Crafting Strong Measures for Indicators of Performance

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2M Research
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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
- Assist in the development of performance measures
- Define the comparison group
- Recommend data collection plans and identify or develop assessment tools
- Recommend analysis methods and perform analyses
- Interpret analysis results
- Assess the impact of program changes on the evaluation activities

A high-quality evaluation design includes the evaluator in planning, implementation, and evaluation.
The Every Student Succeeds Act (ESSA) defines **four levels of evidence**, each offering an increasingly rigorous evidence base.

- **Strong**
  - Experimental design, low attrition, large multisite sample, statistical significance

- **Moderate**
  - Experimental design or QED, baseline equivalence, large multisite sample, statistical significance

- **Promising**
  - Correlational study, account for confounders, can have smaller sample, statistical significance

- **Under Evaluation**
Evidence of Success

What Works Clearinghouse (WWC) Standards

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

**Moderate evidence**
- *Always* meets WWC standards *with reservations*
  - If there is a valid comparison group and baseline equivalence

**Promising evidence**
- *May* meet WWC standards *with reservations* if there is a valid comparison group and baseline equivalence
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
Ensure there is alignment between the **goals**, **objectives**, and **performance measures**.

A **goal** is a general statement that describes what the program seeks to accomplish.

**Improve student achievement in English Language Arts (ELA)**

An **objective** is a targeted statement that specifies how a project goal will be met.

**Expose students to arts-integrated curriculum units to increase content knowledge in ELA**

A **performance measure** is a metric used to gauge progress toward a project goal.

**90 percent or more of participating students improve on an assessment of ELA knowledge by Fall 2019**
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:

1. Written in clear and specific language
2. Measures one thing, not multiple
3. Realistic and achievable
4. Aligned with project goals and objectives
5. Specifies a timeframe for success
Select the appropriate **tools** to measure outcomes.

- **Student Achievement**
  - Standardized assessments and course assessments
  - Grades

- **Student Skills**
  - Teacher evaluations
  - Student surveys

- **Teacher Capacity**
  - Teacher surveys
  - Assessments of content knowledge pre- and post-project

- **Classroom Climate**
  - Teacher and student surveys
  - Classroom referrals
  - Attendance logs

- **Parent or Community Involvement**
  - Parent attendance logs
  - Parent or community surveys
  - Community involvement checklist
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**.

**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**.
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:

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<th>Objective</th>
<th>Performance Measure</th>
<th>Data Source/Tool</th>
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<td>Expose students to arts-integrated curriculum units to increase content knowledge in ELA</td>
<td>90 percent or more of participating students improve on an assessment of ELA knowledge by fall 2019</td>
<td>Standardized assessment</td>
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### Example of a Problematic EPM

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<td>Students will appear more engaged by Spring 2019</td>
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<td>Improve teacher content knowledge of the arts</td>
<td>Expose teachers to learning opportunities</td>
<td>Treatment teachers will score significantly better on an assessment of arts content knowledge than comparison teachers by Fall 2019</td>
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<td>Improve student reading comprehension</td>
<td>Implement professional development workshops for teachers</td>
<td>95% of students will experience a statistically significant increase in reading comprehension from Fall 2018 to Fall 2019</td>
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### Evaluation Design

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- **Not aligned to goal**
- **Unrealistic and not measurable**
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.

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