opportunities to reflect over multiple days was not frequently observed. This typically happened when youth needed to synthesize their learning in order to develop a presentation. However, in some observations, educators were observed making connections to previous activities. For example, educators referenced earlier activities and data they collected in previous field experiences.							X		X				X
Individual activity of the day connects to a larger learning sequence. At about half of sites, the observed sessions were connected to a larger learning sequence. This could be an issue under investigation or a broader general topic of study (e.g., watersheds). Sometimes these connections were explicitly mentioned by the educator (e.g., reminding youth about previous activities they did relate to macroinvertebrates and how it connects to that day's activity).	X	X	X			X	X		X	X			X

Local Context – We observed components of this practice at 12 of 13 sites

The local context was utilized at all but one observed site; however, the extent to which it was emphasized varied. At times it was the focus of an activity either because youth were physically out in the field or because the activity was framed by the educator to emphasize the local context. In other instances, the local context was briefly referenced (e.g., it was mentioned that water samples came from a local water source, but the local context was not emphasized). Local resources such as field sites and local science experts were also typically observed being utilized.

Local Context	Observation Site												
	A	B	C	D	E	F	G	H	I	J	K	L	M
Educators use youth's local environment and community as the learning context. The local context was featured in all observed programs. This included references to local bodies of water, examining water samples collected locally, or taking youth on field trips. However, the extent to which the local environment was emphasized varied. At some observed programs there was a large emphasis placed on the local environment (e.g., youth were out in the field and/or learning activities revolved around that context). Other programs mentioned the local content more in passing. For example, at one site youth played a game where they pretended to be salmon and the educator briefly tied this to salmon found locally at the end of the activity.	X	X	X	X	X	X	X		X	X	X	X	X
Educators incorporate local resources. Most sites incorporated local resources. Some examples include taking youth on field trips and featuring local science experts in programs.	X	X		X	X	X	X		X	X			X

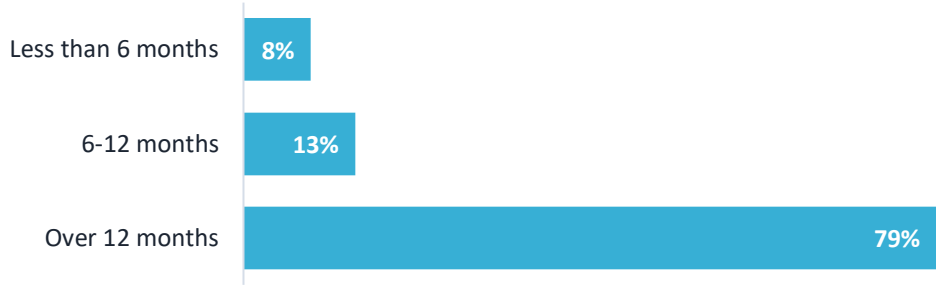
Appendix H. EEO Survey Data Summary

About Respondents

Online survey invitations were sent to a total of 50 EEO representatives as they were nearing or had just completed their programming. A total of 39 responses were received for a response rate of 78%. This includes at least one response from 28 of the 30 grantees.

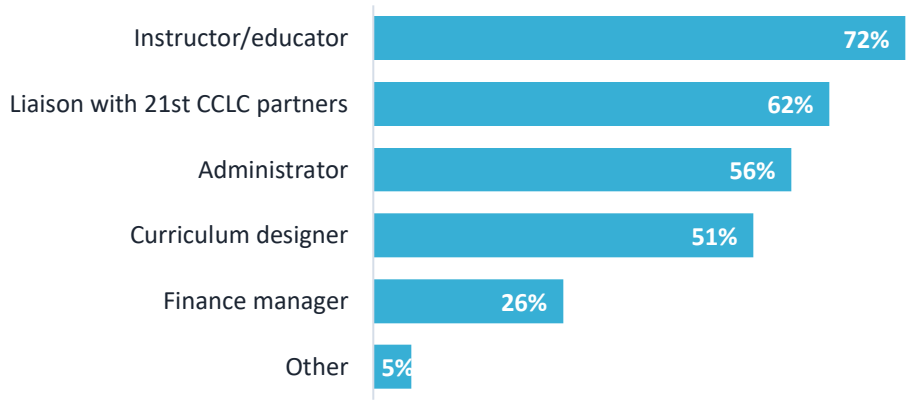
Most respondents (79%) were involved in the program for more than one year.

