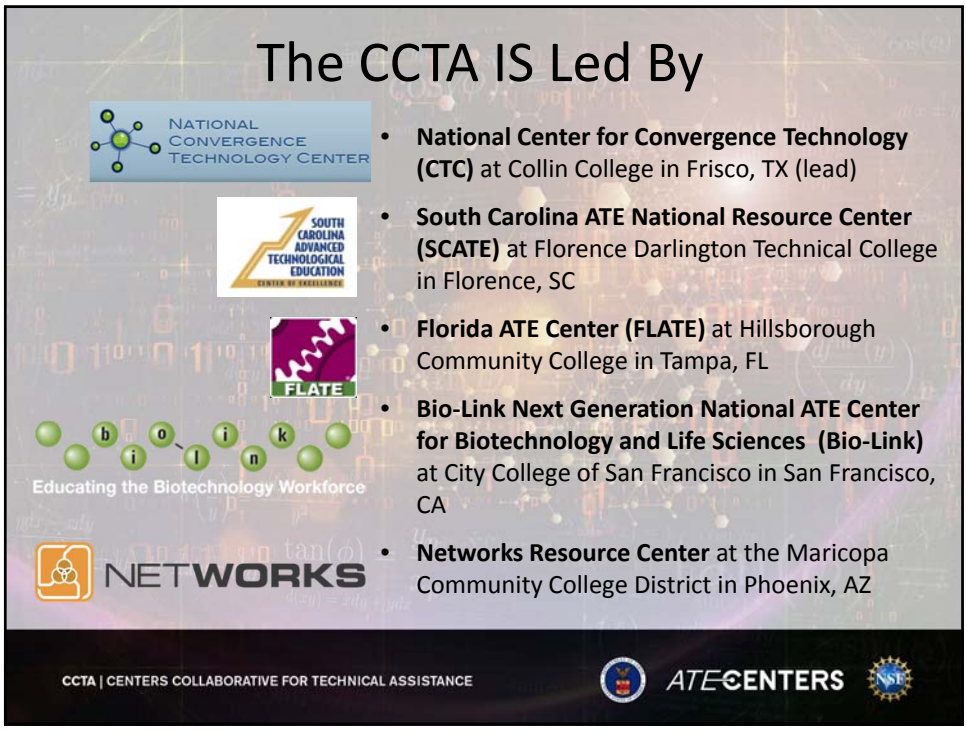
ATECENTERS
Meeting Requirements, Exceeding Expectations: Understanding the Role of Evaluation in Federal Grants
May 25, 2016
Webinar will begin at 3pm ET
CCTA | CENTERS COLLABORATIVE FOR TECHNICAL ASSISTANCE


The CCTA IS Led By
National Convergence Technology Center
South Carolina Advanced Technological Education
FLATE
bio-link
Educating the Biotechnology Workforce
NETWORKS
• National Center for Convergence Technology (CTC) at Collin College in Frisco, TX (lead)
• South Carolina ATE National Resource Center (SCATE) at Florence Darlington Technical College in Florence, SC
• Florida ATE Center (FLATE) at Hillsborough Community College in Tampa, FL
• Bio-Link Next Generation National ATE Center for Biotechnology and Life Sciences (Bio-Link) at City College of San Francisco in San Francisco, CA
• Networks Resource Center at the Maricopa Community College District in Phoenix, AZ
CCTA | CENTERS COLLABORATIVE FOR TECHNICAL ASSISTANCE
ATECENTERS

CCTA Purpose

- Respond to a request from the Department of Labor (DOL) to the NSF to have ATE Centers provide technical assistance services to DOL TAACCCT grantees
- Activities relevant for DOL grants, NSF grants and workforce-oriented programs of all kinds
- Deliverables
  - Topical webinars on existing and new solutions
    - Live/recorded with attendee Q&A
  - Identify and document best practices
  - Host convenings

CCTA | CENTERS COLLABORATIVE FOR TECHNICAL ASSISTANCE ATECENTERS

TODAY'S PRESENTERS

Lori Wingate
Director of Research,
The Evaluation
Center at Western
Michigan University

Leslie Goodyear
Principal Research
Scientist,
EDC

Ann Beheler
Facilitator
PI, National CTC

CCTA | CENTERS COLLABORATIVE FOR TECHNICAL ASSISTANCE ATECENTERS

Lori Wingate
Director

EvaluATE
www.evalu-ate.org

Evaluation resource center for NSF's Advanced Technological Education program

webinars | resource library | newsletter | blog

THE EC EVALUATION CENTER

WESTERN MICHIGAN UNIVERSITY

This material is based upon work supported by the National Science Foundation under grant number 1204683. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the presenters and do not necessarily reflect the views of NSF.

Meeting Requirements Exceeding Expectations

Understanding the Role of Evaluation in Federal Grants

Overview

PART I: Evaluation Fundamentals
Commentary by Leslie Goodyear | Question Break

PART II: Evaluation Requirements and Expectations
Commentary by Leslie Goodyear | Question Break

PART III: Evaluation Staffing, Budgeting, and Utilization
Commentary by Leslie Goodyear | Question Break

Let's play

Two Lies and a Truth!

Find your poll buttons

Which is the truth?

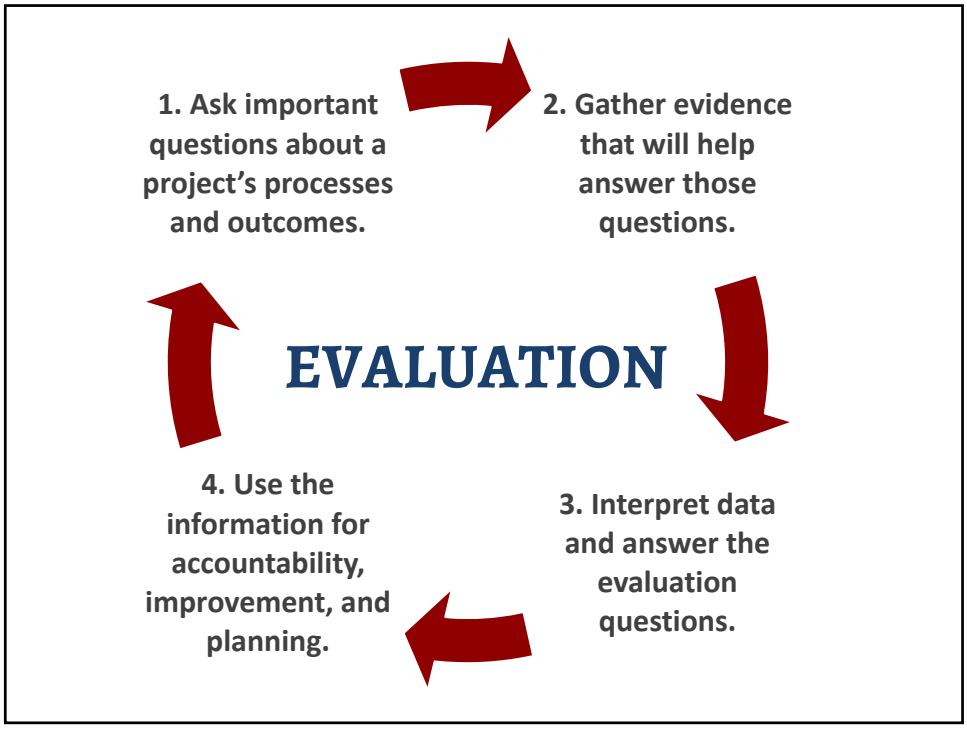
a. A federal evaluation policy dictates the requirements for project-level evaluation.

