



1



2

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evalu-ate.org/webinar/july24

1

OUR Vision

EvaluATE envisions an ATE community in which evaluation is valued, systematic, and used to improve the education of technicians in high-tech fields.

OUR Mission

EvaluATE's mission is to engage the ATE community with information, expertise, and tools to advance high-quality evaluation.

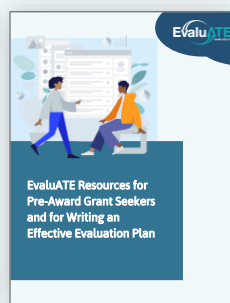


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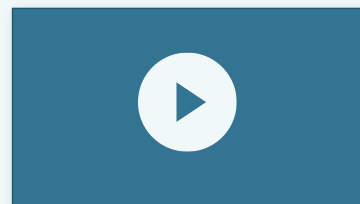
Materials



Slides



Additional
Resources



Recording

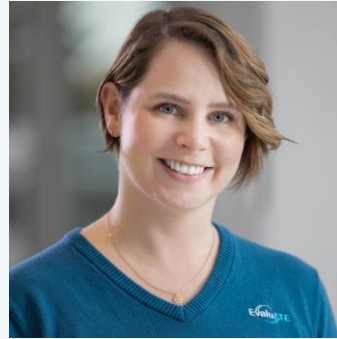


4
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Introductions



Samantha
Hooker



Lyssa
Wilson Becho

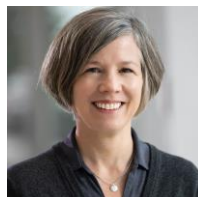


5

Behind the Scenes



Maureen
Green



Lori
Wingate



Carolyn
Williams-Noren



6
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Thank You



Ellen
Hause



Elizabeth
Hawthorne



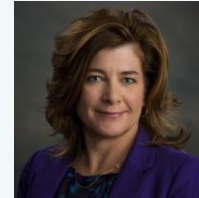
Blake
Urbach



Elaine
Craft



Pam
Silvers



Emery
DeWitt



7



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8
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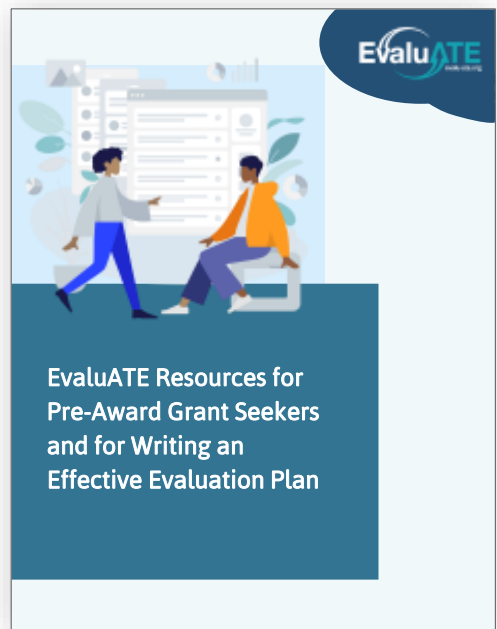
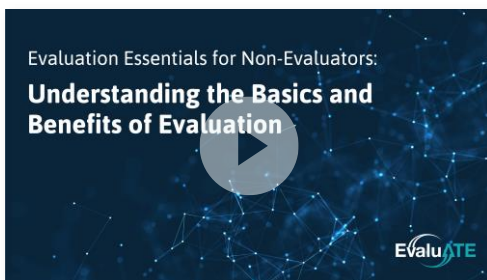


Lyssa

9

Resources

WHAT IS EVALUATION?



10
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Evaluation

PURPOSES



Project improvement



Accountability



Evidence

11

Evaluation

PURPOSES



“if you don’t evaluate and assess your activities and outcomes you can’t know if the project was successful.”

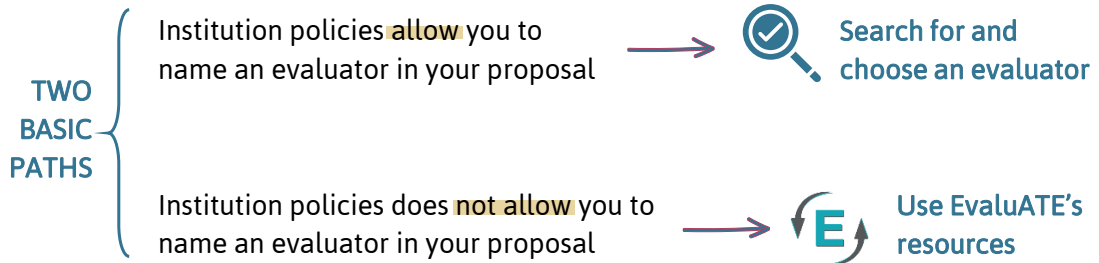
It also provides the project team with data to convince others of the success of the project as well as contributing to the body of knowledge in that particular area of STEM.”

