

Crafting Strong Measures for Indicators of Performance



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2M Research

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RESEARCH



Education
Research



Clinical
Research



Public Health
Research and
Practice



Social, Behavioral,
and Methodological
Sciences Research

The Education Practice currently has contracts with the **Department of Education**, the **National Science Foundation**, and the **Small Business Administration**.



2M provides technical assistance to the Department of Education's Arts in Education grantees—including review of goals, objectives, and performance measures.

Overview



- The role of the evaluator
- How to demonstrate evidence of success
- How to implement a strong evaluation design
- Performance measures activity

The Role of the Evaluator

A **high-quality evaluation design** includes the evaluator in planning, implementation, and evaluation.



Assist in the development of a **logic model**



Recommend analysis methods and perform **analyses**



Assist in the development of **performance measures**



Interpret analysis results



Define the **comparison group**



Assess the **impact** of program changes on the evaluation activities

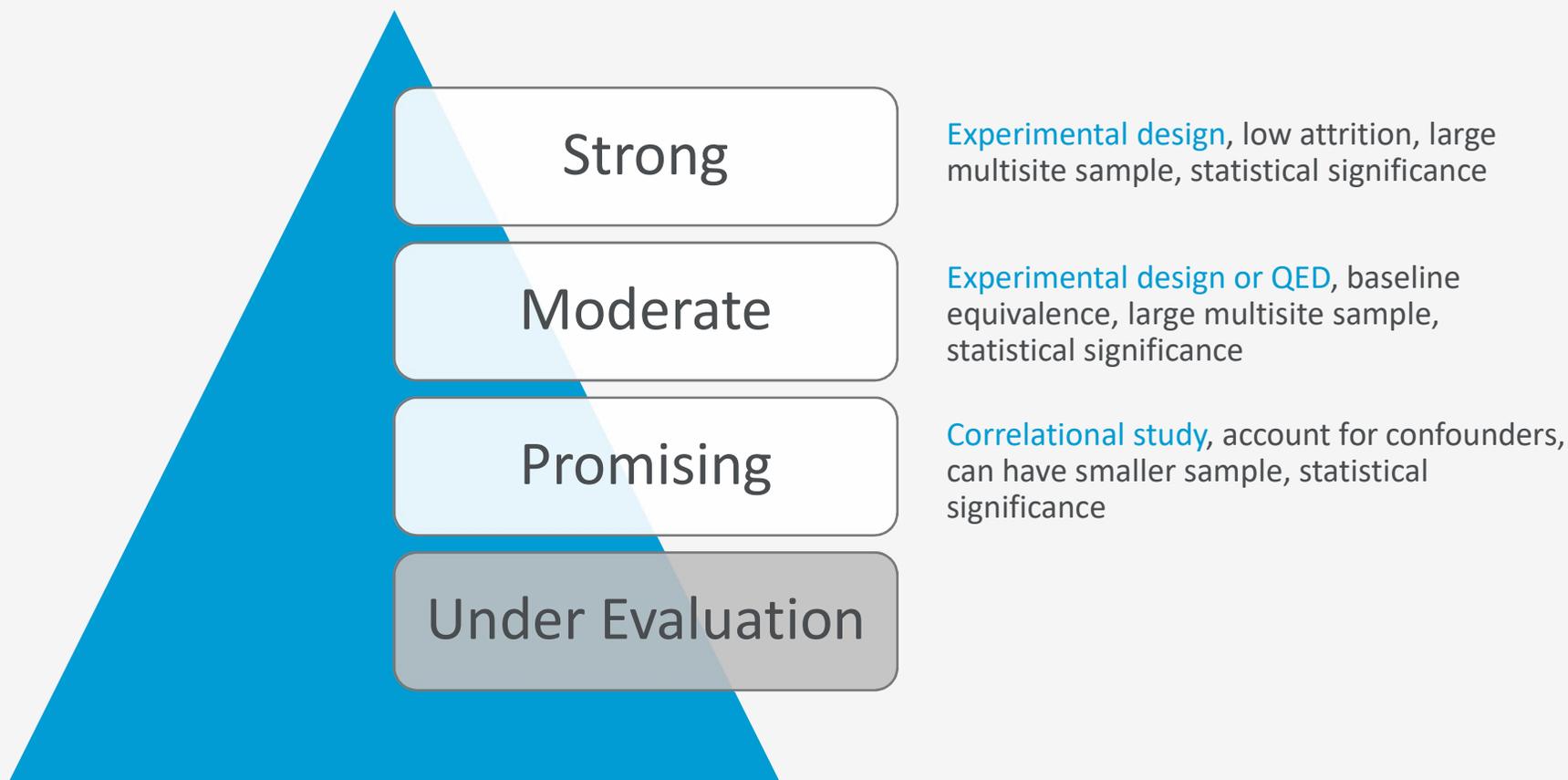


Recommend data collection plans and identify or develop **assessment tools**



Evidence of Success

The Every Student Succeeds Act (ESSA) defines **four levels of evidence**, each offering an increasingly rigorous evidence base.



What Works Clearinghouse (WWC) Standards

Strong evidence

- **Always** meets WWC standards **without reservations**

Moderate evidence

- **Always** meets WWC standards **with reservations**

Promising evidence

- **May** meet WWC standards **with reservations** if there is a valid comparison group and baseline equivalence

Evaluation Design



Regardless of the level of evidence, all evaluations should **monitor progress** and **assess fidelity**.

Monitor progress
toward goals and
objectives of the project

Assess fidelity
or whether and to what
extent the project is
implemented as
intended



Understand if and to what extent the intervention has impacted the population



Understand areas where improvement in project activities is needed



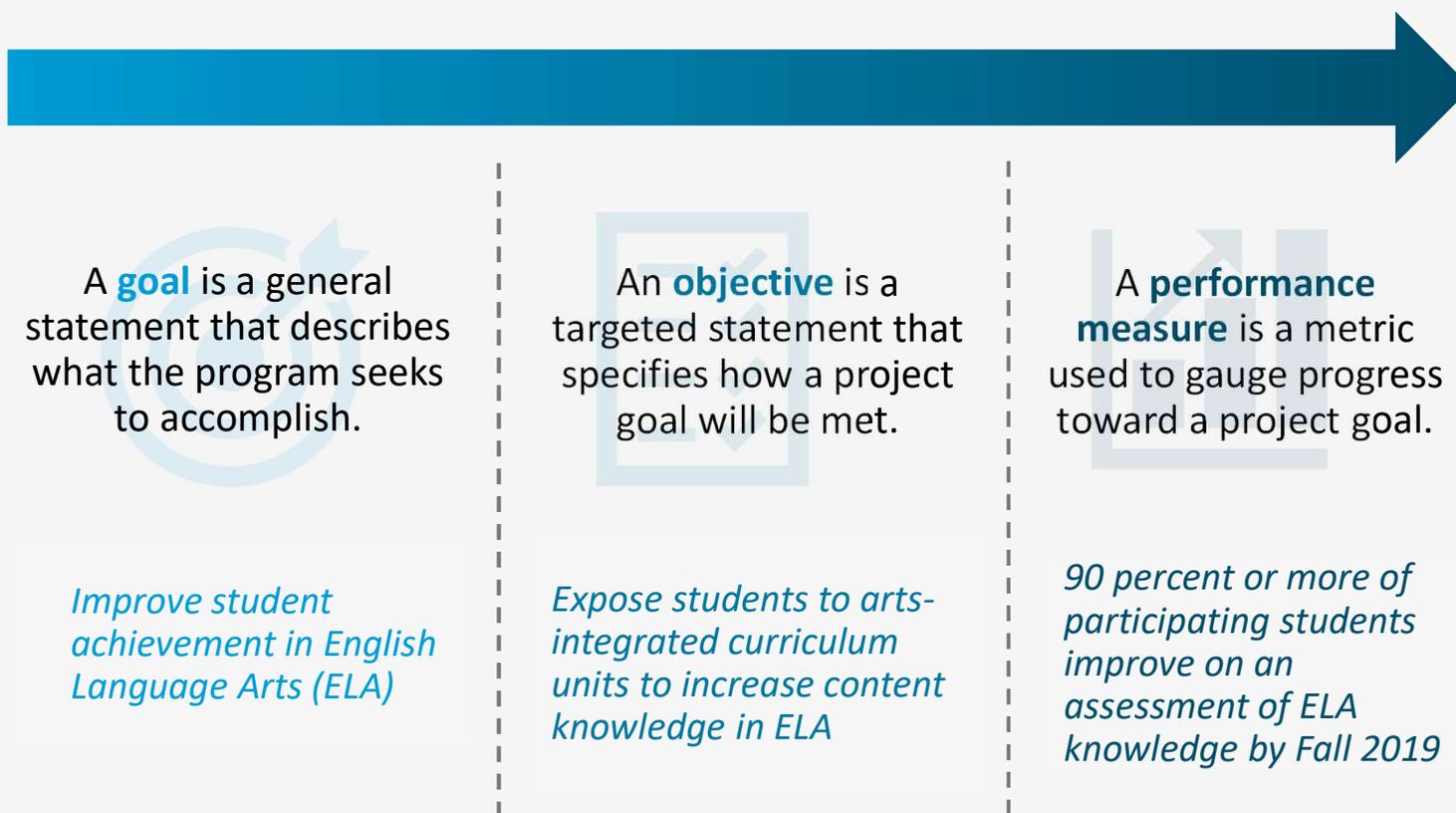
Communicate the successes and lessons learned from a project



