WEBINAR
Evaluation: All the Funded ATE Proposals Are Doing It

EVALUATION
All the funded ATE proposals are doing it

ATECENTRAL
SUPPORTING ADVANCED TECHNOLOGICAL EDUCATION

www.atecentral.net
WEBINAR
Evaluation: All the Funded ATE Proposals Are Doing It 8/16/2017

www.evalu-ate.org

MATERIALS

EVALUATION
All the funded ATE proposals are doing it

Slides  Evaluation Planning Checklist and Other Resources  Recording

bit.ly/aug17-web

evalu-ate.org
INTRODUCTIONS

Mike Lesiecki
Lori Wingate

BEHIND THE SCENES

Emma Perk
Sharon Gusky
Janet Pinhorn
Shannon Payne

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This material is based upon work supported by the National Science Foundation under grant number 1600992.

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.

PART I

Lori
WEBINAR
Evaluation: All the Funded ATE Proposals Are Doing It

8/16/2017

ATE PROGRAM

Program Dev. & Improvement
Educational Materials Dev.
Professional Dev. for Educators
Small Grants - New to ATE
Instrumentation Acquisition

Teacher Preparation
Business/Entrepreneurial Skills
Leadership Capacity Building
Adaption & Implementation
ATE Coordination Networks

Projects

Centers
National Centers
Resource Centers
Planning Grants

Targeted Research
Planning/Pilot
Exploratory
Full-Scale

Conferences & Workshops

www.nsf.gov/ate
EVALUATION
the determination of something’s quality, value, or importance

PROJECT EVALUATION
the systematic determination of a project’s quality, value, or importance based on evidence
Accountability
Evidence
Improvement

WHY?
Evaluation Guidance in 2017 Solicitation

Evaluation: All ATE-funded work must be evaluated, with the exception of planning grants for centers. Project descriptions must include a subsection titled "Evaluation Plan" that includes the following information...
**Merit Review Criteria**

**Intellectual Merit**
- potential to advance knowledge

**Broader Impacts**
- potential to benefit society

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**Resources**

1. Evaluation Planning Checklist for ATE Proposals
2. NSF Prior Support Checklist
3. ATE Logic Model Template
4. Logic Models: Getting them Right and Using them Well [webinar]
5. Guide to Finding and Selecting an Evaluator
6. Evaluation Questions Checklist for Program Evaluation
7. Evaluation Question Development Demonstrations [webinar]
8. Data Collection Planning Matrix
9. Proposal Evaluation Plan Template
10. Evaluator Biographical Sketch Template

[bit.ly/aug17-web]
Evaluation Planning Checklist for ATE Proposals

Proposal Components

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

Evaluation-related information is needed in these sections
### Proposal Components

- **Cover Sheet**
- **Project Summary**
- **Project Description**
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- **Supplementary Documents**

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**Cover Sheet**

- **Human Subjects** *(GPG II.D.6)*
- Exemption Subsection
- **IRB App. Date** *(MM/DD/YY)* **Pending**
- **Human Subjects Assurance Number**

You WILL need approval before grant is awarded

*Indicate “pending” if application not yet submitted*
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☑ Project Summary

PROJECT SUMMARY: EvaluATE

Overview. This proposed project to continue EvaluATE, the anonymous, dedicated to supporting and improving the evaluation practices of approximately 800 ATE centers and projects. EvaluATE includes webinars, workshops, and other resources to help centers and projects improve their evaluation practices. EvaluATE is funded by the National Science Foundation and is managed by the National Center for Analysis and Integration (NCAI).

Intellectual Merit. EvaluATE is a fully anonymous, dedicated to supporting and improving the evaluation practices of approximately 800 ATE centers and projects. EvaluATE includes webinars, workshops, and other resources to help centers and projects improve their evaluation practices. EvaluATE is funded by the National Science Foundation and is managed by the National Center for Analysis and Integration (NCAI).

Broader Impacts. EvaluATE is a fully anonymous, dedicated to supporting and improving the evaluation practices of approximately 800 ATE centers and projects. EvaluATE includes webinars, workshops, and other resources to help centers and projects improve their evaluation practices. EvaluATE is funded by the National Science Foundation and is managed by the National Center for Analysis and Integration (NCAI).

evalu-ate.org
Proposal Components

- Cover Sheet
- Project Summary

- Project Description
  - References Cited
  - Biographical Sketches
  - Budget & Budget Justification
  - Current & Pending Support
  - Facilities, Equipment & Other Resources
  - Supplementary Documents

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Proposal Components

- Cover Sheet
- Project Summary

- Project Description
  - Results from Prior NSF Support
    - Rationale
    - Goals, Objectives, Deliverables, Activities
    - Timetable
    - Management Plan
    - Roles & Responsibilities of Senior Personnel
    - Plan for Sustainability
    - Evaluation Plan
    - Dissemination Plan

15 pages
**Project Description**

Results from Prior NSF Support

"specific outcomes and results including metrics to demonstrate the impact of the project activities"