Figure H1. Most respondents were involved with the program for more than 12 months. (n=39)



Respondents held a variety of roles. The two most common roles were instructor/educator (72%) and liaison with 21st CCLC partners (62%).

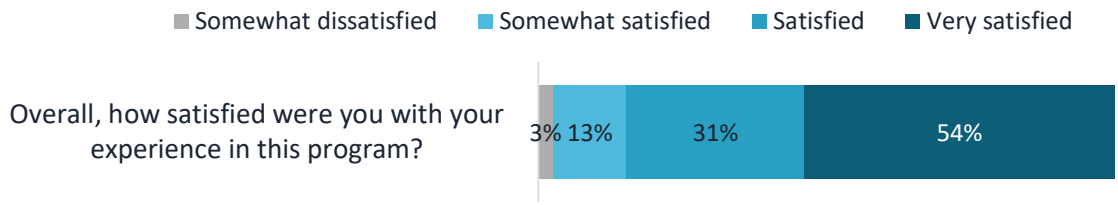
Figure H2. Respondents held a variety of roles, and primarily indicated they were an educator. (n=39)



Percentages do not add to 100% as respondents could select multiple responses.
Other responses: Grant manager/principal investigator, grantee

Most (85%) were “satisfied” or “very satisfied” with their experience in the program.

Figure H3. Respondents were “satisfied” or “very satisfied” with their experience in the program. (n=39)



Note: No one selected “Dissatisfied” or “Very dissatisfied”

Reasons EEO staff gave for being satisfied included:

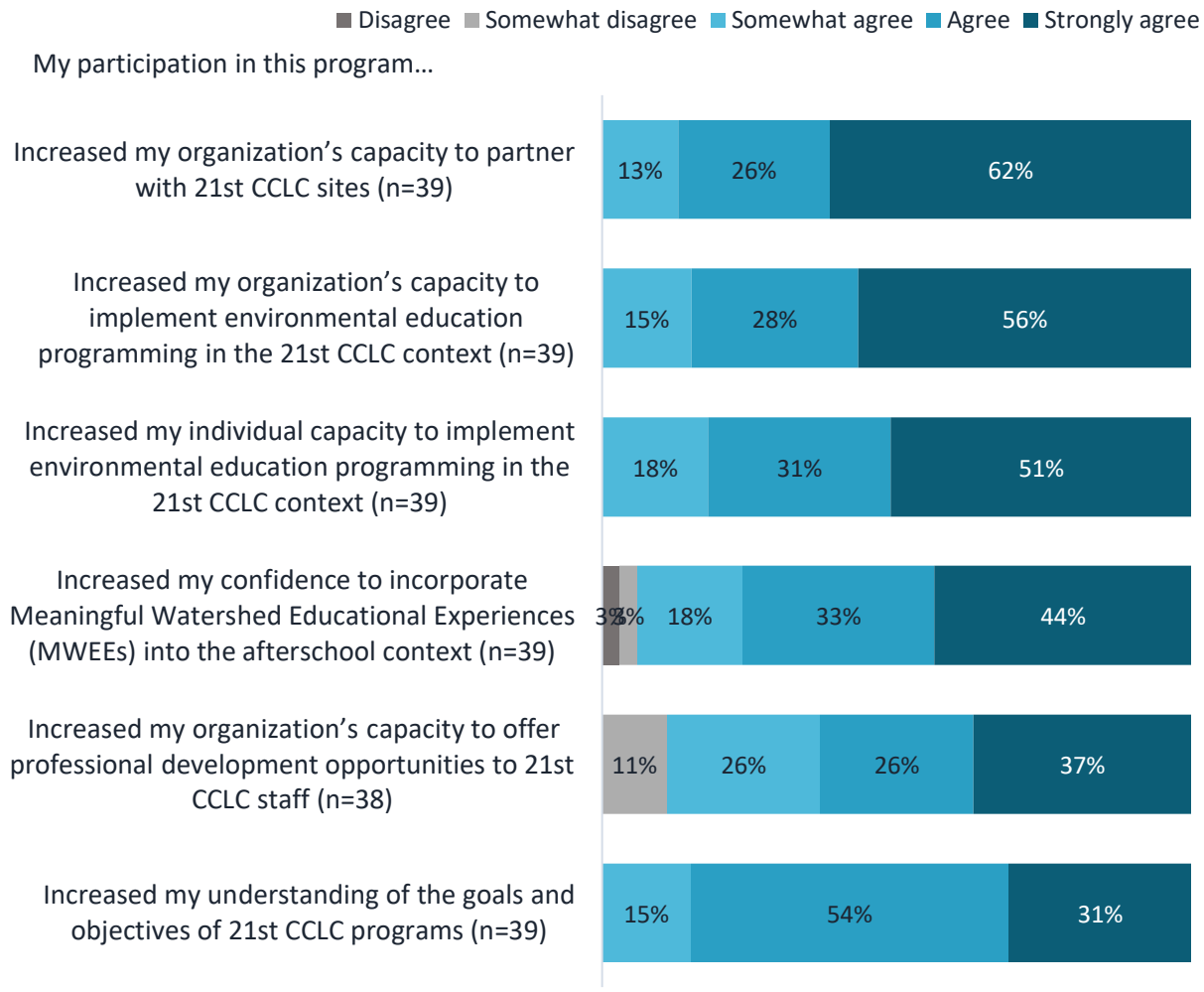
- Support received from NOAA/NAAEE, including flexibility in light of COVID challenges, good communication
- Opportunities to connect with and learn from other EEOs
- Positive impact on students (e.g., engagement, learning)
- Time and resources to build relationships with and support 21st CCLC partners and students
- Grew EEOs capacity to do MWEEs/implement environmental science programming

