Earlier in your project planning, you defined outcomes for your project. Now the big question is how will you know if your reconfiguration of the space and design of the programs and services are a success? When you defined your project goal and intended outcomes, you were laying the foundation for *evaluation* of your Smart Space. The strategies and tools you use to measure the success and impact of your space and programs will be tied to the outcomes you defined.

Consider these questions as you develop ways to measure impact:

- First and foremost, did the program/service meet the community need you identified?
- What worked well for the participants in the program/service?
- Does the program need more or different resources?
- If the program did not meet the need, what other or additional program/service might be more successful?

An outcome statement describes a specific benefit that your community members will receive as a result of participating in your new "smart space." It is an intended change in the user's skills, knowledge, attitude, or life condition brought about by experiencing the program or service at the library.

Outcome statements are aspirational – the impacts you hope the library will have on individuals and the community at large. You designed your program or service with these aspirations in mind.

Photo: Wind Indicator by Hans on Pixabay

How will you know?

Outcome: Tweens learn digital literacy skills and teach each other

Possible indicators:

- They attend classes
- They work together to solve problems
- They demonstrate new skills for creating digital products

But how will you know that you have achieved your intended outcomes?

For each outcome you defined, think about what would tell you that the outcome was achieved. In evaluation parlance, these are the "indicators." Aim for indicators that are feasible to measure. An example of an indicator that would be difficult to measure might be " teens are more likely to go to college."

How will you measure?

Tweens learn digital literacy skills and teach each other

- They attend classes
  - What classes? How many classes? How often? Why are they taking the class (the need)?
- They work together to solve problems
  - What behaviors do you observe? How often? What types of problems? How many of them appear to be teaching others?
- They demonstrate new skills for creating digital products
  - What products? (writings, images, audio recordings, etc.) What did they already know and what are the new skills?

Photo: School Ruler by BRRT on Pixabay

The next question is how will you measure the indicators? For each of the indicators in the teen digital literacy example, here are some suggested ways to measure them. Some measures may involve tracking quantitative data (how many teens attended classes?); some involve observation (how are teens working together?) or keeping a record of the products teens create; and some involve seeking qualitative responses (what need does this class fulfill?). Measurement is also valuable for revealing what's not working or what could be improved.

In an ideal evaluation world, you would establish a baseline at the beginning for where the individuals are starting from, so you can more clearly measure their growth as a result of the program. In the informal learning settings at a library, that rarely happens. However, you can go back to the tools you used in your community discovery process. The information you collected about the interests and needs of target communities may be used as baseline data.

See Discover Community Needs and Interests: https://www.webjunction.org/news/webjunction/discover-community-needs-and-interests.html

From Outcomes to Measures – An Example

OUTCOMES	INDICATORS	MEASURES
Example Outcome: Community entrepreneurs use the Idea Lab Smart Space to help each other promote and sell their crafts on Etsy	• # of entrepreneurs who attend classes on photo/audio equipment • # of hours entrepreneurs spend in the lab • # of Etsy postings of crafts/products made by entrepreneurs • Evidence of helping each other • # of successful product sales or other evidence of success	• Track class attendance, including info about participants' need or interest in the class • Track # of hours people spend in independent use of the lab; use sign in/out sheets • Track # of craft postings and # of sales generated from the posts; form for self-reporting • Ask/survey entrepreneurs about their experience: what was the best thing you learned in the lab? What increased your confidence? What new connections did you make with peers? What could improve the experience? • Observe and record evidence of people helping each other

Here is one example of how to link an outcome statement to meaningful indicators and strategies for measuring to what extent the outcome was achieved. Note that there isn't necessarily a one-to-one relationship between each outcome and each measure. Some outcomes might be measured using more than one strategy. For example: for evidence that community members are helping each other, you might track how many people are using the lab at the same time, observe instances of people working together, and survey them about the experience.

- **Indicators -** For each *outcome* you defined, think about what would tell you that the outcome was achieved.
- **Measures -** For each *indicator*, how might you measure it? Which strategies do you think will work well for measuring the indicators?

From Outcomes to Measures – Your Turn

OUTCOMES	INDICATORS	MEASURES
Outcome Statement:	• • • • •	• • • • •

It's your turn to try it. Insert one of your outcome statements in the first column. Then identify some indicators in the second column and some ways to measure them in the third column. There is no prescription for how many indicators or measures are associated with an outcome.

Check yourself:

- For each *indicator* you listed, how will this help you know that the outcome was achieved?
- For each *measure* you listed, which indicator(s) does this apply to? Will this measure help you understand what worked well or what didn't work to achieve the intended outcome?

Measurement Tools and Strategies

There are a number of tools and strategies to obtain the measurements for evaluation.

