

The Poets House Guide to Measuring Impacts of Poetry & Science Collaborative Programming

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as usual, Coyote leaves smiling

CRISOSTO APACHE (NAVAJO)

P O E T S  H O U S E

Knology



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An excerpt from the poem *Laughter*, by Crisosto Apache, part of the poetry walk installation developed in partnership with Poets House and the Salt Lake City Public Library, at the Bonneville Shoreline Trail, Salt Lake City, Utah. Poetry selected by Poet in Residence, Katharine Coles. © Natural History Museum of Utah

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Poets House is a national poetry library and literary center that invites poets and the public to step into the living tradition of poetry.

Knology is a non-profit institute that produces practical social science research for a better world.

A Guide to Evaluating Poetry & Science Collaborative Programming

What Is This Guide Supposed to Do?

Cultural institutions are discovering that through partnerships they can expand services to a wider range of users and enrich their participation in the cultural life of their communities. As cultural institutions seek to enhance services, audiences, and interdisciplinary learning, the need for such active cultural partnerships intensifies.

This companion guide was created to support library and museum professionals as they monitor and evaluate these collaborative community projects, where humanities and scientific institutions deliver integrated programming. In the case of this project, we developed these tools for libraries and museums collaborating on poetry and science programming. Beyond this specific programming, we believe that this companion guide can be used for evaluation of any type of cross-institutional collaborative effort.

This guide is for individuals who are new to evaluation and want to build their own in-house evaluation program. It is crafted as a workbook to help you develop the best evaluation structure for your own program.

In the following pages, we offer a brief introduction to program structures and evaluation techniques. This guide acts as a resource for creating an evaluation program that is right for you. Alongside introductory concepts and principles for program design and evaluation, we have provided space for you to work through and personalize concepts so they are specific to your needs and desired outcomes.

By equipping libraries and natural history museums – and other types of organizations – with techniques used to evaluate programming, we hope to offer these institutions a deeper sense of logistical and financial independence in understanding the impacts of their programming in their communities and cities.

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Foreword Lee Briccetti & John Fraser

The effort to articulate the phenomena we see around us every day is deeply human. Over the past decade, a national initiative to invest in STEM education has frequently been at the expense of the humanities. Yet, we read a great deal about the need for STEM to work in concert with the humanities to create the innovative, cross-disciplinary thinking necessary to address our incredibly complex world. Poets House and our many partners have worked to create environments where STEM learning may be fostered more effectively through experiences that use techniques and tactics that are formally a part of language arts and the exploration of poetry. Where better to pursue these experiments than through a cross-disciplinary collaboration between public libraries and natural history museums? These major community anchors have the capacity to provide all people – including those specializing in the fields of poetry, science, and library science – with multiple interactive entry points that will “humanize” the language of science, better enabling audiences to engage with science learning. This project also seeks to foster lasting collaborations between libraries and natural history museums.

We’ve partnered with Knology since its founding and have learned so much about how to document the ways poetry influences how people come to understand and think about the world around them. And through our experiments with Field Work: Poetry & Science Collaborations in Libraries and Natural History Museums, we’ve been able to develop this guide to help poets, library professionals, and museum staff to develop a shared language around measuring outcomes. This Poets House guide is not specifically for poets; rather, it’s a guide to help cultural institutions situate collaborative programs that involve poets in their way of seeing and measuring what they do. We hope this resource can foster many more innovative ways for making meaning of the world around us through poetry.

Our entire team thanks Institute of Museum and Library Services (IMLS) for their ongoing support of our work to make poetry available as one of the essential tools cultural organizations such as libraries and museums can use to foster greater learning in our cities. We are also deeply grateful to all our partners in this project – librarians, scientists, museum curators, and poets – for the brilliant work that made this project come alive.

Lee Briccetti, Executive Director of Poets House

I frequently encounter poets who raise their eyebrows when we suggest that we can measure the impact of poetry on audiences. I can say with confidence now, after nearly twenty years collaborating with Poets House, that we can demonstrate impact quite effectively. This guide provides refined tactics for understanding how and why poetry can shape people’s ideas and transform what can be seen and known. We live in a time when the binary separation of the arts and sciences can no longer be the norm.