Only one person selected that they were dissatisfied to any extent. This person described being frustrated with the experience because the 21st CCLC program did not seem to fully value the opportunities the grant provided for students. They recognized, however, that this was not entirely the fault of the 21st CCLC administrators because COVID disrupted scheduling and thus the learning process was also disrupted.

Capacity Building

Most respondents at least somewhat agreed to all statements about their participation in the program. A few disagreed that it increased their confidence to incorporate MWEEs into the afterschool context (6% disagreed or somewhat disagreed) and that it increased their organizations' capacity to offer professional development opportunities to 21st CCLC staff (11% somewhat disagreed). They most strongly agreed that the program increased their individual capacity to implement environmental education programming in the 21st CCLC context (51% strongly agreed), increased their organizations' capacity to partner with 21st CCC sites (62% strongly agreed), and increased their organizations' capacity to implement environmental education programming in the 21st CCLC context (56% strongly agreed).

Figure H4. Over half of respondents strongly agreed that the program increased thir organization's capacity to partner with 21st CCLC sites.

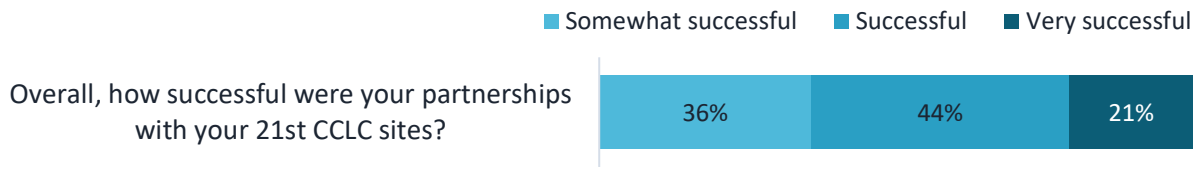


Note: No one selected "Strongly disagree" for any statements

Partnerships

All EEO respondents felt their partnerships with their 21st CCLC sites were at least somewhat successful and more than half (65%) felt that it was successful or very successful.

Figure H5.Respondents indicated that their partnerships were successful. (n=39)



Note: No one selected "Somewhat unsuccessful", "Unsuccessful", or "Very unsuccessful"

EEO staff reported that their experience partnering with their 21st CCLC sites was impacted by COVID-related challenges (e.g., inability to implement as intended, 21st CCLC staff burnout). Other ways they felt their partnership could have been improved included:

- More consistent 21st CCLC staffing (i.e., less turnover)
- More contact/better communication with CCLC partners, especially having in-person meetings
- More buy-in from 21st CCLC sites, being more of a priority
- A better understanding of their specific 21st CCLC partners early on, navigating differences in 21st CCLC sites and the challenges of implementing environmental education in afterschool
- Better student participation (e.g., more students, more consistent attendance)
- More/larger outdoor experiences and field trips

