







Webinars



Resource Library



Blog



ATE Survey Data

www.evaluate-ate.org

MATERIALS



Slides



Evaluation Planning Checklist and Other Resources



Recording

bit.ly/aug17-web

INTRODUCTIONS



Mike
Lesiecki



Lori
Wingate



BEHIND THE SCENES



Emma
Perk



Sharon
Gusky



Janet
Pinhorn



Shannon
Payne

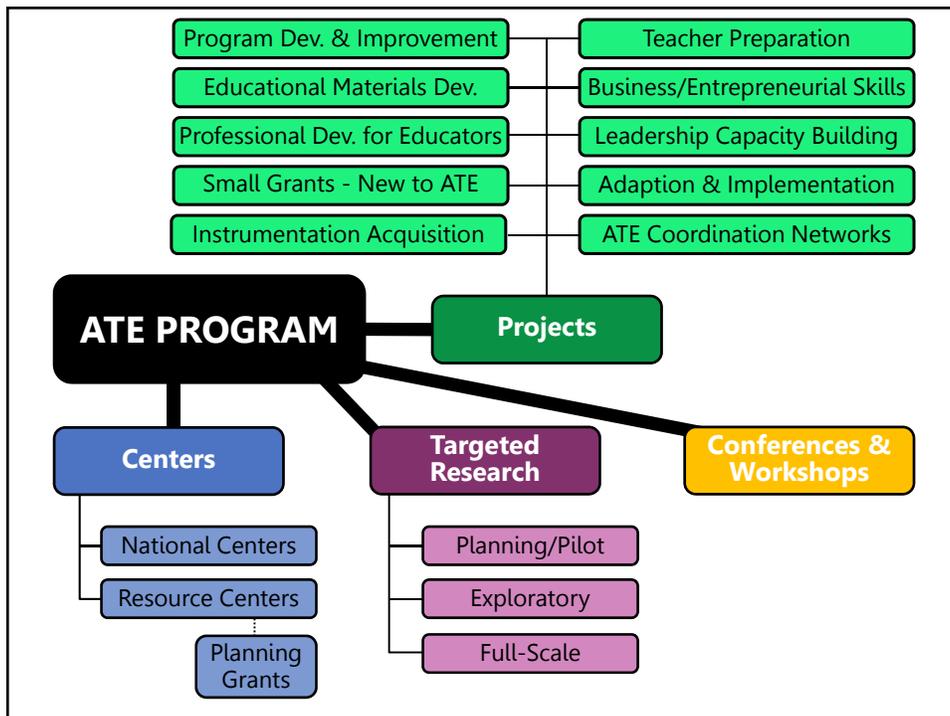




This material is based upon work supported by the National Science Foundation under grant number 1600992.

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.



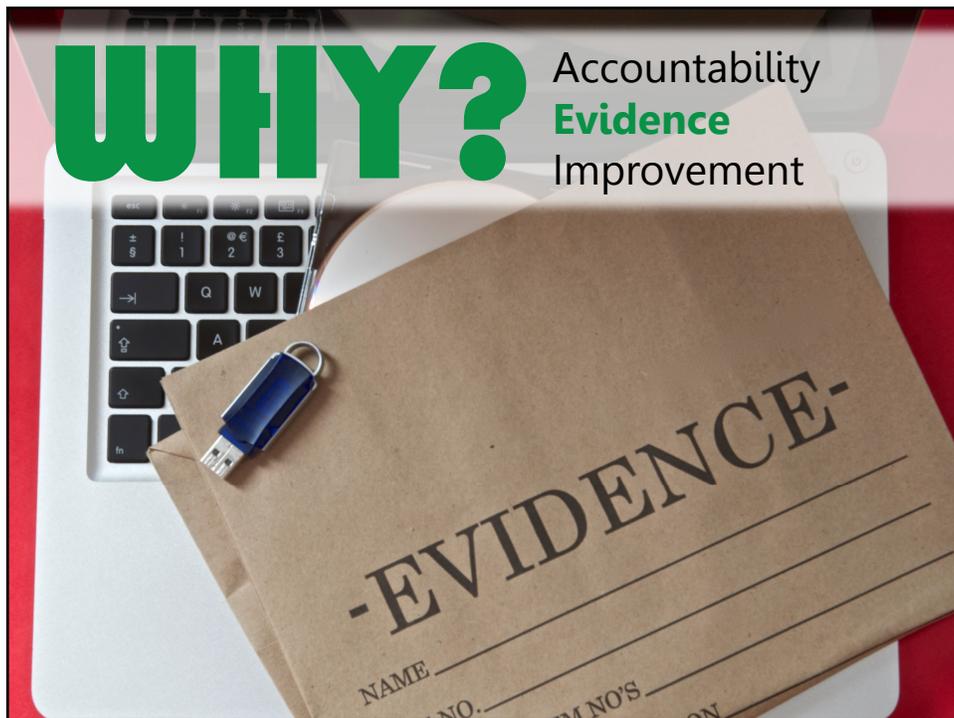


EVALUATION

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





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



- 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

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RESOURCE

1

Evaluation Planning Checklist for ATE Proposals



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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



