



MSAP PRE-APPLICATION WEBINAR

LOGIC MODELS & PERFORMANCE MEASURES

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AGENDA

- Creating effective logic models
 - Logic models and performance measures
- Crafting effective performance measures
 - Purpose of performance measures
 - MSAP performance measures
 - Outcome and process measures
 - Elements of effective measures
 - Formatting measures
 - Next steps with performance measures



PURPOSE OF SESSION

To help MSAP applicants create effective logic models and performance measures that will be included in the grant application.



WHAT IS A LOGIC MODEL?

A logic model, also known as a theory of action, is defined in EDGAR as “a well-specified conceptual framework that identifies key components of the proposed process, product, strategy, or practice (i.e., the active ‘ingredients’ that are hypothesized to be critical to achieving the relevant outcomes) and describes the relationships among the key components and outcomes, theoretically and operationally.”



WHY USE A LOGIC MODEL?

- Logic models can help you to
 - create a common understanding of the assumptions and research underlying a program;
 - check that the desired outcomes will result from the planned strategies and activities;
 - communicate with stakeholders about the program's vision and life cycle;
 - develop a foundation for strategic planning; and
 - create an evaluation plan.



KEY LOGIC MODEL THEORIES

- **Theory of change** is a research-based statement of how the program will solve the present problem. It does not start with an assumption of what the program will be, but instead helps design the program by explaining how and why change will occur.
- **Theory of action** is interchangeable with “logic model.” It focuses on what the program will do to address the problem and achieve desired outcomes.
- **Program theory** encompasses both the theory of change and theory of action.



THEORY OF CHANGE

- The theory of change is the basis for your logic model. While it does not appear on the logic model, it can be included in explanatory material.
- Explains the links between activities and outcomes and how and why the desired change is expected to come about, based on research or experiences.
- One approach is to identify
 - Long-term goal
 - Preconditions
 - Rationale



THEORY OF CHANGE EXAMPLE

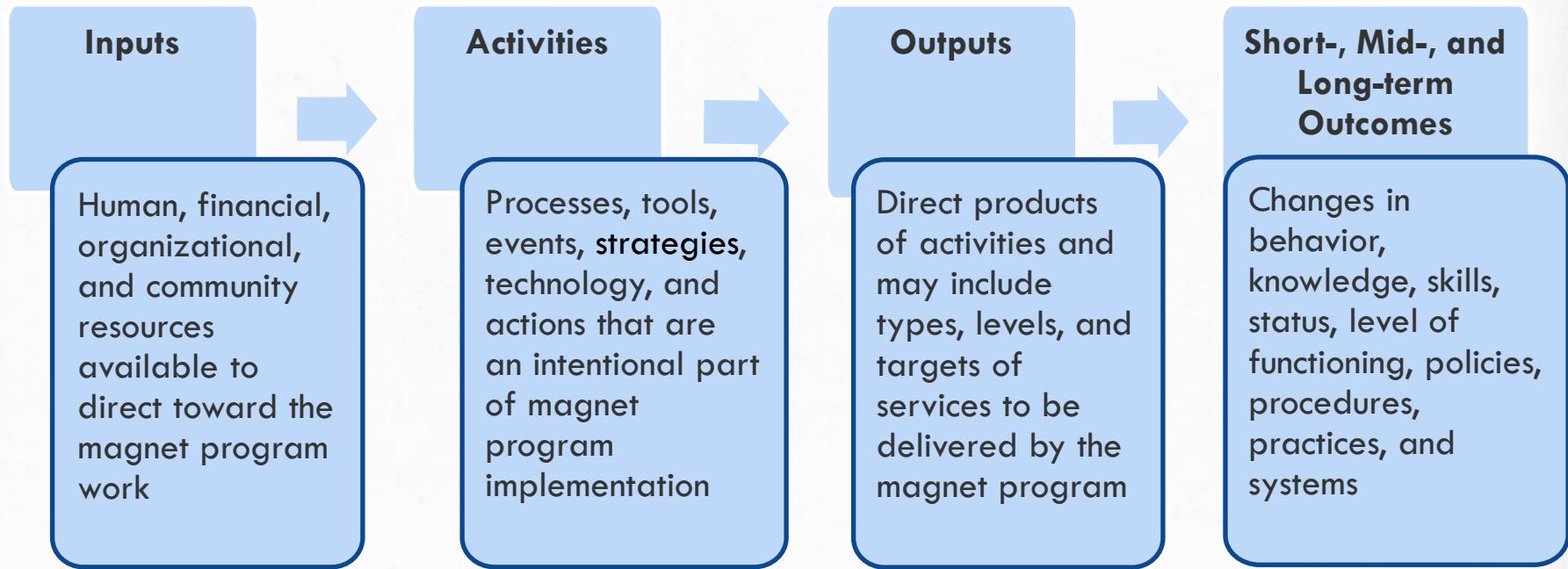
[GOAL] To eliminate racial/ethnic and socioeconomic group isolation, **[PRECONDITIONS]** we must effectively engage and recruit our target population; establish lottery/application procedures to secure diverse enrollments; and implement evidence-based practices focused on student connection.