- Intellectual Merit
- Broader Impacts

---

**NSF Prior Support Checklist**

[Resource Link]

[Link to PDF]

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PART 2

Logic Models

Lori
✓ Useful for depicting overall project design
✓ Using for evaluation planning

Logic Models

! Not required by NSF
! Should not exceed more than one page
! Must not be submitted as supplemental document

Logic Model Template for ATE Projects

bit.ly/aug17-web
Proposition Components

- Cover Sheet
- Project Summary
- Project Description [15 pages]
  - Results from Prior NSF Support
  - Rationale
  - Goals, Objectives, Deliverables, Activities
  - Timetable
  - Management Plan
  - Roles & Responsibilities of Senior Personnel
  - Plan for Sustainability
  - Evaluation Plan
  - Dissemination Plan
☑ Project Description

Evaluation Plan

Evaluator
- Evaluation questions or objectives
- Data collection
- Data analysis and interpretation
- Evaluation deliverables and uses
- Evaluation timeline

Evaluation plan should be 1-3 pages
Aim for 1½ pages
The funds to support an evaluator independent of the project or center must be requested...
**Project Description**

**Evaluation Plan**

Evaluator

**Evaluation questions or objectives**

Data collection

Data analysis and interpretation

Evaluation deliverables and uses

Evaluation timeline

**Evaluation Questions are**

overarching questions about the project’s quality, impact, or effectiveness that the evaluation will answer based on evidence
Project Goals
1. Improve and expand academic rigor and relevance across core technology curriculum and wind energy technology specific curriculum.
2. Design and put into action wind/renewable energy career pathways.
3. Enhance and expand recruitment, retention, and placement efforts across technology programs.

CASE
Growing a New Generation of Energy Technicians and Professionals

EVALUATION QUESTIONS

1. To what degree are the new and improved courses aligned with renewable energy industry needs?
2. How successful are the project’s marketing activities in reaching the intended audience?
3. To what extent do students utilize the career pathways established by the project?
4. To what extent do students gain the competencies needed by energy industry employers?
5. To what extent is the project increasing the supply of qualified technicians to local renewable energy employers?
Evaluation Questions Checklist for Program Evaluation

RESOURCE 6

EVALUATION QUESTIONS CHECKLIST for Program Evaluation

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Evaluation Question Development Demonstrations

RESOURCE 7

Small-Scale Evaluation

February 15, 2017
1-2 p.m. EST

bit.ly/aug17-web
Project Description

Evaluation Plan

Evaluator
Evaluation questions or objectives

Data collection
Data analysis and interpretation
Evaluation deliverables and uses
Evaluation timeline

For each evaluation question, specify:
WHAT will be measured
(indicators)

HOW data will be collected
(methods)
**WHO** will provide the data (sources)

**WHEN** data will be collected (timing)
Data Collection Plan Excerpt: Example 1

Program faculty will administer a survey of dual-enrolled students at the end of each semester to learn about their intent to pursue wind energy technology degrees. The primarily quantitative survey data will be augmented by qualitative data about factors that influence students' education choices obtained through focus groups with dual-enrolled students at the end of each spring semester.

What     How    Who     When

Program faculty will administer a survey of dual-enrolled students at the end of each semester to learn about their intent to pursue wind energy technology degrees. The primarily quantitative survey data will be augmented by qualitative data about factors that influence students' education choices obtained through focus groups with dual-enrolled students at the end of each spring semester.
What will data be collected?

Program faculty will administer a survey of dual-enrolled students at the end of each semester to learn about their intent to pursue wind energy technology degrees. The primarily quantitative survey data will be augmented by qualitative data about factors that influence students’ education choices obtained through focus groups with dual-enrolled students at the end of each spring semester.

How will provide the data?

Program faculty will administer a survey of dual-enrolled students at the end of each semester to learn about their intent to pursue wind energy technology degrees. The primarily quantitative survey data will be augmented by qualitative data about factors that influence students’ education choices obtained through focus groups with dual-enrolled students at the end of each spring semester.
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**Project Description**

**Evaluation Plan**

- Evaluator
- Evaluation questions or objectives
- Data collection
- Data analysis and interpretation
- Evaluation deliverables and uses
- Evaluation timeline
**Analysis**

Transform raw data into usable information

**Interpretation**

Use findings to answer the evaluation questions

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**Data Collection Planning Matrix**

