Space Grant
Evaluation Toolkit

INSPIRE - ENGAGE - EDUCATE - EMPLOY
The Next Generation of Explorers

Contents:

Evaluation Plan Outline (Sample) and Components

Outline:

I. **Introduction**
  a. Purpose
II. **Evaluation Design**
  a. Logic Model
  b. Level of Rigor
  c. Evaluation Question(s)
III. **Evaluation Methodology**
  a. Sampling Strategies
  b. Data Collection Sources
  c. Human subject protections (PRA & IRB considerations)
  d. Data Analysis
IV. **Reporting Plan**
V. **Timeline**
VI. **Roles and Responsibilities**

The evaluation plan should include:

- Evaluation questions and the approach to responding to each question
- Research design (appropriately modeled to answer evaluation questions)
- Description of the specific project activities that are the focus of the evaluation study and anticipated outcomes
- Sampling strategy and strategy for respondent recruitment
- Data collection methods, including description of proposed data collection instruments/protocols
- Data analysis methods
- Approach to informed consent/protection of human subjects, including plans for PRA or IRB review
- Data collection schedule and overall project timeline
- Reporting plans and schedule, including the provision of formative and summative feedback to the Principal Investigator on a periodic basis (monthly, quarterly, annual, etc.)

Developing Evaluation Questions

Basic Steps to Developing Effective Evaluation Questions:

Step 1: Develop a logic model to clarify program design
Step 2: Define the evaluation's purpose and scope
Step 3: Determine the type of evaluation design
Step 4: Draft and finalize evaluation questions

Evaluation questions should be:

- Clear, specific, and well-defined
- Focus on a program or program component
- Measureable by the evaluation
- Aligned with your logic model

Evaluation questions for a process evaluation should:

- Focus on the program or a program component
- Ask who, what, where, when, why, or how?
- Use exploratory verbs, such as report, describe, discover, seek, or explore

Evaluation questions for an outcome evaluation should:

- Be direct and specific as to the theory or assumption being tested (i.e., program effectiveness or impact)
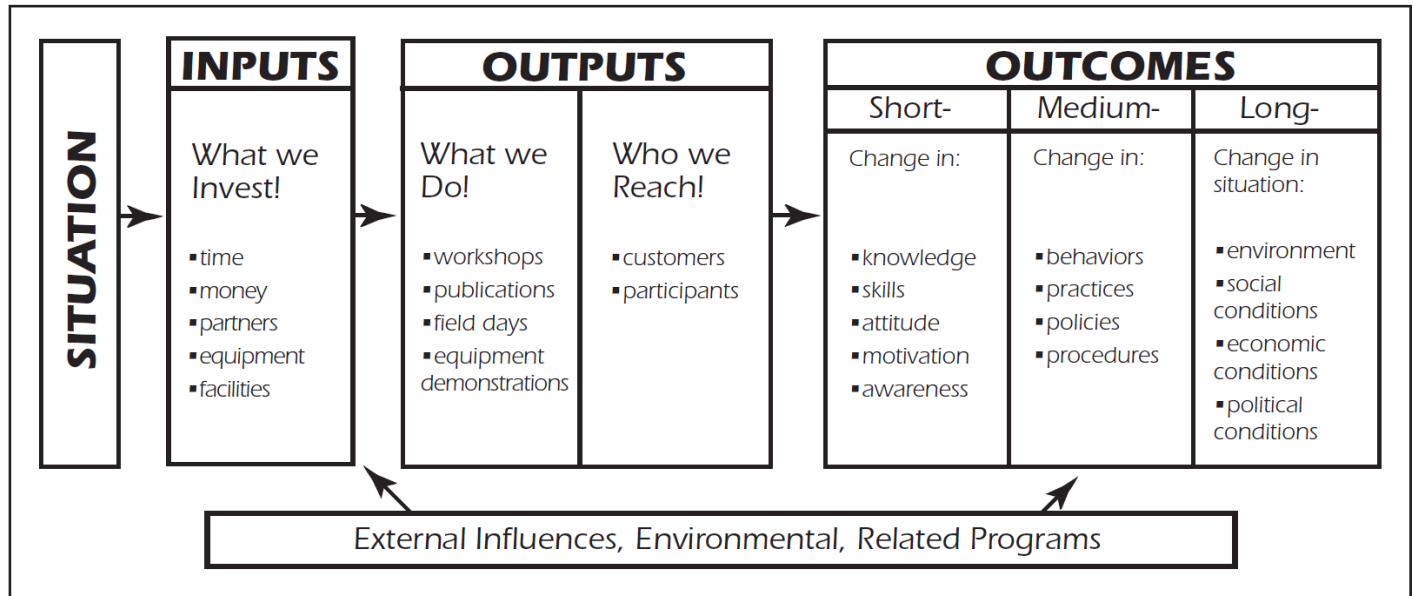- Examine changes, effects, or impacts
- Specify the outcome(s) to be measured

Source: Cooperation for National and Community Service,
http://www.nationalservice.gov/resources/evaluation/planning-evaluation#How_to_write_evaluation_plan

Logic Model Development

Logic models are narrative or graphical depictions of processes in real life that communicate the underlying assumptions upon which an activity is expected to lead to a specific result. Logic models illustrate a sequence of cause-and-effect relationships—a systems approach to communicate the path toward a desired result.