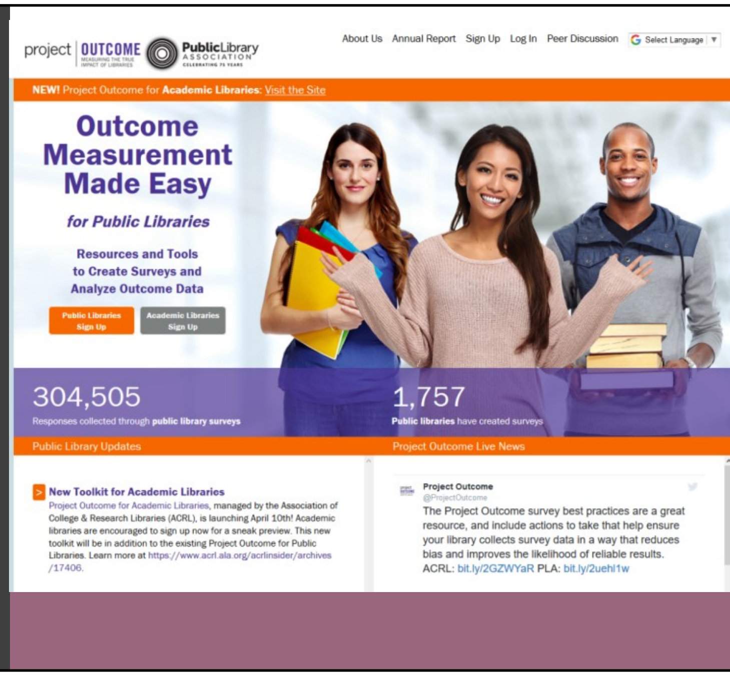
Survey by andibreit on [Pixabay]

When you think about evaluation, likely the first tool or strategy that comes to mind is the survey. The survey is quick, it's easy, it's familiar to most people.

Surveys are a great tool! When it comes to creating a survey, keep in mind what indicators you are trying to measure – do not ask questions or gather data for the sake of asking questions or gathering data. Be intentional about what you're asking and what you want to know. Not only do people appreciate *short* surveys, they are more likely to take the time to complete them.

Survey Tips, Tricks and Tools

- PLA's Project Outcome
  - FREE!
  - Provides ready-made, simple to use surveys
  - Lifelong Learning Survey is probably most applicable for Smart Spaces



Have you have heard of the Public Library Association initiative, Project Outcome?

Project Outcome is a FREE toolkit designed to help public libraries understand and share the impact of essential library programs and services by providing ready-made, simple surveys and an easy-to-use process for measuring and analyzing outcomes.

Go to https://www.projectoutcome.org/ to create a free account. Or check with your library to see if they already have an account. There are tutorials to get you up and running with the tool.

The Lifelong Learning survey is probably the most applicable to Smart Space programs.

DIY Survey Tools

Make Your Own!

- SurveyMonkey
  - Free, Basic Plan Available
- Google Forms
  - Conveniently populated responses

Monkey Laptop by Alex Demoura on pixabay

Or you can create your own survey.

Survey Monkey is a great tool for this. They have a free, basic plan available that gives you the ability to create and send a survey with up to 10 questions or elements and view up to 100 responses per survey. The free plan has a limited set of features, so you'll see notifications in your account if you need to upgrade to use a feature.

If you are expecting more than 100 responses, consider using a google form for your survey. Google forms conveniently populate responses into an excel spreadsheet for easy analysis.

You can also use postcards as a simple survey tool.

For this method, you provide patrons with a postcard with two or three simple questions that they can take home with them. This takes the pressure off of having to spend extra time after a program to fill out a survey at the library.

Patrons fill out the postcard and send it back to you. Just be sure to provide the postage and the address!

Pre/Post Survey Design

One approach that gets around the lack of formal baseline data is to design a pre/post survey: administer one survey to users at the end of a program but ask pre/post questions to gauge the growth or difference from "before" to "after."

For example:

- Rate your level of skill using the Cricut machine BEFORE participating in this program (poor, fair, average, good, excellent)
- Rate your level of skill using the Cricut machine AFTER participating in this program (poor, fair, average, good, excellent)

The main advantage of this approach is that it avoids the potential barrier of requiring pre-survey responses before participating in the program. It also avoids the distortion that happens when people don't know what they don't know and may be overly positive about their skill level before they enter the program or training. Critics of this approach say that people may be more inclined to rate more growth when they see the before and after together.

A Likert Scale measures a continuum, allowing respondents to indicate their position along a scale of responses. It measures responses to survey questions with a greater degree of nuance than a simple “yes/no” answer choice.