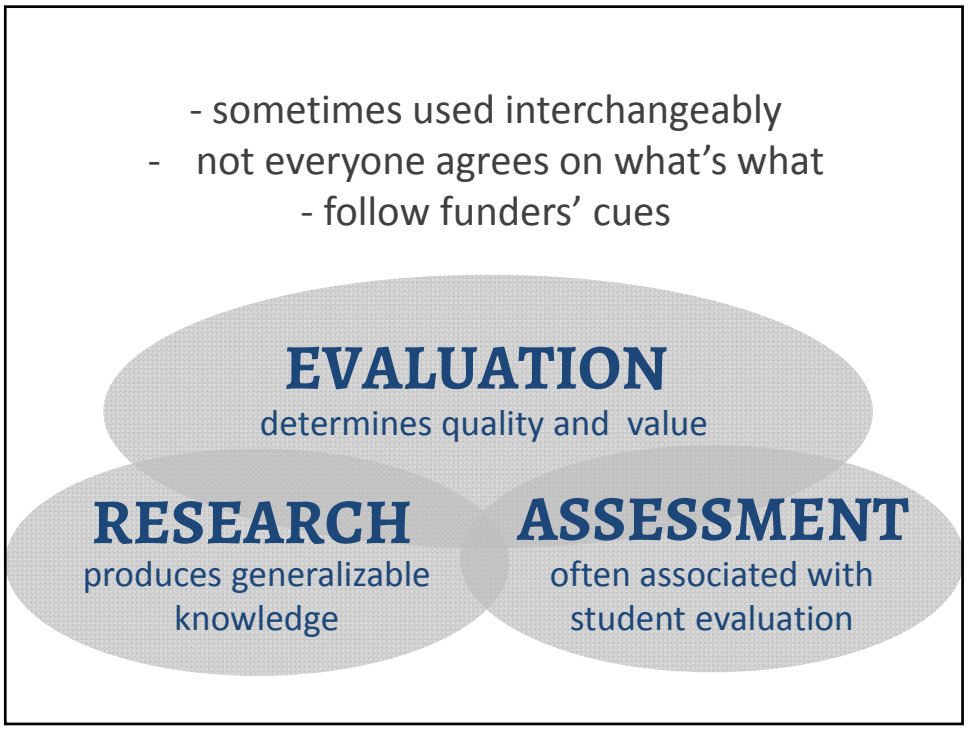
b. All federal grantseekers and grantees should be evaluation-literate.

c. All federal grant programs require project-level evaluation.

systematic **EVALUATION**

the determination of something's quality, value, or importance


1. Ask important questions about a project's processes and outcomes.
2. Gather evidence that will help answer those questions.
EVALUATION
3. Interpret data and answer the evaluation questions.
4. Use the information for accountability, improvement, and planning.


- sometimes used interchangeably
- not everyone agrees on what's what
- follow funders' cues
EVALUATION
determines quality and value
RESEARCH
produces generalizable knowledge
ASSESSMENT
often associated with student evaluation

FALSE A federal evaluation policy dictates the requirements for project-level evaluation.

But...

Some federal agencies have agency-specific guidance on evaluation (and research),

User-Friendly Handbook for Project Evaluation

Framework for Program Evaluation in Public Health

Common Guidelines for Education Research and Development

FALSE All federal grant programs require project-level evaluation.

But...

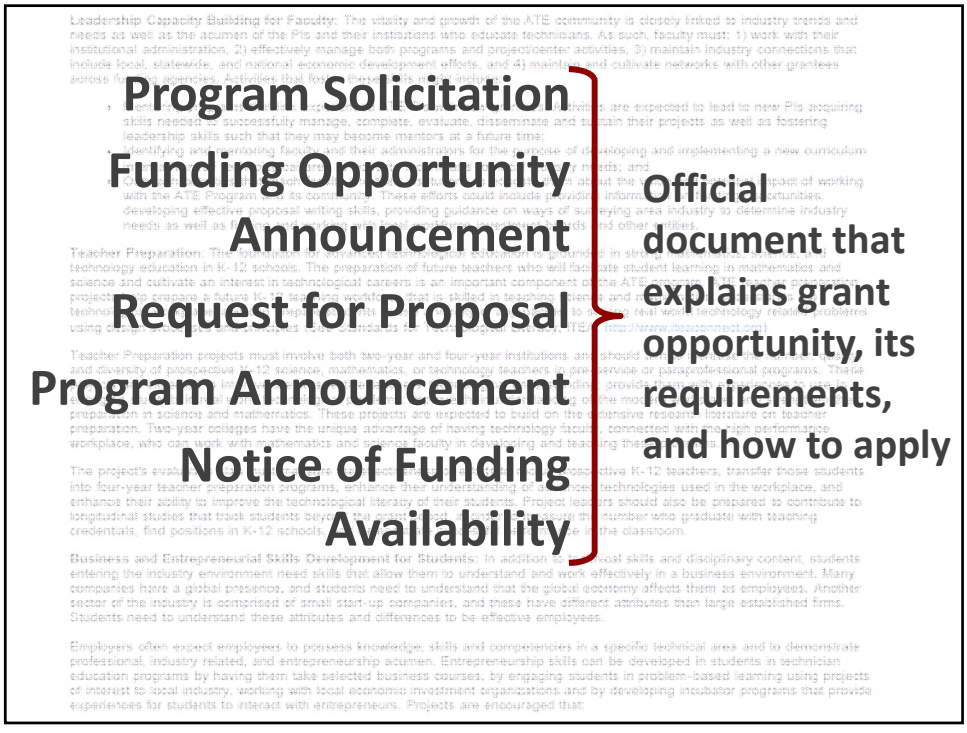
There are good reasons to evaluate, even if you don't have to.

Why some federal programs require projects to be evaluated

Accountability
Improvement
Evidence

Why you should evaluate your project if *even you don't have to*

Accountability
Improvement
Evidence



GRANTS.GOV℠

1,717 grant opportunities

25 federal agencies

We'll look at examples from

NSF · Department of Labor · Department of Education · CDC Centers for Disease Control and Prevention

Comments

Leslie Goodyear, Ph.D.

- Principal Research Scientist at EDC
- Former NSF program officer in the Division of Research on Learning

Questions?

Lori
Wingate

Leslie
Goodyear

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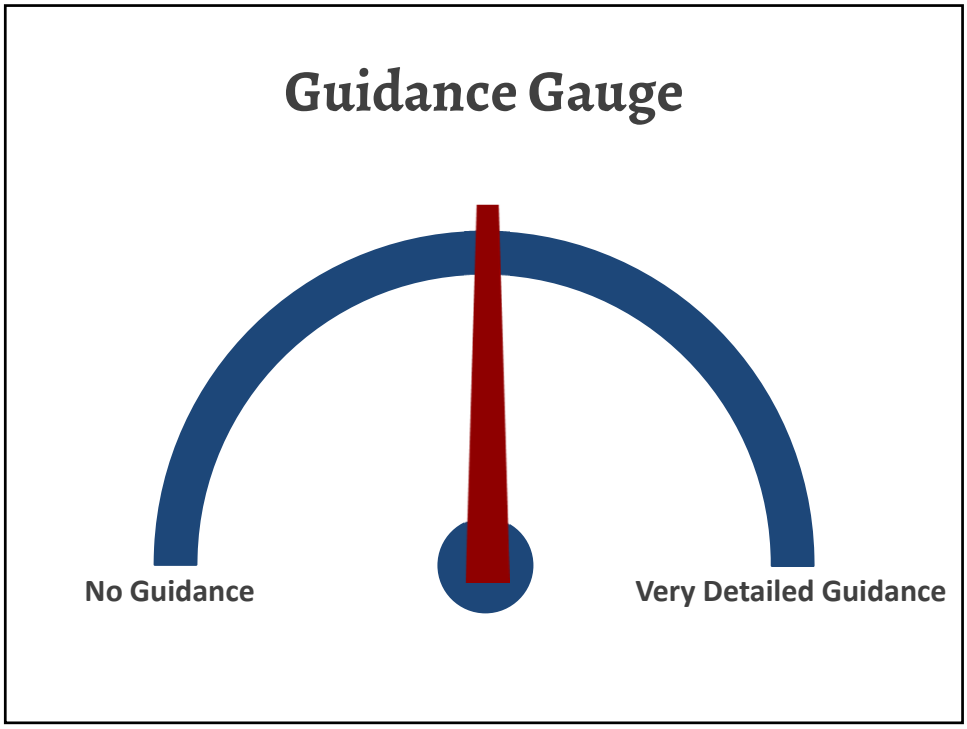

