Magnet Schools Assistance Program
Pre-Application Webinar: Logic Models and Performance Measures
March 15, 2022

Manya Walton: Hello, welcome to the Magnet Schools Assistance Program fiscal year 2022 grant competition pre-application webinar. Today the MSAP technical assistance center will share information on creating logic models and performance measures for your proposed grant projects. But before we start our review basic webinar logistics. We're making an audio recording of this session. The recording and transcript will be posted online. The link will be available on the MSAP page at the U.S. Department of Education's website.

To reduce background noise, we've muted everyone's phone. To speak, press star six to unmute your phone. You'll also press star six to mute your phone again. You can ask questions throughout the presentation by using the chat feature, go to the Chat pod in the lower right corner of your screen and type in your question. Please be aware that your questions will be seen by everyone participating in this webinar. We have a lot of material to cover today, so the U.S. Department of Education will provide written responses to all the questions and post them with the webinar recording. Next slide, please.

Today we'll cover the information here about creating effective logic models and performance measures, including their purpose, how to make them effective and how to format them for the grant application. Next slide. The primary purpose of this session is to help applicants create logic models and performance measures that foster a well thought out and cohesive project design. If you're awarded a grant, you'll use your logic models and performance measures to track how well you're implementing your projects and to report on how well you're meeting your objectives. So it's important that your measures are well crafted. Now, turn the session over to best four. We'll talk about logic model.

Beth Ford: Okay. Thanks Manya.

Manya Walton: Sure.

Beth Ford: So first we'll talk about logic models like Manya just said. So what is a logic model? The Education Department General Administrative Regulations, which are known as EDGAR defines a logic model as a well specified conceptual framework that identifies key components of the proposed process, product strategy or practice. That is the active ingredients that are hypothesized to be critical to achieving the relevant outcomes. The logic model also describes the relationships among the key components and outcomes, both theoretically and operationally. Basically the logic model shows what you plan to do and how that will lead to your desired outcomes. It's the sort of roadmap for your magnet program that lays out what your goals are and what steps you're going to take to get there. With that in mind, why should you use a logic model? A logic model can help you create a common understanding of the assumptions and research underlying a program check that the desired outcomes will result from the plan, strategies and activities, help your communicate with stakeholders about the program's vision and life cycle, develop a foundation for strategic planning, and it can serve as the basis of your evaluation plan.

So let's go over some terms you may have heard around logic models. A 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. A theory of action is the same thing as your logic model, it focuses on what the program will do to address the problem and achieve desired outcome. The term program theory refers both the theory of change and the theory of action.

Ideally, your magnet program should have both the theory of change and the theory of action. The theory of change underpins the components of the logic model and should guide your thinking as you plan your program. The theory of change is separate from the logic model, but it can appear in the explanatory material around your logic model in your grant application narrative. The theory of change explains the links between activities and outcomes, and how and why the desire change is expected to come about, based on research or experiences. One way to help build your theory of change is to identify your long-term goal, the preconditions that must exist for that goal to be achieved and the rationale for why those preconditions will lead to your goal, preferably using research as a basis.

So here's an example of a theory of change that uses these three elements. The long-term goal in this example is to eliminate racial/ethnic and socioeconomic group isolation. In order for the magnet program to meet that goal, the program must effectively engage and recruit the target population, establish lottery and application procedures, to secure diverse enrollments and implement evidence-based practices focused on student connection. The rationale for why these preconditions or strategies will achieve the goal is because research shows that targeted marketing increases diverse enrollment, that improved family and student engagement helps retain students, and that rigorous theme-based programs help improve academic achievement, helping to sustain integrated schools.

So once you have your theory of change, you can flesh out what you'll need to have and do to meet that long-term goal. So that means it's time to create your logic model. Logic model should generally have the components shown here. First, you show the inputs. These are the human financial, organizational and community resources that are available to direct toward the magnet program work. Then you use those inputs to conduct activities. The activities are the processes, tools, events, strategies, technology, and actions that are an intentional part of magnet program implementation. Those activities in turn producer and out outputs. Outputs are the direct products of activities and they include types, levels and targets of services to be delivered by the magnet program.