We believe that guided discussions about what can be known and how we assess that work can reveal greater synergies between the two fields. In the process, we can learn to more innovatively and accurately convey this information to the public. We believe that this companion guide, and the larger body of research we’ve embarked on as an embedded partner at Poets House, will help us demonstrate how poetry can advance the utility of contemporary science in daily life. To follow this path, we need poets willing to engage with their local museums and libraries, to build bridges between historically siloed disciplines, and to share their stories. We hope this guide can be used to document these stories and build a shared story that can enrich the lives of everyone.

John Fraser, President & CEO of Knology

The Field Work Story

Over the past decade, efforts to invest in STEM education have frequently come at the expense of the humanities. This is in spite of the fact that much has been written about the need for STEM to work in concert with the humanities in order to create the kind of innovative, cross-disciplinary thinking necessary to address our incredibly complex world. For example, Dr. Loretta Jackson-Hayes, a professor of chemistry at Rhodes College, wrote in *The Washington Post* that the need isn't for more STEM majors, but for more STEM majors with liberal arts backgrounds. Cornell University president David J. Skorton has argued that scientists are often unable to communicate effectively because “many of us never received education in the humanities or social sciences that would allow us to explain to nonscientists what we do and why it is important.”

Poets House and its collaborators at the think tank Knology (formerly New Knowledge Organization Ltd.) are working to change this narrative by enabling cross-disciplinary learning in various settings. We started with an effort that brought together poets, libraries, and zoos to see if poetry could aid scientists in communicating their conservation message. The result of that project is documented in the book *The Language of Conservation*, now in its second printing with e-versions of the book available at no cost through the Poets House website.

This Guide is the product of a more recent project, Field Work: Poetry & Science Collaborations in Libraries and National History Museums. From 2017 to 2019, these experiments with poets collaborating with both a local natural history museum and the public library created a new way of working together, and a new type of Community Anchor that we believe will reshape what collaboration across disciplinary lanes looks like. Through partnerships between the Milwaukee Public Library and the Milwaukee Public Museum, and between the Salt Lake City Public Library and the Natural History Museum of Utah, we demonstrated that poetry can support STEM learning. Both sets of partners developed joint public programs in their cities, ranging from an evening about the botany of beverages to a four-part workshop on the poetry of field journals. Each also opened a durable “poetry path” through the landscapes surrounding their institutions. This work was made possible by the dedication of sponsoring staff in all four institutions and the Poets-in-Residence in each city. Poets House and Knology are grateful for the vision and commitment to collaboration and to the goals of the project among all our partners.

Through this collaborative effort, we have demonstrated that this approach is replicable and feasible, and creates greater engagement between scientists, poets, librarians, museum professionals, and the general public. We have demonstrated that poets can gain a deeper understanding of natural history and scientific ideas, and scientists can gain greater insight into the language of poetry and its approach to simultaneous intellectual and emotional learning- and that audiences benefit from the integrated approach. In parallel, library and museum professionals are better equipped to facilitate dialogue in their communities.

For more about the Field Work study and outcomes, please visit poetshouse.org and knology.org.

Introduction to Evaluation

Evaluation is an important way of supporting the validity and exploration of one's work, ensuring its continuation by others in the field. Even when evaluations are not required by the funding institutions, conducting an evaluation will support the longevity of one initiative.

Because we are convinced of the importance of this kind of work to bring a fractured society into a more integrated understanding of our world, we invite institutions of all kinds to replicate this work or invent similar projects. For those institutions that accept this invitation, your evaluation of the project brings your experience into a broader realm of discourse and study, helping others to gain from your experience, and encouraging others to integrate the principles of your work into their own.

As described elsewhere in this Guide, a competent evaluation tells the story of your work and offers evidence of its effectuality.

Outcome Evaluation

Outcome evaluation is a systematic way of gathering evidence to show which program activities produced the intended results for the target populations, and which did not. This type of evaluation can be defined as:

A review of a program or initiative's theory of change, providing a framework to collect data on immediate, basic changes that lead to longer, more transformative change, and allows for the plausible assessment of the initiative's contribution to results.

The purpose of using outcome evaluation is to draw clear links between the program activities and the impacts or outcomes they are intended to achieve.

Program Activities

Program Activities include any set of activities which comprise a program of interest. They usually entail a focused intention to achieve one or more outcomes.