Guidance Gauge
No Guidance
Very Detailed Guidance

"evaluation plan"

Evaluation Plan. The application must describe an evaluation plan to review and determine the **quality and effectiveness** of the training project grant.

Occupational Safety and Health Training Project Grants
—Centers for Disease Control and Prevention

Evaluation Plan: Based on the theory of change and the desirable outcomes of the proposed revolution, enumerate appropriate **indicators of success** related to accomplishing the **goals and objectives** and a **timeframe** to seek measurable change.

Formation of Engineers: Revolutionizing Engineering and Computer Science Departments
—National Science Foundation

The **[evaluation] plan** should describe the evaluation design, indicating: (1) what **types of data** will be collected; (2) **when** various types of data will be collected; (3) what **methods** will be used; (4) what **instruments** will be developed and when; (5) how the data will be **analyzed**; (6) when **reports** of results and outcomes will be available; and (7) how the applicant will **use the information** collected through the evaluation to monitor progress of the funded project and to provide accountability information …

Innovative Approaches to Literacy Program
—U.S. Department of Education

Performance Evaluation Describe a **data collection plan**, aimed at describing the **measures, methods, techniques, and tools** used to evaluate the project and whether it achieved its anticipated outcomes, that includes, at minimum:

- Identification of **specific data** on participants and other data that the grantee plans to use, and **how the data** will be collected for analysis
- Plans for how the grantee will **document the lessons learned**, both positive and negative
- Plans to **identify the most effective TA models** and how they were implemented and could potentially be replicated
- Plans for **involving program participants** in evaluation activities
- Plans **for how the data will be used** to inform program delivery

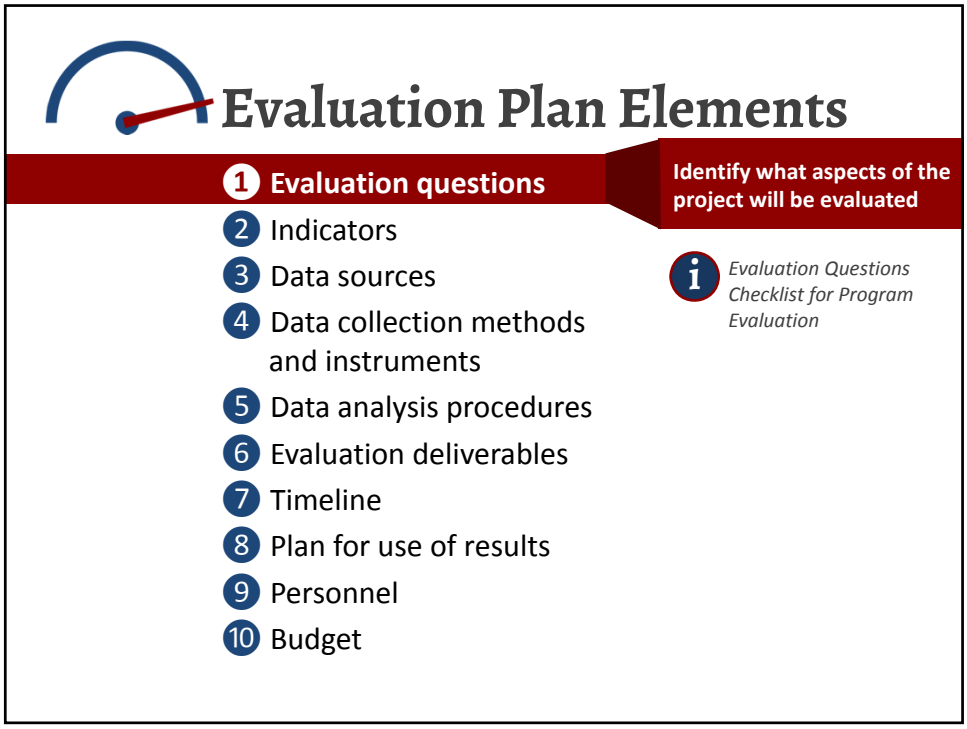
Women in Apprenticeship and Nontraditional Occupations Technical Assistance Grants
—U.S. Department of Labor

Evaluation Plan Elements

1. Evaluation questions
2. Indicators
3. Data sources
4. Data collection methods and instruments
5. Data analysis procedures
6. Evaluation deliverables
7. Timeline
8. Personnel
9. Budget
10. Plan for use of results

