

KICK-START EVALUATION

GENERAL DEVELOPMENT TIMELINE: THIRD-PARTY EVALUATION

- 1** Funding agency releases a solicitation and decision is made to apply.
- 2** Within the solicitation, a need for evaluation is identified.
- 3** The best evaluator for the job is determined and a request/invitation is sent to this evaluator as soon as possible! See Pro Tip #1

Example Conversation:

"Hi John Doe,
I've decided to apply for the upcoming NSF HDR grant and noticed the solicitation calls for evaluation. I'm reaching out to request your services. We anticipate the start date will be January 1, 2019, and we would like to work within a budget of (\$-\$)." See Pro Tip #2

- 4** Evaluation contact returns with good news! They are able to take on your project!
- 5** Share as much information as possible with the evaluation contact. Refer to back of handout for a general list. See Pro Tip #3
- 6** As the deadline approaches, your evaluation contact should provide the agreed upon documentation to be included in your proposal.
- 7** Send evaluation contact a copy of the final proposal. This will expedite things after you're funded.
- 8** Notify evaluation contact of your funding status as soon as this information is available.
- 9** Upon being funded, the evaluation contact will refer to previous documentation such as the evaluation plan/scope of work, logic model, and proposal to begin the evaluation. Likely, additional meetings and dialogue will take place to finalize and communicate evaluation plans.

PRO TIPS

#1

Early notification leads to higher quality evaluation plan & deliverables provided by the evaluation contact.

#2

If you are familiar with evaluation and have a general idea of your preferred deliverables, convey this in the initial phone call. On the other hand, if you are unfamiliar and not sure where to start, communicate this and your Evaluation contact will share options.

#3

Streamline communication and increase efficiency by providing your evaluator with access to the team Google Drive, Dropbox, etc.

NOT SURE WHAT INFORMATION TO PROVIDE YOUR EVALUATOR?

SEE BELOW LIST

- 1** Budget
- 2** Proposal Narrative (most up-to-date draft)
See Pro Tip #3
- 3** Intended Role of Evaluator
- 4** Dates/Project Timeline
- 5** Required Supplementary & Institutional Forms
(e.g. Letter of Collaboration, Indirect Costs, Language for the Data Management Plan, Bibliographical Sketch, Current and Pending, and/or a Collaborator and Other Affiliations, Sub-Recipient Form)

(Note: List not Exhaustive)

A SELECTION OF EVALUATION MODELS AND THEORIES

Experimental or Quasi-Experimental Design: Identifies independent and dependent variables prior to intervention and relies on quantitative methods to link an intervention to outcomes, with a primary focus on summative evaluation. This type of evaluation is required to meet the U.S. Department of Education's What Works Clearinghouse standards.

Shadish, W.R., Cook, T.D., Campbell, D.T. (2002). *Experimental and Quasi-Experimental Designs for Generalized Causal Inference.* Houghton Mifflin Company, New York, NY.

External Critical Review: Utilizes an independent evaluator to review the programs design and activities (including theoretical framework, data collection, analyses, and reporting). A framework for U.S. Department of Education and NSF education research focused programs.

Institute of Education Sciences, U.S. Department of Education. (August, 2013). Common Guidelines for Education and Research Development: A Report from the Institute of Education Sciences, U.S. Department of Education and the National Science Foundation (<https://www.nsf.gov>)

CIPP Model: This type of evaluation begins with an assessment of needs or problems (Context) and is followed by determination of project/intervention plans (Input). The implementation of project plans (Process) is evaluated to inform improvement, and long-term outcomes and project success are measured (Product).

Mertens, D.M. and Wilson, A.T. (2012). *Program Evaluation Theory and Practice: A Comprehensive Guide.* New York, NY.: The Guilford Press.

Development Evaluation: Often used to assist social change innovators by facilitating real-time feedback to create a continuous development loop. Less focus on outcomes, but rather formative evaluation to improve project decisions.

Patton, M.Q. (2011). *Developmental Evaluation: Applying Complexity Concepts to Enhance Innovation and Use.* New York, NY: The Guilford Press.

Evaluating Public and Community Health Programs: A participatory approach to engaging stakeholders is often applied and typically begins with a community needs assessment. A theory of change is also often used to guide evaluation.

Harris, M. J. (2017). *Evaluating public and community health programs.* Hoboken, NJ: Jossey-Bass, a Wiley brand.

A SELECTION OF EVALUATION MODELS AND THEORIES CONTINUED

Kirkpatrick's Model of Evaluation: Focuses on assessing training programs through four-levels of inquiry: 1) participant satisfaction with training, 2) gains in participant knowledge, 3) transfer ability of participant knowledge back into the workplace, and 4) documenting the impact of the training on organizational performance.

Kirkpatrick, J. D., & Kirkpatrick, W. K. (2016). *Kirkpatrick's four levels of training evaluation*. Alexandria: ATD Press.

Outcomes Evaluation: Also known as an effectiveness evaluation, assesses results of the program on the target population.

Mertens, D.M. and Wilson, A.T. (2012). *Program Evaluation Theory and Practice: A Comprehensive Guide*. New York, NY.: The Guilford Press.

Participatory Evaluation: An evaluation in which decision makers are end users of a formative, improvement - or utilization - oriented final evaluation.

Mertens, D.M. and Wilson, A.T. (2012). *Program Evaluation Theory and Practice: A Comprehensive Guide*. New York, NY.: The Guilford Press.

Process (Implementation) Evaluation: As the name suggests, this type of evaluation is concerned with documenting project implementation to assess fidelity (i.e., did the project do what was proposed), and determine which aspects of implementation could be altered to improve outcomes (formative evaluation).

