Evaluation: Don't Submit Your ATE Proposal Without It

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HI-TEC Conference 2015

This material is based upon work supported by the National Science Foundation under grant number 1204683. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the presenters and do not necessarily reflect the views of NSF.
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Evaluation: Don’t Submit Your ATE Proposal Without It
**OBJECTIVES**

1. Know what evaluative elements should be included in a proposal and where

2. Understand how evaluation can be leveraged to strengthen a proposal

*Image source: expertcytometry.com*
Evaluation is the systematic determination of a project’s merit, worth, or significance.
1. Ask important questions about a project’s processes and outcomes.

2. Gather evidence that will help answer those questions.

3. Interpret findings and answer the evaluation questions.

4. Use the information for accountability, improvement, and planning.

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**OBJECTIVES**

1. Know what evaluative elements should be included in a proposal and where

2. Understand how evaluation can be leveraged to strengthen a proposal
Evaluation Planning Checklist for NSF-ATE Proposals

Lois A. Wigen | July 2015

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This checklist is intended to be an informal guideline for evaluating proposals for the National Science Foundation’s Advanced Technological Education (ATE) program. It is organized around the components of an NSF proposal (see the NSF Proposal and Trust) with emphasis on the evaluation aspects. All proposers should carefully read the ATE Program Overview for additional guidance related to developing ATE proposal evaluation sections, see “Helpful Tools and Checklists for Writing Effective Proposals in Your Proposal.” Users may also find it helpful to view EvalATE’s past webinar on integrating evaluation into ATE proposals, available from evalu-ate.org/eval-ate/activities under “Proposals Writing.”

**Organized by proposal component**

### PROPOSAL COMPONENTS

- **Cover Sheet**
- **Project Summary**
- **Project Description**
- **References Cited**
- **Budget and Budget Justification**
- **Current and Pending Support**
- **Facilities, Equipment and Other Resources**
- **Supplementary Documents**

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**Evaluation-related information is needed in these sections**

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**07/29/2015**

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**Proposal Components**

- Cover Sheet
- Project Summary
- Project Description
- References Cited
- Budget and Budget Justification
- Current and Pending Support
- Facilities, Equipment and Other Resources
- Supplementary Documents

**Project Description**

- Results of Prior Support
- Rationale
- Goals, Objectives, Deliverables, Activities
- Timetable
- Management Plan
- Roles and Responsibilities of the PI, co-PI(s), and Other Senior Personnel
- Plan for Sustainability
- Evaluation Plan
- Dissemination Plan
- Broader Impacts (new)
Results of Prior Support

"specific outcomes and results including metrics to demonstrate the impact of the activities undertaken including evidence of the quality and effectiveness of the project's deliverables"

Evaluation Plan

(1-3 pages of your 15-page project description)

- Identify evaluator and briefly describe his/her experience/expertise
- Describe what will be evaluated and how
Evaluation Plan
(1-3 pages of your 15-page project description)

- Identify evaluator and briefly describe his/her experience/expertise
- Describe what will be evaluated and how

Describe the evaluation plan:

1. Logic model
2. Evaluation questions
3. Data collection plan & analysis
4. Evaluation deliverables
Logic Model

Helpful for project and evaluation planning

Activities

Activities supported by the project
1. Logic Model

Outputs

Tangible results of the activities

1. Logic Model

Short-Term Outcomes

What the project’s beneficiaries will know or be able to do because of the project
**PROJECT DESCRIPTION**

1. Logic Model

**Mid-Term Outcomes**

What people will do differently because of the project

**Long-Term Outcomes**

Long-term project goals that align with the ATE program’s goals
Example Logic Model

Renewable Energy Technology Institute

Activities
- Faculty workshops
- Follow-up support
- Guest lectures
- Field trips
- Campus-wide events

Outputs
- Modules
- Curriculum

Short-Term Outcomes
- Faculty gain knowledge and skills needed to teach latest renewable energy technologies
- Student enrollment in renewable energy technology courses and programs increases

Mid-Term Outcomes
- Faculty integrate new modules into existing courses
- Students develop competencies needed for renewable energy jobs

Long-Term Outcomes
- Graduates obtain jobs in renewable energy field
- Regional demand for renewable energy technicians is met

Describe the evaluation plan:

1. Logic model
2. Evaluation questions
3. Data collection plan & analysis
4. Evaluation deliverables
Evaluation Questions

Align the evaluation’s focus with the project’s activities and intended outcomes.

Renewal Energy Technology Institute

<table>
<thead>
<tr>
<th>Activities</th>
<th>Outputs</th>
<th>Short-Term Outcomes</th>
<th>Mid-Term Outcomes</th>
<th>Long-Term Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty workshops</td>
<td>Modules</td>
<td>Faculty gain knowledge and skills needed to teach latest renewable energy technologies</td>
<td>Faculty integrate new modules into existing courses</td>
<td>Graduates obtain jobs in renewable energy field</td>
</tr>
<tr>
<td>Follow-up support</td>
<td>Curriculum</td>
<td></td>
<td>Students develop competencies needed for renewable energy jobs</td>
<td>Regional demand for renewable energy technicians is met</td>
</tr>
<tr>
<td>Guest lectures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field trips</td>
<td></td>
<td></td>
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<td>Campus-wide events</td>
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<td></td>
</tr>
</tbody>
</table>

Student enrollment in renewable energy technology courses and programs increases
2 Evaluation Questions

Renewal Energy Technology Institute

Activities | Outputs | Short-Term Outcomes | Mid-Term Outcomes | Long-Term Outcomes

Faculty workshops
Follow-up support
Guest lectures
Field trips
Campus-wide activities

To what extent did the project reach its intended audience of faculty and students?