The outputs will then lead to short term, midterm and long-term outcomes. Outcomes are the changes in behavior, knowledge, skills, status level of functioning, policies per seizures, practices or systems. Just like the magnet program itself, the logic model takes place within a certain context. This is why the logic model also typically contains a context section that should provide a short summary of the current situation that describes the need, who the needs need effects 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.

As you're creating a logic model, you want to make sure that the components flow logically from one to the next. For each activity, you can start from the left, which is the inputs and move to the right ending at the outcomes. By completing one of these statements, you can state we do this so that this will occur. For example, we hold recruitment events and community centers to receive more applicants from our target population. Or you can use if-then statements such as if we receive more applications from our target population, then more of those students will enroll. A third option is to ask, but why after everything. As in, but why do I develop marketing materials?

Continue following these statements and answering these question until a chain of connections is created, selling to your activities to your long-term outcomes. You should revise the logic models, activities, outputs, and outcomes as needed whenever you notice the logical gap or leap during this process. Next 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, and so forth? Finally consider the context in which the work unfolds. Does your contact section provide a reasonable understanding of the environment and the needs you're trying to address, make sure that your activities make sense within that context and that the inputs are sufficient to implement those activities within the current situation. If any inputs seem to be missing, maybe securing those will become an activity that you know needs to occur.

You can also test the logic model by moving the other way from the right, the outcomes to left, which is the inputs. In this case, you start with one of your long-term outcomes and move backwards to test the logic leading to that outcome. First, move backwards and identify the chain of midterm and short-term outcomes that lead to that final long-term result. Then move backwards again and ask to achieve the short-term outcome, who must participate and what outputs must we produced? Then move to your activities. What activities must be provided, produced, or completed that the identified individuals, groups, or institutions will achieve the desired outcomes.

Lastly, what inputs do you need to ensure the activities are accomplished successfully? Finally, just like you did when you move from left to right, consider whether you provide out a quick explanation of the context. Here's an example of how you might tweak alignment in your logic model as you move through this process. In the first example here, along the top, there's a misalignment in the outputs and outcomes. You have the activity develop high-quality STEM-related professional learning opportunities for all teachers. Then the stated output is increased integration of theme-based curriculum and technology into lessons and units, but that increased integration is not a direct output of creating professional development. Something else needs to happen first.

So in the bottom example, this has been realigned by creating a new output and recognizing that the increased integration is more likely a midterm outcome. Here the activity of developing STEM professional development leads to an output of annual theme-based curriculum design and technology integration training for teachers. This is what you produce as a result of that activity. And then once you have that output, you think that will lead to more teachers attending STEM professional development. Once teachers have attended the professional development, then that will lead to increase the theme integration, which in turn will lead to the desired long-term outcome here of increased student performance on lessons that integrate the theme-based curriculum and technology.

So you may have one logic model for the whole magnet project or you can choose to have one logic model for the district and one for each proposed MSAP school. If you go that route of having multiple logic models, try to differentiate between the district schools and the school's goals. The district and school goals should be aligned in complementary, but they may not be 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 alignment. Doing this will help build support for the MSAP project within the district because it's clear how the two are working towards the same integral goals.

Before we move on to talking about performance measures, let's take a look at how the logic model can also help service the basis for your performance measures. One, you'll go into a more detailed explanation of the difference between the process and outcome measures here in few minutes. But here you can see where both of these types of measures are coming from in the logic model. Process measures are basically what you use to track implementation of the magnet program, whether things were done as planned or not. So you can look to the activities and output section of your logic model for the process measures and the short, mid, and long-term outcomes can serve as the basis for your outcome performance measures to show progression towards your ultimate goal over time.