EEO staff described successes in the partnership with their 21st CCLC partner sites, including:

- Increasing EEOs capacity to implement environmental education programming in afterschool, work with 21st CCLCs, and reach youth
- Fostering relationships with 21st CCLC partners that are likely to continue
- PD/resources offered by EEO grew the capacity of 21st CCLC site staff
- Student benefits (e.g., engagement, connection with local environment, learning, skill development)
- Getting youth outdoors

EEO staff also described challenges in partnering with 21st CCLC sites. Many respondents emphasized that the COVID-19 pandemic caused or exacerbated these challenges. Reported challenges included:

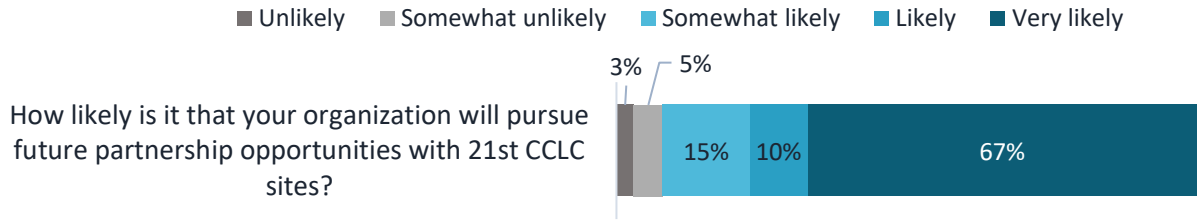
- General COVID-related challenges to implementation, virtual learning was not optimal
- Difficulties arranging field experiences (e.g., due to transportation challenges)
- Low/inconsistent student attendance/retention/engagement
- CCLC staff turnover and burnout (also made PD challenging)
- Communication challenges with 21st CCLC partners
- Difficulty using grant funds (i.e., due to 21st CCLC having its own funding)

- Structure of afterschool (e.g., youth are tired after school, program did not fit into afterschool timeframe, limited time with students)

Future Implementation

Nearly all respondents (91%) indicated that they were at least somewhat likely to pursue future partnerships with 21st CCLC sites and about two-thirds (67%) were very likely to do so.

Figure H6. Overall, respondents were likely to pursue future partnerships with 21st CCLC sites. (n=39)



Note: No one selected "Very unlikely"

EEOs described ways in which they might continue to partner with 21st CCLC sites in the future, including:

- Continue offering similar experiences to 21st CCLC sites (e.g., weekly after school programs, summer camps)
- Similar, but less frequent experiences (e.g., monthly programs, serve as a site for field trips)
- Work with new 21st CCLC sites and afterschool providers (e.g., Boys and Girls Clubs)
- New initiatives/programs for students
- Provide resources and offer professional development to 21st CCLC staff

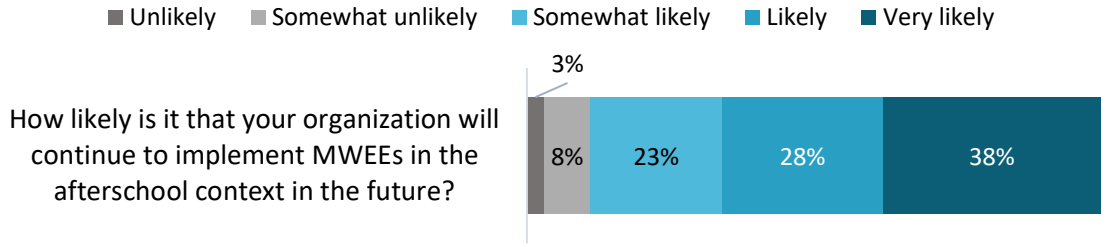
Some noted that these future plans depended on the availability of funding to support programming.

The three EEO staff who were unlikely to partner with 21st CCLC sites in the future gave different reasons for being unlikely to partner. These included:

- 21st CCLC sites wanting EEO staff to do the majority of the work (staffing, planning, curriculum, logistics, etc.), which they do not have the capacity to offer
- Organizational priorities shifting away from providing experiences directly to students
- The challenges (many connected to COVID) of working with 21st CCLC sites

Most EEO staff (89%) reported that they were at least somewhat likely to continue to implement MWEEs in the afterschool context and about two-thirds (66%) reported that this was likely or very likely.