Celeste Carter
ATE Program Director

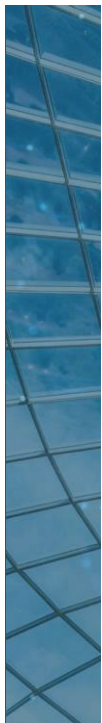


12
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Procuring AN EVALUATOR



13



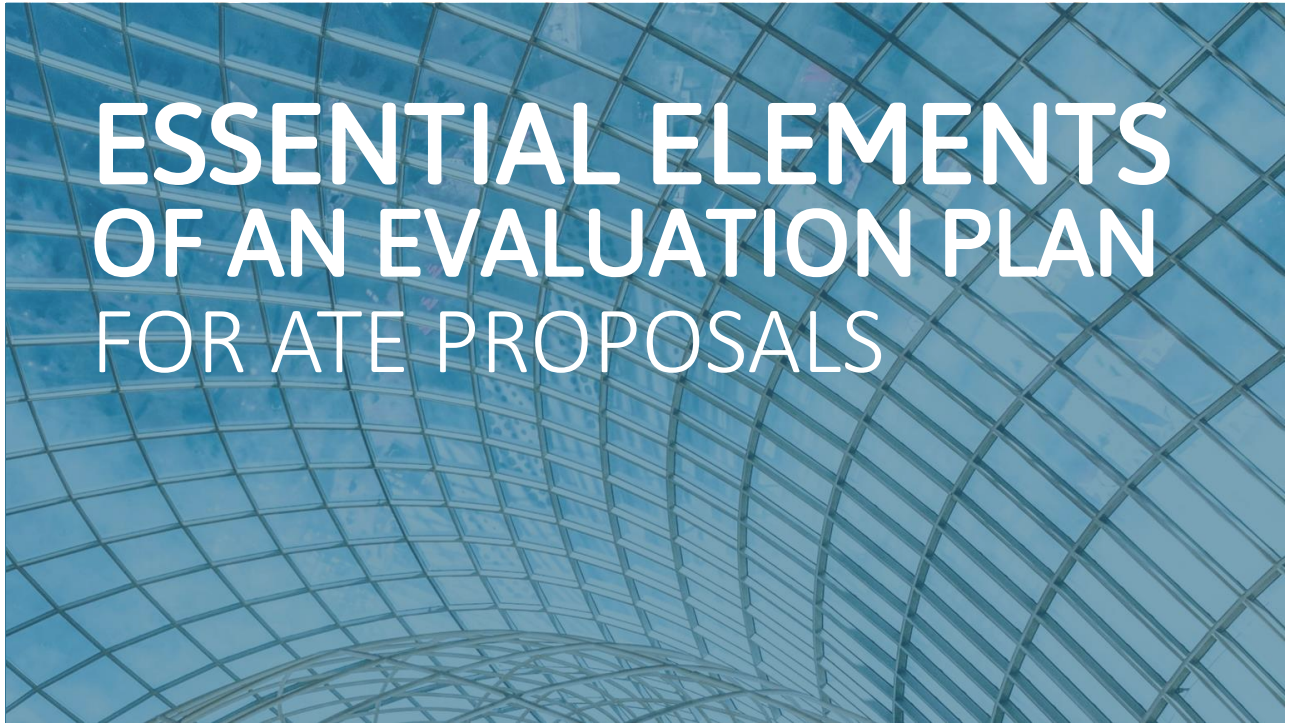
Working with an evaluator

POLL QUESTION

- Given procurement policies at your institution, will you be able to **name an evaluator** in your NSF ATE proposal?

Answer
in chat box

14
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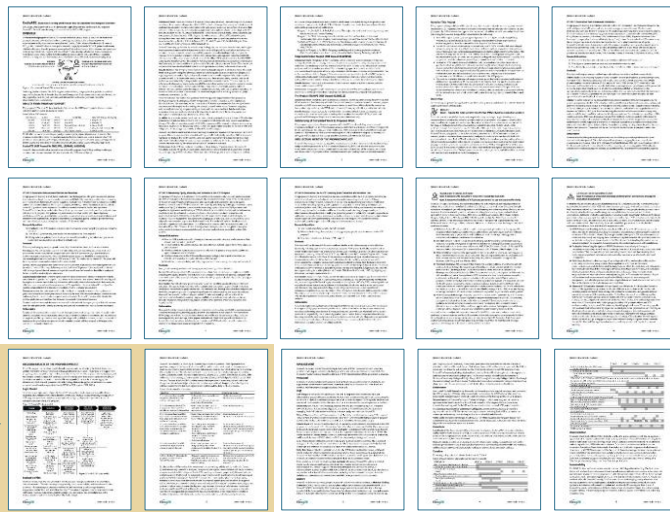


ESSENTIAL ELEMENTS OF AN EVALUATION PLAN FOR ATE PROPOSALS

15

NSF Project Description

15 PAGES



Evaluation Plan ●
1 – 2 pages

16
Slides available at:
evalu-ate.org/webinar/july24

Evaluation Plan

1-2 PAGES

Evaluator
Evaluation Questions
Data
Communication & Use
Timeline

5

PROJECT DESCRIPTION | EvaluATE

Timeline
The timing of key tasks and deliverables is shown in Table 3.

Table 3. Project Timeline (shown in quarter-year increments)

ACTIVITY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Task 1. Evaluation Task Framework Validation	██████████	██████████	██████████	██████████	██████████
- Develop design and research study protocols	██████████	██████████	██████████	██████████	██████████
- Data collection and analysis	██████████	██████████	██████████	██████████	██████████
- Report	██████████	██████████	██████████	██████████	██████████
Task 2. Evaluation Process	██████████	██████████	██████████	██████████	██████████
- Develop design and research instrument	██████████	██████████	██████████	██████████	██████████
- Data collection and analysis	██████████	██████████	██████████	██████████	██████████
- Report	██████████	██████████	██████████	██████████	██████████
Task 3. Strategies for Monitoring ETE in ATE	██████████	██████████	██████████	██████████	██████████
- Develop design and research instrument	██████████	██████████	██████████	██████████	██████████
- Data collection and analysis	██████████	██████████	██████████	██████████	██████████
- Report	██████████	██████████	██████████	██████████	██████████
Task 4. Evaluation Use in the ATE Program	██████████	██████████	██████████	██████████	██████████
- Develop design and research instrument	██████████	██████████	██████████	██████████	██████████
- Data collection and analysis	██████████	██████████	██████████	██████████	██████████
- Report	██████████	██████████	██████████	██████████	██████████

17

Resource

EVAL PLAN CHECKLIST

Page 10

Evaluation Plan Checklist for ATE Proposals
Lori A. Weigelt | July 2020

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 solicitation (https://www.nsf.gov/awardsearch/showAction.do?proj_code=ATE) for details about the program and proposal submission requirements.

Evaluation Plan
ATE proposals must include a subsection titled "Evaluation Plan" within the 15-page project description. EvaluATE recommends dedicating one to two pages to the evaluation plan and including the following five 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 biosketch and letter of collaboration and include these as supplementary documents.
- 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 supervisee 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.
 - Describe how an evaluator 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.
- Ensure that the questions address the project's intellectual merit (contributions to advancing knowledge) and broader impact (contributions to the betterment of society).

3. Data

Indicates

- Identify what information will be used to answer each evaluation question (i.e., what will be measured).

Data Collection: Methods and Sources

- Identify how the information will be gathered and from what sources.
- If relevant, explain sampling and use of comparison or control groups.
- If using existing data collection instruments, include citations and justify their use.

Analysis

- Identify the procedures that will be used to summarize quantitative and qualitative data (e.g., descriptive statistics, inferential tests, regression, deductive or inductive coding).

Interpretation

- Explain how findings will be interpreted to answer the evaluation questions (e.g., compare results with baseline or needs assessment data, with targets/benchmarks, or between groups, use rubrics; engage stakeholders).