Evaluation-related information is needed in these sections

Proposal Components

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

Cover Sheet

Human Subjects (OPG I.L.D.6)

Exemption Subsection

IRB App. Date (MM/DD/YY)

Human Subjects Assurance Number

Indicate "pending" if application not yet submitted

You WILL need approval before grant is awarded

Proposal Components

- Cover Sheet
- Project Summary
- Project Description
- References Cited
- Biographical Sketches
- Budget & Budget Justification
- Current & Pending Support
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- Supplementary Documents

Project Summary

PROJECT SUMMARY: EvaluATE

Overview. This proposal seeks funding to continue EvaluATE, the resource center dedicated to supporting and improving the evaluation practices of approximately 240 ATE grantees across the country. EvaluATE conducts webinars and workshops, publishes a quarterly newsletter, maintains a website with a digital resource library, develops materials to guide evaluation work, and conducts the annual survey of ATE grantees. EvaluATE's mission is to promote the goals of the ATE program by partnering with projects and centers to strengthen the program's evaluation knowledge base, expand the use of exemplary evaluation practices, and support the continuous improvement of technician education throughout the nation. EvaluATE's goals associated with this proposal are to (1) Ensure that all ATE PIs and evaluators know the essential elements of a credible and useful evaluation; (2) Maintain a comprehensive collection of online resources for ATE evaluation; (3) Strengthen and expand the network of ATE evaluator stakeholders; and (4) Gather, synthesize, and disseminate data about the ATE program activities to advance knowledge about ATE/technician education.

Intellectual Merit. EvaluATE is housed within the Evaluation Center at Western Michigan University. The Evaluation Center has been a leader in the evaluation field since 1985. What we learn and discover from all aspects of our evaluation work—from small contracts with local clients through large research and development grants—we apply to our mission-focused work to advance the theory, practice, and utilization of evaluation. EvaluATE's products are informed by current research on evaluation, the National Science Foundation's priorities for the evaluation of ATE grants, and the needs of ATE PIs and evaluators for sound guidance that is immediately relevant and usable in their contexts. With active involvement by an array of ATE colleagues, EvaluATE has made significant progress in developing a culture of evaluation within the program. The fundamental nature of EvaluATE's work is that of *evaluation capacity building*, which is "work to continuously create and sustain overall organizational processes that make quality evaluation and its use routine" (Glockhill, Baizerman, & Compton, 2002). As such, it is geared toward supporting ATE grantees to use evaluation regularly to improve their work and demonstrate their impacts. Our goals are keyed to our overall mission, and our activities are focused and measurable.

Broader Impacts. The work outlined in this proposal is based on needs identified in the annual survey of ATE grantees in 2008 when EvaluATE was established. All of EvaluATE's products are available to the public, and there is evidence that our impacts extend beyond the ATE program. EvaluATE's findings from the annual survey of ATE grantees aid in advancing understanding of the status of technician education and illuminate areas for additional research. We are gathering data and reporting on findings related to ATE grantees' efforts to recruit and retain women (2011) and individuals from under-represented groups (2012) in order to draw more attention to the importance of broadening participation within the ATE program. Given the new attention to veterans in the current program solicitation, the 2013 survey will investigate ATE grantees' work to serve students with veteran status. Survey data are available upon request for research and evaluation purposes. As reflected in proposal, as many as 75 ATE PIs and evaluators will contribute directly to EvaluATE's work under the auspices of the new grant. Involvement by a broad spectrum of ATE stakeholders in increases the relevance and utility of our work to ATE stakeholders and others. A small cadre of community college-based ATE PIs will join the EvaluATE team, facilitating the development, review, and pilot




Proposal Components

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

Proposal 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

Results from Prior NSF Support

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

Intellectual Merit

Broader Impacts

RESOURCE
2

NSF Prior Support Checklist

EvaluATE RESULTS FROM PRIOR NSF SUPPORT CHECKLIST
www.evaluate-ate.org

If a PI or co-PI for an NSF proposal has received NSF funding in the past five years, information on the results of that funding must be included in the proposal, whether it relates to the current proposal or not. This section of the proposal is called *Results from Prior NSF Support*; details about what should be included are provided in the NSF Grant Proposal Guide (see <http://oi.nsf.gov/edu/ate/>). The following is a synopsis of NSF's requirements and EvaluATE's suggestions for this section of an ATE proposal.

REQUIREMENTS

- Limit to 5 pages or less
- Make it the first section of your proposal. If the proposal is for the renewal of an ATE center, it may be uploaded as a supplementary document rather than presented in the 15-page project description.
- Describe research and development products and how they have been made available to others
- Clearly indicate the prior project's
 - Title
 - NSF award number
 - Period of support
- Present results using these exact, distinct headings:
 - Intellectual Merit
 - Broader Impacts
- Provide complete bibliographic citations for all publications developed with NSF support, either in the narrative or in the separate references document. If there were no publications, state "No publications were produced under this award."

