How to Avoid Common Pitfalls When Writing Evaluation Plans for ATE Proposals

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How to Avoid Common Pitfalls When Writing Evaluation Plans for ATE Proposals

Materials

Slides
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Recording

Introductions

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Slides and recording:
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How to Avoid Common Pitfalls When Writing Evaluation Plans for ATE Proposals

Advanced Technological Education Program
www.nsf.gov/ate

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Hello

Lyssa
Wilson Becho

Agenda

- Evaluation overview
- Pitfalls of evaluation plans in ATE proposals
- Toolkit and other resources

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Evaluation
A systematic determination of a project’s quality and effectiveness.

1. Ask important questions about a project’s processes and outcomes.
2. Gather evidence that will help answer those questions.
3. Interpret data and answer the evaluation questions.
4. Use and report results for accountability, improvement, and planning.
“If you don’t evaluate and assess your activities and outcomes you can’t know if the project was successful. It also provides the project team with data to convince others of the success of the project as well as contributing to the body of knowledge in that particular area of STEM.”

Celeste Carter
ATE Program Director

Learn about evaluation basics...

“Evaluation Basics for Non-Evaluators” Video Series
How to Avoid Common Pitfalls When Writing Evaluation Plans for ATE Proposals

Pitfalls of evaluation plans in proposals

Learn about what to include...

Evaluation Plan Checklist for ATE Proposals

This checklist provides information on what should be included in evaluation plans for proposals to the National Science Foundation’s (NSF) Advanced Technological Education (ATE) program. Grant seekers should carefully read the most recent ATE program announcement [link to announcement] for details about the program and proposal submission requirements.

**Evaluation Plan**
ATE proposals must include a subsection titled “Evaluation Plan” within the 12-page project description. EvaluATE recommends dedicating one to two pages to the evaluation plan and including the following key elements:

1. **Evaluator**
   - Identify the project’s evaluator by name and organization.
   - Briefly describe the evaluator’s qualifications, including their experience evaluating STEM education programs.
   - Refer to the evaluator’s biosheet and letter of collaboration and include these as supplementary materials.
   - If the evaluator is an employee of the project’s host institution, explain how the evaluator is independent from the project (they should not work in the same department or be a supervisor or supervisor of project personnel).
   - If the project’s host institution has a policy that prohibits selecting an evaluator at the proposal stage, explain the institutional policy that does not allow for selection of an evaluator prior to funding.
   - Note how an evaluation will be selected after the award is made.

2. **Evaluation Questions**
   - List key questions—ideally, about three to seven—that the evaluation will address.
   - Include questions about both project implementation (what the project does) and outcomes (what changes it brings about).
   - Ensure that the questions align with the project’s goals and activities as described in the proposal.
   - Explain how the questions contribute to the project’s intellectual merit and contributions to advancing knowledge and broader impact (contributions to the betterment of society).

3. **Data**
   - Additional...

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8/19/20
Learn about what to include…

Common Pitfalls in Evaluation Plans for Proposals
AND HOW TO AVOID THEM

PITFALL #1
Choosing an evaluator who is internal to the project
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Evaluator must be external to the project

“The Project Director will conduct the evaluation process, submitting an annual report to NSF and the project participants regarding development areas of the project, project strengths, and recommendations for improvement.”

“Dr. Washington, an external evaluation consultant, will conduct the evaluation process, submitting an annual report to the project participants regarding development areas of the project, project strengths, and recommendations for improvement.”

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PITFALL #1

Choosing an evaluator who is internal to the project

INSTEAD:
- Ensure the evaluator has no connection to or political influence over project or team members

Learn more about evaluator independence...

What counts as independent?

PITFALL #2
No justification for choice of evaluator

“Dr. Parks will conduct this evaluation. This evaluator has coordinated several prior evaluations for NSF grants.”

Only vague reference to prior experience
“Dr. Parks has over a decade of experience in higher education evaluation and a Ph.D. in evaluation. Dr. Parks has served as an independent evaluator for NSF STEM grants, including prior ATE grants (see included biosketch). She has expertise in analyzing both quantitative and qualitative data, with particular expertise in survey methods; surveys are the primary mode of data collection for this evaluation.”
“Dr. Parks has over a decade of experience in higher education evaluation and a Ph.D. in evaluation. Dr. Parks has served as an independent evaluator for NSF STEM grants, including prior ATE grants (see included biosketch). She has expertise in analyzing both quantitative and qualitative data, with particular expertise in survey methods; surveys are the primary mode of data collection for this evaluation.”

PITFALL #2
No justification for choice of evaluator

INSTEAD:
- Address evaluator’s qualifications
- Showcase prior experience
- Match qualifications to evaluation plan
Learn more about evaluator qualifications...

PITFALL #3

Overly general, cut-and-paste evaluation plan
“Project activities and deliverables will be assessed on a continuing basis. The evaluator will compile and present an assessment of project activities and progress towards project objectives to coincide with the project’s annual report to NSF. Research questions related to the project’s intended outcomes will guide data collection and analysis, and research findings will inform and encourage improved practice.”