[RATIONALE] Research shows that targeted marketing increases diverse enrollment; improved family and student engagement helps retain students; and rigorous, theme-based programs help improve academic achievement, helping to sustain integrated schools.



LOGIC MODEL STRUCTURE

Ensure your logic model has the recommended sections.



Context

A short summary of the current situation that describes the need, who the need affects, and why the need should be addressed. This may include relevant demographic, economic, community, historical, cultural, political or other social factors that influence resources, activities, outputs, and outcomes.



TEST THE ALIGNMENT OF YOUR LOGIC MODEL FROM LEFT TO RIGHT → →

1. For each activity, complete one of the following statements, continue repeating and completing the statement until you reach a logical end point.
 - a. “We do _____, SO THAT _____ will occur.”
 - b. “IF we do _____, THEN _____ will occur.”
 - c. Alternatively, use the question “But, why?” For example: “But, why do I develop marketing materials?”



TEST THE ALIGNMENT OF YOUR LOGIC MODEL FROM LEFT TO RIGHT ➔ ➔

2. Continue until a chain of connections is created that links your activities to your long-term outcomes, revising the logic model's activities, outputs, and outcomes as needed.
3. Consider the resources needed to ensure the chain of connections is achieved. Does your current input section reflect all relevant partners, staff, funding, community assets, etc.?
4. Finally, consider context in which the work unfolds. Does your context section provide a reasonable understanding of this environment and the need you are trying to address?



TEST THE ALIGNMENT OF YOUR LOGIC MODEL FROM RIGHT TO LEFT ↙

1. Start at the end. What is your long-term desired outcome?
2. Move backwards and identify the chain of mid- and short-term outcomes that lead to the final, long-term result.
3. Move backwards: what or WHO must participate and what OUTPUTS must we produce?
4. Move backwards: What ACTIVITIES must be provided/produced/completed so that the identified individuals (groups, institutions, etc.) will achieve the desired outcomes?



TEST THE ALIGNMENT OF YOUR LOGIC MODEL FROM RIGHT TO LEFT ←←

5. Move backwards: What INPUTS are needed to make sure the activities are accomplished?
6. Finally, consider context in which the work unfolds. Does your context section provide a reasonable understanding of this environment and the need you are trying to address?



TEST THE ALIGNMENT OF YOUR LOGIC MODEL

Example of misalignment:

| Inputs | Activities | Outputs | Short-term Outcomes | Mid-term Outcomes | Long-term Outcomes |
|--------|--|---|---|---|---|
| | Develop high-quality STEM-related professional learning opportunities for all teachers | Increased integration of theme-based curriculum and technology into lessons/units | Annual theme-based curriculum design and technology integration training for teachers | Increased attendance by teachers at STEM specific professional development events | Increased student performance on lessons that integrate the theme-based curriculum and technology |

Example of improved alignment:

| Inputs | Activities | Outputs | Short-term Outcomes | Mid-term Outcomes | Long-term Outcomes |
|--------|--|---|---|---|---|
| | Develop high-quality STEM-related professional learning opportunities for all teachers | Annual theme-based curriculum design and technology integration training for teachers | Increased attendance by teachers at STEM specific professional development events | Increased integration of theme-based curriculum and technology into lessons/units | Increased student performance on lessons that integrate the theme-based curriculum and technology |