SUGGESTIONS

- Provide a brief factual account of what the project did, created, and who was engaged. A list of activities or deliverables is not sufficient evidence of intellectual merit or broader impacts, but it is important for reviewers to understand the nature and scope of your prior work.
- Present as much hard evidence as possible to describe the project's intellectual merit and broader impacts.
- Be forthright about what didn't work and lessons learned.
- Describe how the current proposal is building on the prior project's results.
- Describe what aspects of previously funded work are being sustained without NSF support.

www.evaluate-ate.org

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Logic Models

The slide displays several logic model diagrams. On the left, a flowchart shows the progression from **INPUTS** (User training, Industry advisory board, Simulation software, Videography internship program, Outreach to students with undisclosed majors) through **ACTIVITIES** (Develop course curriculum, Review materials, Produce video, Make presentations to faculty, admissions, and admissions committee, Outreach to students with undisclosed majors) to **OUTPUTS** (Course materials, Promotional video, Student interest in pursuing STEM degree industries) and finally to **SHORT TERM OUTCOMES** (Students enroll in course, Student interest in pursuing STEM degree industries) and **MID TERM OUTCOMES** (Development of engineering programs, Number of graduates from engineering programs increases). On the right, a more complex logic model includes **Inputs**, **Activities**, **Outputs**, **Short Term Outcomes**, **Mid Term Outcomes**, and **Long Term Outcomes**, with detailed descriptions for each stage. Below the main title, there are two smaller logic model diagrams. The first one on the left is a detailed flowchart with multiple boxes for each stage. The second one on the right is a table-like structure with columns for **Activities**, **Outputs**, **Short Term Outcomes**, **Mid Term Outcomes**, and **Long Term Outcomes**, containing specific program details.

- ✓ 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

RESOURCE
3

Logic Model Template for ATE Projects

EvaluATE Logic Model Template for ATE Projects & Centers
Lori A. Wingate | March 2016

This resource is based upon work supported by the National Science Foundation under grant number 1204889. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of NSF.

A logic model is a visual depiction of what a project does and what changes it is expected to bring about. Developing a logic model is an important first step for project design and evaluation planning. This document is intended to provide general guidance to ATE program proposers and centers for developing their own project logic models. All parts of this document are editable. Replicate the boxes in each column (adding and deleting boxes as necessary) with succinct statements that relate to the question prompts. To add text to a box, click the box and begin typing. Either delete the entire content (title, instructions, examples, etc.) from this document or copy and paste the logic model elements into a new document for your use. To learn more about logic models, see the University of Wisconsin-Stevens Point's Logic Model Resource at [www.uwsp.edu/centerforinnovationandentrepreneurship/](http://www.uwsp.edu/centerforinnovationandentrepreneurship/innovationandentrepreneurship/)

What new and existing resources will be used to support this project?	What are the main things the project will do?	What products will be created? (Digitally, things that can be directly incorporated into an organization's activities after the project ends)	What will occur as a direct result of the anticipated output? (Digitally, things to exchange in a network, in a lab, in a classroom, in a practice, in a service, in a policy, in a practice)	What results should follow from the initial outcome? (Digitally, things that change in a practice, in a service, in a policy, in a practice)	What results should follow from the initial outcome? (Digitally, things that change in a practice, in a service, in a policy, in a practice)
Inputs	Activities	Outputs	Short-Term Outcomes	Mid-Term Outcomes	Long-Term Outcomes

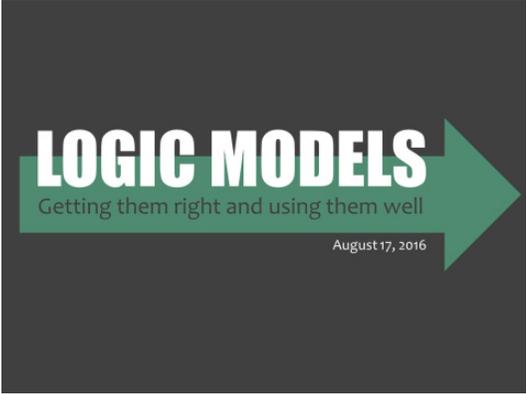
Below are examples of the types of information that might appear under each header of the logic model. When developing a project logic model, be as specific as possible in articulating the components of the model. For example, a project-specific short-term outcome might be phrased as "Increase the number of students who are employed in high-tech occupations."

<ul style="list-style-type: none"> • NSF Funding • Faculty • Advisory panels • Industry partners • In-kind contributions 	<ul style="list-style-type: none"> • Establish regional partnerships • Develop curriculum • Conduct workforce research • Establish articulation agreements 	<ul style="list-style-type: none"> • Curriculum • Facilities needed • Full-time equivalent positions • New certifications • Topic resources 	<ul style="list-style-type: none"> • Faculty intent to use technology • Faculty improve instruction • Technical skills • Student success • Technical careers increase 	<ul style="list-style-type: none"> • Student enroll in their programs • Faculty improve instruction • College-level and program-level developed curriculum 	<ul style="list-style-type: none"> • Increase regional student enrollment • Increase diversity in the workforce • Increase high skill and advanced workforce
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www.evalu-ate.org | (248) 387-5923 | Western Michigan University

bit.ly/aug17-web

RESOURCE 4 Logic Models: Getting them Right and Using them Well [webinar]