Outcomes

Outcomes are changes that occur as a result of the program (or some other action) in the specified populations of interest. Outcomes are often categorized into three general types:

- **Short-Term** outcomes are changes in awareness, knowledge, attitudes, beliefs, self-efficacy, skills, intentions, and motivations of the intended population members, that are measured directly after the program or experience has ended. These are considered short-term, because they are measured directly after the participants experience and we do not know whether these changes will be durable after time has elapsed.
- **Medium-Term** outcomes are the beginnings of paradigm shifts; they are the changes in the behaviors, practices, decision-making processes, power relations, policies, and social norms that happen because of program activities. These are measured at a later date and represent known and more durable changes in participants' perspectives and /or behaviors.
- **Long-Term** outcomes are lasting impacts which can fundamentally transform and alter individuals, communities, cultures, and society at large. Long-term outcomes are generally the foundation of a theory of change and based on goals that logically flow from an activity.

There are many methods available to conduct an outcome evaluation. The most appropriate will depend on the financial resources and capacities available, the types of questions that are to be answered, and the timeframe allotted. We will explore all of these in turn. First, however, it is important to understand the underlying logic of the program.

A Logic Model



Evaluation requires a reflective approach. It allows program developers to define the area of impact they are most interested in knowing more about, and to articulate how that impact might happen. Appropriately conducting an evaluation starts with clearly understanding the program and its purpose. If a program can be defined as a set of activities, evaluation encourages us to ask, “For what purpose have these activities have been occurring? What difference were/are they designed to make in the lives of the beneficiaries?” Thus, an evaluation begins with a well-defined, focused question, and follows with appropriate methods to answer that question.

A useful way to generate evaluation questions is by creating of a program Logic Model. Logic Models are used to identify the relationships between a *Program’s Context*, its *Inputs*, *Activities*, *Audience*, and its *Outputs*, and Short-term, Intermediate and Long-term *Outcomes*. Logic models offer a visual roadmap of your program and highlight the “if-then” theory behind how impact occurs. It’s based on the underlying logic that:

IF the need for a program (Program Context) has been properly assessed and the correct Inputs are used to design appropriate Activities for the correctly targeted Audience, THEN there is a good possibility that the Outputs will lead to the desired Short term and Intermediate Outcomes and achieve the intended Long-term Outcomes.

A sample Logic Model may look something like this:

Inputs	Activities	Audiences	Outputs	Short-term outcomes	Intermediate outcomes	Long-Term Outcomes
Staff Money Materials Partners	Workshops Exhibits Classes Events	Audience 1: 500 High School Students	Students learn about relevant science issues Students write poetry about science issues Students present work to their classmates	Increased poetry & science Knowledge Improved science learning skills Students pursue applications for poetry in science	More likely to pursue interdisciplinary college degrees More students from diverse communities are aware of intersections between poetry and science	Expanded community of teachers and organizations working in art and science collaborations Better Informed & Engaged Community members to support Interdisciplinary learning and collaborations
	Workshops Exhibits Classes Events	Audience 2: 20 High School Teachers	Teachers have awareness of synergies between Poetry and Science and skills with linking poetry with science curriculum goals	Integration of poetry and science in curriculum Increased number of STEM teachers using poetry as a tool in their classrooms	Increased presence of poetry and science content in high school curricula in the community	Increase in poetry and science literacy in area communities

Creating Your Own Logic Model

Below is a set of questions and prompts to help you work through the creation of your own Logic Model for your specific program.

Program Context

First, before you begin constructing the Logic Model, consider the Context and reason for creating of the Program.

	Program Context
What is the need for the program?	
How was the need for this program determined?	
Is it a need that is common to many people in your community? Who?	
What are the inputs that allow the program to take place?	
Are program inputs sufficient to address this need?	
What qualifications do the staff persons administering this program have?	
Is the funding guaranteed?	
Where will the program be held, and what materials are secured?	

Inputs

Now, considering the Logic Model, start to describe what Inputs will be used in the program.

	Inputs
What types of resources will be used to create the program?	
How many people will be needed to create the program?	
Are there venues or funding that will be used to execute the program?	
Do you have partners you will be working with?	

Activities

Considering the Inputs you have, what are the types of Activities you will be creating? Briefly describe each one.

	Activities
Activity 1	
Activity 2	
Activity 3	

Audience

Define your Audience. What are the key characteristics of each Audience (such as level of education, location of residence, ethnicity, socio-economic status, particular interests or concerns, etc.)?

	Audience Key Characteristics
Audience 1	
Audience 2	

Outputs

Now, keeping your Audience(s) in mind, identify expected Outputs, and how they will differ for each Audience. An output is a direct product of the program activities. For example, the quantity of something produced (e.g., audience members, brochures, videos, articles, workshops, etc.).