**Evaluation Question**: To what extent are students using education pathways established by the project?

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Data Source and Methods</th>
<th>Timing</th>
<th>Analysis</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of dual-enrolled high school students who intend to pursue wind technology degrees or certificates</td>
<td>Paper-and-pencil survey of dual-enrolled students</td>
<td>End of each semester</td>
<td>Descriptive statistics, disaggregated by demographic characteristics</td>
<td>Comparison with project target of 60 percent or more, with one-third or more from groups that have been underrepresented in STEM</td>
</tr>
<tr>
<td>Students’ perceptions of what affects their education or career interests</td>
<td>Focus group with students</td>
<td>End of each spring semester</td>
<td>Thematic coding to determine factors that increase or suppress interest in wind technology</td>
<td>Identify which, if any, factors can be influenced by the program</td>
</tr>
<tr>
<td>Percentage of students who began as dual-enrolled who graduate with wind technology degrees or certificates</td>
<td>Query of institutional database</td>
<td>End of each semester after first cohort is eligible to receive degree or certificate</td>
<td>Descriptive statistics, disaggregated by demographic characteristics</td>
<td>Comparison with project target of 40 percent or more, with one-third or more from groups that have been underrepresented in STEM</td>
</tr>
</tbody>
</table>
Data Collection Planning Matrix

Project Description

Evaluation Plan

Evaluator
Evaluation questions or objectives
Data collection
Data analysis and interpretation
Evaluation deliverables and uses
Evaluation timeline

 evalu-ate.org
Evaluation Deliverables and Uses

- Types of reports or other products that will be created
- How will the results will be used

Project Description

Evaluation Plan

- Evaluator
- Evaluation questions or objectives
- Data collection
- Data analysis and interpretation
- Evaluation deliverables and uses
- Evaluation timeline
Evaluation Timeline

Show how evaluation will produce timely information and be integrated into the overall project

ATE-Specific Review Criteria Related to Evaluation:

“Is the evaluation plan clearly tied to the project outcomes?

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

Will the project evaluation inform others through the communication of results?”
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RESOURCES

Evaluation Plan Template

Evaluation Plan

1. Identify the purpose and scope of the evaluation.
2. Define the evaluation questions and hypotheses.
3. Determine the evaluation method(s).
4. Select the data collection tools and procedures.
5. Develop the data analysis plan.
6. Develop the evaluation report plan.

Evaluation Plan Template

bit.ly/aug17-web

PART 3

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Proposal Components

☑ Cover Sheet
☑ Project Summary
☑ Project Description

☑ References Cited

☐ Biographical Sketches
☐ Budget & Budget Justification
☐ Current & Pending Support
☐ Facilities, Equipment & Other Resources
☑ Supplementary Documents

References Cited

Include references to pertinent and current evaluation literature in your evaluation plan section

References


Proposal Components

- Cover Sheet
- Project Summary
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Budget & Budget Justification

The funds to support an evaluator independent of the project or center must be requested. The requested funds must match the scope of the proposed evaluative activities.
Budgeting for Evaluation

10% rule of thumb

Budgeting for Evaluation

7% reality
## Project Budget

<table>
<thead>
<tr>
<th>Category</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries &amp; Fringe Benefits</td>
<td>$350,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>$12,000</td>
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<tr>
<td>Materials</td>
<td>$20,000</td>
</tr>
<tr>
<td>Travel</td>
<td>$7,200</td>
</tr>
<tr>
<td>Other – Evaluation Consultant</td>
<td>$38,920</td>
</tr>
<tr>
<td><strong>Modified Total Direct Costs</strong></td>
<td>$428,120</td>
</tr>
<tr>
<td><strong>Indirect Costs (30%)</strong></td>
<td>$128,436</td>
</tr>
<tr>
<td><strong>TOTAL PROJECT COST</strong></td>
<td>$556,556</td>
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Total direct costs before external evaluation = $389,200

10% of direct costs = $38,920

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| **Other – Evaluation Consultant** | $38,920  | 10% of direct costs
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Direct + Indirect =

Budget Justification

Evaluator’s daily rate  
Time committed to project  
Major deliverables

- **DO NOT** give just a lump sum
- **DO** show individual pay rates
# Proposal Components

-☑️ Cover Sheet
-☑️ Project Summary
-☑️ Project Description
-☑️ References Cited
-☐ Biographical Sketches
-☑️ Budget & Budget Justification
-☐ Current & Pending Support
-☐ Facilities, Equipment & Other Resources
-☑️ Supplementary Documents

## Supplementary Documents

- List of **individuals who will be compensated** by the grant (including evaluator)
- Evaluator’s **commitment letter**
- Evaluator’s **biosketch**
Evaluator Biographical Sketch Template for NSF Proposals

Evaluator Name:

Professional Information:
- Education:
  - Degree:
  - Institution:
  - Location:

Professional Experience:
- Experience:
  - Location:
  - Title:
  - Years:

Supplementary Documents:
- List of individuals who will be compensated by the grant (including evaluator)
- Evaluator’s commitment letter
- Evaluator’s biosketch
- Data Management Plan
Supplementary Documents

Data Management Plans must describe:
1. Types of data
2. Data format and content standards
3. Access and sharing policies
4. Privacy, confidentiality provisions
5. Reuse and redistribution policies
6. Archiving and data preservation plans

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NEXT STEPS!

1. Read the ATE program solicitation
2. Find an evaluator to work with, if allowed by your institution
3. Review resources recommended in this webinar

GOOD LUCK!

THANK YOU!