recording, slides, and handout

bit.ly/aug17-web

Proposal Components

- Cover Sheet
- Project Summary
- Project Description **15 pages**

Results from Prior NSF Support

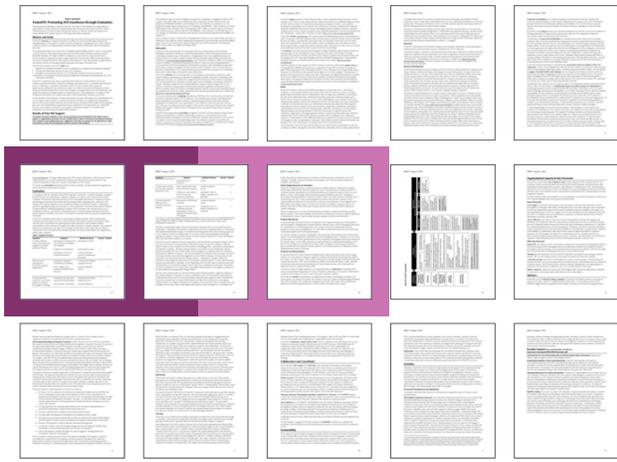
- Rationale
- Goals, Objectives, Deliverables, Activities
- Timetable
- Management Plan
- Roles & Responsibilities of Senior Personnel
- Plan for Sustainability

Evaluation Plan

- Dissemination Plan

✓ Project Description

Evaluation Plan

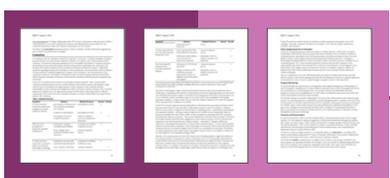


Evaluation plan should be 1-3 pages

Aim for 1½ pages

✓ Project Description

Evaluation Plan



Evaluator

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

“ The funds to support an evaluator **independent** of the project or center must be requested...



RESOURCE 5

Finding and Selecting an Evaluator for ATE Proposals

EvaluATE Finding and Selecting an Evaluator for Advanced Technological Education (ATE) Proposals
Lisa S. Wagoner | July 2017 | www.ate-on.org

ATE PROPOSERS SHOULD CAREFULLY READ THE ATE PROGRAM SOLICITATION: [see below!](#)

All ATE proposals are required to include “a plan to support an evaluator independent of the project.” Ideally, this external evaluator should be identified in the project proposal. The information in this guide is for individuals who are able to select and work with an external evaluator at the proposal stage. However, some institutions prefer selecting an evaluator on a nonprospective basis in advance of an award being made. Advice for individuals in that situation is provided in an EvaluATE blog ([see here](#)) and newsletter article ([see here](#)).

This guide includes advice on how to locate and select an external evaluator. It is not intended as a guide for establishing an evaluator plan or contracting with an evaluator.

An external evaluator is the person who will lead the design and implementation of the evaluation of your ATE project. The evaluation will include systematic collection and analysis of evidence related to the quality, effectiveness, and impact of the project. To be external, the evaluator must be independent of the project (see Question 3).

- 1. What is an external evaluator?**

An external evaluator is the person who will lead the design and implementation of the evaluation of your ATE project. The evaluation will include systematic collection and analysis of evidence related to the quality, effectiveness, and impact of the project. To be external, the evaluator must be independent of the project (see Question 3).
- 2. When should I start working with an evaluator?**

Proposal developers should contact an evaluator at least one month in advance of the proposal's due date—sooner if possible. A good evaluator plan should be closely aligned with the project's goals and activities. To achieve good alignment, the evaluator needs time to review a draft of the proposal, ask questions, and develop a sound evaluation plan. With short notice, some evaluators may offer to provide a generic evaluation plan. However, seasoned proposal reviewers will give your proposal a more favorable review if it has a well-integrated, tailored evaluator plan.
- 3. Where should I look for an evaluator?**

There is no list of vetted or approved evaluators for NSF projects. It is up to the proposal developer (which is usually the principal investigator) to locate an evaluator and determine if they are qualified and right for a project.

Here are three sources for locating a potential evaluator:

 - Ask colleagues for recommendations: if you know someone with a grant that has an evaluation component, ask for the evaluator's name and contact information.
 - Use the American Evaluator Association's evaluator directory ([see here](#)). It's searchable by state and keyword.
 - Use ATE Central's evaluator map ([see here](#)). This interactive map can be used to identify evaluators by location and the types of ATE projects they evaluate.

Most ATE projects employ evaluators based outside of their home institutions. However, program rules do allow grant recipients to contract with an evaluator who is employed by the project's home institution, as long as the evaluator is independent of the project. That is, the evaluator should not work in the same unit

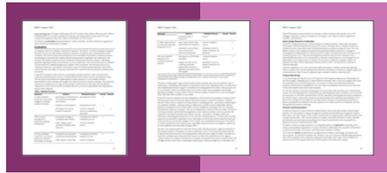
This material is based upon work supported by the National Science Foundation under Grant No. 1609903. Any opinions, findings, and conclusions or recommendations expressed here are the author(s) and do not necessarily reflect the views of the National Science Foundation.



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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

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?