	Outputs	
	Audience 1	Audience 2
How many people are expected to participate in this program?		
How many staff and volunteers will be involved in the program?		
What materials will be produced as a result of the program?		

Outcomes

What will occur as a result of the inputs, activities, and outputs? To identify expected outcomes, think about each audience included in your program. Are there adults and children or different groups of people who you expect to have different experiences? If so, make sure that each audience is considered in isolation. Define your Short-Term, Intermediate, and Long-Term Outcomes, keeping each audience in mind.

	Outcomes	
	Audience 1	Audience 2
Short-Term		
What are the immediate outcomes you expect to occur? (Changes in individuals' awareness level, understanding, skills, etc...)		
Intermediate		
What are the medium-term outcomes you expect to occur? (Changes or benefits within one or two years of the immediate outcomes, e.g. individual status or education level or changes in organizational policies and procedures.)		
Long-Term		
What are the lasting outcomes you expect to occur (e.g., improved social conditions, environmental conditions)?		

Now fill out your own Logic Model, populating the model with summaries of the text you created above. Feel free to use arrows or other indicators to show how different parts of the model are related to each other.

Poetry and Science Logic Model

Inputs	Activities	Audiences	Outputs	Short-term outcomes	Intermediate outcomes	Long-term outcomes

From Logic Model to Measures

Outcome evaluations can occur during programming as part of a Process Evaluation, which aims to improve the program in real time. They can also occur at the end of a program in a Summative Evaluation in order to improve successive iterations of the program or understand its overall impact. Often these two types of evaluation can happen on the same project.

Process Evaluation

A process evaluation occurs while the program is still underway. This allows the evaluation to contribute to any changes and improvements to the program while it is in progress. A process evaluation asks HOW things happened to explain changes, limitations, or opportunities, and collects data to answer that question. If you are conducting a process evaluation, you can focus your measures on the initial purpose of the program and ask whether it is achieving that purpose through its current activities or what other things are needed. In other words, process evaluations focus on outputs and short-term outcomes.

Summative Evaluation

Typically, a summative evaluation shows funders or other stakeholders the final program effects, which informs planning of new or future programs. A summative evaluation is a summary of what was learned from and achieved through the program. If you are conducting a summative evaluation, focus your measures on whether the short-term, intermediate, and long-term outcomes were achieved and what value was added as a result. Often you can only assess what happened immediately after a program, but some evaluations check in with program participants such as program leaders or people who attended a program to see if their experience resulted in a later change that predicts intermediate or long-term outcomes.

What Questions Do You Need to Consider?

The types and content of the evaluation questions you create for your instruments will follow from the program's Logic Model. These questions should provide insights into whether the program is producing the expected Short-term and Intermediate *Outcomes* and ultimately the *Long-term Outcomes*. Perspectives on what counts as evidence of success is subjective (Mertens & Hesse-Biber, 2013), and the outcomes chosen to measure progress will affect whether the program is deemed successful or not. For example, in a hybrid science-poetry program, measures of success should to integrate the missions or aspirations of all partners. In the following sections, we consider each set of outcomes and potential evaluation questions.

Short-Term Outcomes

These are typically measured at the reaction level and concern participants' knowledge, attitudes, skills and / or intentions, that occur directly or soon after the program has finished. You might consider questions such as:

- What did the participants think of the program and their experiences with it?
- What kinds of things did participants say? Was the program interesting? Enjoyable?
- What was the percentage of visitors who could correctly respond when asked about _____?
- How many visitors could correctly label _____?
- Based on the data you collected with your instruments, how did participants' attitudes change?
- What kinds of skills did visitors develop?
- How many visitors claim to intend to attend future similar programs or continue to explore this subject?
- What kinds of intentions do visitors express, immediately after their participation?