Learn more by checking out related resources

—links on the final slide


Evaluation Plan Elements
1 Evaluation questions
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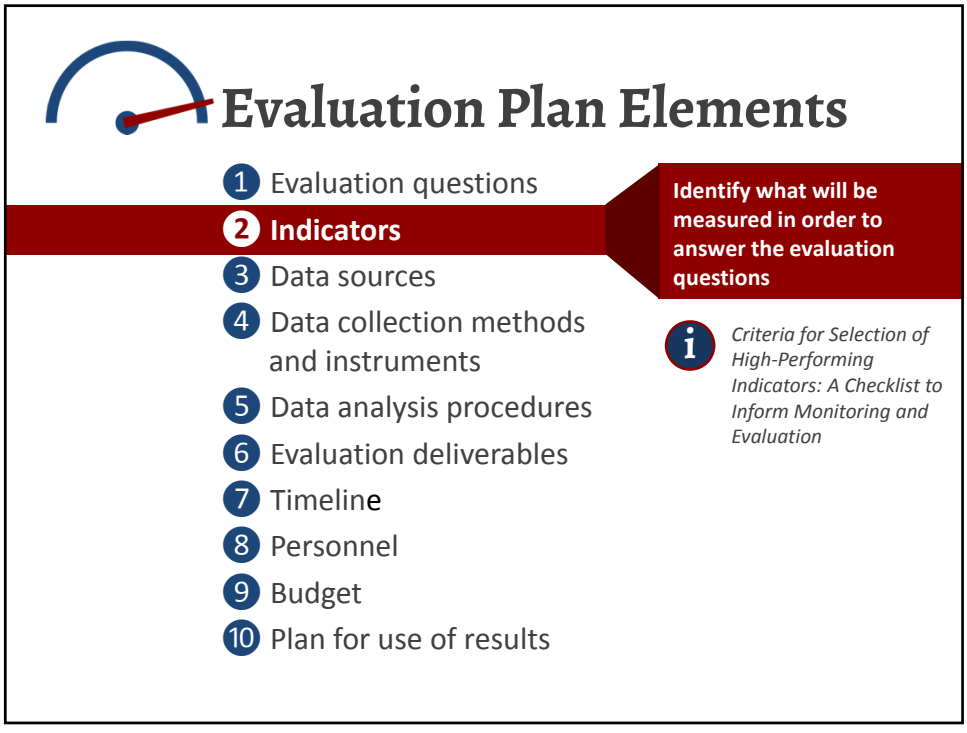
9 Personnel
10 Budget
Identify what aspects of the project will be evaluated
Evaluation Questions Checklist for Program Evaluation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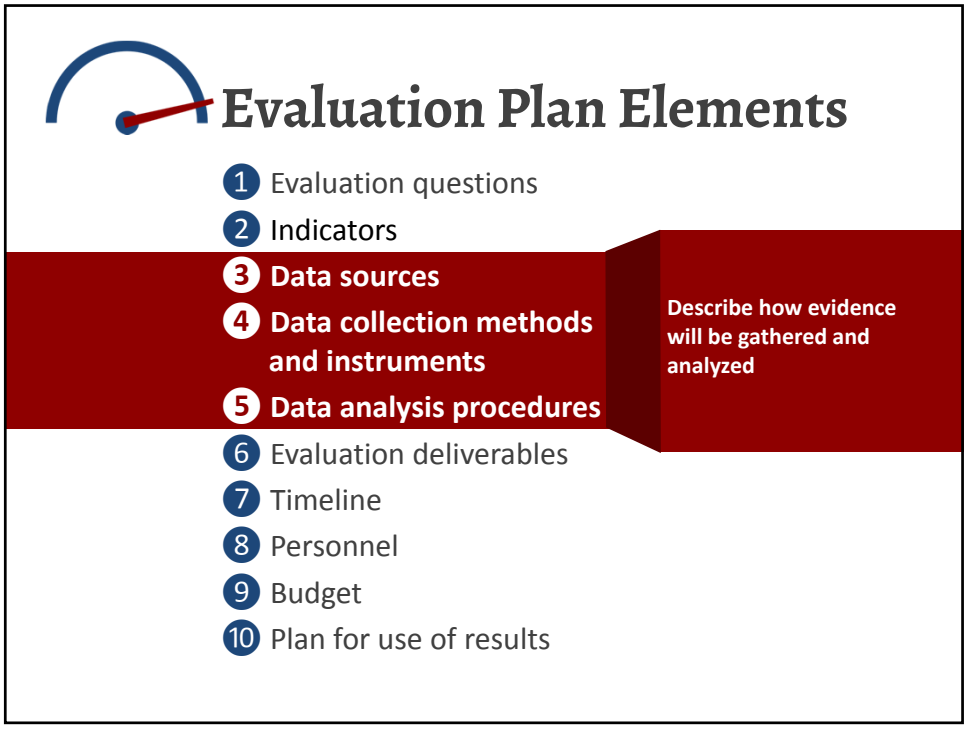
Identify what will be measured in order to answer the evaluation questions
Criteria for Selection of High-Performing Indicators: A Checklist to Inform Monitoring and Evaluation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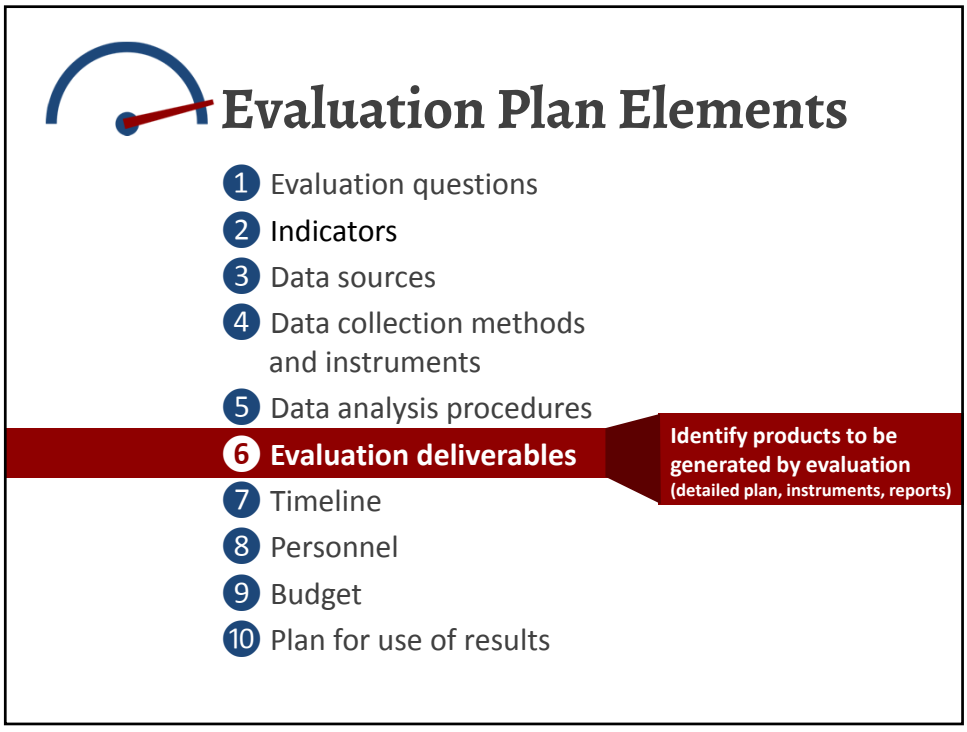
Describe how evidence will be gathered and analyzed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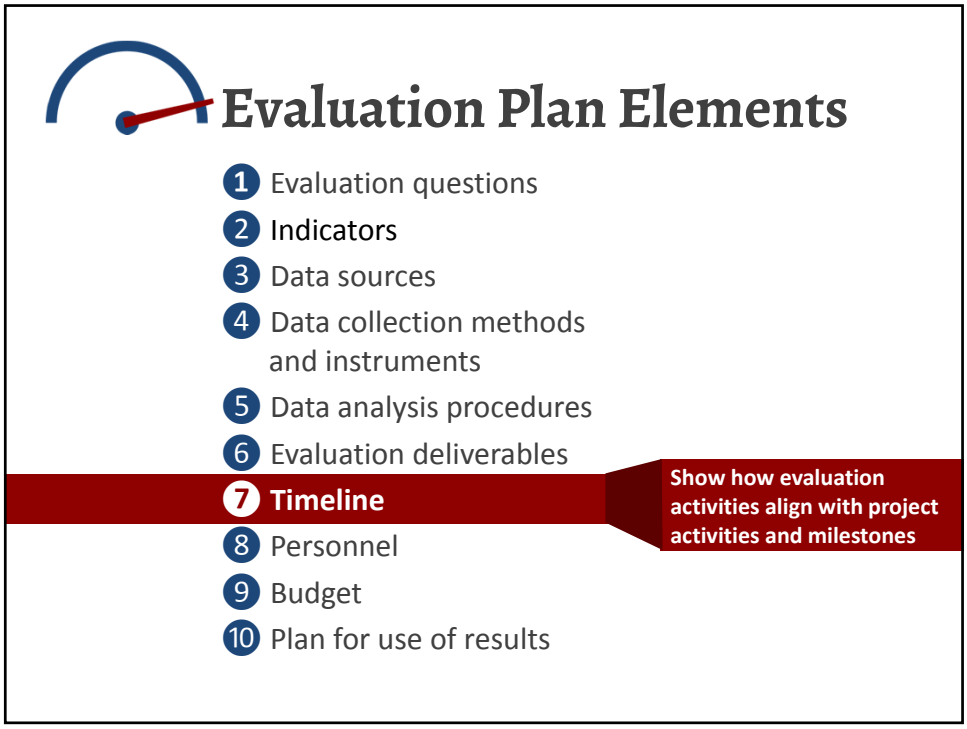
Identify products to be generated by evaluation (detailed plan, instruments, reports)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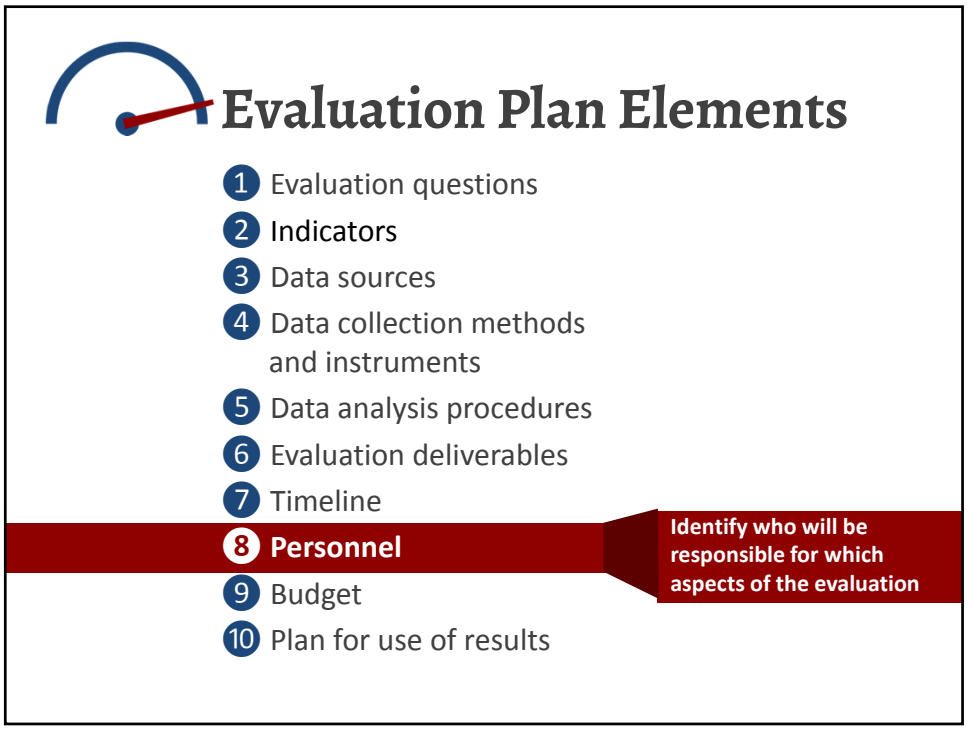