Figure H7. Overall, respondents were likely to continue to implement MWEEs in afterschool. (n=39)



Note: No one selected "Very unlikely"

Reasons EEO staff gave for wanting to continue implementing MWEEs in the afterschool context included:

- MWEEs are part of how they design programs, key to their organization and/or their partners. Although it may not have been initially framed as a MWEE, but their strategy incorporates most/all of the MWEE elements.
- Youth benefit/enjoy MWEE programs and there is a need for this type of learning experience
- Want to continue partnering with and supporting afterschool programs
- Want to continue using/expand use of resources developed through this grant
- Will implement with some adaptations (e.g., different recruitment strategy, more flexibility, do summer-only programming)

The four EEO staff who were unlikely to continue implementing MWEEs in the afterschool context gave different reasons for their responses, including:

- Poor student attendance at afterschool programs
- A lack of opportunities to do afterschool programs compared to working with students during the school day as part of their curriculum
- The EEOs being better suited to support MWEE implementation indirectly (e.g., via workshops on how to implement MWEEs, providing guides and resources on implementing MWEEs, providing materials to schools) as opposed to directly implementing MWEEs with students
- Organizational priorities shifting away from providing experiences directly to students

EEO staff provided suggestions for improving or adapting the MWEE framework for the afterschool context, including:

- Professional development for21st CCLC staff is not optimal due to high turnover, lack of time, etc., but might be needed for some sites with less EEO capacity to implement or to support learning integration (i.e., there is sometimes a need/reason for 21st CCLC staff to lead)

- Ways to overcome inconsistent youth attendance and limited timeframe. Consider smaller, bite-sized pieces (plug and play); Aim to have an extended experience (e.g., summer camp, extended afterschool; work closely with partners. Let students self-select to participate.
- Get students in nature, offsite is ideal, but also consider utilizing the schoolyard (i.e., have a loose interpretation of what "field" means)
- More games and movement; decide if learning integration is essential in this setting or if it can be done in a less “academic” way
- Include family members
- Adaptations for different age groups
- Incorporate cultural competence
- Provide more guidance on what MWEE projects could be, big picture ideas and how to carry them out

Suggestions for Program Improvement

EEO staff offered the following advice to other organizations wanting to participate in a similar grant program:

- Get to know partners early on, set goals and co-develop the program together, maintain regular communication. Know that this can take a lot of time and you need to be dedicated to the program and your partner. Work with one another's strengths.
- Be flexible; have alternative ways to teach the same content and serve different sites
- Keep expectations in-check. Understand the limitations of afterschool in general (e.g., transient youth attendance, understaffed 21st CCLCs), and your specific partners in particular, and plan with this in mind.
- Connect with other grantees and organizations; learn from them and ask for support
- Think beyond traditional professional development for 21st CCLC staff
- Try new things
- Know your students/audience and tailor the experience for them; let the students help guide the work

EEO staff reported that the following supports would be helpful in implementing programs such as these:

- MWEE implementation guides for afterschool, summary of lessons learned from all projects
- Additional training for EEO staff and 21st CCLC partners (offered periodically as staff turn over)
- More opportunities to network, be a part of a community of practice, and share resources
- More tools and resources for teachers, especially as they relate to implementing each essential element (e.g., action project guidance)
- More funding opportunities, including funding to work with non-21st CCLC partners and to implement new activities
- Resources that share an overview of MWEEs, the grant program, and its goals
- Evaluation support: Standardized data collection tools (for use by site staff); access to a third-party evaluator

Some also mentioned that they received all of the support they needed.

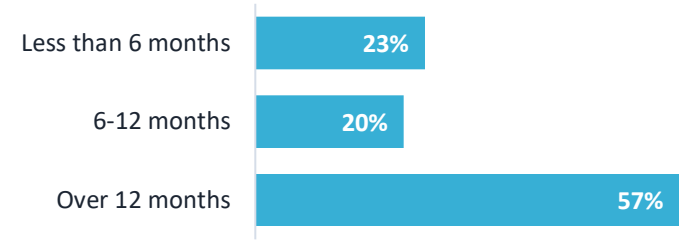
Appendix I. 21st CCLC Survey Data Summary

About Respondents

Online survey invitations were sent to a total of 90 21st CCLC representatives as they were nearing or had just completed their programming. A total of 35 responses were received for a response rate of 39%. This includes at least one response from 19 of the 30 grantees.