Once you have your logic model, you can use it to help design your program evaluation. The short, mid, and long-term goals that you want to achieve listed in your magnet programs, logic model should guide the development of your performance measures and the data that you need to collect. When writing measures you should consider what indicators will show whether the program achieved those shorter, long-term outcomes, when the outcomes are expected to happen and what data will need to be collected to report on the outcomes.

All of that will help make sure that your activities outcomes and performance measures are logically linked, and that your measures are actually monitoring progress toward meeting those objectives and the goals that you set for your project. Okay. Moving on to performance measures, the purpose of performance measures is to assess performance and provide evidence to demonstrate progress toward achieving both program level and project level purposes and objectives. So there are two classifications of MSAP performance measures. Program-level measures are program wide and they're established under EDGAR. And then there are the individual project-level measures, and we'll talk briefly about both of those. Program-level measures address the performance of the program as a whole. All funded applicants in the cohort will report data from the projects on these measures. During the grant period, these data will be combined or aggregated to gauge the overall status of grantees and the progress toward meeting the program goals.

So what are the program-level measures? These are the three measures that if funded you'll report on each year of the grant cycle and the measures are written out here on the slide. So program-level performance measures are used by MSAP program staff to quantify and report progress toward meeting program level objectives. Reporting on these outcomes in annual performance reporting helps MSAP staff identify successes and potential challenges among grantees, define or design MSAP technical assistance services, provide performance reports to Congress about MSAP and improve MSAP overall. There are also three long-term program measures that are reported on 3 years after any funded grant projects ends.

So the performance measures you are creating for your grant application are your project-level measures. Funded applicants report on for the program-level measures and a special section of their annual performance reports. Therefore, applicants do not need to include program-level measures in their project level performance measures with the exception of measure one on minority group isolation, which we'll talk about a little bit later in the webinar. Project-level measures address the performance of an individual grantee. You'll design those measures in your grant applications to meet the needs of your community. Therefore, these are site specific measures, so the data can never be combined with data from other funded assets. Instead, these data will help The LEA and MSAP staff gauge the grantees progress and identify areas where technical assistance may be needed. Now I'll turn the session back over to Manya.

Manya Walton: Thanks, Beth. Now, I'll talk about how to create project-level performance measures. When crafting project-level measures, the first step is to create overall objectives. These are general categories under which the performance measures will fall. Most applicants will have about four to six objectives that focus on broad MSAP purposes, such as desegregating schools, improving academic achievement and building capacity. Objectives are written at to statements. For example, to reduce minority group isolation the MSAP schools will, and then you fill in the blank. Be sure to write two statements, so the objectives are clearly stated as the goals, your project will accomplish. Then write performance measures that show how well you will meet those objectives. Each of your objectives must have at least one performance measure. For example, for a desegregation objective, you will have measures about reducing minority group isolation. For a building capacity objective, you'll have measures about professional development.

Next slide, please. While objectives must have at least one performance measure, they also can have more than one measure. For example, a desegregation objective could have measures about reducing minority group isolation, increasing classroom diversity and increasing socioeconomic diversity. And academic achievement objectives could have measures about improving instruction, improving student learning and improving test results. And a building capacity objective could have measures about enhancing professional development, building sustainability and establishing community partnership. Next slide, please. As mentioned earlier, your project objectives and performance measure serve two primary purposes, to track project implementation, which are process measures and to report on your performance annually, which are outcome measures. Now I'll talk about process and outcome measures, and I'll start with process measures. Next slide, please.

Process measures address how well the objective will be met and the activities that will be implemented to affect change. Basically, as Beth said before process measures track implementation of the magnet project. So refer to your logic model to make sure your process measures addressed, whether the activities being implemented will help you meet your intended objectives. For example, redesign of marketing materials will be completed by February 1st. As Beth said before, this process measure is related to attracting students to the magnet school. It is tracking whether you completed a specific activity is basically a check off, you did it or you didn't. Next slide, please.

