



**MILWAUKEE  
PUBLIC SCHOOLS**  
RESEARCH AND DEVELOPMENT

**A Guide for Developing  
Logic Models  
Through a  
Program Theory of Change**

**MPS Department of Research and Development**  
**November 2014**

## Milwaukee Board of School Directors



**Michael Bonds**  
President, 3<sup>rd</sup> District



**Meagan Holman**  
Vice President, 8<sup>th</sup> District



**Mark Sain**  
1<sup>st</sup> District



**Jeff Spence**  
2<sup>nd</sup> District



**Annie Woodward**  
4<sup>th</sup> District



**Larry Miller**  
5<sup>th</sup> District



**Tatiana Joseph**  
6<sup>th</sup> District



**Claire Zautke**  
7<sup>th</sup> District



**Terrence Falk**  
At-Large

Jacqueline Mann, Director of Board Governance/Board Clerk, (414) 475-8284  
Bob DelGhingaro, CPA, Chief Accountability and Efficiency Officer

**Darienne B. Driver, Ed.D., Superintendent**

**Senior Team**

**Erbert Johnson, CPA, Chief of Staff**

**Ruth Maegli, Acting Chief Innovation Officer**

**Tina Flood, Chief Academic Officer**

**Karen Jackson, Ph.D., Chief Human Capital Officer**

**Michelle Nate, Chief Operations Officer**

**Gerald Pace, Esq., Chief Financial Officer**

**Keith Posley, Ed.D., Chief School Administration Officer**

**Sue Saller, Executive Coordinator, Superintendent's Initiatives**

**Nondiscrimination Notice**

It is the policy of the Milwaukee Public Schools that, as required by section 118.13, Wisconsin Statutes, no person will be denied admission to any public school or be denied the benefits of, or be discriminated against in any curricular, extracurricular, pupil services, recreational or other program or activity because of the person's sex, race, religion, national origin, ancestry, creed, pregnancy, marital or parental status, sexual orientation or physical, mental, emotional or learning disability.

This policy also prohibits discrimination under related federal statutes, including Title VI of the Civil Rights Act of 1964 (race, color, and national origin), Title IX of the Education Amendments of 1972 (sex), and Section 504 of the Rehabilitation Act of 1973 (disability), and the Americans with Disabilities Act of 1990 (disability).

The following individuals have been designated to handle inquiries regarding the non-discrimination policies:

- ☉ For Section 118.13, Wisconsin Statutes, federal Title II, or federal Title IX: Patricia Gill, Executive Director, Department of Family and Student Services, Room 133, Milwaukee Public Schools, 5225 W. Vliet St. P. O. Box 2181, Milwaukee, Wisconsin, 53201-2181
- ☉ For Section 504 of the Rehabilitation Act of 1973 (Section 504): Jeff Molter, 504/ADA Coordinator for Students, MPS Department of Special Services, 5225 W. Vliet St., Milwaukee, Wisconsin, 53208. (414) 475-8817 TTD: (414) 475-8139



**MILWAUKEE  
PUBLIC SCHOOLS**

## **Table of Contents**

---

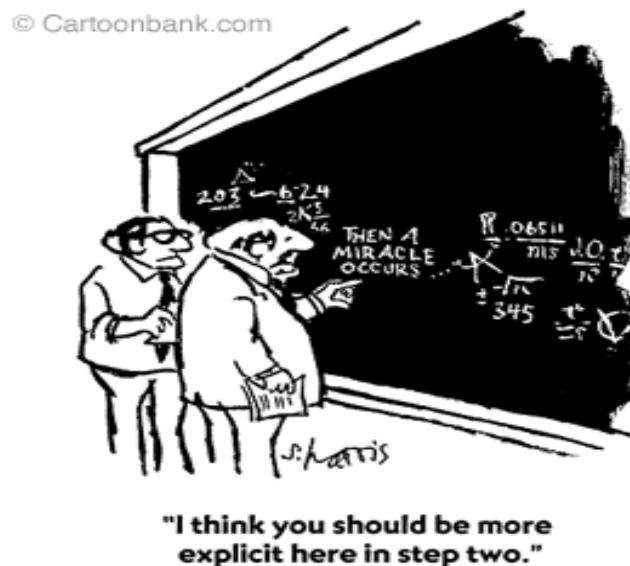
Introduction .....	4
Core Components of a Logic Model.....	6
Developing a Logic Model with a Theory of Change .....	7
The Importance of Research.....	8
Key Stakeholders.....	9
The Problem, Target Population, and Solutions .....	10
Theory of Change.....	11
Outcomes.....	13
Indicators .....	15
Activities.....	18
Inputs .....	18
Outputs .....	19
Obstacles and Challenges .....	19
References .....	20
Example: Tutoring Program: Logic Model and Theory of Change Template.....	21
Appendix: Logic Model Template .....	22