No explanation of how evaluation will be conducted

“Project activities and deliverables will be assessed on a continuing basis. The evaluator will compile and present an assessment of project activities and progress towards project objectives to coincide with the project’s annual report to NSF. Research questions related to the project’s intended outcomes will guide data collection and analysis, and research findings will inform and encourage improved practice.”

No identification of questions or evaluation criteria
“The project’s outcomes and implementation will be assessed through a mixed methods evaluation. The evaluation is driven by **six overarching evaluation questions**, presented in **Table 2**, along with the key indicators that will be used to answer each question, data sources, and methods. These evaluation questions are in direct response to the activities and outcomes described in **the project’s logic model** found in **Figure 3**.”

References more detail in tables and figures

Evaluation details in direct response to project activities and outcomes
PITFALL #3

Overly general, cut-and-paste evaluation plan

INSTEAD:

◆ Be specific to project
◆ Expand on how evaluation activities match with project goals and outcomes
◆ Avoid vague, filler language

Learn more about helpful hints for evaluation plans...

10 Helpful Hints and 10 Fatal Flaws

1. Identify an evaluator in advance and include that person’s name and qualifications in the proposal. If possible, the evaluator should have experience and expertise in evaluating programs at two-year colleges and/or workforce-related projects. A few sentences should be included in the proposal itself about the evaluator’s expertise. For ATE, a two-page bio should be included in the supplementary documents section and tailored, using the required NSF biographical sketch format, to demonstrate the evaluator’s qualifications to evaluate the particular project. (See Step 6, Part 2.) and [Example Bio Sketch](https://www.epi.org/files/ate/nov2012/bio-sketch) for a highly successful example of how to include a bio. It is especially important to note the skills and qualifications you will be seeking in an evaluator in the evaluation section of the proposal. The evaluator should not be a co-principal investigator and should have independence from the project. For smaller projects, the evaluator could be in the institutional research office or another department at the institution, but the evaluator for larger projects should be external to the institution. (Note: Many other NSF programs do allow combination documents.)
Questions?

PITFALL #4

Unclear connections between project activities, evaluation methods, and measures

8/19/20
“This project will be evaluated through a comprehensive approach. Qualitative and quantitative data will be collected and triangulated to assess whether outcomes identified in the logic model were achieved. Surveys and interviews will be used to collect data.”

**Assumes reader can infer which outcomes will be measured**

**Does not match methods, measures, and questions**
“Data Collection and Methodologies: (1) student success data will be compared to student success rates over the life of the project; (2) student data will be collected to determine changes in enrollment, retention, and completion rates for students enrolled in courses and programs; (3) recruitment, retention, and placement efforts will be monitored and evaluated to determine impact on the pipeline of students from secondary schools and participation levels of women, veterans, and underrepresented minorities.”

<table>
<thead>
<tr>
<th>Relevant Project Activities(s)</th>
<th>Evaluation Questions</th>
<th>Data Collection Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities #2 &amp; #3</td>
<td>What effect is the project having on student enrollment and retention?</td>
<td>• institutional enrollment data</td>
</tr>
<tr>
<td>Activities #4</td>
<td>What effect is the project having on women and other underrepresented groups’ enrollment and retention?</td>
<td>• institutional enrollment data • student surveys • interviews</td>
</tr>
</tbody>
</table>
Learn more about evaluation data matrixes...

**Evaluation Data Matrix Template**

- **PITFALL #4**
  - Unclear connections between project goals, evaluation methods, and measures

  **INSTEAD:**
  - Match project activities, data collection methods, and evaluation criteria
  - Use a table to connect pieces

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PITFALL #5

Only asking about the easy things

“Only asking about the easy things.”

“This evaluation will measure the project’s anticipated outcomes: creation of an advisory board; production of comprehensive documentation based on planning activities; along with students’ satisfaction and overall experience in courses.”
“The evaluation will focus on the program’s impact on student academic success and career choice outcomes. The evaluation will track student degree completion rates and course grades, and will conduct an analysis to help determine whether certain factors predict student success in the program. The surveys will ask students to rate their overall experience with the program, share their current/future career goals, and describe the skills they have gained in the past year. After graduating, students will also be invited to complete a survey about their current job placement and plans for the future.”

PITFALL #5
Only asking about the easy things

INSTEAD:
- Go beyond outputs and short-term outcomes
- Consider asking about both the project’s process and its outcomes
Learn more about the Kirkpatrick model...

"Kirkpatrick Model for ATE Evaluation” Blog

PITFALL #6
No discussion of how evaluation will be used
“All of the materials produced under this project, including the logic model documentation, evaluations, curriculum, and other documentation will be stored on a network server.”

“Report for compliance purposes only”

“A report will be prepared and provided for inclusion with the project’s final report to the National Science Foundation.”
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“The PI will consult regularly (at minimum, once per quarter) with the evaluator. The evaluator will take part in annual face-to-face meetings and provide ongoing feedback throughout the project on the quality of project activities and products.”

PITFALL #6
No discussion of how evaluation will be used

INSTEAD:
- Acknowledge how project staff will use evaluation findings for project improvement
Learn more about evaluation use...

Blog: Three Questions to Spur Action from Your Evaluation Report

“Three Questions to Spur Action from Your Evaluation Report” Blog

Questions?

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ATE Evaluation COACHING

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