Show how evaluation activities align with project activities and milestones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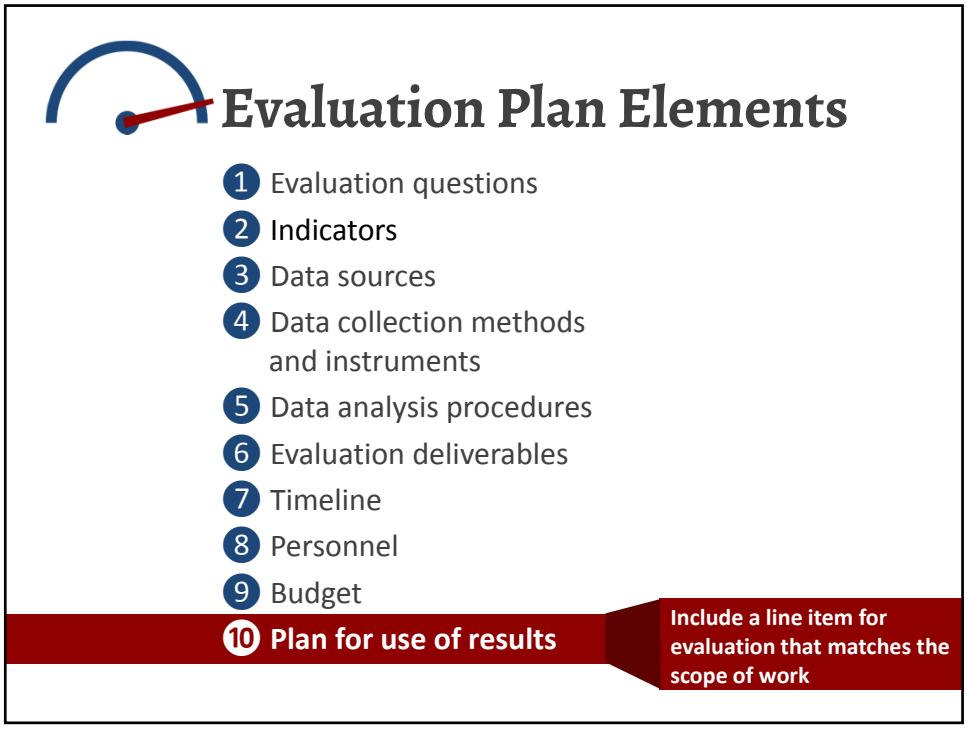
Identify who will be responsible for which aspects of the evaluation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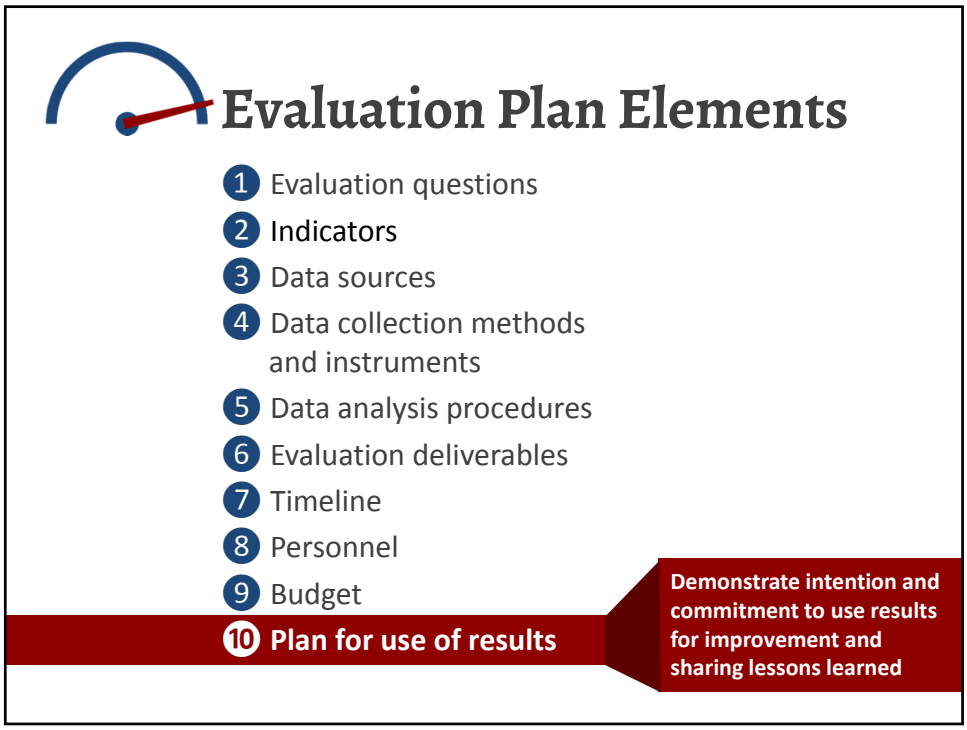
Include a line item for evaluation that matches the scope of work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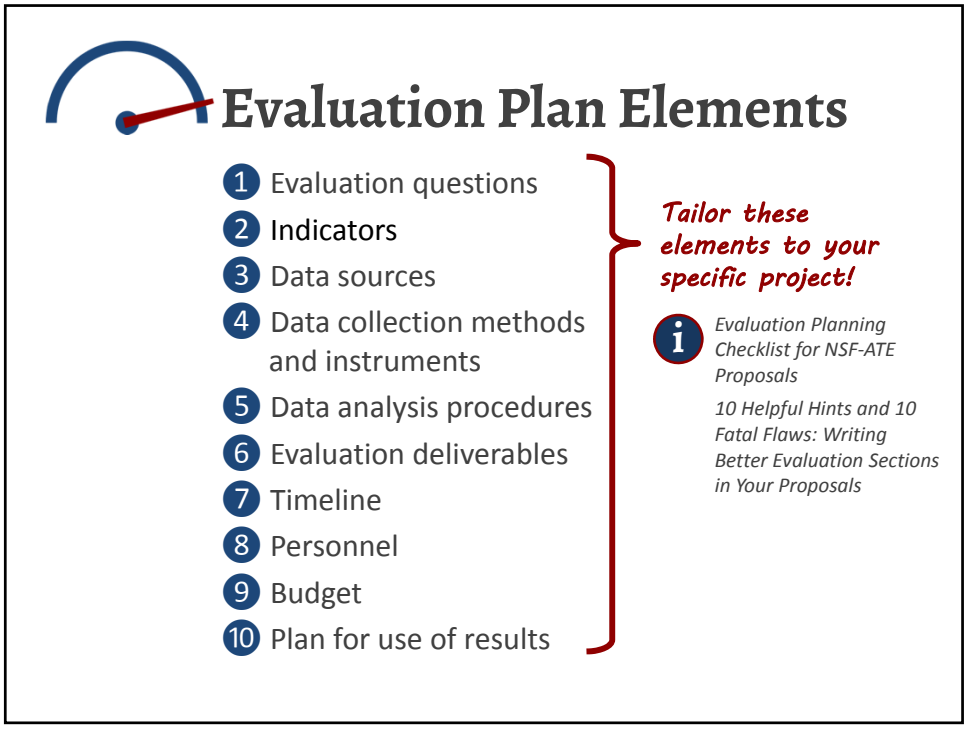
Demonstrate intention and commitment to use results for improvement and sharing lessons learned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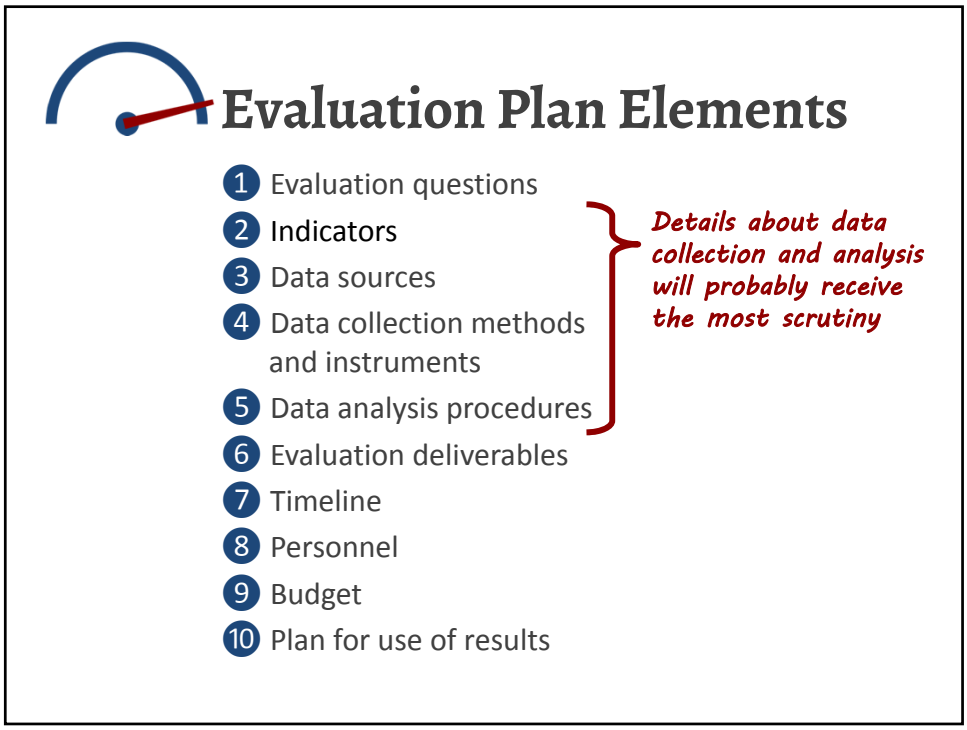
Tailor these elements to your specific project!
Evaluation Planning Checklist for NSF-ATE Proposals
10 Helpful Hints and 10 Fatal Flaws: Writing Better Evaluation Sections in Your Proposals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Details about data collection and analysis will probably receive the most scrutiny