Process

Outcome

RESOURCE
6

Evaluation Questions Checklist for Program Evaluation

EVALUATION QUESTIONS CHECKLIST for Program Evaluation
 Lori Wingate, The Evaluation Center | Daniela Schreiber, School of Public Affairs and Administration
 Western Michigan University | 2010

Evaluation questions identify what aspects of a program will be investigated. They focus on the merit, worth, or significance of a program or particular aspects of a program. Unlike survey questions, they are *not* intended to derive single data points. Evaluation questions help to define the boundaries of an evaluation that are consistent with evaluation users' information needs, opportunities and constraints related to data collection, and available resources.

The purpose of this checklist is to aid in developing effective and appropriate evaluation questions and in assessing the quality of existing questions. It identifies characteristics of good evaluation questions, based on the relevant literature and our own experience with evaluation design, implementation, and use.

Evaluation questions SHOULD be...	Evaluation questions SHOULD NOT be...
<p>EVALUATIVE Evaluative questions call for an appraisal of a program or aspects of it based on the factual and descriptive information gathered about it. Questions should be framed so they will yield answers that:</p> <ul style="list-style-type: none"> provide determinations of merit, worth, or significance, or enable evaluation users to readily reach such determinations on their own. directly inform decisions about the program (e.g., how to improve or modify it, whether to continue, discontinue, expand, or reconfigure it). 	<p>NON-EVALUATIVE Non-evaluative questions call only for factual information or discrete data points that do not readily translate into determinations of program merit, worth, or significance. Answers to these types of questions have limited potential to influence decisions, because they do not provide a frame of reference in relation to merit, worth, or significance.</p>
<p>PERTINENT Pertinent questions are clearly related to the program's substance and evaluation users' information needs. Questions should be directly relevant to:</p> <ul style="list-style-type: none"> the program's design, purpose, activities, or outcomes. the purpose of the evaluation. what evaluation users need to find out from the evaluation. 	<p>PERIPHERAL Peripheral questions are about minor, irrelevant, or superficial aspects of the program or stakeholder interests.</p>
<p>REASONABLE Reasonable questions are linked to what a program can practically and realistically achieve or influence. Questions should be suitable with regard to the program's scope (reasonable limits of what or whom the program can influence):</p> <ul style="list-style-type: none"> maturity (the program's stage of development, such as whether it is just starting, fully developed and implemented, or preparing for closure). resources (monetary and nonmonetary resources needed to implement and produce outcomes). 	<p>UNREASONABLE Unreasonable questions are about things the program cannot realistically influence given its resources and the nature of the intervention.</p>

www.wmich.edu/evaluation/checklists

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RESOURCE
7

Evaluation Question Development Demonstrations



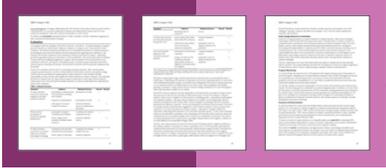
SMALL-SCALE EVALUATION

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

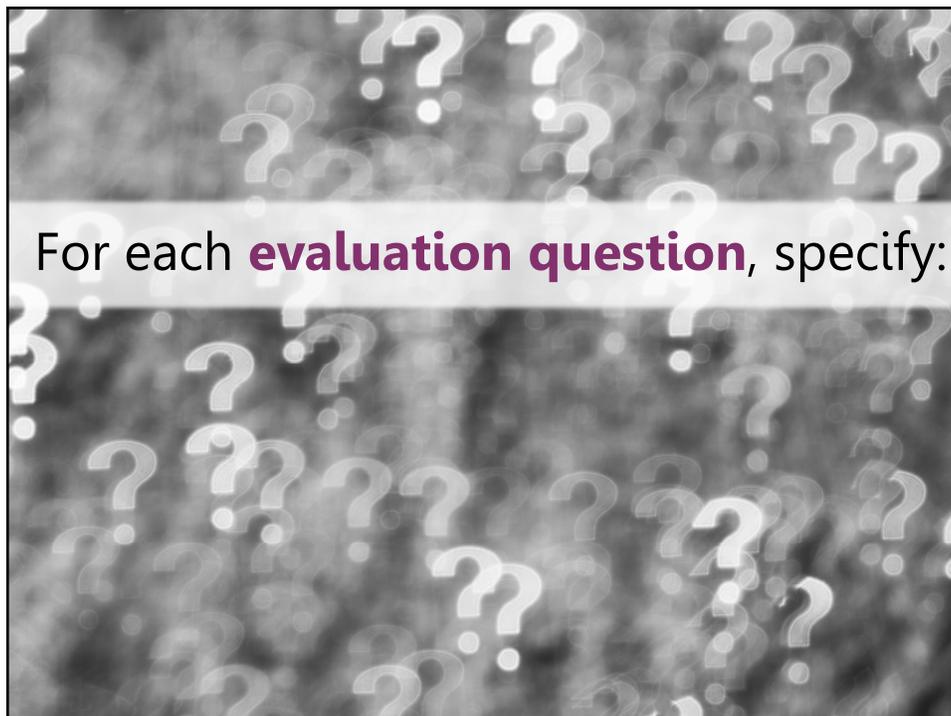
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✓ Project Description

Evaluation Plan



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



For each **evaluation question**, specify:





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.

