

Logic Modeling

*Using Logic Modeling for Program Planning
and Evaluation*

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Purpose

- ▣ **Answer** “What is a logic model?”
- ▣ **Describe** “How logic modeling can be used in program planning and evaluation?”
- ▣ **Discuss** “What does a TTT grantee’s logic model look like?” “And how have they used it in practice?”

What is A Logic Model?

- A simplified picture of a program, initiative or intervention
- Shows logical relationships among resources that are invested, the activities that take place, and the benefits of change that result
- Is a tool to describe program effectiveness

What is A Logic Model?

- ▣ Clarifies the strategy underlying your program
- ▣ Builds common understanding, especially about the relationship between actions and results
- ▣ Communicates what your program is (and is not) about
- ▣ *Forms a basis for evaluation*

The Logic Model

- **Different Looks, Additional Components**
 - Graphs, tables, flow chart, or narrative
 - May include information about assumptions, externalities/contextual issues, and theories of change
 - The logic model is a way to communicate to yourself and stakeholders what your program is about

The Logic Model

Program Goal~ What is your overall aim or intended impact?

- Example: Is it to increase the pool of qualified STEM teachers in your district?

Logic Model for Mobilizing National Educator Talent (Project mNET)

Overarching Goals

- Improved teacher and school leader quality
- Improved school quality
- Improved school district stability
- Increased student achievement

Logic Model for Project mNET

- **Situation:** Project m-NET is designed to assist high-need local educational agencies (LEAs) in the development, enhancement, or expansion of innovative programs to recruit, train, and retain teachers for core content areas. High-need LEAs typically encounter a number of barriers to recruiting, selecting, and retaining high quality teachers. Project m-NET partners, independently and collectively desire to assist identified LEAs in overcoming these barriers and enhance their ability to retain teachers and school leaders qualified to address how to improve student academic achievement and other school challenges.
- **Priorities:** Education needs enhanced capability of teachers and school leaders to lead educational reform efforts in high need, hard to staff LEA's by understanding how to improve teaching and learning, influencing policy, involving the community, and documenting how to help students achieve at higher levels.

Assumptions and External Factors of the mNET Logic Model



Assumptions

Educational teachers and school leaders can be developed

- Involvement in professional development influences teacher and school leader behavior
- Well prepared teachers and school leaders create organizations that are responsive and adaptable

External Factors

- The economy will continue to grow and need high quality teachers and school leaders
- Technological change will continue at a rapid rate
- Many highly skilled workers will retire from the labor market in the coming decade
- Education will prepare students for college and careers