Figure 1. Elements of the Logic Model.[3]

Source: https://www.d.umn.edu/~kgilbert/educ5165-731/Readings/The%20Logic%20Model.pdf

Logic Model Resources

- W.K. Kellogg Foundation Logic Model Development Guide
    - http://www.smartgivers.org/uploads/logicmodelguidepdf.pdf
    - https://www.wkkf.org/resource-directory/resource/2006/02/wk-kellogg-foundation-logic-model-development-guide
- Enhancing Program Performance with Logic Models, University of Wisconsin-Extension
    - http://www.uwex.edu/ces/lmcourse/
    - http://www.uwex.edu/ces/pdande/evaluation/pdf/lmcourseall.pdf

Logic Model Worksheet

Inputs	➡	Outputs		➡	Short Term Outcomes	➡	Long Term Outcomes

Inputs	Activities	Participants	Short Term Outcomes	Long Term Outcomes
	•	•	•	•

Evaluation Plan

Evaluation Resources

- **"Common Guidelines for Education Research and Development"**

  http://ies.ed.gov/pdf/CommonGuidelines.pdf

- **"Designing Evaluations"**

  http://www.gao.gov/products/GAO-12-208G

- **"Effective Practices for Evaluation STEM Out-of-School Time Programs"**

  http://files.eric.ed.gov/fulltext/EJ1021960.pdf

- **"Identifying and Implementing Educational Practices Supported by Rigorous Evidence: A User-Friendly Guide"**

  http://www2.ed.gov/rschstat/research/pubs/rigorousevid/rigorousevid.pdf

- **"User-Friendly Handbook for Project Evaluation"**

  http://www.evalu-ate.org/wp-content/uploads/formidable/Doc_2010_NSFHandbook.pdf

Developing an Effective Evaluation Report

The data collection process is when instruments are administered to your target populations. Once you have collected data from your participants or target populations, review your evaluation plan to determine what data analysis approach is used to analyze your data.

After data is analyzed, the results should produce findings as recommendations or implications for your program or activity.

An effective evaluation report will highlight a program or activity's performance.

Example Table of Contents from a Final Report

The following is an excerpt from the main Table of Contents for an Evaluation Report for USAID (2010), pp 8-9 (NB: not including title page, preface, glossary and list of acronyms, terms, etc.)

- Executive Summary

- Introduction

- Description of the project

- Evaluation Purpose and Methodology – context of evaluation, questions, team, limitations…)

- Findings, Conclusions and Recommendations

- Lessons Learned

- Appendices:

- Terms of Reference

- Evaluation design and methodology – more complete overview than in introduction

- List of persons interviewed

- List of documents review

Other resources for writing an evaluation report for activity performance reporting:

Developing an Effective Evaluation Report

Centers for Disease Control and Prevention (2013) Setting the course for effective program evaluation. National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, Division of Nutrition, Physical Activity and Obesity. Retrieved at: https://www.cdc.gov/eval/materials/developing-an-effective-evaluation-report_tag508.pdf

Writing Final Reports

Better Evaluation (2017) *Final Reports.* Retrieved at: http://www.betterevaluation.org/en/evaluation-options/final_reports

Evaluation Report Checklist

Miron, G. (2004). *Evaluation Report Checklist*. Western Michigan University. Retrieved at:
https://www.wmich.edu/sites/default/files/attachments/u350/2014/evaluation-reports.pdf

Your Detailed Evaluation Report

Evaluation Toolbox (2010). *Your detailed evaluation report.* Community Sustainability Engagement. Retrieved
at: http://evaluationtoolbox.net.au/index.php?option=com_content&id=48

Sample Form of an Evaluation Report

World Bank (1999) *Sample form of evaluation report.* Procurement Policy and Services Group
Operational Core Services Department. Retrieved at:
http://siteresources.worldbank.org/PROCUREMENT/Resources/eval-ev2.pdf

