**Checklist for Effective EE Programs: A guide to formative evaluation reflection**

The following recommendations and prompting questions are designed to help program coordinators and staff consider whether their program is on track for success. Of course that depends on your purpose, your learners, and what your intention is for the program, but they are versatile. Questions like these have been used to improve teacher workshops, community festivals, and nature center programs for youth. Nevertheless, some of the following questions may not apply to your program. Others may trigger some interesting possibilities for program improvement. These recommendations are based on insights from [Supportive Environments for Effectiveness](https://redirect.org/) (SEE), an evidence-based framework that describes how environments can be designed to encourage learning and empower people. We believe there are four areas where educators might make improvements using this framework. The following questions might spark ideas for collecting data from program participants or staff.

**Establishing common ground and making connections**

Making connections between what learners already know and what they experience in your program is an essential part of good education. Retaining and applying new knowledge and experiences is more likely when these ideas and experiences are integrated into the learner’s existing mental models of the world. This means we need to think about where learners are at.  What ideas and understandings do they bring with them to your program? Lasting knowledge is also more likely when learners can grasp a larger meaning and apply ideas to new contexts.  These are systems thinking skills, and can be practiced through life cycle analysis exercises, or following a nutrient through a food chain, or even imagining how a change could ripple through the community or world generating other opportunities for change. Does your program help learners make connections?

▢ What strategies does the program use to acknowledge and address preexisting ideas that learners bring with them? (Do you ask learners to explain what they already know about the topic? Did you do an audience assessment? The KWL framework might be useful (“what do you know” and “what do you want to know” before the program, and “what did you learn” after)..

▢ Are you relying on the intuition of educators to guess what learners already know or are you collecting this information from learners in some way?

▢ How does the program provide learners with the opportunities to connect concepts to their own experience? Are they encouraged to ask questions?

▢ How does the program prompt learners to appreciate why new ideas/concepts matter?  Can they see connections to issues they care about, impacts over time, and cause and effect relationships (systems thinking)?

▢ Do program facilitators present information that contains enough detail to enable understanding, but not so many details as to overwhelm participants?

**Encouraging active exploration and reflection**

Learners often do best when they have an opportunity to actively explore new information. While being able to use new ideas to solve a problem or see the world more clearly can be deeply rewarding, exploring unfamiliar ideas can be too challenging without assistance. To what extent does your program encourage and support exploration? Reflecting on our experience is also critical for strengthening memories and building durable mental models and can be effective with small group discussions or individual journaling. Does the program guide learners to reflect on their experience and then apply the information to something relevant and interesting to them?

▢ In what ways does the program give learners the opportunity to use, apply, and test new concepts and ideas for themselves? Are there worksheets, homework exercises, or opportunities to repeat the skills at home? How does the program support this exploration and help learners feel comfortable asking questions?

▢ What approaches are used to give learners control over the learning experience? By discussing and/or applying new ideas? Are learners given feedback in a way that helps them develop their own understanding?

▢ What does the program do to allow learners to reflect on their experiences?

**Building skills, taking action, and making an impact**

Many environmental education programs help learners develop skills so they can communicate, think critically, solve problems, work on teams and help transform their communities toward sustainability. How does your program help learners to cultivate these abilities? Having time to practice new skills in a safe environment can help and learners can also benefit from mentors/role models, examples, and success stories. Likewise, it can be important to think about how you might take advantage of the talents and interests learners already have. Being able to actually do something meaningful can be critical for empowering learners and sustaining motivation.

▢ To what extent does the program consider the existing talents and interests of learners? How is this done?

▢ How does the program provide sufficient time for learners to build and practice new skills? What kinds of support is offered to learners?

▢ What is the mechanism for giving feedback to learners in a way that helps them strengthen skills and gain confidence?

▢ How are learners encouraged to create meaningful and achievable goals for their participation in the program?

▢  Are learners are able to see the impact of their actions?  How easy is it for learners to see that their participation makes a difference?

**Professional growth & development**

Staff can also be learners when it comes to developing effective environmental education programs. What changes and adjustments might improve your programs? Trying new ways of doing things while making efforts to collect feedback from participants and could lead to important insights and more effective programs. Some of the following questions might help you support their professional development as they create effective educational experiences.

▢ Is there a mechanism for learners to provide feedback about the program? How is this information used to reflect on the program and make improvements?

▢ Do staff have the ability to make adjustments and try out new ways of doing things?  How are they supported in these efforts? What data could help them know if their efforts were effective?