Intermediate Outcomes

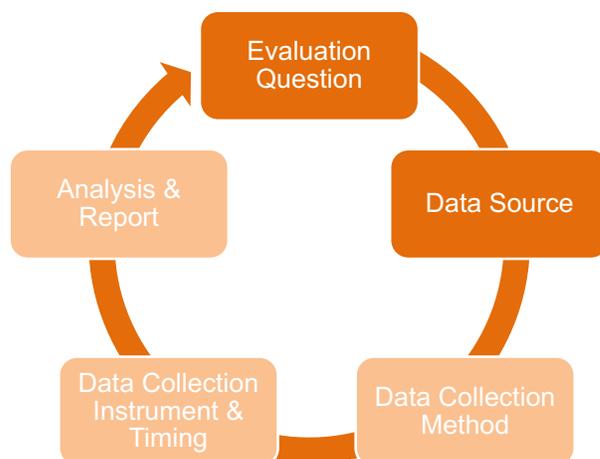
These often address changes in participant behavior that occurs months to years after the program has finished. You may be interested in:

- What new things do audience members do or plan to do outside of the library/museum based on what they gained from this program?
- Do visitors engage in similar programs after this program?
- Did their behavior in everyday life change in some way?

Long-Term Outcomes

These outcomes questions consider the achievement of an ideal and can be challenging to measure, but identifying how your program aligns with these long-term outcomes is important. Indeed, long-term outcomes are often not measured, but are the ultimate theory of change behind the program. Instead we use indicators that might point to the possibility of longer-term outcomes coming to fruition. Even though we often cannot measure the long-term outcomes directly, we can ask, for example, "Given the short-term or intermediate outcomes, what changes can we expect for the individual in the long-term?". Or, "If enough people change in knowledge, attitude, skills, intentions, and ultimately change their behavior, what kinds of changes in the community can we expect?"

DATA SOURCES



After the questions and measures have been identified, the team needs to determine who will be able to provide the data that answers it. These are the Populations of Interest and they can include:

- Individuals
- Households
- Communities
- Organizations
- Policymakers

When you drafted your logic model, you identified the Audience your program hopes to engage. The Population of Interest is the part of your Audience you will focus your evaluation on to evaluate your program. The Population of Interest may be the same as your Audience, or it may be a subgroup of that Audience.

Who can best answer whether a program has made a difference in the lives of young children?

If a program is directed toward young children, any questions need to be reasonably based on what they can know or respond to. For example, a six-year-old will have limited vocabulary but can describe how they situate a learning experience in their knowledge world.

Often caregivers can offer opinions based on knowledge of the child's other experiences or in comparison to other children, which can help explain the potential of a learning program. Parents and other family members, educators, and perhaps even those who delivered the program may be able to provide reliable insight into experiences of young program participants. At the same time, the evaluator's observation of the activity is essential to understand the experience of young people.

How Much Data Do You Need?

Ideal evaluations collect just enough data to understand generally how the majority of participants were impacted. The more people included in the sample, the more valid (or accurate and reliable) the results will be.

When considering the validity of results, it's important to ensure the populations in the sample chosen are demographically similar to the Audience or greater community the program is designed to benefit. This strategy ensures those who can benefit from the program have access, are included in the data, are equitably represented, and accurately reflect the interests of the Audience.

When it is not feasible or cost-effective to talk to everyone who might have been in contact with the program, there are rules of thumb on how many total people to include in your sample, and how to select them. Sample size and error are calculated through statistical formulas. Sample size calculators are available online, for example through Creative Research Systems (<https://www.surveysystem.com/sscalc.htm>).

DATA COLLECTION METHODS



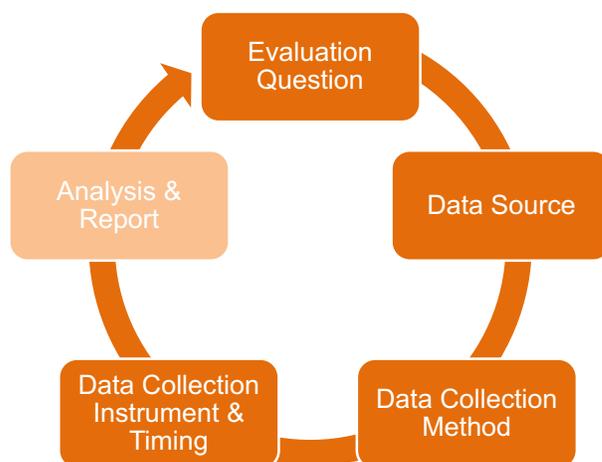
The data collection method(s) selected for an evaluation will depend on:

- The purpose of the evaluation,
- The users of the evaluation,
- The resources available to conduct the evaluation,
- The accessibility of the Population of Interest,
- The type of information (e.g., statistically generalizable or descriptive), and
- The relative advantages or disadvantages of the method(s).