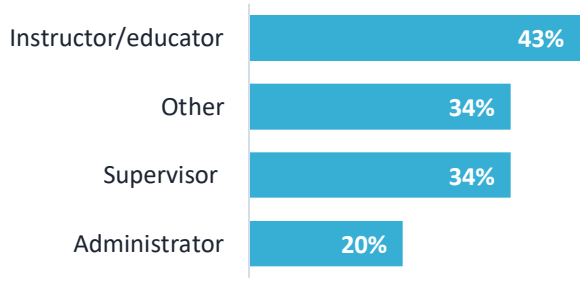
Over half of respondents (57%) were involved with the program for more than 12 months.

Figure I1. Most respondents were involved with the program for more than 12 months. (n=35)



Respondents held a variety of roles.

Figure I2. Over one third of respondents were instructor/educators. (n=35)



Percentages do not add to 100% as respondents could select multiple responses.
Other responses:

- *Chaperone for a field trip*
- *Club Operations Director*
- *Director of Program*
- *Grant Writer*
- *Partner*
- *Program Coordinator (x2)*
- *Site Coordinator (x4)*

Most (97%) were “satisfied” or “very satisfied” with their experience in the program.

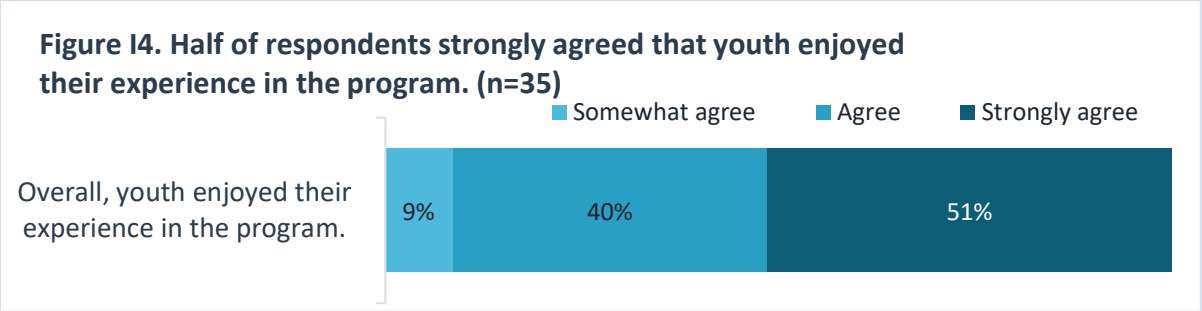
Note: No one selected “Somewhat dissatisfied,” “Dissatisfied,” or “Very dissatisfied”

Reasons 21st CCLC staff gave for being satisfied included:

- Youth enjoyed the program and it provided valuable opportunities for youth to have experiences that were hands-on and unique
- The program was easy to add into their 21st CCLC site
- The EEO instructors were knowledgeable
- They were able to adapt the program to the COVID-19 context

One respondent shared that they did not think their EEO organization was transparent about the grant.

According to 21st CCLC respondents, youth enjoyed their experience in the program.