## Introduction

---

Many in the social service sector are familiar with the use of logic models for identifying outcomes. Incorporation of an *intentional* identification of a program theory of change demonstrates *why* those activities will positively affect the individuals served. The program theory of change may be implied in a logic model, but making a conscious effort to explicitly examine assumptions of program planners about why an intervention might (or might not) work will ensure program activities logically support the achievement of targeted outcomes.

**Illustration 1: Logic Models aren't necessarily miracles, but they can certainly be useful.**



In 2012, the Center for Urban Initiatives and Research at the University of Wisconsin-Milwaukee developed a guidebook for MPS on creating logic models with a program theory of change. Building upon this foundation, the MPS Department of Research and Development reworked and revised this resource into a short guidebook and supplemental workbook for use by MPS staff.

This guide provides instructions for engaging in a program theory of change-driven logic modeling process. It begins by describing program theory of change and discusses its role as the foundation of the logic model. Using this theory to create outcomes (including long-term, intermediate and short-term), outputs, activities, and inputs follows. A separate step-by-step workbook is available to engage in theory of change logic modeling, from identifying important stakeholders through evaluating a program's process and impact. A recommended template can be found in the Appendix.

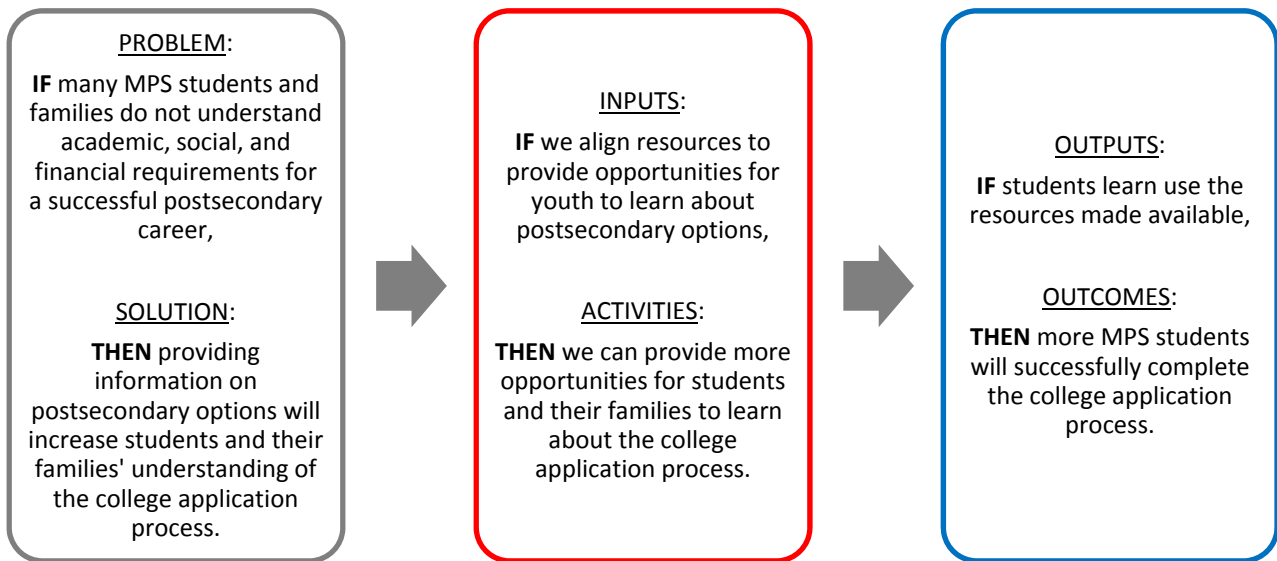
If you have questions or comments about this guide, please contact Scott Davis, Research Specialist, at [davisgs@milwaukee.k12.wi.us](mailto:davisgs@milwaukee.k12.wi.us).