It is common to gather data from more than one group when you do an evaluation, sometimes to answer the different types of questions and sometimes to answer the same question in multiple ways. All evaluations should aim to use mixed methods, that is, a combination of quantitative and qualitative methods to capture multiple facets of the program outcomes, and to be able to triangulate the findings. These types of methods are discussed below in the **Data Analysis & Reporting** chapter. Types of instruments normally used to answer the evaluation questions are not limited to but include:

- Key informant interviews,
- Focus group interviews,
- Direct observation, and
- Questionnaires

INSTRUMENT DESIGN



Instrument (or the type of survey) design depends on the data collection method you plan to use. Education and research organizations, such as CAISE (informal.science.org) offer tested instruments through their websites that are relevant to education programs. Note that most instruments contain items to collect both quantitative (e.g., anything that can be measured by a number) and qualitative (e.g., anything that is descriptive, using words to explain) data. It is likely that these instruments will need to be adapted for a specific community or program. In that case, pilot testing of the adapted instruments may be necessary to ensure they are easily understood, used, and relevant to the Population of Interest.

Pilot testing means selecting a group of people who are similar to the intended audience to review or “test” the instrument. In other words, an evaluator asks the interview questions or administers a questionnaire to a small group of people, or does a few observations to try out their observation protocol (these individuals are then excluded from the evaluation of the full program, as the pilot test will create a bias). A pilot test can reveal which questions are not understood or which wording might be changed to better ask a question. In the pilot test, the evaluator is not only asking for information but is also seeking a critique of the instrument. For that reason, a pilot test should always include an open-ended question that asks for general input, such as, “Is there anything else about this program / experience that you’d like to share?”

You can use many different types of instruments. The type of instrument you choose to use will depend on your population, and intended outcomes. These instruments fall into two main categories: Qualitative and Quantitative. A more in-depth understanding of these categories is described in the next section on Analysis and Reporting.

Types of Instruments include:

- Questionnaires (paper or online)
- Interview
- Observation
- Focus Group
- Tests
- Photos/Videos
- Document Review
- Journal, diary, log

Different instrument types (questionnaire/interview/observation) should include a mix of statements to uncover whether the expected outcomes occurred. By asking the same question in different ways, and compiling results, you ensure that participants are responding to the intended query. Instrument items designed to measure outcomes generally ask about:

- Overall opinions or reactions
- Thoughts and feelings
- Knowledge of content
- Specific responses to a tested element and how it affects the individual's experience
- Comments/suggestions for the institution
- Ratings of elements
- Demographic characteristics

Below we outline some potential questions that would follow from the Poetry and Science Logic Model on page 12. Your questions will be different and specific to your program, but these may help illustrate the connections between the logic model you created and your evaluation questions.

Poetry and Science Evaluation Questions from Logic Model

Inputs	Activities	Audiences	Outputs	Short-term outcomes	Intermediate outcomes	Long-term Outcomes
Were program inputs sufficient and timely?	<p>What was the quality of the intervention?</p> <p>Did we use the best methods and materials we could have?</p>	<p>How adequate was the program reach?</p> <p>Did we reach enough people?</p> <p>Did we reach those with the greatest need?</p>		Did participants' attitudes toward and knowledge of poetry and/or science increase?	<p>Did the program make a difference in people's lives?</p> <p>Are participants regularly engaging in poetry + science activities?</p>	<p>Does the program contribute to long-term policy changes?</p> <p>Is it plausible your end goal will be achieved through programming like this?</p>

You will want to think about how the answers you receive will be helpful, which will in turn guide the wording and types of questions you create. Here we also include some potential Indicators to consider when crafting your questions.

Poetry and Science Indicators from Logic Model

Inputs	Activities	Audiences	Outputs	Short-term outcomes	Intermediate outcomes	Long-term outcomes
Number of staff, funds invested, delivery schedule	Percent or portion of participants that rated the intervention as positive.	Number of each Audience who attended the program.		Percent of participants who report positive attitudes and increased knowledge toward the program topic.	Percent of participants engaging in related activities at certain frequencies	Indicators describing changes in the overall policies and practices of libraries and museums

DATA ANALYSIS & REPORTING



There are two primary types of data and analysis, both of which provide valuable insights into the program being assessed. For the National Impact of Library Public Programs Assessment (www.nilppa.org), we used the following explanations of two types of data and analysis, which have been useful in library and museum contexts.

Quantitative research methods rely on numerical data to calculate statistics and provide insight into a research topic, enabling researchers to empirically look at data and validate qualitative insights.