Now, let's talk about outcome measures. These measures assess the extent to which the intended results of the project have been met and entail some level of change related to knowledge, attitudes or behavior. Outcome measures look at the results of an activity, not the activity itself. This is why we think that outcome measures tend to be more meaningful and reporting than process measures are, since infecting change is the fundamental purpose of your project. For example, Magnet School A's graduation rate will increase by 10 percentage points by June 1, 2027. This measure indicates the change that will occur due to some magnet activities that were implemented. Next slide, please.

We find that applicants and grantees tend to focus more on process measures, basically reporting whether they did or didn't do a plan activity. But to make your performance measures meaningful, you need to think about what you want to achieve and how you'll get there. So now I'll talk about how to build your performance measures to make them more meaningful. First, let's examine these process measures. These measures are basically checking off in activity the project will do. The first example is what we often see in grant applications. Teachers will receive 40 hours of professional development by June 1 of each grant year. This is not a strong measure because it doesn't mention the type of professional development that'll be provided. The second example, teachers will receive 40 hours of professional development and STEM integration concepts by June 1, 2023. This is a stronger measure because it details the topic of professional development that will occur in a particular timeframe, instead of just stating that you do the same thing each grant year, like in the first example.

Since funded applicants would be implementing their project over 5 years, professional development should change over time as implementation progresses each grant year. That means you must think critically about the type of professional development that will help you achieve your outcomes. For example, next year's professional development could be two lead STEM teachers will complete a summer externship with community partner X by August 1, 2024. This measure shows that you're building our professional development to achieve your objectives. So make sure you consider how your project implementation will progress when crafting your process measures to make sure you're doing what will help you achieve your outcome measures and objectives. Next slide, please.

Now take a look at these examples of outcome measures. I'm not going to read them, but look at the first one. The first example is more than just stating that professional development will be provided is checking that teachers are using the strategies they learned in the professional development. However, on its own, this measure is not sufficient. It is still only measuring what teachers will do, while this measure could be considered a short-term outcome measure. You need to include a measure that reflects the objective. The professional development should help you achieve, which generally is improved student achievement.

The second example is a better outcome measure. This measure tracks the result of the professional development provided, and how well teachers implemented the instructional practices because it assesses the changes the activities will affect. If the teachers attend the professional development and implement the strategies, then what is expected to change? We expect that student learning will improve and end of unit test scores will increase. So basically make sure your performance measures clearly show how you plan to achieve project objectives. Next slide, please.

Now let's talk about what makes an effective performance measures. Effective measures use clear, simple language and include the following element. What will be measure basically what will change, who will achieve the change, these specifics such as fourth graders will achieve the change. When will a change occur or be measured include a date, how much change will occur include a number, ratio or percentage and in what direction increase or decrease, and if appropriate include your baseline from which the change would be measured. Next slide, please.

Here are a couple examples of measures that include all of the effective elements. By October 1, 2023, when at least 80 percent, how much of 10th graders of MSAP school A, who will pass the state high school competency assessment? The next example, by October 1, 2023, when there will be a 6 percentage point, how much increase direction from the previous year baseline and the number of 10th graders in MSAP school A, who that pass the state high school competency assessment? What? Make sure that your measures include all of these elements, so the expected outcome is clear and you know if the measure is met. Next slide, please.

If funded your report on the project level performance measures from your grant application in your project, implementation plans and annual performance report, just so you know, annual performance reporting happens twice a year in the spring fall. Funded applicants will use a web-based version of the project status chart section of the ED 524B form to report project level measure, performance target, document actual performance, and provide explanation of progress for each of your project level measures.

Because MSAP program level measures, and this is something that's talked about earlier, measures two and three. Look at state assessment data for English language arts and mathematics, you do not need to create separate project-level measures for those indicators. This means that you can focus your project level measures on other academic achievement indicators like end of unit tests or student grade. However, even though MSAP program-level measure one focuses on minority group isolation, we need you to recreate minority group isolation, project-level measures for each your schools because MGI measures can be complex. And I'll talk a little bit more about this later. Next slide, please.