Let's play

Be the Reviewer!

Get ready to use your poll buttons

Which data collection description is better?

a

The evaluation will utilize an accepted mixed-methods design (Cook & Campbell, 1979). Quantitative and qualitative measures of performance will be used in both a formative and summative manner to gauge the merit and worth of the grant initiative. This mixed-methods approach has proven useful in utilizing both quantitative and qualitative performance indicators in a single research design (Frechtling & Sharp, 1997). It is also consistent with the best practices and recommendations for rigorous scientifically-based research.

b

Project staff will administer an end-of-workshop survey to obtain participants' feedback, including both ratings and open-ended comments. The external evaluator will conduct interviews with participants six months following the workshop to determine the extent to which they applied the workshop content. She also will interview a random sample of students at the end of each semester to learn how their knowledge and perceptions of green energy technology were impacted.

Data Collection Planning Matrix

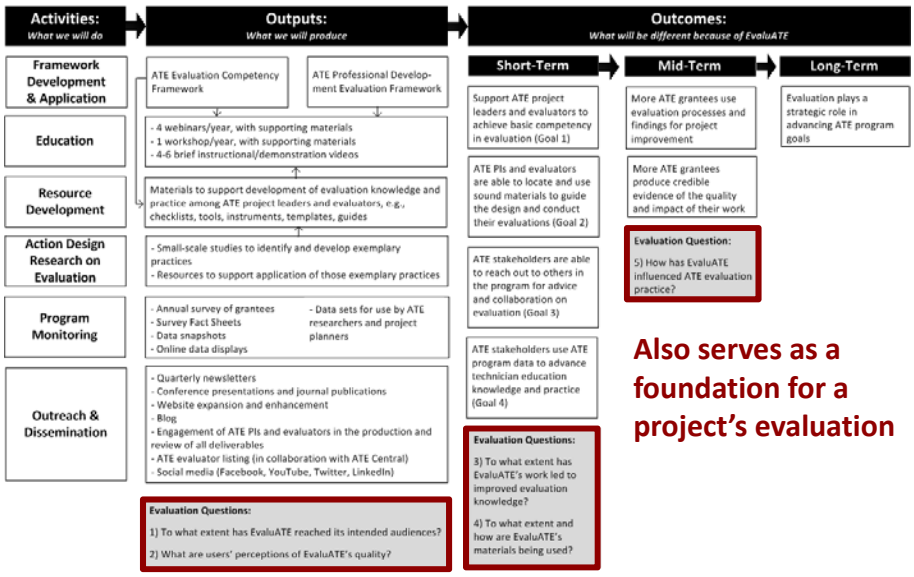
Evaluation Question: How has the project impacted enrollment in renewable energy programs and courses?					
Indicator	**Data Source**	**Method**	**Responsible Party**	**Timing**	**Analysis Plan**
Change in course enrollment numbers	Institutional research database	Review of institutional and departmental records	Project PI	End of each semester	Comparison of enrollment numbers over time (start 2 years prior to project start)
Opinions of faculty and career center staff about the project's impact	Participating faculty Career center advisors Career center director	In-person interviews	External evaluator	Annually	Inductive coding of interviews to identify themes
Students' reports about why they enrolled	Enrolled students	Web survey	Instructors (instructions provided by evaluator)	Beginning of each semester	Descriptive statistics and inductive coding

