EvaluATE

4 Steps of Evaluation

1.
Ask important questions
about a project's processes and outcomes.

4.
Use and report results
for accountability, improvement, and planning.

2.
Gather evidence
that will help answer those questions.

3.
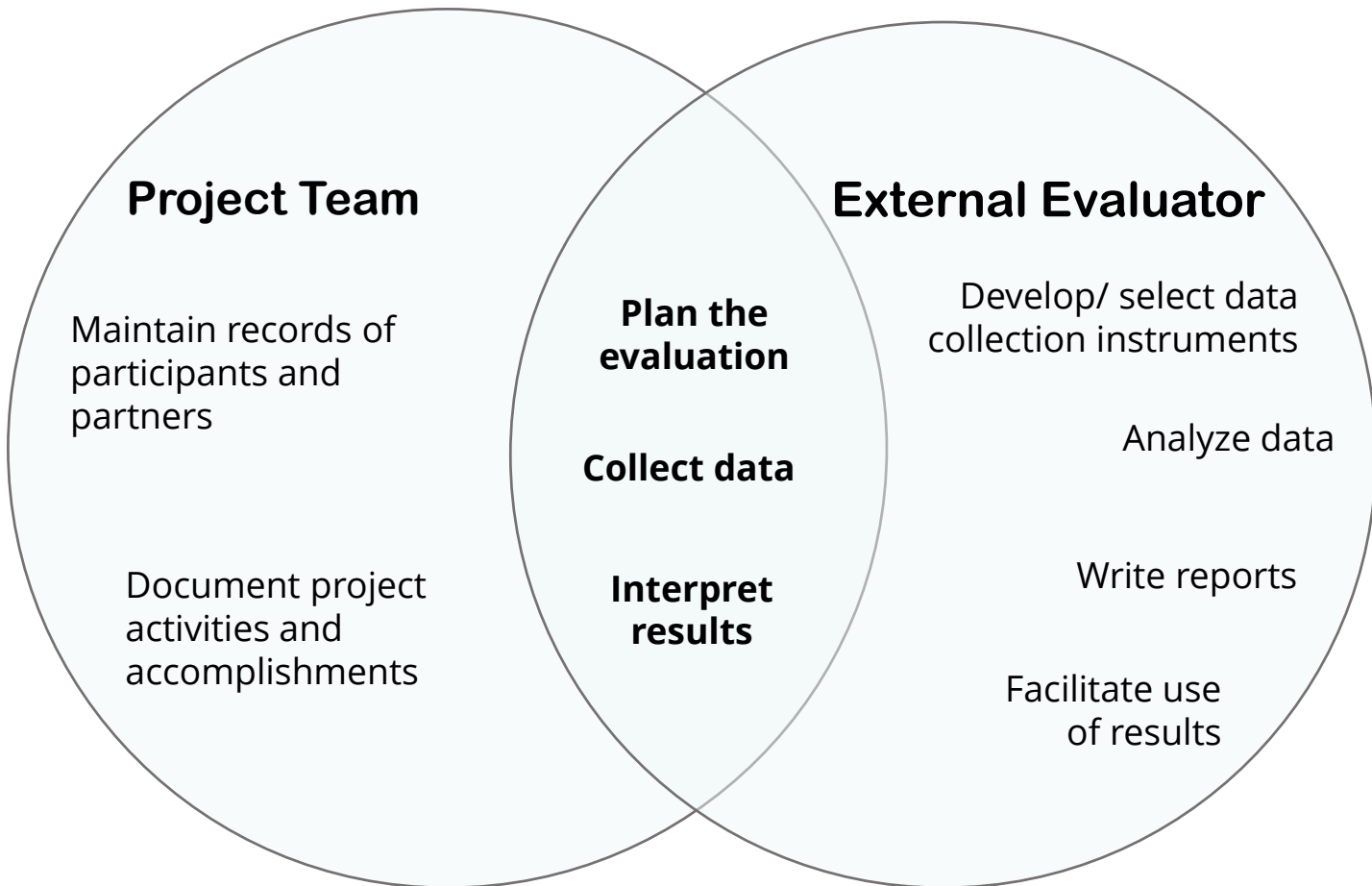**Interpret data**
and answer the evaluation questions.

EvaluATE

Evaluation Responsibility Diagram

Lyssa Wilson Becho | September 2020 | www.evalu-ate.org

Project Team

Maintain records of participants and partners

Document project activities and accomplishments

Plan the evaluation

Collect data

Interpret results

External Evaluator

Develop/ select data collection instruments

Analyze data

Write reports

Facilitate use of results

Evaluation Data Matrix Template

Lori Wingate | July 2017

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.

Evaluation Question:					
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 an 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.