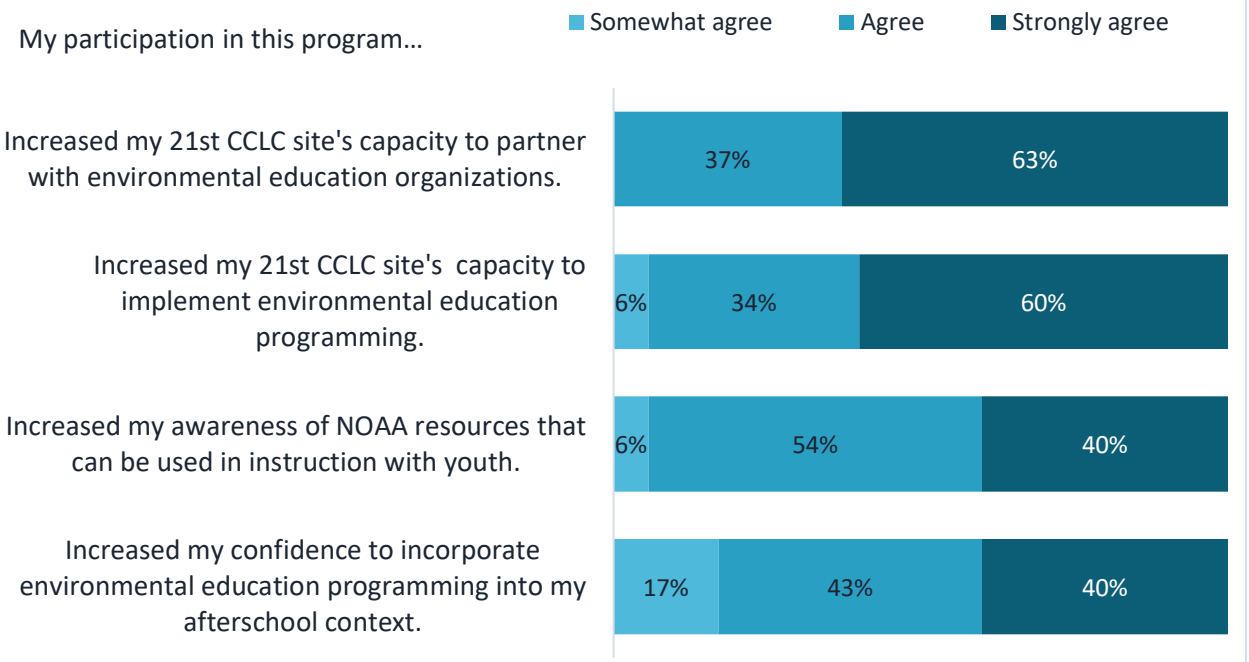


Note: No one selected “Somewhat agree,” “Disagree,” or “Strongly disagree”

Capacity Building

Most respondents at least somewhat agreed to all statements about their participation in the program. They most strongly agreed that the program increased their site’s capacity to partner with environmental education organizations (63% strongly agreed), increased their site’s capacity to implement environmental education programming (60% strongly agreed), and increased their own awareness of NOAA resources that can be used in instruction with youth (40% strongly agreed).

Figure I5. Respondents gained capacity, awanress, and confidence from participating in the program. (n=35)

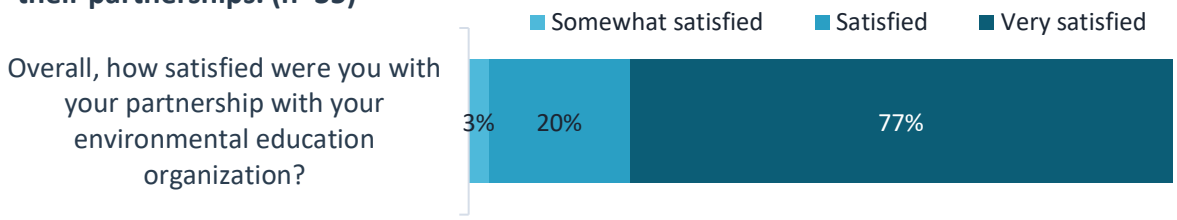


Note: No one selected "Somewhat agree," "Disagree," or "Strongly disagree"

Partnerships

All 21st CCLC staff respondents were satisfied with their partnerships with their EEOs, and most (77%) were very satisfied.

Figure I6. Over two-thirds of respondents were very satisfied with their partnerships. (n=35)



Note: No one selected "Somewhat dissatisfied," "Dissatisfied," or "Very dissatisfied"

21st CCLC staff suggested ways their partnerships could have been improved, including:

- More activities that suited summer camp
- Better communication with the EEO
- Additional time to plan the program and implement the program
- Even more activities and field trips with the EEO
- Fewer instruction-based activities
- Additional staff at the EEO supporting the EEO staff partner
- Better transparency from the EEO about how the details of the grant

21st CCLC staff described successes in the partnership with their EEOs, including:

- The programming offered by EEOs gave youth the opportunity learn science content, learn outside
- The programs gave youth the opportunity to learn about new things in new settings (i.e., outside)
- They worked well with the EEOs and had strong collaboration