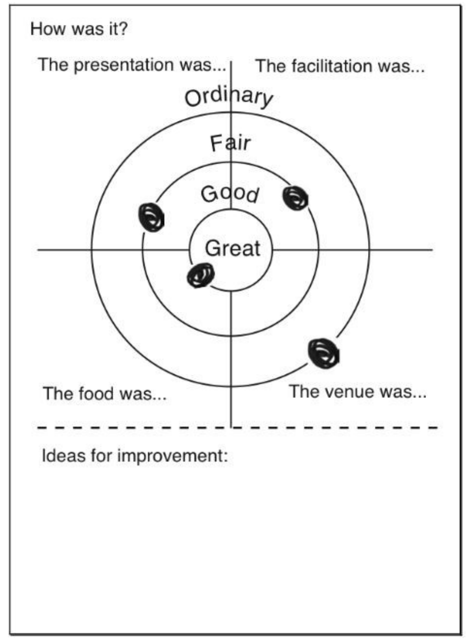
Many questions use this scaled response to get quantifiable results. It is particularly useful for pre/post surveys to show an individual’s or a group’s movement from one end of the spectrum before the program to the other end after the program. (Note: the example on the previous slide uses a Likert Scale)

Likert Scales are most commonly 5-point or 7-point. The odd number of choices allows for some “neutral” ground in the middle for those whose opinion isn’t clearly “agree” or “disagree.”

For example:

- Question: Rate your level of agreement with this statement: “I am confident that I can build a working robot.”
    - 5-point response choices: 1) Strongly agree; 2) Agree; 3) Neither agree nor disagree; 4) Disagree; 5) Strongly disagree

Bullseye by clicker-free-vector-images on Pixabay



There are fun and clever ways to solicit feedback from your users that get around "survey fatigue." They won't even know they're being evaluated.

Try making a *Dart Board*—Print out 1/2 sheets with a dart board format that has the ratings in concentric circles, i.e., "great" in the center (the bullseye), then "good," "fair," and "ordinary" radiating out from there. Divide the dart board into quadrants, with a question in each quadrant, e.g., "the presentation was …" Ask patrons to rate how close the program got to a bullseye by marking locations on the concentric rings. (example from http://www.enablingchange.com.au/community_tools/How_to_evaluate_activities.pdf)

In general, make it easy for people to record their appreciation of the space and activities. It can be as simple as putting up a sheet of butcher paper with questions like "What do you like most about the Smart Space?" or "What is the best thing you learned today?"


Marbles by Marc Pascual on Pixabay

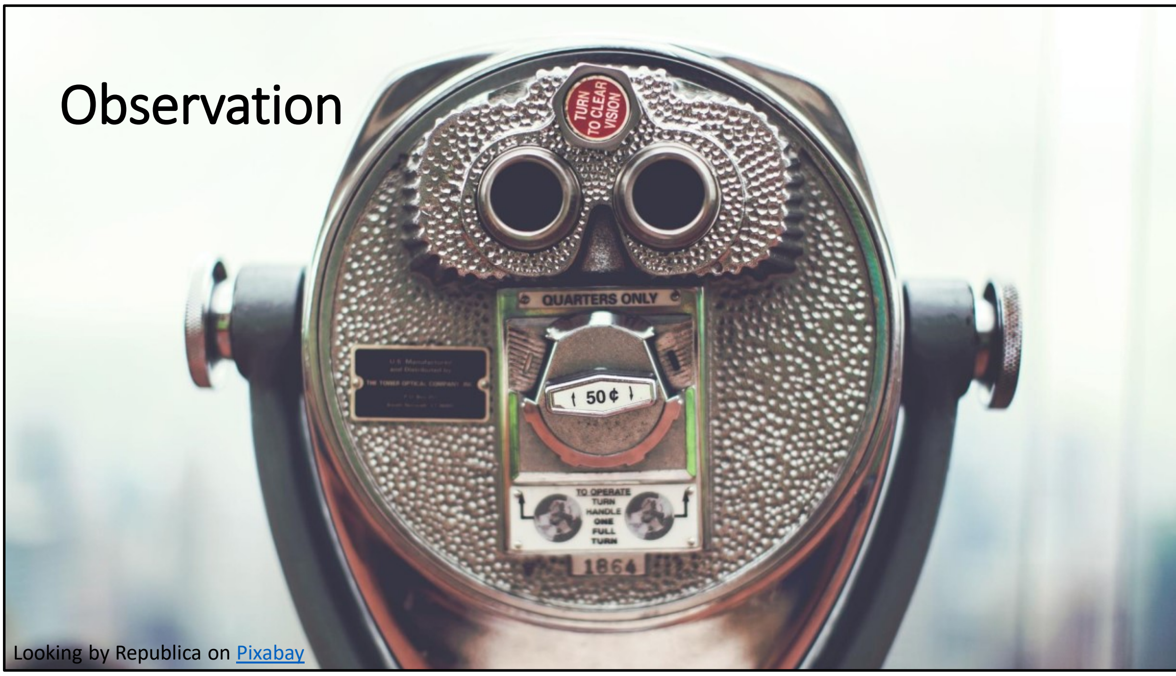
Marble Voting as Evaluation

This is another creative way to get your patrons involved in planning for your library. You can use this marble voting method to get community input for program selection, equipment selection, even color selection!