Here's the ED 524B form project status chart. The project status chart is where funded applicants will report on the objectives and performance measures that were established in the grant application. Again, you must have at least one performance measure for each objective, but applicants often have more than one measure per objective. If funded you'll be held accountable for your performance measures, therefore it's important to carefully consider your project goals and how you plan to achieve them when crafting the measures. Now let's look at the ED 524B form itself. Since funded applicants will use this reporting form, measures need to be structured in a certain way. As you can see, the space for each measure only has one cell for actual data and one cell for target data. Therefore, a measure that collapses, multiple schools or indicators such as each school will increase applications by 10 percent each year cannot be reported in this form. Also reporting for example, that three out of four schools met the measure does not provide sufficient data to be meaningful, to report the best data, please create a separate measure for each school and indicator. Next slide, please.

Here's an example. The first measure is not formatted appropriately. By June 30, 2027, 70 percent of students at MSAP school A will be proficient on the state assessments for English language, art and mathematics. This measure is not appropriate because it has two indicators. It's measuring progress for both language arts and mathematics assessments, and therefore can't be reported on easily in the project status chart. To reformat, this measure create two separate measures, one for English language arts assessment, and one for mathematics assessment. Otherwise if 70 percent of students are not proficient on both assessments, you will not meet this measure. Next slide, please.

Here's another example, teachers at all MSAP schools will receive 25 hours of training and the magnet theme by June 30, 2024. To reformat, this measure create a separate measure for each school, so data reviewers can easily identify what's happening in 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 construction by June 30, 2024. Next slide, please.

So here's some more formatting instructions. All measures must be written in a sentence format similar to the examples shared today and separated into discrete measures. One measure can include targets for all years, as long as the same thing is being measured each year. For example, Hispanic student enrollment at magnet school C will decrease to 75 percent by October 1, 2023 to 73 percent by October 1st, 2024 to 71 percent by October 1, 2025, and so on. Next slide, please.

The minority group isolation measure provides data for program-level measure one. As mentioned earlier, minority group isolation is the only program level measure that you need to include in your project level measures. Given that MGI targets vary across schools and can be complex, it's important to write separate MGI project-level measures for each school. In addition to the other elements of effective performance measures, each school's minority isolated group should be clearly stated along with the enrollment targets. Also the Year 5 MGI target should match the Year 5 projected enrollment for the minority isolated group that you include in table three of your grant applications. And your MGI measures should align with your desegregation plan. Next slide, please.

So here's some examples of effective outcome measures for MGI. By October 1, 2023, the percentage of black students will decrease to 75 percent 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 percent. We've also noticed that some applicants include measures about the number of enrollment applications received. We want to let you know that this is not an MGI measure. In fact, it's a process measure, not an outcome measure. You will certainly want to track the number of applicants you receive, but that does not provide information on your progress in meeting your projects, MGI goals. The result of receiving those applications should be the reduction, elimination or prevention of MGI. Next slide, please.

Some schools may have more than one minority isolated group. In those cases, you should have one measure for each group as shown in this example. Magnet school C has one measure for Hispanic students and one measure for black students with targets for each grant year in both measures. So if you do have more than one minority isolated group, please write your measures like this. Next slide, please. So in summary, when writing your performance measures, think about how you report the data and what the data will tell you about how well your project is performing. Make sure all your measures include the elements of effective measures and use the logic models to determine what outcomes you should look at. This will ensure that your performance measures and logic models are aligned. So that ends our presentation. We'll now take any questions.

The webinar will be posted at the MSAP page at the U.S. Department of Education's website, probably within a week from now. Well, you should make sure that your measures aligned with what you plan to do in your desegregation plan and also for your overall proposed projects. However, yes, if you do have a lot of schools and you have a lot of measures and you need to write measures for each school, it does add up. We've had some applicants and grantees that could have 100 measures. So that's why we are suggesting or recommending that you really consider what measures will best show that you're making progress and meeting your objectives. GPRA has... What's the word? Gillian, I'll let you answer that. They're now called program-level measures, we no longer called them GPRA measures because they have... I can't think of the term, but there's no longer a GPRA law.