18
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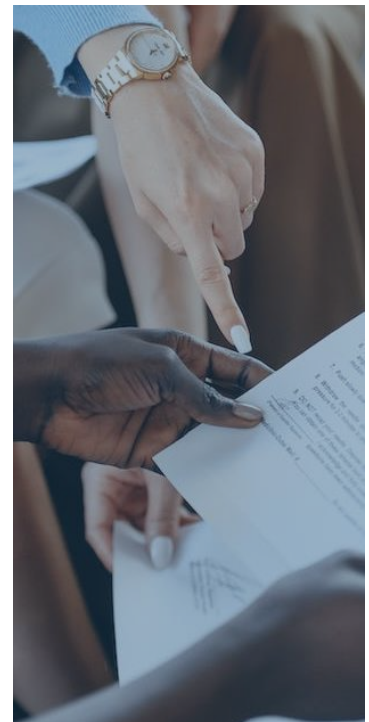
Evaluator

19

Evaluator

EVAL PLAN CHECKLIST

- Identify the project's evaluator
- Describe the evaluator's qualifications
- Refer to the evaluator's biosketch and letter of collaboration



20
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Remember Jen Genericson*?



She has a **GREAT** idea
for an ATE proposal

*This is a fictional character and project.
Any resemblance to actual persons or projects is coincidental.

21



- 1 Embed training on sanitary welding into existing courses
- 2 Professional development for faculty
- 3 Purchase new lab equipment

22

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Resources

IDENTIFYING YOUR EVALUATOR

Evaluator Procurement Process

Page 2



23

EvaluATE Guide to Navigating the Evaluator Procurement Process
Megan López & Michael Lesiecki | February 2023

Every NSF-funded ATE project is required to include an evaluation plan in its proposal and to work with an independent evaluator. For many projects, the act of procuring independent evaluation services is subject to institutional procurement policies. This step-by-step map aims to provide prospective and new ATE grantees with a general overview of when and how to select an evaluator. This resource may be most helpful while developing an ATE proposal and/or before naming an independent evaluator.

Remember, this process varies across institutions and can take time. Therefore, we recommend meeting early on with those who can walk you through your institution's specific process (e.g., your institution's procurement officer, purchasing or fiscal agent, or grants manager).

Mapping Out the Evaluator Procurement Process

```

    graph TD
        Q1[What best describes your award stage?] --> B1[I am in the ATE grant proposal development stage.]
        Q1 --> B2[My ATE project has been awarded.]
        B1 --> Q2[Are you able to work with an independent evaluator to develop an evaluation plan for your ATE proposal?]
        B2 --> Q3[Is a sole source justification allowed?]
        Q2 -- No --> R1[Refer to the next page for resources that can help you with writing an evaluation plan without an evaluator. Revisit this guide when you are ready to contract with an evaluator.]
        Q2 -- Yes --> Q4[Under your institution's procurement or contracting policies, can you name an evaluator in your project proposal?]
        Q4 -- No --> R2[Your project is likely subject to competitive bidding or a similar process. Refer to the next page to learn more about this. Begin meeting with your institution's procurement officer or grants manager as soon as possible for more information.]
        Q4 -- Yes --> Q3
        Q3 -- No --> R1
        Q3 -- Yes --> R3[You can likely interview prospective evaluators. Refer to the next page for resources on finding and selecting an evaluator.]
    
```

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Resources

IDENTIFYING YOUR EVALUATOR

Guide to Finding and Selecting an Evaluator

Page 4



24

Slides available at:
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EvaluATE Finding and Selecting an Evaluator for Advanced Technological Education (ATE) Proposals
Lori A. Wingate | July 2017 | www.evalu-ate.org

ATE PROPOSERS SHOULD CAREFULLY READ THE ATE PROGRAM SOLICITATION: bit.ly/2047ATE

All ATE proposals are required to request "funds 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 prohibit selecting an evaluator on a noncompetitive basis in advance of an award being made. Advice for individuals in that situation is provided in an EvaluATE blog (bit.ly/franck) and newsletter article (bit.ly/roose).

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

- 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—earlier if possible. A good evaluation 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 evaluation 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 (bit.ly/aea-dir): It's searchable by state and keyword.
 - Use ATE Central's evaluator map (central.ateevaluation.org): 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. 8801992. 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.



25



26
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Evaluation Questions

EVAL PLAN CHECKLIST

- List the key questions that the evaluation will address
- Include questions about both project implementation and outcomes
- Ensure that questions align with project's goals and activities

27

Evaluation Questions

WHAT MAKES A GOOD EVALUATION QUESTION?



Evaluative ●

- ✗ **Not evaluative:**
How many students did the project serve?
- ✓ **Evaluative:**
What was the project's impact on program enrollment?

28

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Evaluation Questions

WHAT MAKES A GOOD EVALUATION QUESTION?



Evaluative



Reasonable



Unreasonable:

Did the project increase hygienic welding employment in the state?



Reasonable:

To what extent did students served by the project find employment in the hygienic welding sector?

29

Evaluation Questions

WHAT MAKES A GOOD EVALUATION QUESTION?



Evaluative



Reasonable



Specific



Vague:

Did the project increase instructor effectiveness?



Specific:

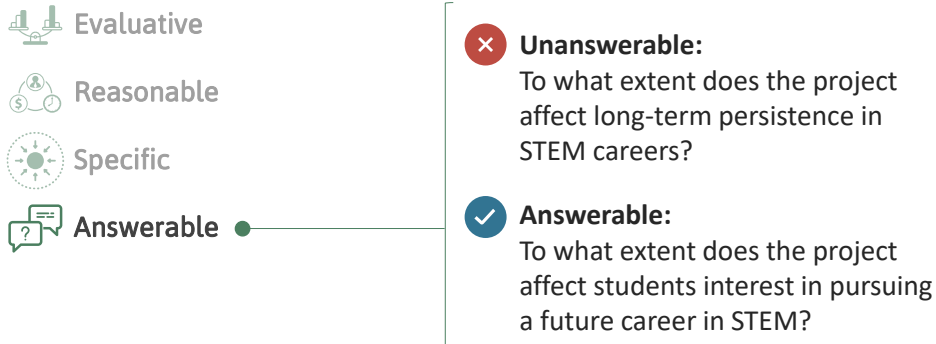
To what extent did participating instructors increase their knowledge about sanitary welding techniques?

30

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Evaluation Questions

WHAT MAKES A GOOD EVALUATION QUESTION?



31

Evaluation Questions

WHAT MAKES A GOOD EVALUATION QUESTION?