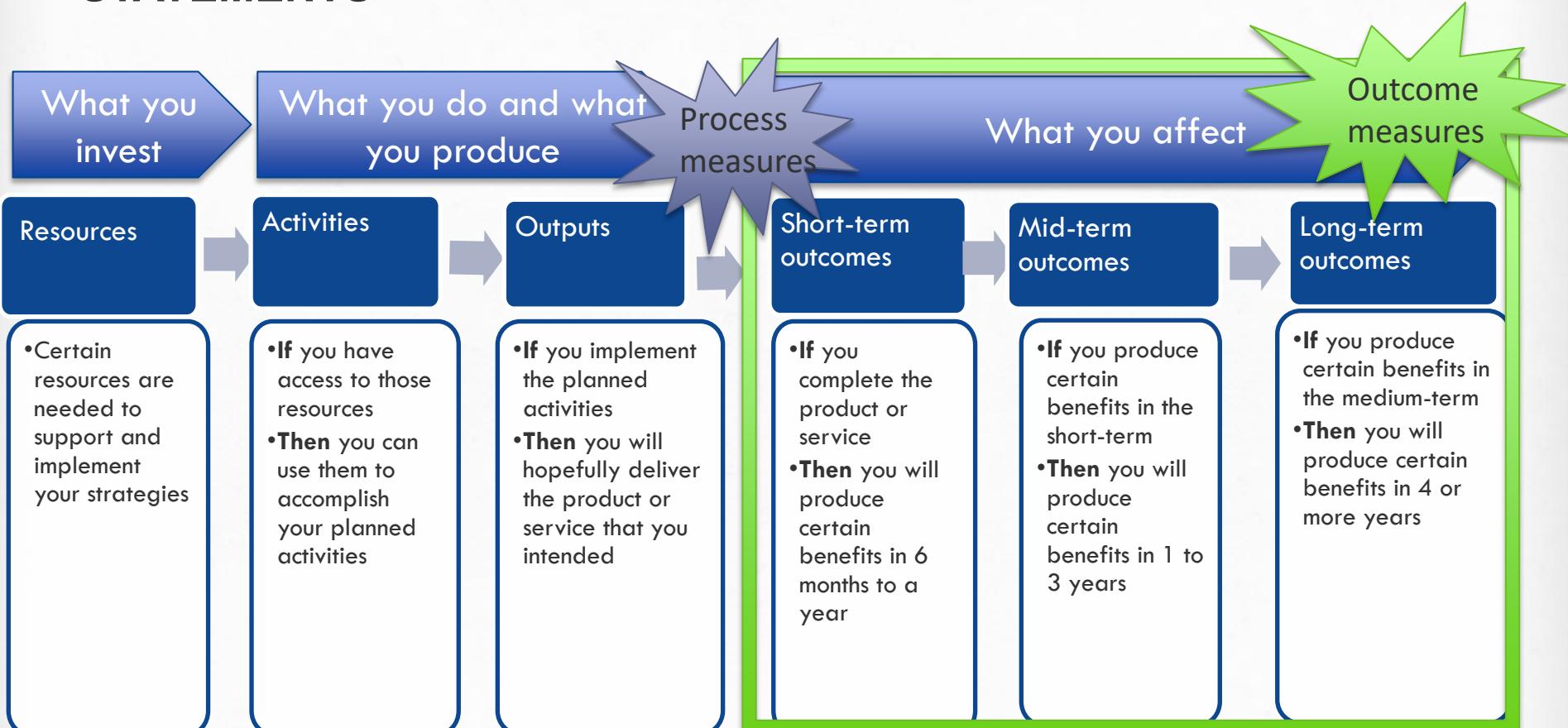
DISTRICT AND SCHOOL LOGIC MODELS

- You may choose to have individual logic models for the district and each MSAP school, but try to differentiate between the district's goals and the school's goals.
 - The district and school goals should be aligned and complementary, but not exactly the same.
 - For example, if the district goal is to implement project-based learning and the MSAP school will use project-based learning in its STEM program, highlight that.
- Doing this will help build support for the MSAP project within the district because it is clear how the two are working toward the same integral goals.



PROCESS AND OUTCOME MEASURES IN YOUR LOGIC MODEL

LOGIC MODELS ARE GROUNDED IN A SERIES OF “IF-THEN” STATEMENTS



E. Context

Relevant demographic, economic, community, historical, cultural, political or other social factors that influence activities and outcomes.

