Writing an Evaluation Plan

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Why Evaluate?

- Funding sources require it... and you also need to know
 - To improve your program/project
 - To see the impact of your program

Where do you start?



Analyzing the Solicitation

- What is the solicitation asking for?
 - Differs within and between agencies
 - NSF

Describe how the research and education will be evaluated (*internally and/or externally*).

Analyzing the Solicitation

• NSF

All proposals must include an appropriate evaluation plan. A number of **resources for developing evaluation plans** are available at http://caise.insci.org/resources including the 2010 User-Friendly Handbook for Project Evaluation, Framework for Evaluating Impacts of Informal Science Education Projects (Framework), and the Impacts and Indicators Worksheet.

Evaluation design: Evaluation questions, design, data collection methods, analyses, and reporting/dissemination strategies must be detailed in the evaluation plan, *including formative and summative evaluation goals and strategies* that seek to answer the evaluation questions. The evaluation design must emphasize the coherence between the proposal goals and evidence of meeting such goals, and must be appropriate to the type, scope, and scale of the proposed project. Logic models or theories of action, as an example, can help describe the project inputs, outputs, outcomes and impacts. All project types must include a *summative evaluation by an external evaluator*. NOTE: details of the evaluation plan may be included as a *Supplementary Document*.

Analyzing the Solicitation

• NIH

Evaluation Plan (6 pages, total)

Provide a comprehensive Evaluation Plan to be used to **monitor the conduct and track the progress of proposed TCC research, implementation and dissemination activities**. Describe how the evaluation will be conducted, the principal measures and metrics to be used, and the potential sources of data. Also include a detailed self-evaluation plan to assess achievement of short- and long-term TCC goals. The Administrative Core is responsible for implementing the Evaluation Plan.

Since the major purpose of the evaluation is to provide information to assist with TCC planning and management, **the plan should address both administrative and scientific function and accomplishments**. The Evaluation Plan should address the following areas of particular importance: translational activities; scope and impact of research; innovation; collaboration and communication; integration and synergy; and funds management. Describe timelines, key milestones and expected outcomes for each area as appropriate.

While evaluation should be a continuous process, *a formal evaluation by an outside*, *independent group* selected by TCC leadership and approved by NIMHD staff should be conducted at least every two years. TCCs may also be called upon to gather data and participate in the development of a national TCC Program evaluation.

Types of Evaluations

- Internal
- Independent
- External

Types of Evaluations

- Formative Evaluation, two components:
 - Implementation (or process) evaluation
 - Progress evaluation
- > Provides information to improve programs



Types of Evaluations

- Summative Evaluation
 - Did the program meet its goals and objectives?
 - What evidence can serve to show this?
 - Baseline information
 - Summative information

Developing the Evaluation Plan

- Program context
 - What is the problem or need for the program?
 - What are the goals and objectives of your program?
 - Who is involved?
 - What activities will take place?
 - How will you measure progress and impact?

Selecting Indicators for Assessment

• What do you expect to see if program/project is correctly implemented and progresses toward stated objectives?

Implementation:

Recruitment

Selection

Participation:

- Activities
- Assessments

- * Researchers:
 - Program plan
 - Meetings

Select Appropriate Indicators



Quantitative Data

- Provide for easy comparisons; can come from existing or created sources
 - Records
 - Surveys
 - Learning assessments

> Thought should be given to validity and reliability

Qualitative Data

- Provide for descriptions about program activities, context, and participants' behaviors
 - Document review
 - Observations
 - Focus Groups
 - Interviews
 - Open-ended questions on surveys
- > Have guidelines in place

- Illustrate the relationship among your program/project elements:
 - Inputs: Resources necessary for program implementation
 - Activities: Interventions that will be implemented to achieve outcomes
 - Outputs: Direct products obtained as a result of program activities

 Outcomes: The impacts, changes, or results of the program activities and outputs; link to your objectives and your goals

Short-term:

- knowledge
- skills
- attitudes
- motivation
- awareness

Intermediate-term:

- behaviors
- practices
- policies
- procedures

Long-term:

- environmental
- social conditions
- economic
- conditions
- political
- conditions



	INPUTS	ACTIVITIES (Participant)	OUTPUTS	SHORT-TERM OUTCOMES	MEDIUM-TERM OUTCOMES	LONG-TERM IMPACTS
LOGIC MODEL EXAMPLE	 Project leaders, scientists, support staff, educators, Volunteers' interest, time, skills, prior knowledge, and motivation Partnering institutions Funding sources 	 Learn about project protocol Collect and submit data View and explore data. Provide feedback to project staff Communicate with others via groups, list serves, etc. 	 Amount of volunteer-collected data Publicly accessible database Individuals engaged with program Interactive and educational web site 	 Increased engagement with science and nature Increased knowledge of science content Improved data collection skills Improved species identification skills 	 Increased public access to scientific institutions Sustained change in the way participants collect high-quality data Participants serve as project ambassadors to promote project 	 Increased public support of science Increased public appreciation and stewardship of nature
INDICATORS	 Number of staff Available resources Baseline data of participants interest, knowledge, skills, etc. 	 Participants express understanding of project protocol Participants demonstrate confidence in collecting & submitting data Web analytics of project web site Quality & quantity of communication between staff and participants 	 Number and quality of data submitted Number of people accessing database Number of people engaged; frequency, duration, and intensity of engagement Web analytics of project web site; quality of web-based educational materials 	 Number of hours spent with science and nature activities Measures of change in knowledge content from pre to post tests Self reported increase in data collection skills Demonstrated increase in species identification skills from pre to post quiz 	 Change in quantity of communications between scientists and participants Detection of changes in long-term data submission records Data is of higher quality and more valuable over time Amount of publicity and project exposure by participants 	 Increased private and public funding for science institutions Improved environmental conditions

Keep it Simple!

- Don't assume
- Don't get too complex
- Don't get too fancy
- Don't overdo it

Keep it Simple!



Tips for writing your plan

- Know your audience
- Drop the jargon and be straightforward, clearly stating what you plan to do
- Try to incorporate both quantitative and qualitative data collection methods
- Be honest, note any challenges you may face and how you may overcome these

Writing your plan

• Two examples

Budgeting for the Evaluation

• May range from 5 – 10% (or more)of the grant amount

Evaluation Activities

- Consultation and analysis
- Development of plan
- Literature review
- Coordination with stakeholders
- Data requests
- Periodic and final reports
- Etc.

- Development of measures
 - Surveys
 - Interview and focus group questions & logistics
 - Tests
 - Etc.
- Data collection
- Data analysis & results

Finding an Evaluator

- American Evaluation Association:
 - <u>http://www.eval.org/find_an_evaluator/evaluators_found.asp?where=TX</u>
- Institute of Organizational and Program Evaluation Research:
 - http://www.cgu.edu/pages/506.asp

Sources

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Questions?