**What is a Logic Model?**

A logic model is a visual representation of a plausible and sensible method of how a program will work under certain conditions to solve an identified problem. It is a visualization of what a program will do and what it hopes to accomplish. The purpose of a logic model is to show stakeholders such as administrators, line staff, funders, and others the underlying rationale for a particular program. In addition, it identifies the necessary resources for implementation, and the intended effects of implementation. A well-crafted logic model shows, in a simple, common sense manner, the relationship between the underlying rationale and the elements of evaluation. Logic models provide a “snap-shot” of the program that is easily understood. These are dynamic documents that change over time based on emerging program needs, resources, and contextual factors.

Logic models can be thought of as a series of “if-then” statements from assumptions about the underlying problem, to actions taken, to results from those actions. See Figure 1.

**Figure 1: Logic Model Sample: GEAR UP Grant**



## Core Components of a Logic Model

---

There are many different examples and types of logic models. However, there is a central core that is common to all logic models. The three core components of a logic model are the assumptions, the actions, and the intended results. In addition, each core component is comprised of distinct elements which taken in whole provide a high degree of clarity for the program or project.

Assumptions. The assumptions component of a logic model has two inter-connected components: identification of problem, target population, and solutions; and the program theory of change.

Actions. There are three inter-connected elements that make up the actions component: inputs, activities, and outputs. They are connected like the mathematical formula: Inputs + Activities = Outputs. These should be clearly connected to the assumptions, and logically support the achievement of intended results.

Results. Results are the desired or intended outcomes of program implementation. These are the changes that one hope will occur in the intended recipients due to the actions. Results should be concrete, measureable, and realistic outcomes in the short-term, intermediate-term, and long-term.

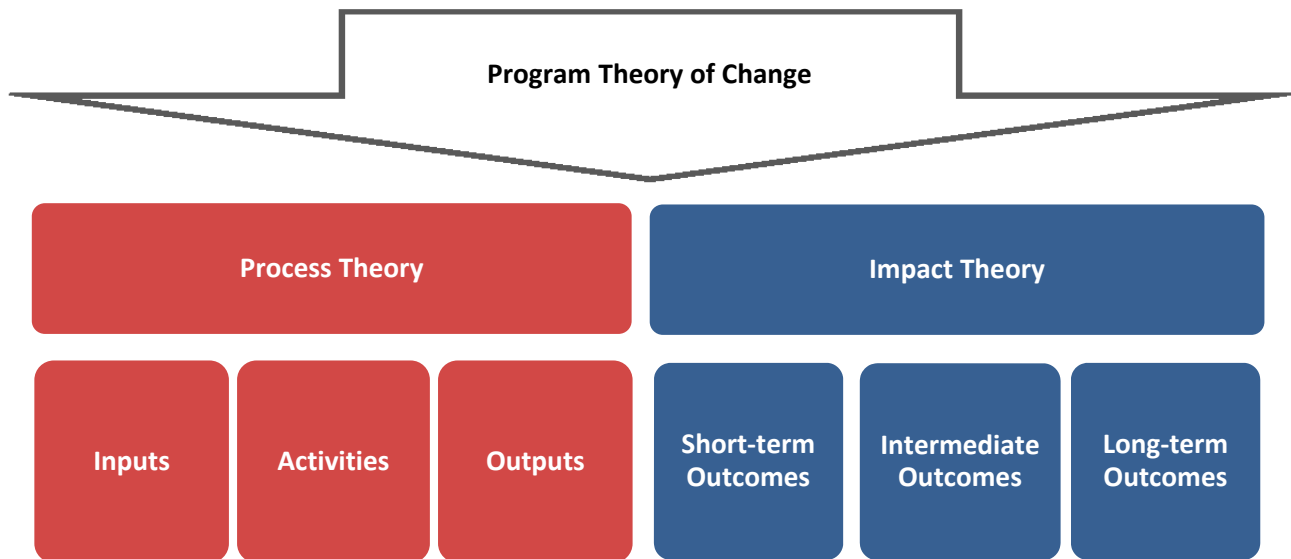
**Figure 2: Core Components and Elements of a Logic Model**



## Developing a Logic Model with a Theory of Change

There are many types and examples of logic models that one may choose. However, the logic model framework displayed below is an excellent example because it requires the program theory of change to be explicitly defined, along with the interconnecting process and impact theories. The theory of change provides the foundation for all of the interconnecting components of the logic model.