Constructing an Evaluation Report for Performance Monitoring

USAID (2010) Performance monitoring and evaluation tips: Constructing an evaluation report. *United States
Agency for International Development (USAID)*. Retrieved at:
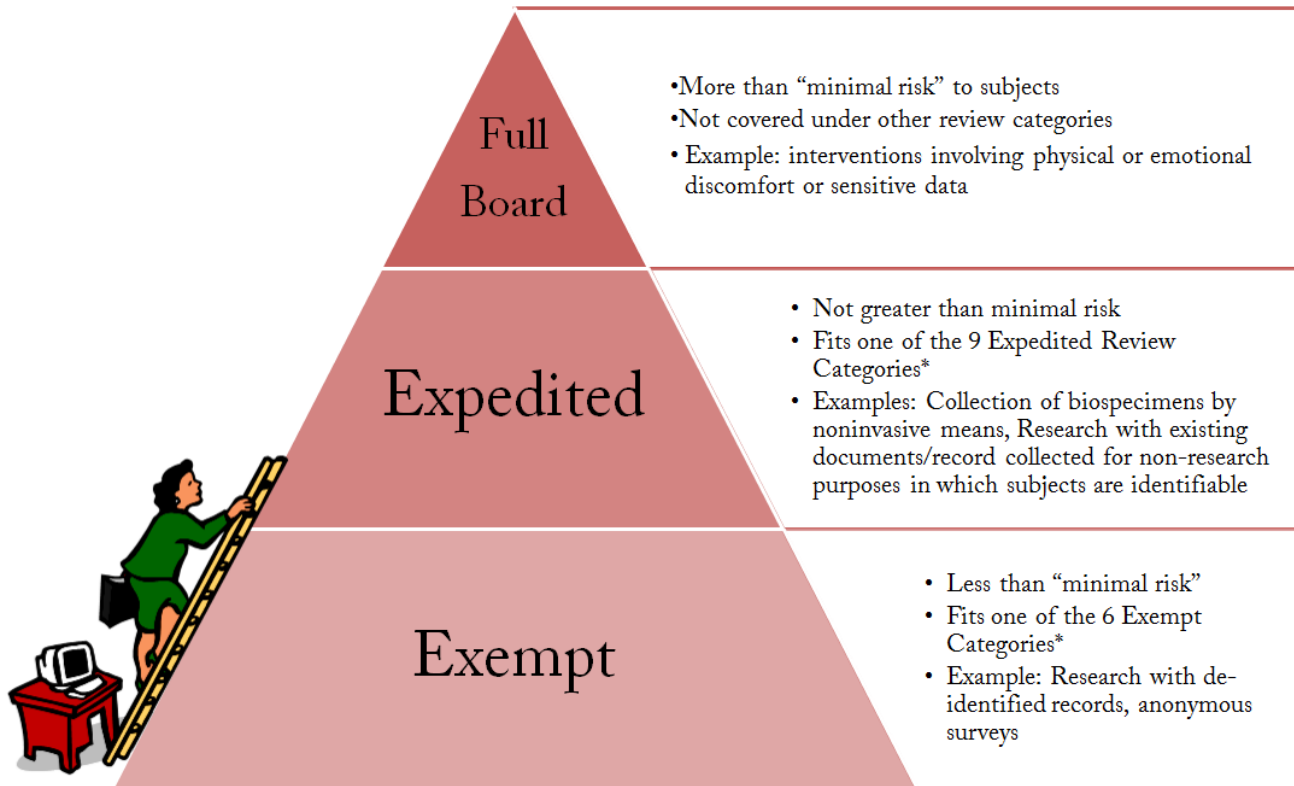http://pdf.usaid.gov/pdf_docs/Pnadw117.pdf

What is an IRB?

To be able to publish results, evalutions need to obtain IRB exception or approval.

IRB is the acronym for Institutional Review Board for Human Participants. Any institution that receives federal funding to conduct research with human participants, is required to establish an IRB to review all research that directly or indirectly involves human participants, and to set forth institutional policy governing such research.

The IRB for Human Participants has the authority to review, approve, disapprove or require changes in research or related activities involving human participants. Research reviewed by the IRB may also be subject to other review and approval or disapproval by officials. However, those officials may not approve research that has not been approved by the IRB for Human Participants. The IRB primary role is to ensure the protection of human participants as subjects of research.

NASA IRB information can be found at: http://irb.nasa.gov/

Levels of IRB Review

Full Board
- More than "minimal risk" to subjects
- Not covered under other review categories
- Example: interventions involving physical or emotional discomfort or sensitive data

Expedited
- Not greater than minimal risk
- Fits one of the 9 Expedited Review Categories*
- Examples: Collection of biospecimens by noninvasive means, Research with existing documents/record collected for non-research purposes in which subjects are identifiable

Exempt
- Less than "minimal risk"
- Fits one of the 6 Exempt Categories*
- Example: Research with de-identified records, anonymous surveys

*Defined by federal regulation (45 CFR 46)