Mertens, D.M. and Wilson, A.T. (2012). *Program Evaluation Theory and Practice: A Comprehensive Guide*. New York, NY.: The Guilford Press.

Theory-Based Evaluation: Often described through logic models or log frames that visibly link inputs to impact, theory-based evaluation focuses on documenting project inputs, activities, outputs, and outcomes to provide formative evaluation and determine the extent of project impact (summative evaluation).

W.K. Kellogg Foundation (2004). *Logic Model Development Guide*. Battle Creek Michigan: W.K. Kellogg Foundation.

Utilization-Focused Evaluation: Has a primary goal of providing actionable information to evaluation users while the project is in process (formative). It implies a collaborative relationship between evaluator and PI to frame evaluation questions that can lead to project improvements while documenting project progress and impact (summative).

Patton, M.Q. (2008). *Utilization-Focused Evaluation*, 4th edition. Thousand Oaks, CA: Sage Publications.

OFFICE OF EDUCATIONAL INNOVATION AND EVALUATION

EVALUATION RESOURCES

ORGANIZATION	URL	DESCRIPTION
American Evaluation Association (AEA)	www.eval.org	The most prominent professional society for evaluators in the U.S. The AEA publishes the American Journal of Evaluation.
Evaluation Center at Western Michigan University	www.wmich.edu	The Evaluation Center provides evaluation services, maintains an online repository of checklists and other resources for evaluators, publishes the Journal of Multidisciplinary Evaluation, and oversees the university's Interdisciplinary Ph.D. in Evaluation.
Online Evaluation Resource Library (OERL)	www.oerl.sri.com	Supported by the National Science Foundation, the OERL includes sample evaluation plans, instruments, and reports for a number of evaluation areas including curriculum development.
2010 User-Friendly Handbook for Project Evaluation	www.westat.com	Published by the National Science Foundation, this document is a periodically updated guide to the fundamentals of evaluating a program or intervention.
Informal Science (National Science Foundation)*	www.informalscience.org	Informal Science presents a number of resources aimed at educators, researchers, and evaluators working on informal STEM education. Their evaluation resources include a number of guides to basic evaluation and assessment practice.
IES NCES, National Center for Education Statistics	www.nces.ed.gov	IES NCES provides a comprehensive Logic Model Workshop Handbook designed to help users connect the logic model to program evaluation.

EVALUATION RESOURCES CONTINUED

ORGANIZATION	URL	DESCRIPTION
<p>NIH Office of Evaluation, Performance, and Reporting</p>	<p>www.dpcpsi.nih.gov</p>	<p>NIH offers resources/links to other evaluation websites plus archived examples of program evaluation.</p>
<p>STEM Learning and Research Center (STELAR)</p>	<p>www.stelar.edc.org</p>	<p>The STEM Learning and Research Center (STELAR) is led by Education Development Center, Inc. (EDC). This website has STEM assessment instruments and tools available under the “resources” header on their website.</p>
<p>W.K. Kellogg Foundation Evaluation Handbook</p>	<p>www.wkkf.org</p>	<p>The Kellogg Foundation is a major philanthropic organization and an early innovator in the use of evaluation. The Kellogg Evaluation Handbook is a popular and well-regarded resource for program evaluation.</p>
<p>NSF/ED Common Guidelines for Education Research and Development</p>	<p>www.nsf.gov</p>	<p>A cross-agency guideline for improving the quality, coherence, and pace of knowledge development in STEM education. An important resource when working on STEM education projects.</p>
<p>ED What Works Clearing House</p>	<p>www.ies.ed.gov</p>	<p>The What Works Clearinghouse (WWC) provides educators, policymakers, researchers, and the public with a central source of scientific evidence on what works in education to improve student outcomes. Evaluators are required to adhere to the What Works Clearinghouse (WWC) guidelines when working on ED funded projects.</p>

COMMON EVALUATION TERMINOLOGY

Advisory Boards/Advisory Group: A group of experts who contribute to evaluation by offering perceptions, reviewing data, and making suggestions for program improvement.

External Critical Review: This type of evaluation works in tandem with projects by collecting outcome data from participants as part of their research on effectiveness. This is not formative or summative evaluation; a strong research plan must be in place.

External Evaluation: Systematic assessment of program data done by an evaluator not employed by the same institution or implementing the program.

Formative: An evaluation conducted during development or delivery of a program or product with the intention of providing feedback for improvement.

Impact: The long-term, cumulative effect of a program/intervention over time (may be interchangeable with the term 'outcomes'). Measured against intended outcomes.

Indicator: Quantitative or qualitative marker of progress toward desired change. Provides a valid measurable assessment of the performance of an intervention.

Internal Evaluation: Systematic assessment of program data done by individuals involved in implementation or by an individual employed at the same institution.

Metrics: Quantifiable measures used to explain performance of a program. Indicators are often metrics, but may also include participant perceptions such as satisfaction.

Goals and Objectives: Statement of desired results caused by an intervention. Meets criteria of being Specific, Measurable, Achievable, Realistic, and Time-phased (SMART).

Outcomes: Changes in knowledge, attitudes, skills, behaviors, and social conditions resulting from the program.

Outputs: Direct products or deliverables of program activities.

Process Evaluation: An evaluation that continually informs stakeholders about progress and early indications of results (some evaluators define this as 'formative' evaluation).

Research: A study which intends to generate or contribute to generalizable knowledge. Evaluation utilizes research methods with a key difference; **evaluation is intended to determine the merit or worth of a program.**

Summative: Additive, cumulative; an evaluation done at the end of or completion of a program.

References:

Mertens, D.W. and Wilson, A.T. (2012). *Program evaluation Theory and Practice: A Comprehensive Guide*. The Guilford Press. New York, NY.