Traditionally, quantitative analysis of circulation records has helped libraries develop or optimize their collections. Quantitative methods can be applied to measure the performance of public programming by comparing time spent on planning and implementation with measurable outcomes, such as increase in circulation of relevant collections, positive user feedback, and other signs of “success.” Furthermore, quantitative data can provide useful, easy-to-digest data for local, state, and national governments and funding agencies and provide a basis for establishing metrics for further inquiry. Quantitative methods may constitute a straightforward approach to data collection but lack a way of truly gauging the overall value of libraries in communities.

Qualitative research prioritizes the meaning ascribed to social or human phenomena (Creswell, 2007). Qualitative methods use textual, non-numerical data to answer “how” and “why” research questions, to understand the views and opinions of participants. To collect qualitative data, researchers must interact with the Populations of Interest, a connection that can facilitate the discovery of new perspectives and reveal insights undetected by quantitative researcher methods (Creswell, 1994). Bryman (2004) contends that “the social world must be interpreted from the perspective of the people being studied, rather than as though those subjects were incapable of their own reflections” (p. 279). Rather than try to isolate and control variables, its goal is to understand multiple perspectives that allow for a more holistic analysis. It is an expansive rather than

reductionist approach: “Researchers are bound not by tight cause-and-effect relationships among factors, but rather by identifying the complex interactions of factors in any situation” (Creswell, 2007, p. 39). Qualitative methods are frequently used to complement quantitative research methods, as each approach has strengths and weaknesses.

A library may find that their programming staff spend long hours planning new programs with low attendance. While quantitative research would indicate that such programming may not be a worthwhile pursuit, qualitative methods, such as a survey with open-ended question feedback, may reveal unexpected value for program attendees. Furthermore, qualitative analysis can make known nuanced thoughts and opinions about ways to modify or improve current programs, beyond merely indicating satisfaction or dissatisfaction with a given experience.

Conclusion

Telling the story of the collaborative community project through its evaluation will help others understand the project's value. This companion guide was designed to enable library and museum professionals to join in the evaluation process and incorporate evaluative thinking into their work. Through participating in the organization's evaluation activities, professionals can become better aware of how different project elements fit together and deliver strategic impact within the community.

How these results are presented is also an important part of evaluation. Results should be presented in a clear and logical way that appeals to the curiosity and interest of the reader. We encourage you to try to tell a "story" in your findings. We have found that presenting the project evaluation as a "story," and considering story arc narrative – with a beginning, middle, and end – helps others digest and connect to the journey we have embarked on toward a deeper understanding of our collaborative efforts. There are two ways to do this.

The first way takes a wider perspective in which the beginning tells the reader *what you are going to say*, the middle *says it*, and the end, *explains what you just said*. This approach is almost like saying the bottom line three times from three different perspectives. In essence, we contextualize the program, describe how the program went, and then discuss what this information means. This way of storytelling offers the reader multiple perspectives and increases the chance the reader will understand and relate to the program's purpose.

The second way of storytelling is more closely aligned with a story arc narrative, in which the beginning describes a challenge or problem, the middle describes how the challenge was addressed, and the end describes whether the challenge was overcome. You can begin a report by introducing the program and why it is being created. What is the challenge or issue the program is trying to address? Then you can describe the effort to address that issue, or in other words, the program itself. Finally, you can discuss whether your efforts were successful including what you learned.

Another important aspect of storytelling is to reflect on the audience for your story. Include information that is useful to understanding the context of the program and why your institution worked on it. Use language that is accessible and comfortable for your readers. Specifically, avoid technical jargon, or explain technical terms if you need to include them in your writing. You may also consider which format to use – some groups will appreciate a printed or digital report, while others may find a PowerPoint with voiceover more approachable.

A report's intended audience may dictate what the best way to structure your findings will be. Using one or both of these general writing approaches will help you get a start. We wish you luck and congratulate you for embarking on the meaningful journey!

Resources

For further reading and information on a more detailed description of evaluation and tools and techniques please see:

The Kellogg Foundation's website (<https://www.wkkf.org/resource-directory/resource/2017/11/wk-kellogg-foundation-step-by-step-guide-to-evaluation>). This site offers high-quality, in-depth resources that act as a supplement to this basic guide.

Better Evaluation provides tools for conceptualizing a program and how to evaluate it (http://www.betterevaluation.org/en/plan/approach/outcome_mapping).

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