- Evaluative**
- Reasonable**
- Specific**
- Answerable**
- Complete**

32
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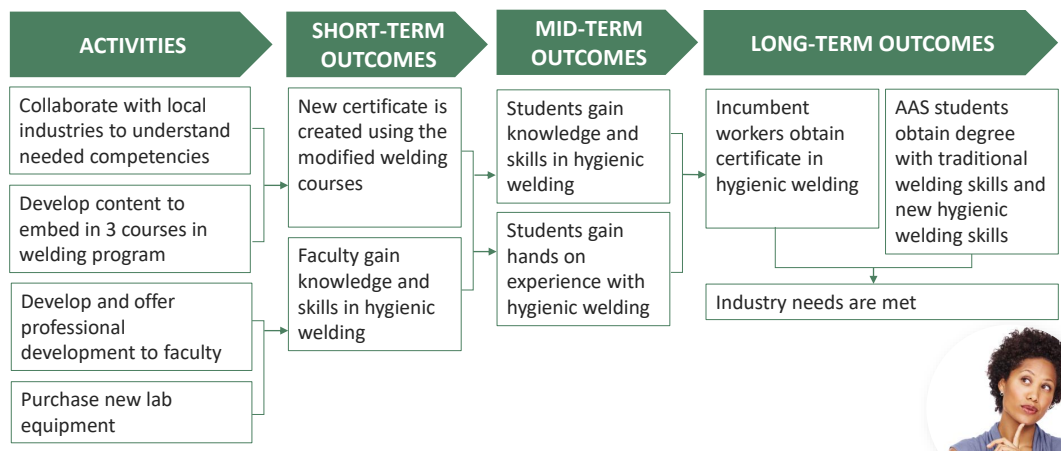
Logic Models

ORGANIZING EVALUATION QUESTIONS

33

Logic Models

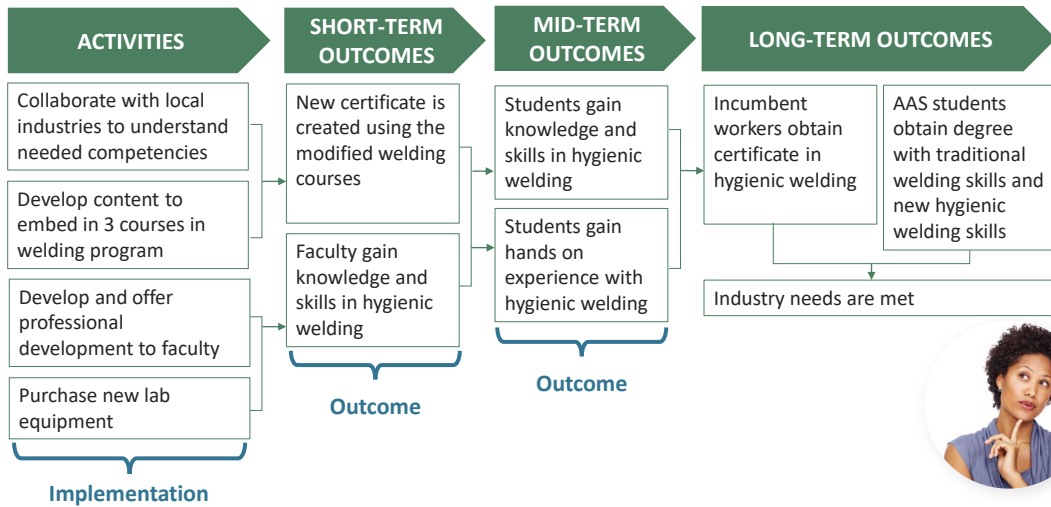
EXAMPLE



34
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Logic Models

ORGANIZING EVALUATION QUESTIONS



35

Resources

EVALUATION QUESTIONS

Logic Model Guide
for ATE Projects
& Template

Page 24

EvaluATE Logic Model Guide for ATE Projects
by Kelly N. Robertson, Lyssa Wilson Becho, & Lori A. Wingate | September 2023

This guide provides an overview of logic model components to assist National Science Foundation Advanced Technological Education (ATE) program grant seekers and grantees in developing logic models for their initiatives.

Why use a logic model?
Developing a logic model is an important first step in planning a project. A logic model is a visual depiction of what a project is about. A logic model can be presented as a flowchart that succinctly communicates the overall vision of a project and identifies evaluation questions and the data needed to answer them.

What are the components of a logic model?
There is no one right way to make a logic model. However, you should clearly communicate the project's plan and goals. You should choose a structure and additional components based on your audience's information needs. Beyond the basic components, you may include inputs, outputs, context, assumptions, and influencers.

Core components
Include these essential components in your logic model. It intends to bring about:

- Inputs
- Activities
- Short-Term Outcomes
- Mid-Term Outcomes
- Long-Term Outcomes

Assumptions
The key things your project will depend on to bring about intended change (e.g., actions, processes, and events).

Influential
Answers the question: What or who are the things the project will do to bring about change?

36
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Resources

EVALUATION QUESTIONS

Next-Level Logic
Models for Your ATE
Proposal and Beyond:
Webinar



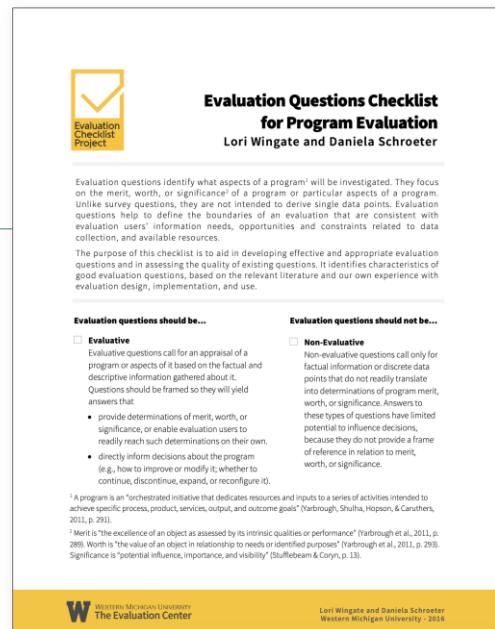
37

Resources

EVALUATION QUESTIONS

Evaluation Questions
Checklist

Page 14



38
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Resources

EVALUATION QUESTIONS

Logic Model &
Evaluation Plan
Clinics



39



40
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41

Data

EVAL PLAN CHECKLIST

- What information will be used to answer the evaluation questions
- How the information will be obtained and from what sources
- Procedures for summarizing quantitative and qualitative data
- Procedures for interpreting findings** to answer evaluation questions



42

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Data

KEY TERMS



Indicators

What will be measured in order to answer evaluation questions



Data Collection Methods

Obtaining information needed for the evaluation



Analysis

Transforming raw data into usable information



Interpretation

Translating findings into conclusions that address the evaluation questions

43

Describing data

CHAT QUESTION



Indicators



Methods



Analysis



Interpretation

- What is your opinion of the description of data that will be used in an evaluation?

“The evaluation will utilize a mixed-methods approach in which quantitative and qualitative measures of performance will be used in both formative and summative manner to gauge the merit and worth of the grant initiative. Methods will include surveys, interviews, and review of program records.”