EXAMPLE

Evaluation Question: To what extent are students using education pathways established by the project?					
Indicator	**Data Source and Methods**	**Responsible Party**	**Timing**	**Analysis**	**Interpretation**
Number of high school students enrolled in the college's wind energy technology courses	Institutional data	Project director obtains from institutional research office	End of each semester	Counts	Comparison with project target of 10 per semester
Percentage of dual-enrolled high school students who intend to pursue wind technology degrees or certificates	Survey of dual-enrolled students	External evaluator develops survey and conducts analyses; faculty administer survey	End of each semester	Descriptive statistics, disaggregated by demographic characteristics	Comparison with project target of 60% or more, , with one-third or more from underrepresented minority groups
Students' perceptions of what affects their education or career interests	Focus group with	External evaluator	End of each spring semester	Inductive 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 has dual-enrolled who graduate with wind technology degrees or certificates	Institutional data	Project director obtains from institutional research office	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% or more, with one-third or more from underrepresented minority groups

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

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 grantees for developing their own project logic models. *All parts of this document are editable.* Populate 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, select the box and begin typing. Either delete the extra 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-Extension's Logic Model Resources at www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html.

What new and existing resources will be used to support the project?	What are the main things the project will do?	What products will be created? (typically, things that can be directly observed and that will continue to exist after the project ends)	What will occur as a direct result of the activities and outputs? (typically, changes in knowledge, skills, attitudes)	What results should follow from the initial outcomes? (typically, changes in behavior, policies, practice)	What results should follow from the initial outcomes? (typically, changes in broader conditions)
Inputs	**Activities**	**Outputs**	**Short-Term Outcomes**	**Mid-Term Outcomes**	**Long-Term Outcomes**

Below are examples 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 "learners will be able to install, maintain, and troubleshoot high-vacuum systems."

Inputs	Activities	Outputs	Short-Term Outcomes	Mid-Term Outcomes	Long-Term Outcomes
• NSF funding • Faculty • Advisory panel • Industry partners • In-kind contributions	• Establish regional partnerships • Develop curriculum • Conduct workshops • Provide research/field experiences • Establish articulation agreement	• Curriculum materials developed • Policies created • Publications issued • New certifications • Tools/resources	• Faculty learn to use instructional technology • Students gain technical skills • Students' interest in technical careers increases	• Students persist in their programs • Faculty improve instruction • Colleges adopt and implement project-developed curriculum	• Increased regional economic vitality • Increased diversity in the technical workforce • A more highly skilled and adaptable workforce

Summary: Checklist for Program Evaluation Report Content

Kelly N. Robertson and Lori A. Wingate

Title Page
- ☐ Title
- ☐ Recipient(s)
- ☐ Author(s)
- ☐ Date
- ☐ Preferred citation

Acknowledgments
- ☐ Contributors

Table of Contents
- ☐ Headings
- ☐ Page numbers

List of Tables and Figures
Include if five or more are in the report.
- ☐ Titles
- ☐ Page numbers

List of Acronyms
Include if five or more are in the report.
- ☐ Definitions

Executive Summary
- ☐ Most important content (key findings, conclusions, and recommendations)

Introduction
- ☐ Overview
- ☐ Structure
- ☐ Intended audience
- ☐ Purpose and intended use

Program Description
- ☐ Goals and/or objectives
- ☐ Funder and funding
- ☐ Organizations involved
- ☐ Intended beneficiaries
- ☐ Program design
- ☐ Context
- ☐ History

Evaluation Background
- ☐ Purpose and intended use
- ☐ Scope
- ☐ Stakeholder engagement
- ☐ Responsiveness to culture and context
- ☐ Budget
- ☐ Evaluation team
- ☐ Prior evaluation

Evaluation Methods
Although several items are listed below, this should not be the longest section of the report.
- ☐ Approach
- ☐ Evaluation questions
- ☐ Criteria
- ☐ Indicators
- ☐ Data sources
- ☐ Data source selection (census or sampling)
- ☐ Sample size and description
- ☐ Data collection methods
- ☐ Data collection procedures
- ☐ Instruments

- ☐ Timeline
- ☐ Data management
- ☐ Data analysis
- ☐ Interpretation
- ☐ Limitations

Evaluation Results
Although only two items are listed below, this section will likely be the longest, because it includes the most important and substantive information. Organize results by evaluation questions or criteria.
- ☐ Findings
- ☐ Conclusions

Recommendations
- ☐ Development process
- ☐ Recommendations for the program
- ☐ Recommendations for future evaluations
- ☐ Ideas for consideration

References
- ☐ Sources

Appendices
- ☐ Data collection materials
- ☐ List of reviewed documents or artifacts
- ☐ Supplementary data or findings.