To what extent were participating faculty satisfied with the workshops and support?

Evaluation Questions

Renewal Energy Technology Institute

Activities | Outputs | Short-Term Outcomes | Mid-Term Outcomes | Long-Term Outcomes

Modules
Curriculum

What is the quality of the faculty-developed modules?

To what extent does the new curriculum support development of competencies needed by renewable energy technicians?
### Evaluation Questions

#### Renewal Energy Technology Institute

#### Activities
- To what extent did faculty acquire the necessary knowledge/skills to teach the latest renewable energy technologies?

#### Outputs

**Short-Term Outcomes**
- Faculty gain knowledge and skills needed to teach latest renewable energy technologies

**Mid-Term Outcomes**
- Student enrollment in renewable energy technology courses and programs increases

**Long-Term Outcomes**
- How has the project impacted enrollment in renewable energy programs and courses?

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#### Activities
- To what extent did faculty integrate new modules into their courses?

#### Outputs

**Short-Term Outcomes**

**Mid-Term Outcomes**
- Faculty integrate new modules into existing courses

**Long-Term Outcomes**
- Students develop competencies needed for renewable energy jobs
Evaluation Questions

Renewal Energy Technology Institute

Activities → Outputs → Short-Term Outcomes → Mid-Term Outcomes → Long-Term Outcomes

To what extent do students with renewable energy certificates and degrees obtain renewable energy jobs?

How has the project contributed to meeting the regional demand for renewable energy technicians?

Describe the evaluation plan:

1. Logic model
2. Evaluation questions
3. Data collection & analysis
4. Evaluation deliverables
3 Data collection plan

What information do you need?

How will you collect it?

From whom?

When?

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3 Data collection plan Tips

- Align your data collection to answer your evaluation questions
- Build a body of evidence
  - multiple data sources
  - qualitative and quantitative data
- Embed data collection in regular project activities
- Use existing data whenever possible
- Use existing instruments when/if they match your needs
3 Data collection & analysis

**Analysis**
Organizing, transforming, and describing data

**Interpretation**
Making sense of analyzed data so that conclusions can be made about the project’s quality, progress or impact

Renewable Energy Technology Institute

Case Study Activity
**Data Collection Planning Matrix**

**Evaluation Question:** How has the project impacted enrollment in renewable energy programs and courses?

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Data Source</th>
<th>Method</th>
<th>Responsible Party</th>
<th>Timing</th>
<th>Analysis Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in course enrollment numbers</td>
<td>Institutional research database</td>
<td>Review of institutional and departmental records</td>
<td>Project PI</td>
<td>End of each semester</td>
<td>Comparison of enrollment numbers over time (start 2 years prior to project start)</td>
</tr>
<tr>
<td>Opinions of faculty and career center staff about the project’s impact</td>
<td>Participating faculty Career center advisors Career center director</td>
<td>In-person interviews</td>
<td>External evaluator</td>
<td>Annually</td>
<td>Inductive coding of interviews to identify themes</td>
</tr>
<tr>
<td>Students’ reports about why they enrolled</td>
<td>Enrolled students</td>
<td>Web survey</td>
<td>Instructors (instructions provided by evaluator)</td>
<td>Beginning of each semester</td>
<td>Descriptive statistics and inductive coding</td>
</tr>
</tbody>
</table>

**Describe the evaluation plan:**

1. Logic model
2. Evaluation questions
3. Data collection & analysis
4. Evaluation deliverables
Evaluation Deliverables

ATE-Specific INTELLECTUAL MERIT Criterion

"Is the evaluation likely to provide useful information to the project and others?"

4 Evaluation Deliverables

When and what types of reports will be issued?

How will results be shared?

Who will results be shared with?
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4 Evaluation Deliverables

Information from the evaluation will be needed for

- annual reports to NSF
- annual survey of grantees
- reports to advisory groups

5 Evaluation Deliverables

**Improvement**
To identify areas for project improvement.

**Evidence**
To describe the project’s impact.

**Accountability**
To provide assurance that the project is using resources appropriately.
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EVALUATION:
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August 19, 2015 | 1 p.m. EDT

Blog
- Creation, Dissemination, and Accessibility of ATE-Related Resources
- Final Questions All Evaluators Should Ask Their Clients: Happy 4th of July!

Highlights
- Information about ATE Annual Survey 2015
- Materials from our webinar: Low Cost, High Impact Evaluation for Small Projects
- Evaluation Planning Checklist for NIP ATE Proposals

Recent Library Additions
- Data Collection Planning Matrix
- Webinar Coordination Checklist
- Criterion Writing Checklist

Thank You!