Answer
in chat box

44

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22

Data

KEY TERMS



Indicators



Data
Collection
Methods



Analysis



Interpretation

It's OK to sacrifice some detail, but must convey there is a **concrete plan** for collecting and using evaluation data



45

Data Matrix

Evaluation Question 3: To what extent is participation in the professional development affecting faculty's knowledge and skills in hygienic welding?

Indicators	Data Sources & Methods	Analysis	Interpretation
Change in faculty knowledge of sanitary techniques and hygienic design	Pre- and post-assessment of faculty	Inferential statistics	Compare understanding before workshop with after workshop
Proficiency of faculty in basic hygienic welding techniques	Observation assessment	Descriptive statistics	Compare with project target of 90% pass rate
Faculty opinions about hygienic welding coursework	Survey	Descriptive statistics Inductive coding of qualitative data	Compare results with rubric to judge degree of satisfaction
...

46

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Resources

DATA

Evaluation Data Matrix Template

Page 19

EvaluATE Evaluation Data Matrix Template
Lori Wingate | July 2017

This material is based upon work supported by the National Science Foundation under grant number 1602092. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author and do not necessarily reflect the views of NSF.

An evaluation plan should include a clear description of what data will be collected, from what sources and how, by whom, and when, as well as how the data will be analyzed. Placing this information in a matrix helps ensure that there is a viable plan for collecting all the data necessary to answer each evaluation question and that all collected data will serve a specific, intended purpose. The table below may be copied into another document, such as a grant proposal, and edited/ expanded as needed. An example is provided on the next page.

Indicator	Data Source and Methods	Responsible Party	Timing	Analysis Plan	Interpretation

If space is limited, such as in a National Science Foundation proposal, fewer columns may be used. It is most critical to include the evaluation questions, indicators, data sources and methods, and timing.

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; 3 to 7 questions is typical. Questions should address both project implementation and outcomes.

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 to address an evaluation question, including qualitative and quantitative data.

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. 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). It is important to identify approximately when data collection will take place to ensure the information will be obtained when needed for reporting purposes and decision making and that the data collection schedule is conducive to other things taking place in project's context (e.g., other major data collection activities, semester schedules).

Analysis Plan how the quantitative and qualitative data will be summarized into meaningful, usable information.

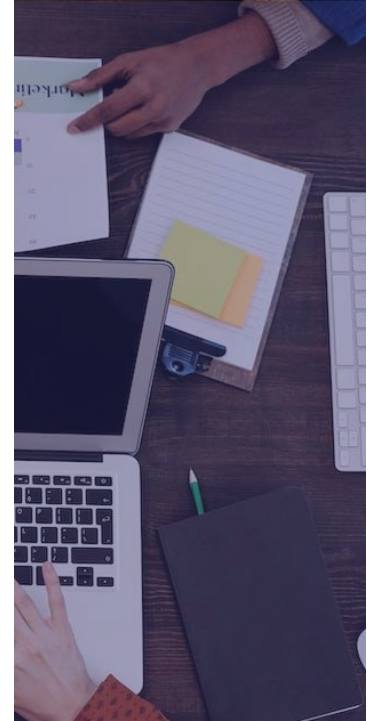
Interpretation is how the analyzed data will be used to reach conclusions related to the evaluation questions.

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47



48
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Communication & Use

EVAL PLAN CHECKLIST

- Identify what evaluation reports will be prepared
- Identify the frequency with which the evaluator will communicate with the project team
- Describe how evaluation **results will be shared with external audiences**

49

ATE-Specific Review Criteria

RELATED TO EVALUATION



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

ATE-Specific Review Criteria

RELATED TO EVALUATION



- ✓ Is the evaluation likely to provide useful information to the project and others?
- ✓ Will the project evaluation inform others through the **communication of results**?

51

Which is the best description of evaluation communication & use?

POLL QUESTION

Example A

The evaluator will work with the project PI to prepare required annual reports submitted to NSF. Evaluation reports will be shared with appropriate decision-makers. The two teams will meet as needed to ensure an effective evaluation.

Example B

The evaluator will meet with the project team quarterly to share evaluation results and receive updates on the project. Interim evaluation reports will be used by project team for improvement. In the final year, the project PI will collaborate with the evaluator to prepare a presentation to present at national conferences.

Example C

The evaluator will submit annual reports to the project PI and assist the project team in preparing evaluation results for inclusion in the project's annual report to NSF. Evaluation reports will be shared with the project's advisory committee.

Answer
in poll box

52

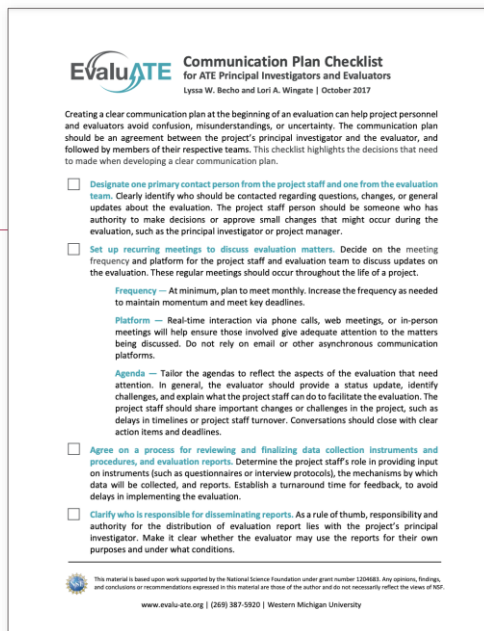
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Resources

COMMUNICATION & USE

Communication Plan Checklist

[Bit.ly/checklist-commplan](https://bit.ly/checklist-commplan)



EvaluATE Communication Plan Checklist
for ATE Principal Investigators and Evaluators
Lyssa W. Becho and Lori A. Wingate | October 2017

Creating a clear communication plan at the beginning of an evaluation can help project personnel and evaluators avoid confusion, misunderstandings, or uncertainty. The communication plan should be an agreement between the project's principal investigator and the evaluator, and followed by members of their respective teams. This checklist highlights the decisions that need to be made when developing a clear communication plan.

