



REVIEW CRITERIA AND EVALUATION

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Your mission:

TO CONVINCe REVIEWERS AND PROGRAM OFFICERS:

- THAT THIS IS A GENIUS IDEA
- THAT IT FITS THEIR FUNDING PRIORITIES, AND
- THAT YOU ARE THE BEST TEAM IN THE WORLD TO DO THE WORK.



The review process

- Who are the reviewers?
- What do reviewers want to know?
- What are the criteria for the agency?
- What are the criteria for the funding program?
- What are the essential elements of a good proposal?



Finding proposal review criteria

- Read the whole solicitation
- Always read the recommended references
- Look up agency guidelines (e.g. PPG)
- Find and study the review criteria
- Look at examples of successful proposals on agency website, if possible



Example: Review criteria for NSF

1. Intellectual Merit: potential to advance the field
2. Broader Impacts: potential to benefit society and contribute to the achievement of specific, desired societal goals



Common Criteria

- Does it fit funders mission?
- Does it represent a good return on investment?
- Does it fill a gap in research or meet an unmet need?
- Do the proposers have the skill and resources to do the work?



Common Mistakes

- Assuming the reviewer can read your mind
- Assuming the reviewers know what you know
- Font size, spelling or grammatical errors
- Not following guidelines of how content should be presented
- Lack of clear explanation of how the work fits into mission and purpose of agency
- Elements of proposal not aligned



Suggested evaluation plan

- Evaluation theory
- Logic model or theory of change
- Evaluation questions
- Appropriate methods for data collection and analysis
- Existing instruments or pilot-tested new ones
- Quality evaluator (s)
- Communicating and reporting mechanisms

EPA example of evaluation requirements


Describe the scope and application of the method, any tests (and measurements) to be conducted to support the method development, the type of instrumentation that will be used and any required instrument conditions (e.g., calibration frequency), planned QC checks and associated criteria (e.g., spikes, replicates, blanks), and tests to verify the method's performance.

Discuss the justification for the size of the proposed sample for both the overall project and all subsamples for specific treatments or tests. Identify and explain the rationale for the proposed statistical techniques (e.g., evaluation of statistical power).

For approaches to plan and evaluate CEnR, see *Partnerships for Environmental Public Health Evaluation Metrics Manual* published by National Institute of Environmental Health Sciences at [Evaluation Metrics](#). Key areas addressed in the Manual include community-research partnerships, the translation and dissemination of messages based on research findings, education and training, and capacity building.

NSF example of evaluation requirements

All DRL projects are subject to a series of external, critical reviews of their designs and activities (including their theoretical frameworks, any data collection plans, analysis plans, and reporting plans) A proposal must describe appropriate project-specific external review and feedback processes. These might include an external review panel or advisory board proposed by the project or a third-party evaluator. The external critical review or evaluation should be sufficiently independent and rigorous to influence the project's activities and improve the quality of its findings. Successful proposals will (1) describe the expertise of the external reviewer(s); (2) explain how that expertise relates to the goals and objectives of the proposal; and (3) specify how the PI will report and use results of the project's external, critical review process.



Department of Education example of evaluation requirements

Evaluation Plan (20 points)

- The proposed evaluation plan is related to the objectives.
- The plan is rigorous, comprehensive, and effective.
- The plan includes means to assess increases in teachers' content knowledge.
- The plan includes means to assess increases in students' content knowledge.
- An external evaluator is encouraged, but not required.

Another NSF example of evaluation requirements

Evaluation Plan: Every AGEP-BPR proposal must include an evaluation plan for an independent project evaluation of the proposed research project. The budget must include sufficient resources for evaluation. Formative evaluation of an AGEP-BPR project may include, but is not limited to, such activities as documenting and describing the operations of the project; appropriate selection of research subjects; and the fidelity and integrity of the research design and measures. Summative evaluation of an AGEP-BPR project should include an assessment of the contribution of project results to the field's knowledge base. The proposal should include a plan to communicate information to the field about the project components the independent evaluation finds to be effective and ineffective.

An independent evaluator is expected to adhere to the American Evaluation Association's Guiding Principles for Evaluators (www.eval.org/Publications/GuidingPrinciples.asp) and project evaluations are expected to be consistent with the standards established by the Joint Committee on Standards for Educational Evaluation ([www.jcsee.org/program-evaluation-standards/program evaluation- standards-statements](http://www.jcsee.org/program-evaluation-standards/program%20evaluation-standards-statements)).

