Now that you have identified the outcomes of your program to evaluate, it's time to determine how to collect those data. There are many evaluation design options available and the most appropriate approach will be the one that effectively enables you to answer your evaluation questions while staying within the budget or resources available to you.

Below are a few evaluation designs that are available to you for your evaluation. Most of these examples are non-experimental, meaning that there is no comparison group. All of the designs, however, can be adapted to be quasi-experimental by adding a comparison group. Given the size of most NNLM projects, the first 3 options may be most appropriate.

**Posttest only**

Data collected at the end of the program or following the close of the program. This design is often used when resources are very limited or when participants were not available at the start of the program for a pretest. A limitation of this design is that it does not have a reference point for comparison such as a pretest or comparison group. Given this, it is difficult to determine the magnitude of the outcome or where the outcomes are due to the program or due to other causes.

**Retrospective Pre & Posttest**

Data are collected at the end of the program. Participants are asked to assess their current level of knowledge/attitudes/behaviors/skills after experiencing the program. At the same time, the participants are asked to reflect on their previous level knowledge/attitudes/behaviors/skills, prior to the program. This design can be used when a pretest is not possible. In interpreting results it is important to consider recall bias, that is, that some may find it hard or difficult to remember how they thought or behaved prior to the program.

**Pre & Posttest**

Data is collected before the program begins and again at the end of the program. Using the same data collection instrument allows you to compare the pretest and posttest results. This is a relatively easy design to implement that allows the evaluator to control for prior knowledge/attitudes/behaviors/skills. Because there is no comparison group, you cannot account for non-program influences on outcomes. In interpreting results, also be aware that self-reporting at posttest is sometimes lower than at pretest because participants often overestimate their self-reported knowledge/attitudes/behaviors/skills during a pretest but more accurately assess themselves after being exposed to content.
Pre & Posttest with Comparison Group

Data is collected before the program begins from two groups (comparison and intervention). One group participates in the program and the other does not. Data are collected from both groups once the program has ended. By incorporating data from the comparison group that did not take part in the program, this design has the most assurance that outcomes are actually a result of the program. In carrying out this design, try to identify a comparison group that is similar to your intervention group in terms of demographic data. Also keep in mind that the comparison group is not receiving the benefit of the program so there may need to be an incentive for taking part in the evaluation.

Pre & Posttest with Follow-Up

This design involves carrying out a pretest, posttest, and follow-up assessment among program participants. The pretest takes place before the program and the posttest takes place at the end of the program. The follow-up assessment takes place sometime in the future. The benefit of this design is it allows you to see if the program has lasting effects. Because there is no comparison group, it is not possible to account for non-program influences.

Intermediate Testing & Posttest

This design includes measurements being taken at multiple points during the program and then again at the end of the program. This allows you to track participants' progress as they move through the program. This design is best used when the program is long and allows for multiple time points for measurement. A benefit of this design is that it allows you to identify weaknesses during the program when there is still time to address any challenges through future programming.

This document is adapted from Zint, Michaela. My Environmental Education Evaluation Resource Assistant. Retrieved 2 November 2020 from https://meera.snre.umich.edu/types-evaluation-designs