Start with a bucket of marbles and three (or more) empty jars, each labeled with a choice you are offering. For example, if you want to gauge the level of interest in a program you’re thinking to deliver, the jar labels might be: 1) making robots; 2) building with cardboard; 3) sewing with light circuits.

Ask users to vote for their favorite project by placing one marble in the jar of their choice.

Observation

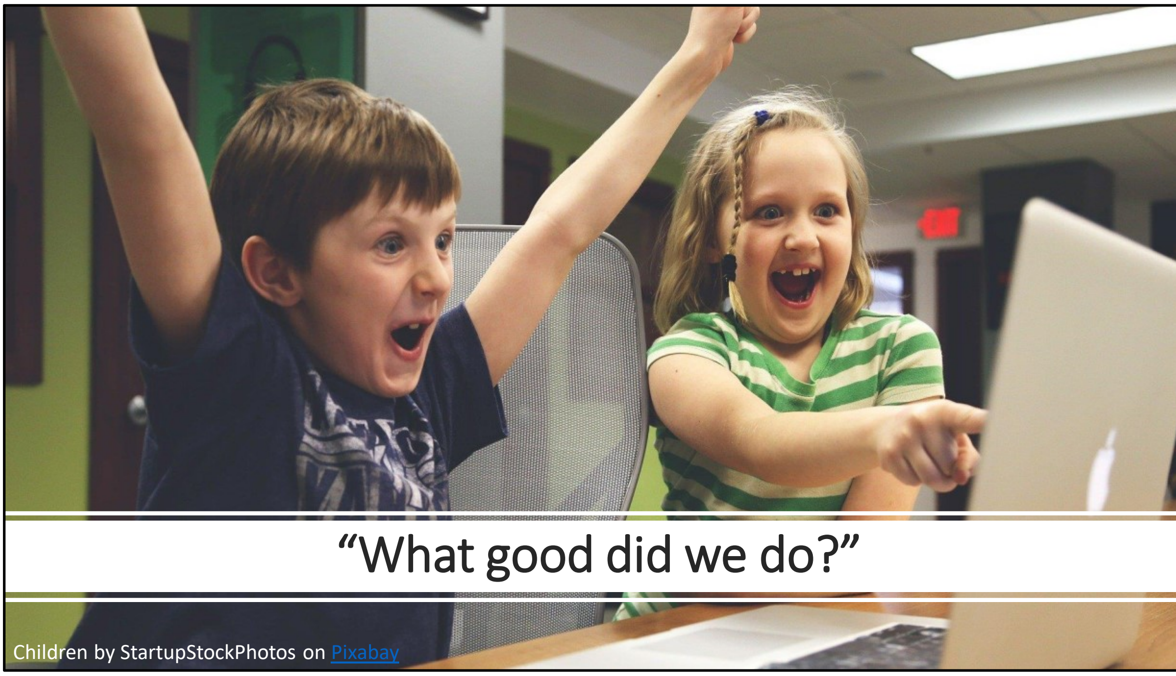


Looking by Republica on [Pixabay]

Don't forget the power of your observation. Observe how people interact in your space and during your programs. Are they moving furniture themselves? Are they using the space for collaboration or study? Keep records of these details.

Are people spending more time in the library now that the Smart Space is activated? Are they working together on projects? Are they connecting with new people?

Take photos as part of your observation —photos of people having fun, looking absorbed, clustering in groups, working together, etc. This is all rich visual evidence of success.



Children by StartupStockPhotos on [Pixabay]

When it comes to evaluation – there are many tools and strategies out there to use.

The biggest thing to keep in mind as you develop evaluation strategies is that it ultimately comes down to trying to answer this question: *What good did we do?* What good did we do for our community with these programs and spaces?

Acknowledgements

- Association of Rural & Small Libraries (ARSL) worked collaboratively with WebJunction on all phases of the project.
- This project was made possible by support from OCLC and by a grant from the Institute of Museum & Library Services, LG-80-16-0039-16

Thank you!