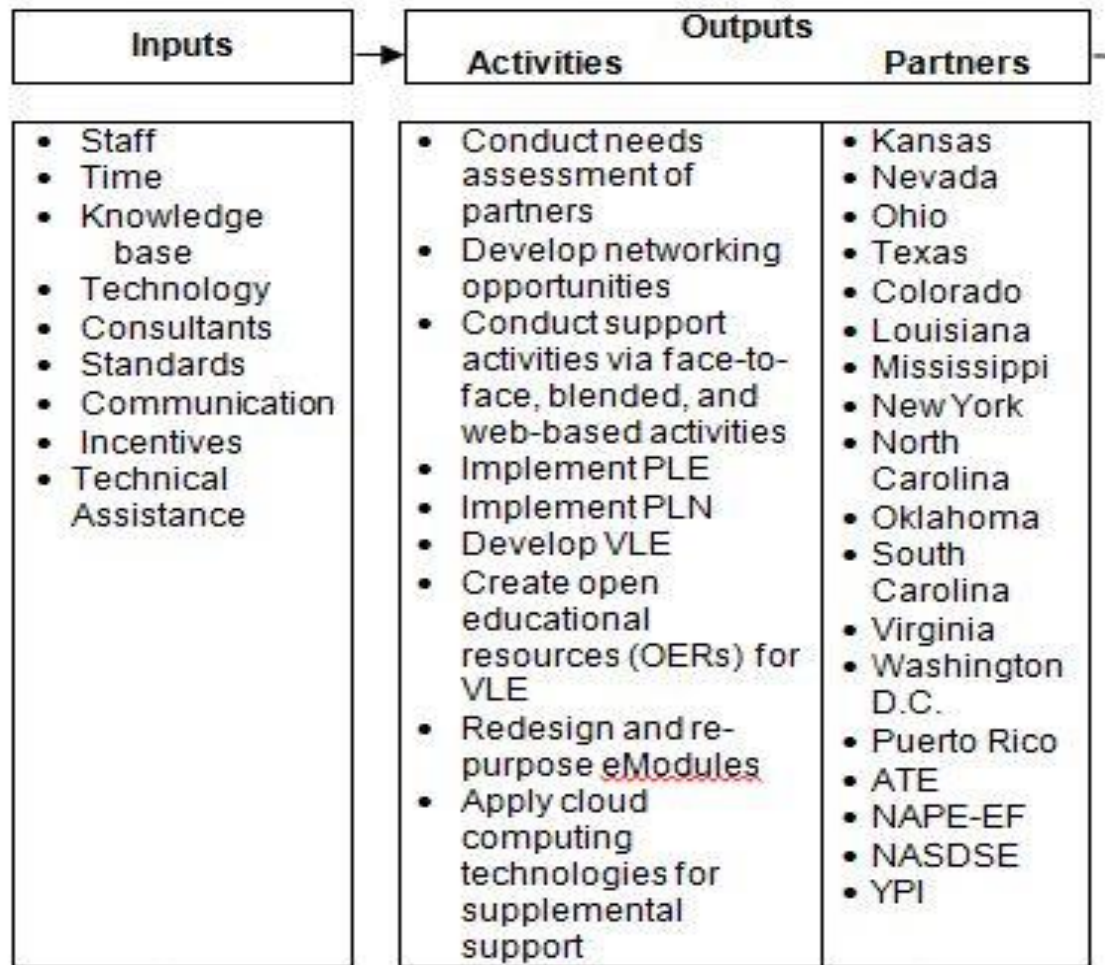
The Logic Model Answers

- ▣ What ***resources*** you are putting into the program?
- ▣ What ***activities or program actions*** are used to achieve outcomes?
- ▣ What are the ***outputs or measurable products*** of a program's activities?
- ▣ What are the ***outcomes***? What you are trying to achieve?

The Logic Model

- **Inputs**-the resources invested that allow us to achieve the desired outputs
- **Outputs**-activities conducted or products created that reach targeted participants or populations. Outputs lead to outcomes
- **Outcomes**-changes or benefits to individuals, families, groups, businesses, organizations and communities

mNET Inputs & Outputs – Activities and Partners



Resources -Inputs

- *What are you using?*
 - Human Resources
 - Facilities
 - Equipment/supplies
 - Partners
 - Technology

Resources-Inputs for mNET



Activities

- *What is the program doing?*
- Think about all of your major components 1st:
 - Recruitment/Outreach
 - Selection
 - Training
 - Staff Development
 - Partnership Development
 - Support

Activities

- *What is the program doing?*
- Think about all of your details 2nd:
 - E.g. Recruitment/Outreach
 - Website ads
 - Job Fairs
 - Distributing flyers
 - Contact with local colleges
 - Word of Mouth

mNET Activities



- Conduct needs assessment of partners
- Develop networking opportunities
- Conduct support activities via face-to-face, blended, and web-based activities
- Implement PLE
- Implement PLN
- Develop VLE
- Create open educational resources (OERs) for VLE
- Redesign and re-purpose eModules
- Apply cloud computing technologies for supplemental support

Outputs

- *What is the program producing?*
 - # of professional development workshops/institutes held
 - # of participants receiving their certifications
 - # of participants receiving job offers
 - # of quality partnerships formed

mNET Outputs



Outcomes

- *What difference is the program making?*
 - Outcomes are about change:
 - New Knowledge
 - Increased Skills
 - Changed attitudes or values
 - Modified behavior/practice
 - Changed conditions