Gillian Cohen-Boyer: Manya, can you hear me now?

Manya Walton: Yes, we can. Yeah.

Gillian Cohen-Boyer: Yeah. The GPRA measures the act itself, sunsetted, is that what the word you were looking for?

Manya Walton: Yeah.

Gillian Cohen-Boyer: But we're still collecting those measures under EDGAR, which is why she are, and governing regulations. And I did want to say to one's commented just to build on what Manya said, because you do end up with so many measures, that's part of why we are really recommending trying to logically separate program outcomes or... Sorry, outcome measures from progress measures. It's not that they're not both important, they are. We just want them to go in different places so that you're measuring your outcomes in your annual performance review. And you're measuring your outputs in your implementation plans.

And we think that that helps streamline particularly the APRs, the annual performance reviews, when you do have a lot of schools. I'm not sure if you answered this Manya, but Lisa had asked, does the logic model structure have to match through one in the slide? And the answer I believe is no, it doesn't have to exactly be that. But those are the major components that we really recommend having the activities, the resources, the outputs, as a result of the activities, the outcomes as a result of having done those activities.

Manya Walton: Okay. To answer Anne's question, no, you do not need to include GPRA measures in your application, but you should include a project-level measure for minority group isolation for each of your schools. And I explained that because that's a complicated measure and it's important to put it in the grant application so that we can better understand exactly how you plan to address the minority group isolation measure. Gillian, do you want to answer some of these questions?

Gillian Cohen-Boyer: Sure. And also, I think Liz, you asked... I think you were asking about the GPRA statement and I'm not sure I understand the question. So if you want to clarify that. But GEPA and GPRA are different things. And I think you know that, so I'm not sure about the question. To answer Cindy's questions, should the logic model now be placed in the narrative of the desegregation section? Yes, we are explicitly asking that you should certainly reference it. We are asking that the logic model clearly just pick how you are achieving the desegregation goals. That doesn't mean that it should also depict all the program design, outcomes that you're looking for. But we want to make sure that it really does look at the desegregation goals.

Yes, I believe we referenced. So Lisa asks, "Is there a citation in EDGAR, where the measures are required?" And there is a citation that we get in the first webinar that we did. I don't have it off the top my head, but it is basically saying that we can set performance standards and we still think it's important to do that. So we're just citing. EDGAR is the reason as opposed to the government performance results tax. Thanks, Liz.

Manya Walton: Answer Thomas' question. Yes. You need to have separate measures for each school, even in the application. Any other questions?

I think Amy is typing something.

Gillian Cohen-Boyer: And to the extent that it's helpful, I also wanted to address Lisa's question about the EDGAR regulation by just saying, this is not just specific to MSAP, the GPRA act has sunsetted. So for all of our programs, we're moving to EDGAR.

Manya Walton: So Amy asked if it's okay to provide a measure for reading and math achievement, even though that's a program-level measure? You can provide it, but you might want to use a different indicator, something other than the program level measure that looks at the percentage increase that.... Can you go back to those measures that looks at the percentage increase of students that proficient are above on state assessments for reading and then the next measure is for math. So we recommend that you use a different measure because you're going to report on that in the annual performance report anyway. So it would help to have maybe a different measure. Gillian, now that you answer Christine's question.

Gillian Cohen-Boyer: Yeah. I think you addressed this too earlier, which is you can do either. It really is what's going to be best for you or the purpose of figuring out that logic, that tracking. So again, what are your expectations of what the district is going to do and therefore accomplish if you do X, then this will happen? And how might that be different than what's happening at the individual schools? To some extent, it's a matter of accountability too, right? If you're saying this particular thing has to happen at a school level, then you can use the school level logic model in something to refer back to. We also logic models because they're just a way to communicate about the program. And so if it's helpful to have school level, then you may want to do that, but it's really up to you.

Manya Walton: Any other questions? Okay. If there are no other questions, this ends our webinar. Thank you guys for attending.

Gillian Cohen-Boyer: Thank you, Manya.

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