- Designate one primary contact person from the project staff and one from the evaluation team. Clearly identify who should be contacted regarding questions, changes, or general updates about the evaluation. The project staff person should be someone who has authority to make decisions or approve small changes that might occur during the evaluation, such as the principal investigator or project manager.
- Set up recurring meetings to discuss evaluation matters. Decide on the meeting frequency and platform for the project staff and evaluation team to discuss updates on the evaluation. These regular meetings should occur throughout the life of a project.
 - Frequency** — At minimum, plan to meet monthly. Increase the frequency as needed to maintain momentum and meet key deadlines.
 - Platform** — Real-time interaction via phone calls, web meetings, or in-person meetings will help ensure those involved give adequate attention to the matters being discussed. Do not rely on email or other asynchronous communication platforms.
 - Agendas** — Tailor the agendas to reflect the aspects of the evaluation that need attention. In general, the evaluator should provide a status update, identify challenges, and explain what the project staff can do to facilitate the evaluation. The project staff should share important changes or challenges in the project, such as delays in timelines or project staff turnover. Conversations should close with clear action items and deadlines.
- Agree on a process for reviewing and finalizing data collection instruments and procedures, and evaluation reports. Determine the project staff's role in providing input on instruments (such as questionnaires or interview protocols), the mechanisms by which data will be collected, and reports. Establish a turnaround time for feedback, to avoid delays in implementing the evaluation.
- Clarify who is responsible for disseminating reports. As a rule of thumb, responsibility and authority for the distribution of evaluation report lies with the project's principal investigator. Make it clear whether the evaluator may use the reports for their own purposes and under what conditions.

This material is based on 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 author and do not necessarily reflect the views of NSF.

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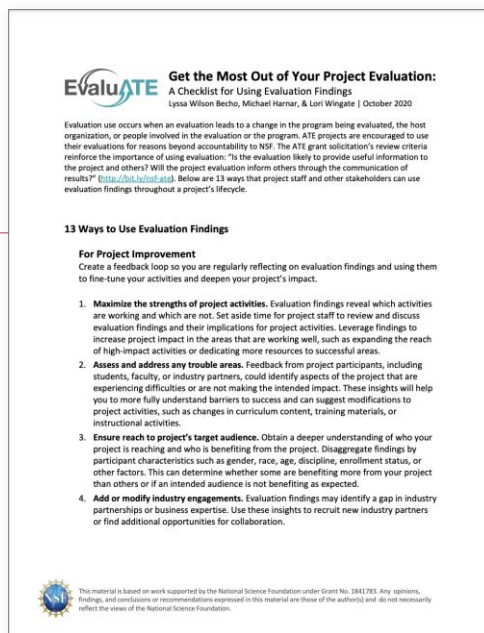
53

Resources

COMMUNICATION & USE

Getting the Most Out of Your Evaluation: Checklist for Using Evaluation Findings

[Bit.ly/eval-use-checklist](https://bit.ly/eval-use-checklist)



EvaluATE Get the Most Out of Your Project Evaluation:
A Checklist for Using Evaluation Findings
Lyssa Wilson Becho, Michael Harnar, & Lori Wingate | October 2020

Evaluation use occurs when an evaluation leads to a change in the program being evaluated, the host organization, or people involved in the evaluation or the program. ATE projects are encouraged to use their evaluations for reasons beyond accountability to NSF: "The ATE grant solicitation's review criteria reinforce the importance of using evaluation: 'Is the evaluation likely to provide useful information to the project and others? Will the project evaluation inform others through the communication of results?' (<https://nsf.gov/ate>). Below are 13 ways that project staff and other stakeholders can use evaluation findings throughout a project's lifecycle.

13 Ways to Use Evaluation Findings

For Project Improvement

Create a feedback loop so you are regularly reflecting on evaluation findings and using them to fine-tune your activities and deepen your project's impact.

- Maximize the strengths of project activities.** Evaluation findings reveal which activities are working and which are not. Set aside time for project staff to review and discuss evaluation findings and their implications for project activities. Leverage findings to increase project impact in the areas that are working well, such as expanding the reach of high-impact activities or dedicating more resources to successful areas.
- Assess and address any trouble areas.** Feedback from project participants, including students, faculty, or industry partners, could identify aspects of the project that are experiencing difficulties or are not making the intended impact. These insights will help you to more fully understand barriers to success and can suggest modifications to project activities, such as changes in curriculum content, training materials, or instructional activities.
- Ensure reach to project's target audience.** Obtain a deeper understanding of who your project is reaching and who is benefiting from the project. Disaggregate findings by participant characteristics such as gender, race, age, discipline, enrollment status, or other factors. This can determine whether some are benefiting more from your project than others or if an intended audience is not benefiting as expected.
- Add or modify industry engagements.** Evaluation findings may identify a gap in industry partnerships or business expertise. Use these insights to recruit new industry partners or find additional opportunities for collaboration.

This material is based on work supported by the National Science Foundation under Grant No. 1841783. 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.

54
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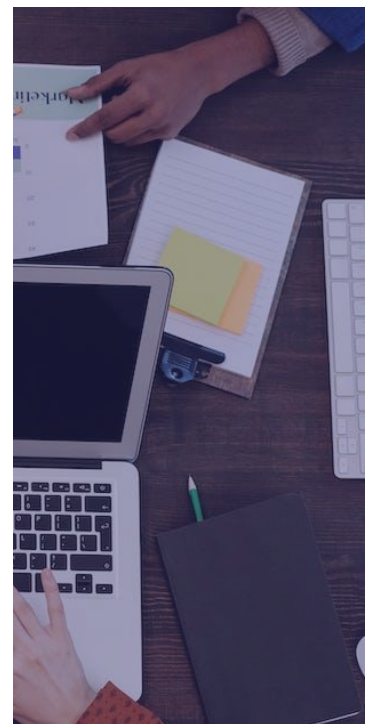


55

Timeline

EVAL PLAN CHECKLIST

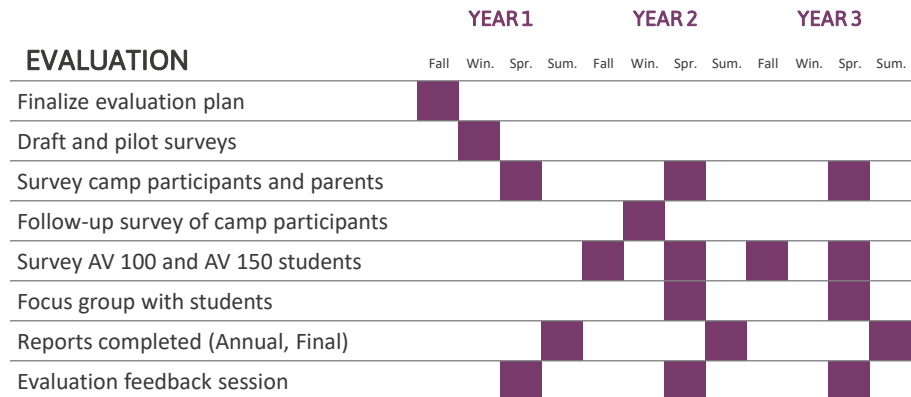
- Identify when **key evaluation activities** will occur in order to produce timely information