Data Collection Planning Matrix

"logic model"

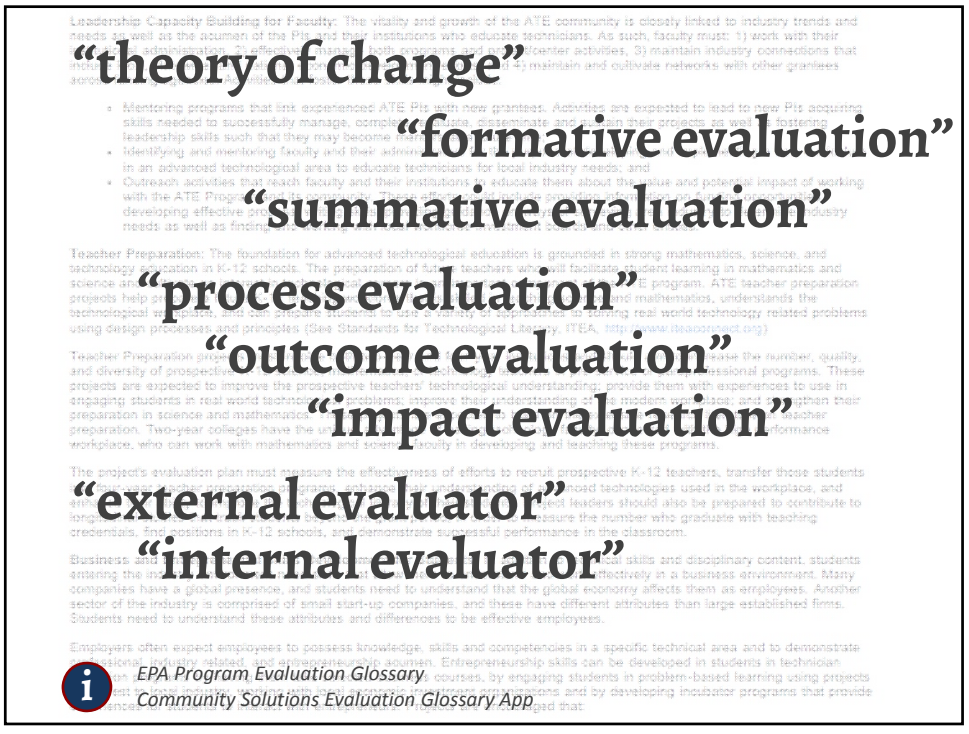
Visual representation of a project's inputs, activities, outputs, and outcomes and the logical progression of how resources translate into impact

Logic Model Example



Also serves as a foundation for a project's evaluation

Small Project Evaluation: Principles and Practices
ATE Logic Model Template



EPA Program Evaluation Glossary
Community Solutions Evaluation Glossary App

Comments

Leslie Goodyear, Ph.D.

- Principal Research Scientist at EDC
- Former NSF program officer in the Division of Research on Learning

Questions?

Lori
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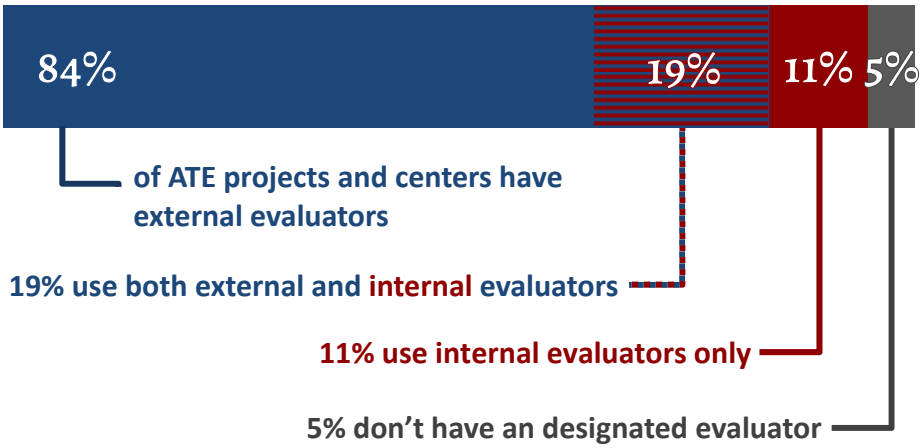
Evaluation **Staffing** and Budgeting

> **Evaluation**: All projects and centers carry out evaluative activities. The funds to support an **evaluator independent of the project or center** must be requested, and the requested funds must match the scope of the proposed evaluative activities.
>
> Advanced Technological Education Program
> —National Science Foundation

Evaluators in the ATE Program



Locating an Evaluator

AMERICAN EVALUATION ASSOCIATION
www.eval.org

Check the American Evaluation Association's Evaluator Directory

If already funded, post an RFP in the "Career" section of AEA's website

Check with university-based evaluation centers in your region

Ask for recommendations from colleagues or other program grantees

Evaluation Staffing and Budgeting

> **Evaluation**: All projects and centers carry out evaluative activities. The funds to support an evaluator independent of the project or center must be requested, and the **requested funds must match the scope of the proposed evaluative activities**.

Advanced Technological Education Program
—National Science Foundation

Evaluation Budgeting Rule of Thumb

10%

of the cost of conducting the project should be allocated to evaluation

Small Project Evaluation: Principles and Practices

Evaluation Utilization

1. Use results to inform for continuous project improvement
2. Share results with project participants, partners, and other stakeholders
3. Report on project success and lessons learned in annual reports to funders
4. Incorporate evaluation results into new funding proposals