Complete required reports clearly and efficiently

Evaluation Design

Ensure there is alignment between the **goals, objectives**, and **performance measures**.





Monitoring Progress

- Utilize performance measures to gauge progress toward each goal and objective of the project
- May be required by program guidelines (e.g., GPRA)
- Five components of **strong** performance measures

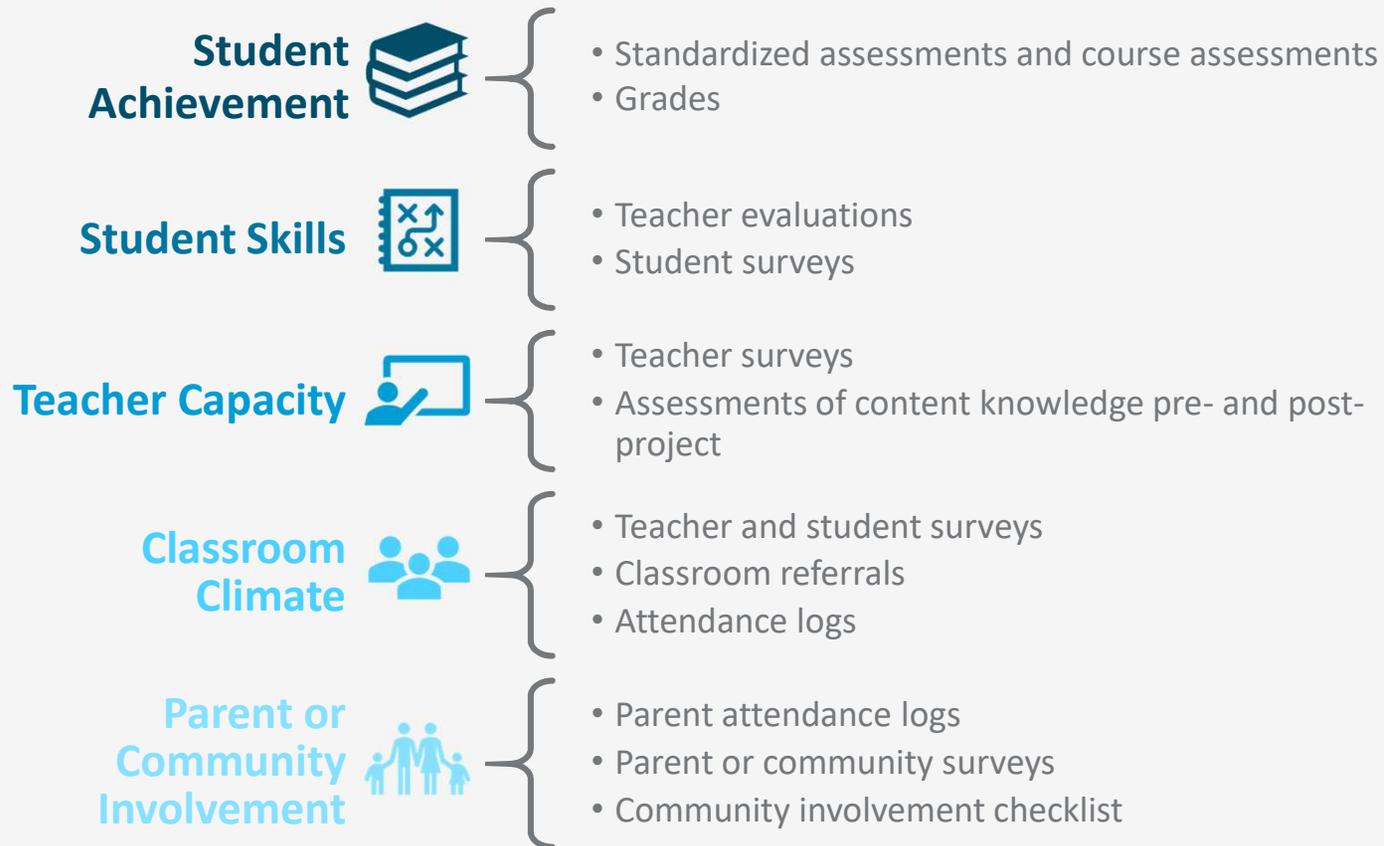




Evaluation Design



Select the appropriate **tools** to measure outcomes.



Evaluation Design



Ensure the **reliability** and **validity** of selected tools.

Validity

The extent to which an instrument measures what it is supposed to measure

An end-of-year ELA assessment

- Does the assessment fairly and accurately capture proficiency in ELA knowledge?
- If not, the assessment is not *valid*.

High
Reliability
and Low
Validity



Reliability

The extent to which the instrument consistently measures the same construct

A teacher survey with questions about student engagement

- Are the answers teachers give to each question consistently reflecting a similar level of engagement?
- If answers (pertaining to same students) differ significantly across question, time, or teacher, the survey is not *reliable*.

Low
Reliability
and Low
Validity



High
Reliability
and High
Validity





The Evaluation Planning Matrix (EPM)

Ensures that **goals and objectives have associated performance measures and data sources**

Focuses evaluation activities on **collecting evidence that speaks directly to progress toward the goals** of the project

Ensures that the **entire project team is on the same page**

Helps identify potential **challenges and resources** to address them

Serves as a **management tool**

Example:

| Goal | Objective | Performance Measure | Data Source/Tool |
|------------------------------------|--|---|-------------------------|
