Reducing the Outcomes Angst

A Step-by-Step Approach to Identify What to Measure

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March 21, 2012

Webinar recording, slides, and handout are available at evalu-ate.org/events/reducing_the_outcomes_angst/

Q: The program model is pretty complex. Are there times during the evaluation that one area of the model needs more focus than at other times?

A: (Lana Rucks) Absolutely. If you think about the way that the logic model is approached, a formative evaluation of project activities is going to be the focus earlier in the project life cycle. You cannot begin to measure outcomes if you do not have any outputs yet. So in the early parts of the project life cycle you are going to focus more on how the project is implemented and what is the best way to implement it. Building the logic model should be iterative. As you get more information and feedback about what is working or not and what is important to the project or not, you will make changes to the logic model.

Q: What programs do you use or recommend for putting the logic model together?

A: (Lana Rucks) This is a two-fold question. In regards to literally putting the logic model together, you can use Visio or something similar—I use SmartDraw. For developing the actual components—the content—of the logic model, that's what the evaluation team is going to work on. For example, asking "Is this an important piece, how important of a piece is it, and what type of changes do we expect to occur if we put this project in place?" Also, we ask, "If we are expecting these types of behavioral changes, what do we expect to happen before these changes occur?" So developing the logic model is an opportunity for the evaluation team to really think through what the mechanism of action is for the project. It has been my experience in facilitating meetings around developing a logic model that going through that effort and really spending time on getting that piece right will reduce outcomes angst later. It also improves the project so you get more outputs and outcomes, and more favorable outcomes later, too.

Q: Are there projects where the logic model is not the best evaluation method?

A: (Lana Rucks) As a trained scientist, I would say there may be one out there. You can never say that there are none. However, it has been my experience that the logic model is always useful. I work in a variety of areas in terms of doing evaluation—STEM projects, public health, the for-profit sector—and I use this process in all of these areas. I was a chemistry minor, so I think of the logic model in terms of chemistry: You put the model together so you can have something to hold in your hands and understand how the different elements will interact together. You gain that type of understanding of how the elements will yield different reactions. I think of the logic model in those terms as well. If you do this, you will get that, and then this other thing will happen. You get to understand why you do a, b, and c, and what should happen. It has been my experience that most projects will be benefit from it.

Q: Why didn't you include methods of data collection in that model, and is there a data management plan that correlates with that logic model?

A: (Lana Rucks) I think of data collection as being part of the actual evaluation design. You may notice that in the logic model, the variables are written in a fuzzy, nebulous manner; but in evaluation you need those variables to be quantifiable. The reason for the fuzziness is that it gives you the freedom of deciding how best to measure those constructs. All that the logic model is really tapping into is the mechanism of action of the program: How does this program work, what type of changes do we expect to occur? Once you understand this, then later you can actually put together the design plan. What I try to do is to take baby steps and not put too many items together, so it makes everything clearer and reduces the outcomes angst.

Evalu**a**t**e**

Q: The NSF project officer has 65 other projects to attend to, so how can we make sure that that individual can serve on a detail oriented evaluation team?

Your NSF program office does do not need to be involved in the development of the logic model or evaluation design.

A: (Lana Rucks) [In relation to the management at the institution] my perspective is that it depends on the overall organization's resources. When you think about the evaluation team, that person can be involved at different levels of the evaluation. For example that person probably does not need to be involved in the actual distribution of a measurement instrument. They do need to have some level of involvement in the overall evaluation process, and you may need to ensure that that person has the resources to support their involvement. It could also be about how best to think about the process and who is being involved at what levels. What I do know is that when people are committed to an idea, people become very creative in their approaches to those issues.

Q: In relation to triangulation and measuring outcomes with different methods, what do you do if the information from those different methods conflicts?

A: (Lana Rucks) There are a couple of things you could do. One thing to do is to step back and ask, "Did you really measure the same construct, or were you tapping into something else?" For example, you could be tapping into knowledge about an idea or you could be tapping into a different type of attitude. That's really valuable information, because you can look to see if the project is operating differently than you thought it was. If you are measuring the same construct, then perhaps one of those indicators is a leading indicator and one is a lagging indicator. In other words, what could be happening is that one indicator is more sensitive to immediate changes and the other is sensitive to slower change. Now if the data you are getting from those indicators is completely contradictory, then you may be picking up a different construct altogether. This is still important to know, so you can take another look at what that construct actually is and how it relates to your project.

Q: I am working with someone who has used a pre- and post- test, but the questions were not worded the same at the post test. How does that affect the validity of the comparison?

A: (Lana Rucks) That's where the interpretation becomes more challenging, particularly if a lot of weight is placed on those scales. One of the things that you can do is to look at it statistically. If these questions represented a quantitative scale, then you can look at the validity of the scales and how the pretest and posttest versions correlate. If they correlate highly, then you can still make a comparison. You can also look at the questions and see how similar they are, and if they seem to tap into the same construct. However, what you really want to do is to ask the same questions at the two time points. If you weren't able to do that, then you can ask people at the posttest to note how they would have answered that question on the pretest.

Q: How many classrooms did you observe using the RTOPS instrument, and what percentage of the teachers who participated in the workshops was observed?

A: (Lalitha Locker) We used the RTOPS during the first year of the grant, and 100 percent of the teachers that took the workshop were observed. We had specific requirements for participation in the workshop. We had eight teachers in the workshop, and each teacher was observed three times.

(Lana Rucks) We're doing it again this year as well as a pre/posttest. As background, the teachers completed an initial background of inquiry-based learning and during the summer they will complete a professional development on actually developing the lessons. So, there were seventeen in total and the majority of them were more than willing to have someone come in to observe them.)

Q: How much additional time/money is needed to include comparison groups an evaluation?

A: (Lana Rucks) When deciding to include a comparison group, you really need to assess the additional expense and decide whether or not the additional rigor is worth that expense. My sense is that if the expense is particularly high than it may not be necessary. Comparison groups are ideal, but should not be considered mandatory *(Additional information: controls other than comparison groups are discussed in the webinar content).*

(Lana Rucks) It all depends on how detailed the contract is if there's a possibility of including that in the scope of work. There's a process component that needs to be addressed as far as conceptualizing how the evaluation should move forward. With other evaluation projects I have done, we have always had an evaluation team, even if it was not formally called that. We always wanted to make sure that the evaluation was collaborative. It has been my leaning that evaluations should not be about judging the project; rather you are involved in such a way that you do not hide things, but you are also responsive to the needs of the project.

Q: We seem to have trouble with finding validated surveys that match or relate to our project—any thoughts?

A: (Lana Rucks) Relatively little in terms of the formal part of the project is devoted to that. My approach is that early in my engagement with the project, I have an opportunity to have a meeting in which we talk about the evaluation questions, what outcomes you want, and what will drive those outcomes. We usually take about an hour and a half at the front end of the project to do the initial work on getting the logic model down. Then we come back to it once it is in written format and ask if this is what we agreed on. Throughout the project, I will continue to go back to that logic model and review it with the team. Towards that end, I also see that my role is to help build evaluation capacity by educating the teams I work with on evaluation and the evaluation process. Since using a logic model that way is not necessarily second nature for the team, I will frame those discussions around specific decisions about processes or improvements. I then ask if we need to change things about the logic model. The reason is that the more accurate that logic model is, the easier it is to do the measurement later. So it is not very time intensive, but a little time at the front end makes it easier later in the project.