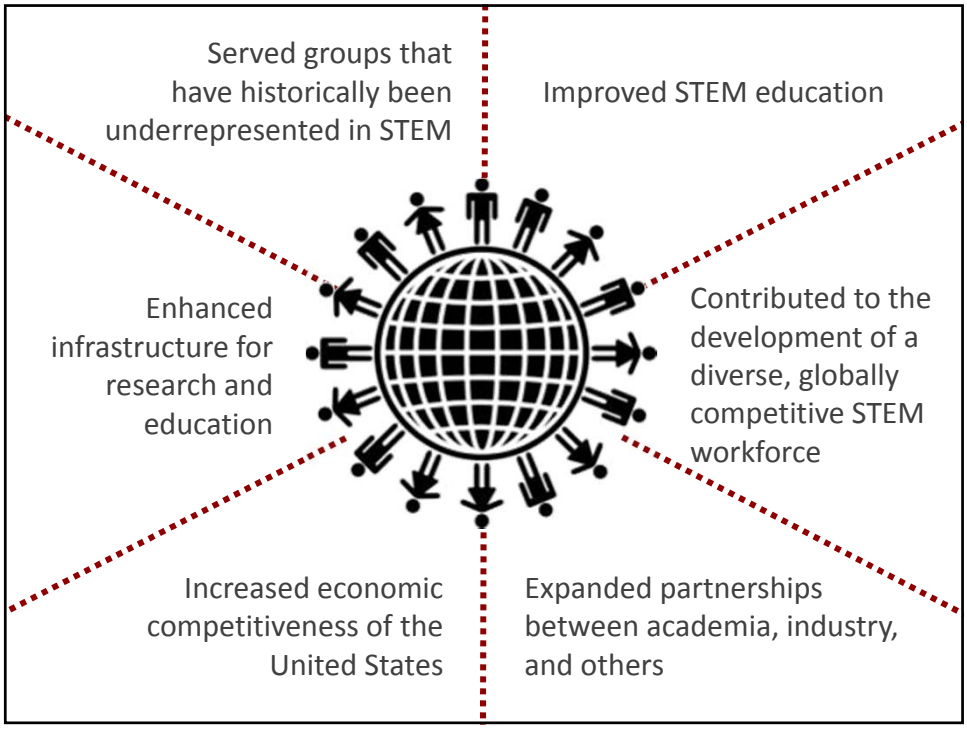
Results from Prior NSF Support

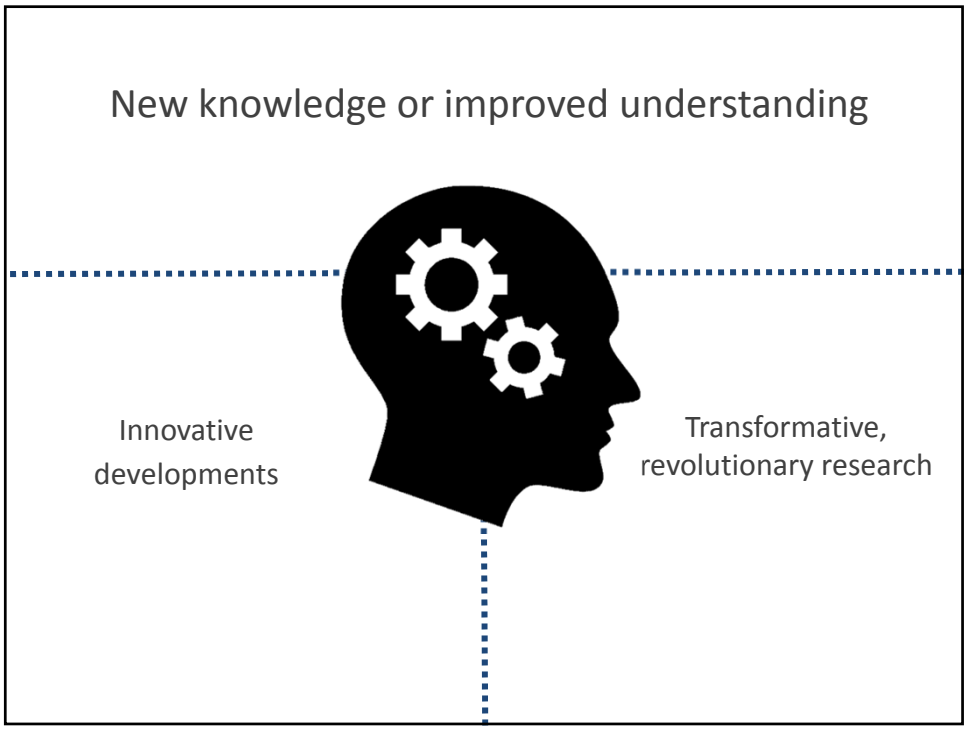
> specific outcomes and results including metrics to demonstrate the impact of the project

Broader Impacts
Benefits to society; contributions to the achievement of desired societal outcomes

Intellectual Merit
Advances in knowledge and understanding

EvaluATE Winter 2016 newsletter: Revisiting Intellectual Merit and Broader Support


Served groups that have historically been underrepresented in STEM
Improved STEM education
Enhanced infrastructure for research and education
Contributed to the development of a diverse, globally competitive STEM workforce
Increased economic competitiveness of the United States
Expanded partnerships between academia, industry, and others


New knowledge or improved understanding
Innovative developments
Transformative, revolutionary research

Advice from EvaluATE blog contributor, Amy Germuth

State goal

As part of this project, **our goal was to increase the number of women who successfully earned an associate's degree in welding.** To this end, we began a targeted recruiting campaign focusing on women who were about to complete or had recently completed other related programs such as pipefitting and construction and developed a brochure for new students that included positive images of women in welding. We used funding to develop the Women in Welding program and support team building and outreach efforts by them. Institutional data reveal that since this project was started, the number of women in the welding program has almost tripled from 12 (2006-10), of which only 8 graduated to 34 (2011-16), of which 17 have already graduated and 5 have only one semester left. Even if the remaining 17 were not to graduate, the 17 who already have is double the number of female students who graduated from the program between 2006 -10."

Getting Ready to Reapply: Highlighting Results of Prior Support

Advice from EvaluATE blog contributor, Amy Germuth

Identify target audience

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Getting Ready to Reapply: Highlighting Results of Prior Support

Advice from EvaluATE blog contributor, Amy Germuth

Describe impact with evidence

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Getting Ready to Reapply: Highlighting Results of Prior Support

Results from Prior NSF Support

ADDITIONAL TIPS

- Focus on outcomes
- Include as much evidence as possible
- Describe how the current proposal is building on results from prior work
- Be forthright about what didn't work and lessons learned

Intellectual Merit and Broader Impacts: Identifying Your Project's Achievements and Supporting Evidence

Comments

Leslie Goodyear, Ph.D.

- Principal Research Scientist at EDC
- Former NSF program officer in the Division of Research on Learning

Questions?

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Resources

TOPIC	RESOURCE	LINK
Evaluation Questions	*Evaluation Questions Checklist for Program Evaluation*	http://bit.ly/eval-questions
Indicators	*Criteria for Selection of High-Performing Indicators: A Checklist to Inform Monitoring and Evaluation*	http://bit.ly/indicator-eval
Integrating Evaluation into Proposals	*Evaluation Planning Checklist for NSF-ATE Proposals*	http://bit.ly/planningChecklist
	10 Helpful Hints and 10 Fatal Flaws: Writing Better Evaluation Sections in Your Proposals	http://bit.ly/hints-flaws
Data Collection Planning	*Data Collection Planning Matrix*	http://bit.ly/data-matrix
Logic Models	*Logic Model Template for ATE Projects and Centers*	http://bit.ly/ate-logic
Evaluation Terminology	*EPA Program Evaluation Glossary*	http://bit.ly/epa-evalgloss
	Community Solutions' Evaluation Glossary App	http://bit.ly/cs-gloss
Evaluation Planning, Budgeting, and Staffing (and more on logic models and evaluation questions)	*Small Project Evaluation: Principles and Practices:*	http://bit.ly/2016-mar
Communicating Evidence of Prior NSF Support	EvaluATE's Winter 2016 newsletter: Revisiting Intellectual Merit and Broader Support	http://bit.ly/winter16news
	Getting Ready to Reapply: Highlighting Results of Prior Support	http://bit.ly/germuth_dec15
	Intellectual Merit and Broader Impacts: Identifying Your Project's Achievements and Supporting Evidence	http://bit.ly/wingate-oct15

Webinar: Small Project Evaluation: Principles and Practices

Webinar included demonstrations of:

- Evaluation budget development
- Logic model development
- Evaluation question development
- How to divide internal and external evaluation tasks

Check out the recording, plus slides and resource handout!
www.evalu-ate.org/webinars/2016-march/