LOGIC MODELS AND PERFORMANCE MEASURES

- The short-, medium-, and long-term goals that you want to achieve listed in your magnet program's logic model should guide the development of your performance measures and the data you need to collect.
- When writing measures consider
 - What indicators will show whether the program achieved these short- or long-term outcomes;
 - When the outcomes are expected to happen; and
 - What data need to be collected to report on the outcomes.



PURPOSE OF PERFORMANCE MEASURES

Performance measures assess performance and provide evidence to demonstrate progress toward achieving program-level and project-level purposes and objectives.



MSAP PERFORMANCE MEASURES

There are two classifications of MSAP performance measures.

- **Program-level Education Department General Administrative Regulations (EDGAR) measures**
- **Project-level measures**



MSAP PERFORMANCE MEASURES

Program-level measures are program-level measures established for reporting to Congress. All grant awardees are required by statute to report on these measures.



MSAP PROGRAM-LEVEL MEASURES

Annual measures

1. The number and percentage of magnet schools receiving assistance whose student enrollment reduces, eliminates, or prevents minority group isolation.
2. The percentage increase of students from major racial and ethnic groups in magnet schools receiving assistance who score proficient or above on State assessments in reading/language arts as compared to previous year's data.
3. The percentage increase of students from major racial and ethnic groups in magnet schools receiving assistance who score proficient or above on State assessments in mathematics as compared to previous year's data.



MSAP PROGRAM-LEVEL MEASURES

Long-term measures

4. The percentage of magnet schools that received assistance that are still operating magnet school programs three years after Federal funding ends.
5. The percentage increase of students from major racial and ethnic groups in MSAP-funded magnet schools who score proficient or above on State assessments in reading/language arts three years after Federal funding ends.
6. The percentage increase of students from major racial and ethnic groups in MSAP-funded magnet schools who score proficient or above on State assessments in mathematics three years after Federal funding ends.



MSAP PERFORMANCE MEASURES

Project-level measures are specific project-level measures that grantees establish in their grant applications to meet the project objectives. These may be different for each grantee.



PROJECT OBJECTIVES

- First, establish objectives.
- Objectives are typically written as “to” statements.
For example, “To reduce minority group isolation in MSAP project schools.”
- Then, write performance measures that will show how well you are meeting your objectives.



PROJECT OBJECTIVES

Each objective will have multiple measures. For example,

- A desegregation objective will have measures about reducing minority group isolation, increasing classroom diversity, and increasing socioeconomic diversity.
- An academic achievement objective will have measures about improving instruction, improving student learning, and improving test results.
- A building capacity objective will have measures about enhancing professional development, building sustainability, and establishing community partnerships.



TYPES OF MEASURES

In general, two types of measures are used to report on MSAP projects—process and outcome measures.



TYPES OF MEASURES: PROCESS

- **Process measures** address how the objective will be met and what activities will be implemented to effect change.
- Example: Redesign of marketing materials (e.g., logo, brochures, letterhead) will be completed by February 1, 2023.



TYPES OF MEASURES: OUTCOME

- **Outcome measures** assess the extent to which the objective is met, and entail some level of change related to knowledge, attitudes, or behavior.
- Example: Magnet School A's graduation rate will increase 10 percentage points by June 1, 2027.



PROCESS MEASURE EXAMPLES

- Teachers will receive 40 hours of professional development by June 1 of each grant year.
- Teachers will receive 40 hours of professional development in STEM integration concepts by June 1, 2023.



OUTCOME MEASURES EXAMPLES

- Teachers will utilize three strategies identified in professional development sessions in the classroom as shown through classroom observations conducted by June 1 of each grant year.
- By June 1, 2024, students will score an average of 2 percentage points higher on science end-of-unit tests.



EFFECTIVE MEASURES: ELEMENTS

Effective measures use clear, simple language and include the following:

- **What** will be measured
- **Who** will achieve the change
- **When** it will be measured or achieved
- **How much** it will change and in what **direction**
- The **baseline** from which the change will be measured (if applicable)



EFFECTIVE MEASURES: EXAMPLES

- By October 1, 2023 (WHEN), at least 80% (HOW MUCH) of 10th graders in MSAP School A (WHO) will pass the state high school competency assessment (WHAT).
- By October 1, 2023 (WHEN), there will be a 5-percentage point (HOW MUCH) increase (DIRECTION) from the previous year (BASELINE) in the number of 10th graders in MSAP School A (WHO) that pass the state high school competency assessment (WHAT).