56
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Evaluation Timeline

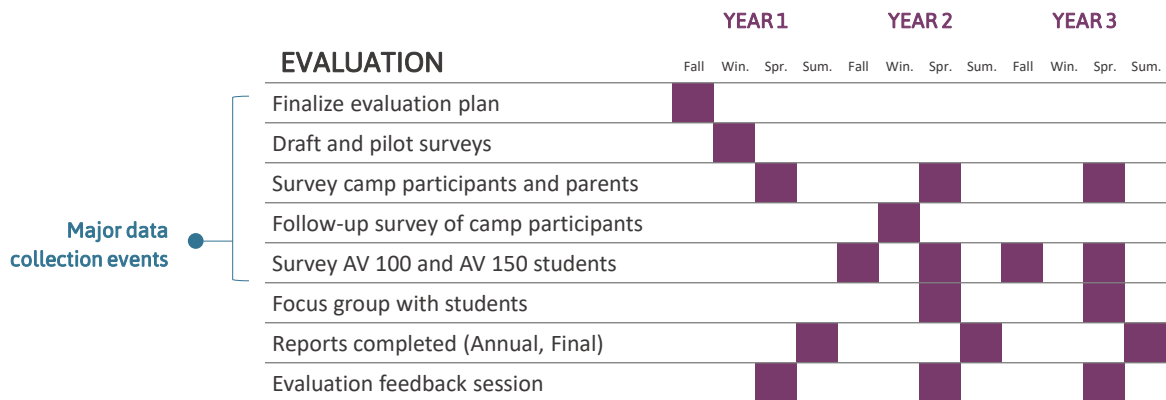
EXAMPLE



57

Evaluation Timeline

EXAMPLE

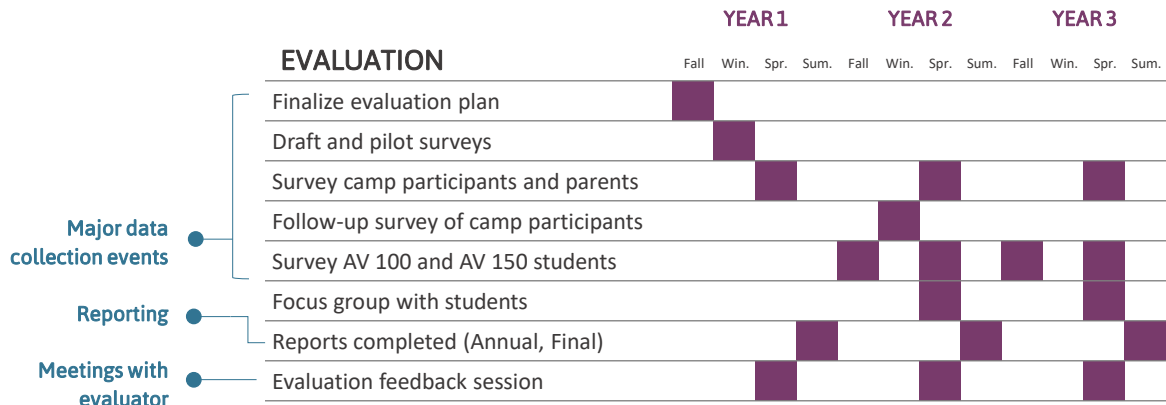


58

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Evaluation Timeline

EXAMPLE

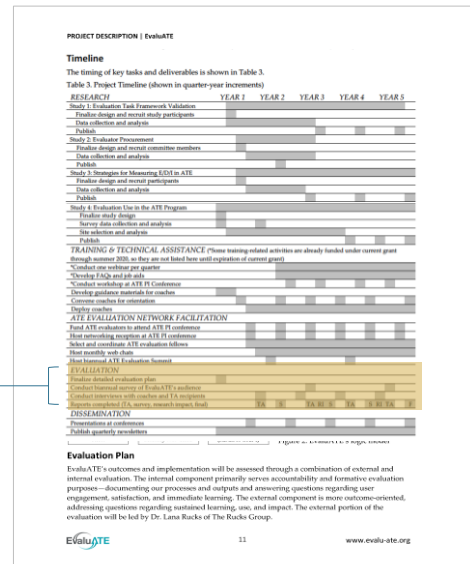


59

Evaluation Timeline

EXAMPLE

Evaluation timeline

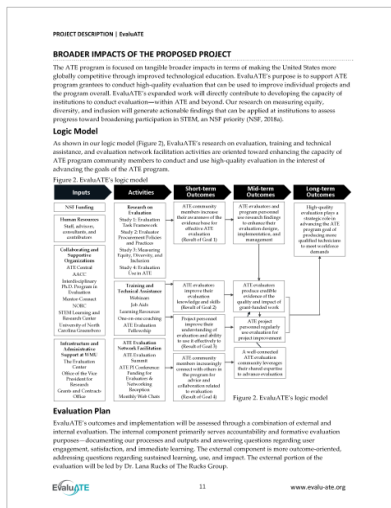


60
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Evaluation Plan

ESSENTIAL ELEMENTS

- 1 Evaluator
- 2 Evaluation Questions
- 3 Data
- 4 Communication & Use
- 5 Timeline



PROJECT DESCRIPTION | EvaluATE

EvaluATE's evaluation is driven by six overarching evaluation questions. Table 2 presents these questions, along with the key indicators that will be used to answer each question, data sources and methods, and whether responsibility for data collection and analysis lies with the internal (I) or external (E) evaluation team. The indicators are based on a body of research on evaluation capacity building (Laloux, 2015; Latta, Duffy, Meyer, Wandersman & Lencore, 2014; Levine, 2013; Poddick & Reiss, 2008) and evaluation of training and communities of practice (Easley, 1999; Kirkpatrick & Krieger, 2004; Wenger, Traynor, & de Laat, 2013), which recognize the importance of increasing not only individual changes in attitude, knowledge, and practice, but also organizational changes, such as the degree to which evaluation is reflected in an organization's culture and the daily work of personnel.