6.0 Evaluation plan (an example)

6.1 Overview. Because of the scope and nature of this XXX project, the project team will utilize a DBR/iterative approach to model development and a quasi-experimental design to test the model. Figure 1, the *XXX Project Logic Model*, shows the primary activities of the project and the expected outputs (products), as well as the short-term, intermediate-term, and long-term expected outcomes. **The role of the project evaluator** will be used to determine the progress of the project in meeting its goals and to summarize the arguments for accepting or rejecting the five hypotheses established to guide the project. Both an **internal and an external evaluator** will be used in this project. The internal evaluator will be used to assess annual progress and to conduct the multiple case study to evaluate impact. An external evaluator will conduct the summative evaluation and recommend accepting or rejecting the five project hypotheses. The internal evaluator will provide information as requested by the summative evaluator, as will the Project PI. XXX, Senior Personnel, is a professional evaluator and she will serve as a liaison between PIs and evaluators to coordinate activities, as needed. All evaluation activities will be conducted in accord with the recommendations of the Joint Committee on Standards for Educational Evaluation and will use the guidelines of the Universal Design for Evaluation, established by the Disabilities and Other Vulnerable Populations Topical Interest Group of the American Evaluation Association. Specific evaluation plans will be created by the evaluators in collaboratively with the PIs and other project stakeholders and will be based on the Program Logic Model found in Figure 1.

6.2: Formative/progress evaluation (internal evaluation team). XXX will provide the internal evaluation team for this project. A **letter from the XXX explains their commitment to provide evaluation services** to the project and explains their organization and its work. XXX will **examine project documents and utilize staff interviews do determine annual project progress** in conducting its activities in accordance with the timeline. Qualitative analysis methods will be used in the document review and to analyze interview transcripts. XXX will provide an annual report of the progress of the project in meeting its objectives and completing the planned activities in a timely manner. These reports will be sent to the external evaluator and to the PI.

6.3: Summative evaluation (external evaluator). The summative evaluation will be conducted by Dr. XXX, an engineer and a program evaluator with experience with NSF programs. She will **utilize the progress reports and conduct an independent analysis of project documents and products to determine the extent to which the project met its goals and to provide recommendation and arguments for accepting or rejecting the five project hypotheses.** In addition, Dr. XXX will utilize the findings of the multiple case study conducted by XXX, described below, to determine the acceptability of the fifth hypothesis. A biosketch and letter of **commitment** from Dr. XXX are found in the supplemental materials.

6.4: Multiple case study of impact. Beyond the research that is part of the model building and testing process, the PIs have asked the **internal evaluation team to also conduct a multiple case study of the impact of the project and the model** on students, faculty, and related departments and universities. The evaluation team will use a **multiple case methodological framework** (Yin, 1994; Mertens, 2005; Cresswell, 2013; Guba and Lincoln, 1989) developing cases related to students, faculty, and the institution (departments, DSS, colleges). **Data collection methods** will include focus groups, guided interviews, and brief on-line surveys. The resulting cases will provide “thick descriptions “ of the perceptions of impacts on each of these groups/entities. The results of these cases will be triangulated to produce information relevant to Hypothesis 5.

Evaluation Plan Review #!

Weaknesses: The evaluation plan is inadequate and the letter from the external evaluator does not align with the goal and the three objectives of the evaluation (p 14). It is not clear what data will be collected and how it will be analyzed to evaluate “what does and does not work in improving academic performance” ... , determine the extent of the integration of practices into organizational functioning and fill gaps in knowledge and practice. (p14). The evaluation section mentions a Table 6 for outcome evaluation, but there is no table 6 in the narrative. The budget mentions XXX evaluation instruments but these are not addressed in the evaluation section.



Evaluation Plan Review #2

Strengths: The project has three specific goals, with expected outcomes related to baseline (e.g. increase in retention from 75% to 85%). The evaluation plan includes both formative and summative evaluations. The evaluation will address six specific goals, which are very appropriate for the project and have the potential to make strong statements about the impact of the project. Indicators are listed for each activity for the formative evaluation. Intermediate and long-term metrics are listed.



My Best Advice

- Do your homework
- Start early
- Establish your team
- Ask for and accept critical review

Questions?

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