| Improve student achievement in ELA | Expose students to arts-integrated curriculum units to increase content knowledge in ELA | 90 percent or more of participating students improve on an assessment of ELA knowledge by fall 2019 | Standardized assessment |



Example of a Problematic EPM

| Goal | Objective | Performance Measure | Data Source/Tool |
|---|--|---|---|
| Increase student engagement in the classroom | Expose students to arts-integrated curriculum to increase engagement in math class | Students will appear more engaged by Spring 2019 | Pre-post classroom observation |
| Improve teacher content knowledge of the arts | Expose teachers to learning opportunities | Treatment teachers will score significantly better on an assessment of arts content knowledge than comparison teachers by Fall 2019 | A pre-post assessment of teacher perceptions of arts integration |
| Improve student reading comprehension | Implement professional development workshops for teachers | 95% of students will experience a statistically significant increase in reading comprehension from Fall 2018 to Fall 2019 | A standardized assessment of student reading comprehension given at the end of the intervention |



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Non-specific language

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↑
Not aligned to goal

↑
Unrealistic and not measurable

Performance Measures Activity



1. Think about the three most important goals of a current or previous project.
2. Develop an EPM with at least one objective and one performance measure for each goal, and the data source/tool you plan to use or are using to capture the information.
3. Discuss each EPM as a group.

| Goal | Objective | Performance Measure | Data Source/Tool |
|------|-----------|---------------------|------------------|
| | | | |