READ

What How Who When
will be measured?

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.

WRITE IN CHAT BOX

What **How** Who When
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.

WRITE IN CHAT BOX

What How **Who** When
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.

WRITE IN CHAT BOX

What **How** **Who** **When**
will the data be obtained?

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.**

WRITE IN CHAT BOX

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

Data Collection Planning Matrix

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

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

RESOURCE

8

Data Collection Planning Matrix

EvaluATE Data Collection Planning Matrix
Lori Wiegler | July 2017

DEFINITIONS

Evaluation Questions are overarching questions about a project's quality or impact. The number of evaluation questions depends on the scope and purpose of the evaluation; three to seven questions is typical. Questions should clearly align with project goals and activities, address both outcomes and implementation.

Indicators are specific pieces of information about an aspect of a project—basically, what will be measured in order to answer the evaluation questions. It is useful to use multiple indicators, using both qualitative and quantitative data, to address an evaluation question.

Data Sources are the entities from which data will be collected. Typical data sources for ATE evaluations include project personnel, students, graduates, faculty, project partners, business and industry representatives, institutional records, website usage statistics, and teaching and learning artifacts.

Data Collection Methods are the means by which information will be gathered from each data source. Typical methods include surveys, focus groups, interviews, observations, and institutional database queries.

Responsible Parties are the individuals or organizations tasked with collecting the needed information. In many cases, data collection requires cooperation among multiple entities. For example, an external evaluator may be responsible for administering a survey, but a member of the project staff may need to supply the contact information.

Timing identifies when and how frequently data will be collected (e.g., at events, quarterly, annually). Data collection should be scheduled so that the information will be obtained when it is needed for reporting purposes.

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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

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?



RESOURCE

9

Evaluation Plan Template

Evaluate ATE Proposal Evaluation Plan Template

July 2017

This template is for use in preparing the evaluation plan sections for proposals to the National Science Foundation's Advanced Technological Education (ATE) program. It is based on the ATE Evaluation Planning Checklist (see <https://www.evaluate-ate.org/ate-evaluation-planning-checklist>), also developed by Evaluate ATE. It is aligned with the evaluation guidance included in the [2017 ATE Program Solicitation](#). All proposers should read the solicitation in full.

How to use this template: Replace the descriptions of what should go in each section below with relevant details about your proposed project's evaluation. Copy the text into your Project Description. The evaluation plan should comprise one to two pages of your proposal's 15 page Project Description.

This material is based upon work supported by the National Science Foundation under Grant No. 1600901. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

Evaluation Plan

Identify by name the person(s) who will lead the external evaluation of the project. Briefly describe their academic training and professional experience that qualifies them to serve as an external evaluator. Refer to the evaluator's bio/sketch and commitment letter and include those documents with the proposal's Supplementary Documents.

Evaluation Questions. Identify the focus of the evaluation by listing the evaluation questions. The questions should align with the project's purpose and address both implementation and outcomes. Examples of outcomes of interest to the ATE program include, but are not limited to, changes related to student learning, persistence, retention, graduation, and employment; faculty knowledge and pedagogical skills; increasing participation in STEM; meeting workforce needs; enhancing institutional capacity; and advancing knowledge about technician education. If the project has a logic model, refer to it and make sure the evaluation questions align with the logic model components.

Data Collection and Analysis. For each evaluation question, identify what will be measured, how the data will be collected and from what sources, and when. If specific published instruments will be used for data collection, describe and cite them (and include in References/End section of proposal). Describe how data will be analyzed so that the evaluation questions can be answered. Placing this information in a table helps show linkages between the evaluation questions and the data, such as shown below (see Evaluate ATE's [Data Collection Planning Matrix](#) for additional details).

Evaluation Question (State evaluation question, add rows as needed for additional evaluation questions and related indicators)	Data Source & Collection Method	Timing	Analysis	Interpretation
[what will be measured - ideally there will be more than one indicator per evaluation question]	[where the data will come from and how it will be obtained]	[when the data will be collected]	[how the qualitative and quantitative data will be transformed and summarized into usable information]	[procedures for using findings to answer the evaluation questions and reach evaluative conclusions]

Reporting and Use. Identify the deliverables that will be produced by the evaluation after the project is funded, such as a detailed evaluation plan, data collection instruments, and reports. Identify when reports will be provided to the project and how the results will be used to inform project improvement.

(Also include evaluation activities in the project's Timetable elsewhere in the Project Description. Include pertinent details about staff responsibilities related to evaluation in the Management Plan section.)

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PART 3

Lori

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

Bartlett, K. R., Schleif, N., & Bowen, M. M. (in press). The use of workforce assessment in career and technical education program evaluation. *Career and Technical Education*.

Frechting, J. (2010). *The 2010 user-friendly guide for project evaluation*. Retrieved September 14, 2011 from www.westat.com/Westat/pdf/projects/2010UFHB.pdf

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Gullickson, A. R., & Hanssen, C. E. (2006). Local evaluation in multisite STEM program evaluation use and program results. In D. Huffman & F. P. Lawrenz (Eds.), *Evaluation of science, technology, engineering and mathematics: New Directions in Evaluation* (Vol. 118, pp. 1-10). San Francisco: Jossey-Bass.