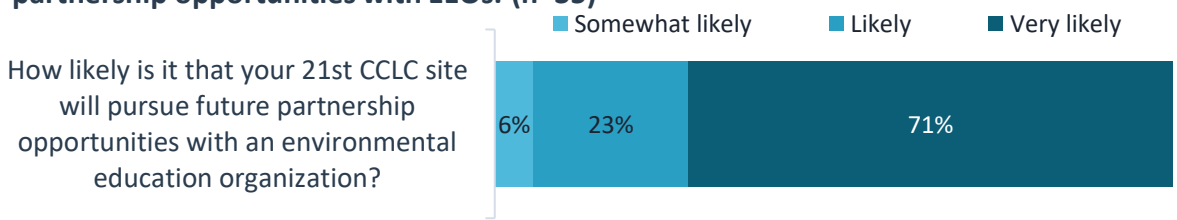
21st CCLC staff described challenges in partnering with EEOs, a few of which directly related to COVID-19. Reported challenges included:

- Finding time to meet, scheduling programming, and generally finding time for 21st CCL staff to prepare and work on this program
- Low youth attendance
- EEOs not being familiar with the way 21st CCLC work with youth (e.g., EEO staff are more lenient with youth behavior than 21st CCLC staff)
- 21st CCLC staff wanted more field trips for youth

Future Implementation

Most respondents (71%) indicated that they were very likely to pursue future partnerships with 21st EEOs.

Figure I7. Most respondents were very likely to pursue future partnership opportunities with EEOs. (n=35)



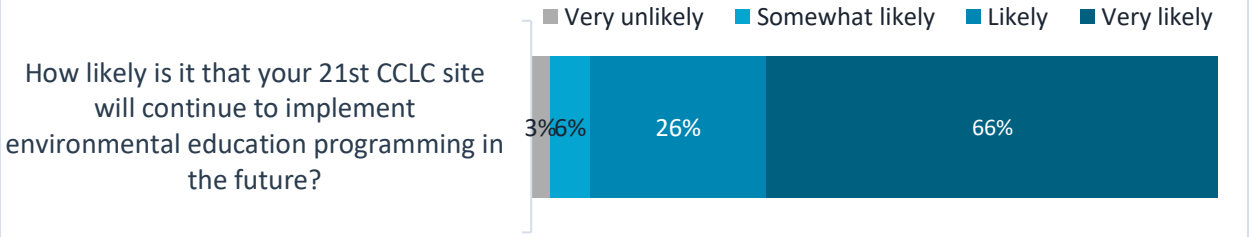
Note: No one selected "Somewhat unlikely," "Unlikely," or "Very unlikely"

21st CCLC staff described ways in which they might continue to partner with EEOs in the future, including:

- Hoping to have more of the same type of programming
- Have the EEO continue to do environmental education programming with youth at their site
- Include a broader audience in programming (e.g., families and seniors)
- Expand activity offerings
- Take youth on field trips to the EEO
- Ask the EEO to do a shorter-term project with their site
- Include more EEO partners

Most 21st CCLC staff (98%) reported that they were at least somewhat likely to continue to implement environmental education programming in the future. Only 3% of respondents indicated they were very unlikely to do so.

Figure I8. Respondents indicated they are likely to continue to implement environmental education in the future at their site. (n-35)



Note: No one selected "Somewhat unlikely" or "Unlikely."

Reasons 21st CCLC staff gave for wanting to continue implementing environmental education programming in the future included:

- Environmental education is an important topic
- Youth enjoy environmental education programming, based on their experience with the EEO
- The topic is a good fit for their programs and it's easy to incorporate since there's teacher interest and interest from families
- Sites have the resources to implement environmental education programming

Only one person indicated it is very unlikely that they will continue, and indicated this was because their 21st CCLC grant is ending.

Suggestions for Program Improvement

21st CCLC staff had advice to offer future sites who wanted to participate in a similar grant. Their advice included:

- 21st CCLC sites should be open to new partnerships and new programming experiences for youth
- Recommended more regular communication with the EEO

- Suggested to be flexible in working with the EEO
- Talk with other 21st CCLC staff about the program
- Consider staffing at the 21st CCLC site to know who will coordinate with EEO staff

21st CCLC staff reported that the following supports would be helpful in implementing programs such as these:

- Training and implementation guides
- Grant opportunities and continued funding
- Data and information from this program
- Add a requirement that EEO should share grant information with the 21CCLC site