Outcomes

- *Levels of outcomes*
 - **Short term:** most direct results of activities and outputs, generally achievable in one year
 - **Intermediate:** Link a program's short-term outcomes to long-term outcomes
 - **Long term:** result from the achievement of short term and intermediate term outcomes and often take longer to achieve and lead to sustainability.

mNET Outcomes - Impact

Short Term	Outcomes – Impact Medium Term	Long Term
<ul style="list-style-type: none"> • Strategies to recruit number of teachers for each cohort • Evidence of appropriate needs assessments • Evidence of collaboration with key partners to target key school leaders for participation • Development of VLE • Evidence of training and technical assistance for program providers • Selection and training of e-coaches • Selection and/or development of appropriate tools for program management and feedback • Evidence of key partner collaboration 	<ul style="list-style-type: none"> • Number of teachers and school leaders for each cohort • Evidence of appropriate recruitment strategies • Evidence of online collaboration (programs and participants) • Evidence of accessing and using VLE by teachers and school leaders • Evidence of training and technical assistance for VLE participants • Key partner satisfaction with program implementation • Development of content packages • Redesign of eModules • Application of cloud computing technologies 	<ul style="list-style-type: none"> • Target number of teachers serve in high need LEAs • Target numbers of teachers obtain full state certification within 3 yrs. • Retention of three years of qualified teachers in high-need LEAs • Increase in TPACK skills of participants as measured by pre-post assessments • Improved capacity and quality of participating programs • Institutionalization of best practices and strategies • Sustainability of key program components • Access to high quality resources and cloud computing technologies

Outcomes

- *What is a reasonable level of ambition for an outcome?*
 - Factor in your timeline~5 year grant
 - Factor in the scope of your resources and activities
 - Factor in any other variables that might influence the achievement of outcomes

The Logic Model

- *What is your overall aim or intended impact?*
 - To increase the number of STEM teachers in your district
 - To increase the number of certified teachers in your region
 - To increase the number of highly qualified teachers in your district
 - To increase student achievement

Logic Model: Evaluation

- Evaluation is the process of asking- *and answering*-questions:
 - What did you do?
 - How well did you do it?
 - What did you achieve?

Logic Model: Evaluation

- **Outcome Indicators/Milestones**
 - Indicators/milestones are specific, measurable characteristics or changes that represent achievement of an outcome.
 - Indicators/milestones are measurable and observable and answer the question:
“How will I know when my goal is achieved?”

Logic Model: Evaluation

- **Outcome**

- Increase in STEM teachers in the district
- Increase in highly qualified teachers in the district

- **Indicator**

- #/% of Math teachers hired in District 9 by 2014
- #/% of certified teachers hired in District 15 by 2015

Specific mNET Goal

Indicators/Benchmarks-Example

II. Recruitment and Selection

(i) Recruitment: 80% of sites will meet or exceed teacher recruitment goals annually, Years 2-5.

(ii) 100% of selected teachers meet project eligibility requirements, Years 2-5.

(iii) All sites utilize proven, research-based recruitment practices.

(iv) By the end of Year 4, each LEA develops a long-term recruitment planning and strategy.

(v) Project will select at least 25% of teachers from traditionally under-represented groups, Years 2-5.

(vi) By their 3rd year of teaching, 75% of selected teachers are strongly committed to working in high need schools.

(vii) *All the participating LEAs will successfully meet their staffing needs with mid-career professionals and recent college graduates.*

Specific mNET Goal Indicator/Benchmark-Example

IV. Placement

(i) 85% of teacher participants are hired as TOR by high-need LEAs within 1 year of enrollment in the project.