REPORTING ON MEASURES

- The performance measures you list in your application will be reported on in your implementation plans and annual performance reports if your application is funded.
- Funded applicants will use a web-based version of the Project Status Chart section of the ED 524B form to report on project-level measures.



FORMATTING MEASURES

ED 542B FORM-PROJECT STATUS CHART



U.S. Department of Education
Grant Performance Report (ED 524B)
Project Status Chart

OMB No. 1894-0003
Exp. 02/28/2011

PR/Award # (11 characters): _____

SECTION A - Performance Objectives Information and Related Performance Measures Data (See Instructions. Use as many pages as necessary.)

1. Project Objective Check if this is a status update for the previous budget period.

| 1.a. Performance Measure | Measure Type | Quantitative Data | | | | | |
|--------------------------|--------------|-------------------|-------|---|-------------------------|-------|---|
| | | Target | | | Actual Performance Data | | |
| | | Raw Number | Ratio | % | Raw Number | Ratio | % |
| | | / | | | | / | |

| 1.b. Performance Measure | Measure Type | Quantitative Data | | | | | |
|--------------------------|--------------|-------------------|-------|---|-------------------------|-------|---|
| | | Target | | | Actual Performance Data | | |
| | | Raw Number | Ratio | % | Raw Number | Ratio | % |
| | | / | | | | / | |

Explanation of Progress (Include Qualitative Data and Data Collection Information)



FORMATTING MEASURES

EXAMPLES

- Original
 - By June 30, 2027, 70% of students at Magnet School A will be proficient on the state assessments in English language arts and mathematics.

- Reformatted
 - To format this measure, create two separate measures: one for the English language arts assessment and one for the mathematics assessment. Otherwise, if 70% of students are not proficient on *both* tests, you will not meet this measure!



FORMATTING MEASURES

EXAMPLES (CONT.)

- Original
 - Teachers at all MSAP schools will receive 25 hours of training in the magnet theme by June 30, 2024.
- Reformatted
 - To format this measure, create a separate measure for each school so data reviewers can easily identify what is happening at each school.
 - Teachers at MSAP School B will receive 25 hours of training in STEM instruction by June 30, 2024.
 - Teachers at MSAP School C will receive 25 hours of training in arts instruction by June 30, 2024.



FORMATTING MEASURES

- All information must be in a sentence format. (No tables can be placed in the performance measure.)
- One measure can include targets for all years as long as the same thing is being measured each year.
 - Example: Hispanic student enrollment at Magnet School C will decrease to 75% by October 1, 2023, to 73% by October 1, 2024, to 71% by October 1, 2025, to 69% by October 1, 2026, and to 67% by October 1, 2027.



MGJ PERFORMANCE MEASURES PURPOSE AND ELEMENTS

- The minority group isolation (MGI) measure provides data for program-level measure 1.
- In addition to the other elements of an effective performance measure, each school's minority isolated group should be clearly stated.
- The Year 5 MGI target should match the Year 5 projected enrollment for the minority isolated group that is in the Table 3 submitted with your grant application.



MGJ PERFORMANCE MEASURES EXAMPLES

- By October 1, 2023, the percentage of Black students will decrease to 75% at Magnet School C.
- By October 1, 2023, the percentage of Hispanic students at Magnet School B will decrease by 3 percentage points from the base year enrollment of 78%.



FORMATTING MEASURES FOR MAPS

- If a school has two minority isolated groups, you should have separate measures.
- Example:
 - Hispanic student enrollment at Magnet School C will decrease to 65% by October 1, 2023, to 63% by October 1, 2024, to 61% by October 1, 2025, to 59% by October 1, 2026, and to 57% by October 1, 2027.
 - Black student enrollment at Magnet School C will decrease to 30% by October 1, 2023, to 28% by October 1, 2024, to 26% by October 1, 2025, to 24% by October 1, 2026, and to 22% by October 1, 2027.



SUMMARY

- When writing performance measures, think about how you will report the data and what the data will tell you about how well your project is performing.
- Make sure all of your measures include the elements of effective measures.
- Use the logic model as the basis of what outcomes you should look at.



THANK YOU

Direct questions about the grant application to the MSAP Team at the U.S. Department of Education at msap.team@ed.gov.