Table 2. Evaluation Plan Overview

Question	Key Indicators	Methods and Sources
1. To what extent has EvaluATE engaged its intended and other audiences?/Engagement	<ul style="list-style-type: none"> Website structure and participant characteristics User reports of sharing information from EvaluATE with others 	<ul style="list-style-type: none"> Formative research (I) Internal external evaluation surveys (E)
2. To what extent has EvaluATE's user-orientated with EvaluATE activities and resources?	User ratings and descriptions of satisfaction with EvaluATE activities and resources	Event feedback surveys (E)
3. To what extent has EvaluATE's user-orientated with EvaluATE activities and resources?	User ratings and descriptions of how much they learned from EvaluATE	Internal external evaluation surveys (E)
4. To what extent has EvaluATE's work improved users' knowledge of and attitudes toward evaluation?/Learning	User ratings and descriptions of their scores on applicable pre- and post-test surveys and worksheets	Internal external evaluation surveys (E)
5. To what extent has EvaluATE's work improved users' knowledge of and attitudes toward evaluation?/Application	User ratings and descriptions of EvaluATE's influence on their evaluation practice	Event feedback surveys (E)
6. To what extent has EvaluATE's work improved users' knowledge of and attitudes toward evaluation?/Impact	User ratings and descriptions of changes in the quality of their evaluation attributable to EvaluATE	Internal external evaluation surveys (E)
7. How is EvaluATE influencing the program's overall impact?	Changes in organizational processes and practices related to evaluation	Key informant interviews (E)

Qualitative data will be analyzed by a two-member team working collaboratively to identify themes. Quantitative survey data will be analyzed using mainly descriptive inferential tools will be performed to compare results for different types of EvaluATE users (i.e., internal vs. external). Biannual external evaluation survey findings will be compared against baseline results and interpretive rubrics developed jointly by The Bucks Group and EvaluATE. Because of the extensive dataset across multiple years, biannual external evaluation survey results can be compared against previous iterations. To augment self-reported data, the external evaluation team will compare TA recipient evaluation materials pre- and post-technical assistance to assess the degree of improvement. Conflicts arise between the external evaluators and EvaluATE staff will keep all parties apprised of the evaluator's progress and results. Reports will be prepared in accordance with the rubric indicated in the project budget (Table 3). Results will be shared with the broader evaluation community via conferences and publications.

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Resources

EVALUATION PLAN

ATE Proposal 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://doi.org/10.25334/2017-01-01-0001>), also developed by EvaluATE. 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. 1600992. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author 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 biosketch and commitment letter and include those documents with the proposer'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; broadening 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 (Cited 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'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 quantitative and qualitative 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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63



64

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32

Beyond the Evaluation Plan



Results from Prior NSF Support



“This subsection must contain specific outcomes and results including metrics to demonstrate the impact of the project activities.”



Intellectual Merit

advancement of knowledge



Broader Impacts

benefit to society

65

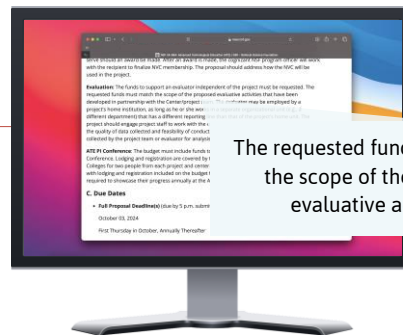
Beyond the Evaluation Plan



Results from Prior NSF Support



Budget and Budget Justification



The requested funds must match the scope of the proposed evaluative activities.

66

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33

Beyond the Evaluation Plan

 Results from Prior NSF Support

 Budget and Budget Justification

According to PAPPG

- Identify hourly rate of pay for evaluator
- Justify time required for evaluator
- Outline their main tasks and deliverables

67

Beyond the Evaluation Plan

 Results from Prior NSF Support

 Budget and Budget Justification

 Data Management Plan

Requirements

- Types of **data** and other materials to be produced
- Format of the **data**
- Policies for accessing and sharing **data**
- Policies for use of **data** by others
- Plans for archiving **data** for preserving access



Include
evaluation
data

Beyond the Evaluation Plan



Results from Prior NSF Support



Budget and Budget Justification



Data Management Plan



References

Include references to evaluation literature

Justify evaluation approach

Justify use of instruments and methods

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Beyond the Evaluation Plan



Results from Prior NSF Support



Budget and Budget Justification



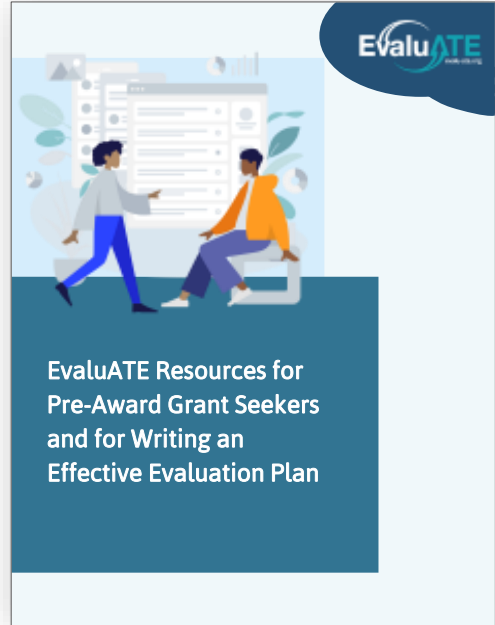
Data Management Plan



References

Resources

EVALUATION PLANS

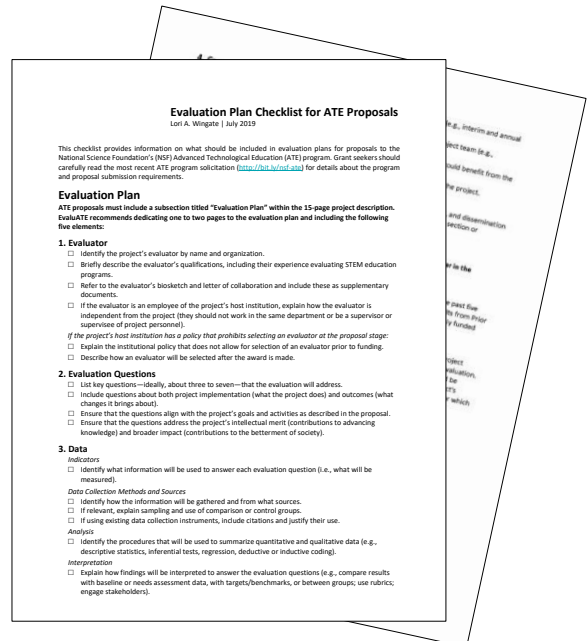


71

Resources

EVAL PLAN CHECKLIST

Page 10



72
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Resources

EVALUATION QUESTIONS

Logic Model &
Evaluation Plan
Clinics



73

Next Steps

OVERVIEW

- 1 Know your institution's requirements for procuring an evaluator
- 2 Search for evaluators with skills and experience that fit your project's needs
- 3 Develop evaluation questions that will inform your project's learning
- 4 Identify data that will answer your evaluation questions
- 5 Consider how your project will engage with evaluation findings

74

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75

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76
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77