(ii) *95% of all project participants will become TOR in high-need schools.*

Specific mNET Goals

Indicator/Benchmarks-Example

V. Licensure & Certification
(i) 95% of teacher participants pass appropriate licensure exam on first attempt when in program.
(ii) 85% of teacher participants pass all licensure exams within 3 years.
(iii) 85% of teacher participants are highly qualified within 3 years.
(iv) <i>80% of teacher participants receive full certification within 3 years of enrolling in the project.</i>
VI. Persistence & Retention (see also III (iv) & (v))
(i) <i>80% of project participants who are TOR in high-need LEAs will retain their positions for at least 3 years</i>

Logic Model: Evaluation

- *Compiling an Evaluation Plan*
 - The “What” ~ the indicators
 - The “How” ~ the data collection instruments and evaluation design
 - The “When” ~ understanding when to collect the data (apart of the data collection plan)
 - The “Who” ~ understanding of who will collect the data and who to collect the data from (apart of the data collection plan)

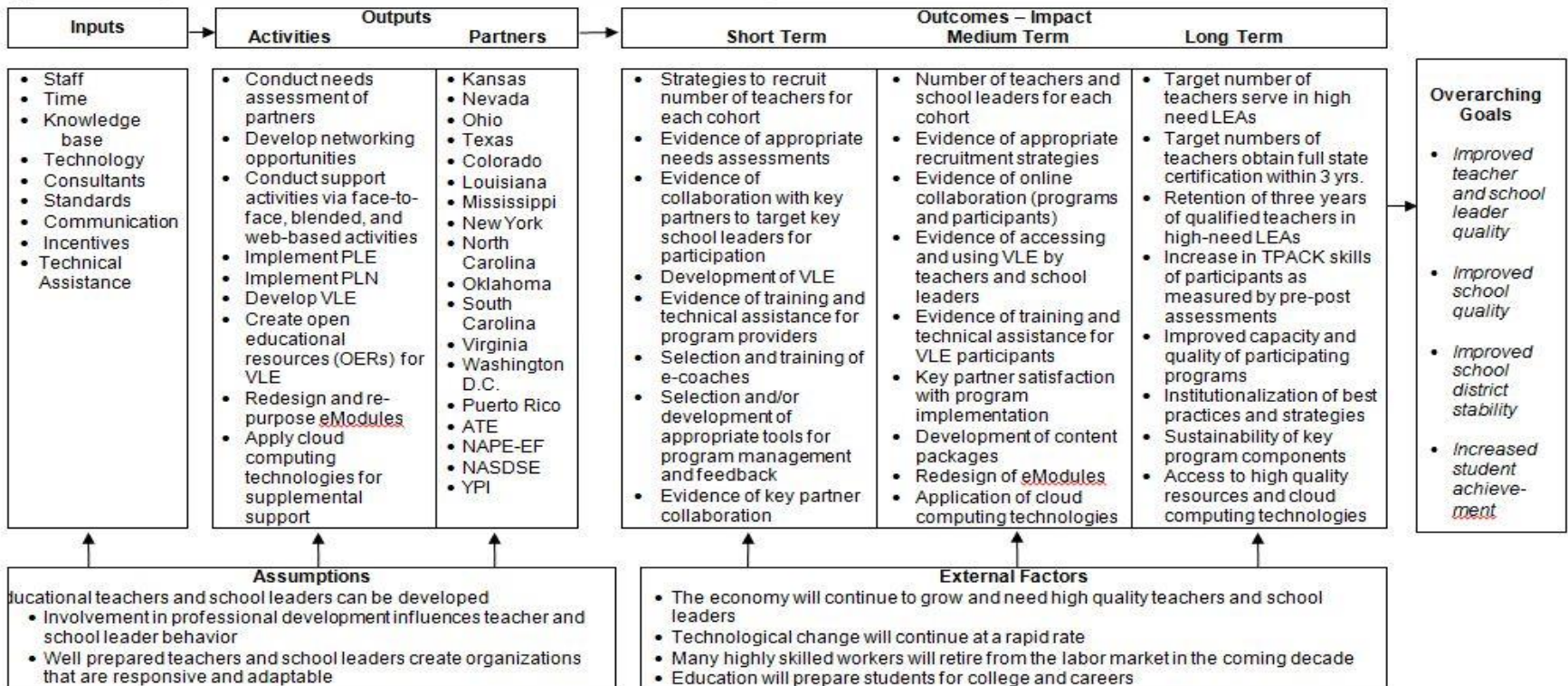
All Together Now....

mNET Logic Model

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Questions????

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