Gullickson, A. R., Coryn, C. L. S., & Ritchie, L. A. (2006). *Program evaluation* [Advanced Education Program Evaluation Briefing Paper Series, Briefing Paper #1]. Kalamazoo, MI: Michigan University, The Evaluation Center. Retrieved September 8, 2011 from http://www.ate.org/app/webroot/files/uploads/ATE_Eval_Briefing_Paper.pdf

Guskey, T. (1999). *Evaluating professional development*. Thousand Oaks, CA: Sage.

Hales, B., Terblanche, M., Fowler, R., & Sibbald, W. (2008). Development of medical education to improve quality of patient care. *International Journal for Quality in Health Care*, 30(1), 1-10.

Kirkpatrick, D. L., & Kirkpatrick, J. D. (2006). *Evaluating training programs: The new gold standard*. San Francisco: Berrett-Koehler.

Parsons, B., & Jessup, P. (2011). *EvaluATE needs assessment phase 2 internal report*. Available upon request via www.evaluate-ate.org.

Phillips, P. P., & Phillips, J. J. (2007). *The value of learning: How organizations capture and use knowledge*. San Francisco: Jossey-Bass.

Proposal Components

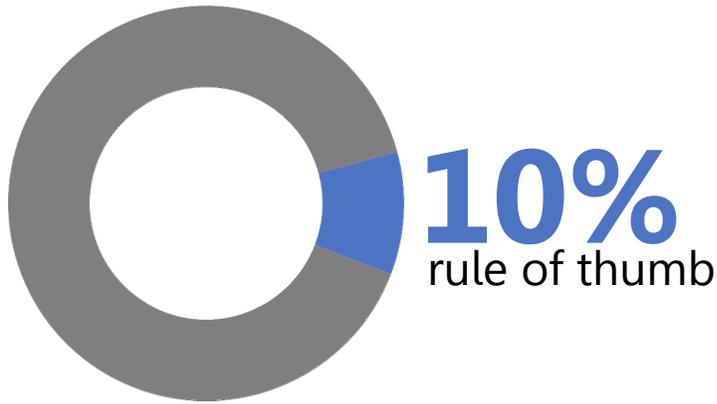
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Budget & Budget Justification

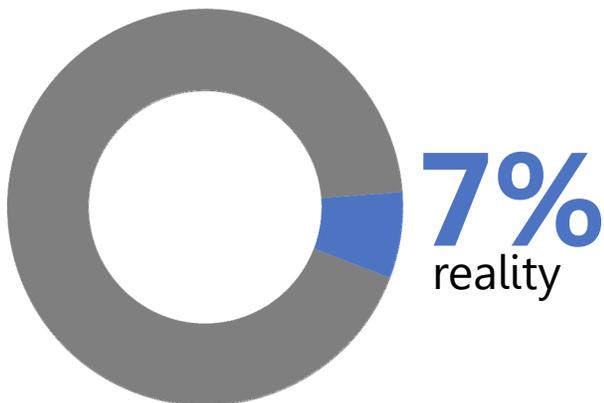
“ The **funds** to support an evaluator independent of the project or center must be requested. The requested funds **must match the scope** of the proposed evaluative activities.



Budgeting for Evaluation



Budgeting for Evaluation



Project Budget

Category	Cost
Salaries & Fringe Benefits	\$350,000
Equipment	\$12,000
Materials	\$20,000
Travel	\$7,200
Other – Evaluation Consultant	\$38,920
Modified Total Direct Costs	\$428,120
Indirect Costs (30%)	\$128,436
TOTAL PROJECT COST	\$556,556

Total direct costs before external evaluation = \$389,200

Project Budget

Category	Cost
Salaries & Fringe Benefits	\$350,000
Equipment	\$12,000
Materials	\$20,000
Travel	\$7,200
Other – Evaluation Consultant	\$38,920
Modified Total Direct Costs	\$428,120
Indirect Costs (30%)	\$128,436
TOTAL PROJECT COST	\$556,556

10% of direct costs

Project Budget

Category	Cost	
Salaries & Fringe Benefits	\$350,000	
Equipment	\$12,000	
Materials	\$20,000	
Travel	\$7,200	
Other – Evaluation Consultant	\$38,920	
Modified Total Direct Costs	\$428,120	Total before indirect
Indirect Costs (30%)	\$128,436	
TOTAL PROJECT COST	\$556,556	

Project Budget

Category	Cost	
Salaries & Fringe Benefits	\$350,000	
Equipment	\$12,000	
Materials	\$20,000	
Travel	\$7,200	
Other – Evaluation Consultant	\$38,920	
Modified Total Direct Costs	\$428,120	
Indirect Costs (30%)	\$128,436	Indirect costs
TOTAL PROJECT COST	\$556,556	

Project Budget

Category	Cost	
Salaries & Fringe Benefits	\$350,000	
Equipment	\$12,000	
Materials	\$20,000	
Travel	\$7,200	
Other – Evaluation Consultant	\$38,920	
Modified Total Direct Costs	\$428,120	Direct +
Indirect Costs (30%)	\$128,436	Indirect=
TOTAL PROJECT COST	\$556,556	Grand total

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

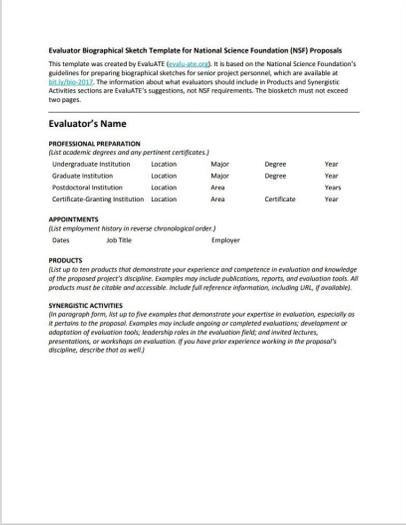
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Supplementary Documents

- List of **individuals who will be compensated** by the grant (including evaluator)
- Evaluator's **commitment letter**
- Evaluator's **biosketch**

RESOURCE
10

Evaluator Biographical Sketch Template for NSF Proposals



Evaluator Biographical Sketch Template for National Science Foundation (NSF) Proposals
This template was created by EvalAATE (evalu-ate.org). It is based on the National Science Foundation's guidelines for preparing biographical sketches for senior project personnel, which are available at: <https://www.nsf.gov/pubs/2012/nsf12001-3112/>. The information about what evaluators should include in Products and Synergistic Activities sections are EvalAATE's suggestions, not NSF requirements. The biosketch must not exceed two pages.

Evaluator's Name

PROFESSIONAL PREPARATION
(List academic degrees and any pertinent certificates.)

Undergraduate Institution	Location	Major	Degree	Year
Graduate Institution	Location	Major	Degree	Year
Postdoctoral Institution	Location	Area	Area	Years
Certificate-granting Institution	Location	Area	Certificate	Year

APPOINTMENTS
(List employment history in reverse chronological order.)

Dates	Job Title	Employer

PRODUCTS
(List up to ten products that demonstrate your experience and competence in evaluation and knowledge of the program/proposal's discipline. Examples may include publications, reports, and evaluation tools. All products must be citable and accessible. Include full reference information, including URL, if available.)

SYNERGISTIC ACTIVITIES
(In paragraph form, list up to five examples that demonstrate your expertise in evaluation, especially as it pertains to the proposal. Examples may include ongoing or completed evaluations, development or adaptation of evaluation tools, leadership roles in the evaluation field, and invited lectures, presentations, or workshops on evaluation. If you have prior experience working in the proposal's discipline, describe that as well.)

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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



Proposal Components

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evaluATE Evaluation Planning Checklist for ATE Proposals
 Lori A. Weigart | July 2017

This checklist is intended to be of assistance to grant writers, project leaders, and evaluators as they develop evaluation plans for proposals to the National Science Foundation's Advanced Technological Education (ATE) program. It is organized around the components of an RFP proposal (see the [2017 Grant Catalog Guide](#)), with an emphasis on the evaluation elements that are needed in several locations throughout a grant proposal. This document is not intended to serve as a comprehensive checklist for preparing an RFP proposal. Rather, it includes guidance for aspects of a proposal that pertain to evaluation. All proposers should carefully read the [2017 Grant Catalog Guide](#).

PROJECT SUMMARY
 Your one-page project summary may be entered into text boxes in FastLane or you may upload the complete document.

What you need to do	What you need to know
<ul style="list-style-type: none"> 1. Prepare a one-page project summary that includes the following three sections: <ul style="list-style-type: none"> - Overview - Intellectual Merit - Broader Impacts 	In addition to the general RFP merit review criteria of intellectual merit and broader impacts, there are some ATE-specific review criteria (see p. 14 of the 2017 proposal solicitation). Some of these are specific to the project's evaluation. <p>Resource: NSF's Funded Merit Review Criteria Resources for the External Community</p>

PROJECT DESCRIPTION
 Your Project Description is the main part of your overall proposal where you explain what you will do and submit with the grant funding. It must not exceed 12 pages.

What you need to do	What you need to know
<ul style="list-style-type: none"> 1. Clearly explain the following: <ul style="list-style-type: none"> - Research Plan - Results from Prior NSF Support* - Rationale - Goals, Objectives, Deliverables - Activities - Timeline - Management Plan - Roles and Responsibilities of Senior Personnel - Plan for Sustainability - Evaluation Plan** - Dissemination Plan 	All elements of the Project Description, including the evaluation plan, should comprise a coherent plan that supports your initial goals and/or the project's intellectual merit and broader impacts (see above). <p>*Results from Prior NSF Support and Evaluation Plan are the Project Description sections that result in all evaluation elements. What should be included in these sections is described below. You may wish to include information related to the evaluation in other sections as well, such as the Timeline and Management Plan, as appropriate.</p>

NEXT STEPS!



Read the ATE program solicitation



Find an evaluator to work with, if allowed by your institution



Review resources recommended in this webinar

GOOD LUCK!

THANK YOU!