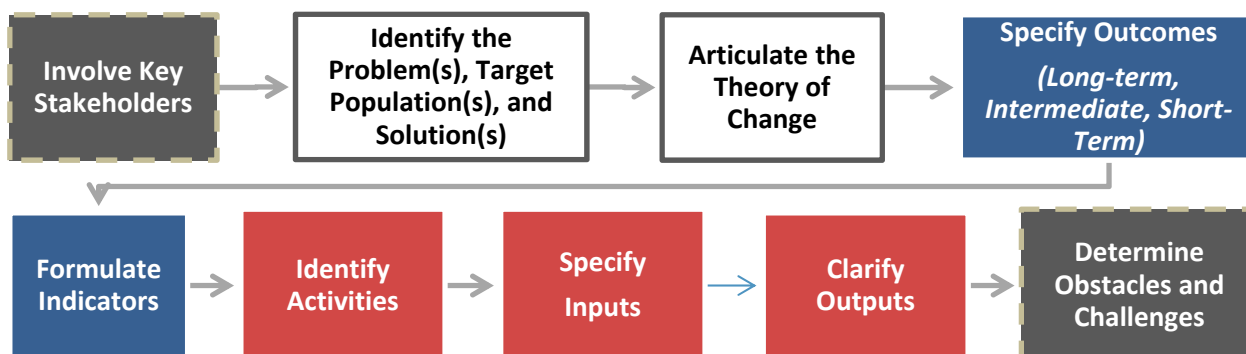
Figure 3: Theory of Change as Foundation of the Logic Model



The preferred process for developing a logic model is based on the creation of the theory of change as the foundation of all activities and outcomes. The process involves nine inter-connected steps as shown in Figure 4. **First**, the program theory of change has been identified and articulated, **and then** outcomes<sup>1</sup> are specified. These are **followed by** identification of the activities and resources needed to promote achievement of those outcomes. The first step, **Involve Key Stakeholders**, and the last step, **Obstacles and Challenges**, are contextual issues related to the logic model and theory of change. Although not formally identified as a component, it is essential that these are considered, discussed and addressed.

<sup>1</sup> In this process, long-term outcomes are developed first, followed by intermediate and then short-term outcomes.

Figure 4: Outcomes to Activities—The Preferred Process of Developing a Logic Model



## The Importance of Research

Basing program development on sound, relevant research is recommended. Research can provide a sturdy foundation for program development, providing scientific and rigorous support for decisions throughout the process. It also provides insight and information that clarify the assumptions, actions, and results. In addition, research can help to identify components and elements of the theory of change, logic model, and ultimately the implemented program. This strengthens the model, and increases the chances for successful outcomes.

Where research will help:

Assumptions. Knowing the theory and science behind an issue and successful solutions will start the creation of a logic model off from a position of strength. This begins with the root-cause analysis (identification of problems and solutions). Carefully and mindfully coalescing this information will prepare for a cohesive theory of change upon which the logic model is founded. Familiarizing yourself with the literature also provides you with an opportunity to test your own assumptions about the issue for which you are creating the logic model.

Actions. Research identifies evidence-based models of action and best practices. Through use of scientifically-proven activities, two gains are possible: First, this knowledge allows for innovation in program development and implementation as you identify where there are gaps in the literature. Second, it provides a competitive edge in comparison to other efforts (commonly, grant proposals).

Results. Research furnishes insight and information related to the impact of interventions on intended recipients. These are often concrete, measurable, and realistic outcomes in the short-term, intermediate-term, and long-term. In addition, it is common for research to provide field-tested measures and benchmarks that are easily adapted and adopted.



## **Key Stakeholders**

---

Before starting any logic modeling process, key stakeholders should be identified and recruited to be involved from the beginning of the process. Stakeholders may have differing levels of involvement or input in the various aspects of program planning and implementation, but it is essential to connect them to process from the onset. **Bottom line: Know who knows and involve them.**

Stakeholders should be any and all individuals (or organizations) who will have a part in:

- Planning,
- Implementing,
- Acting as a partner (for instance, those that will contribute resources),
- Receiving services, or
- Evaluating the efforts.

Throughout the process one should visit and re-visit the subject of stakeholders. Different persons may be involved at different times or for different components. Stakeholders may have differing levels of involvement or input in the various aspects of program planning and implementation, but it is essential to connect them to the process from the onset. If a stakeholder is not identified early on, and their questions are not clarified from the onset, then it is likely that the program plan will be deficient in some areas, and support may be lost from someone who is essential to successful implementation of the program.

It may prove helpful to have individuals from the following areas in program planning and the logic model.

Content Experts: These individuals can provide relevant and current input regarding the root causes of the issue, successful solutions and evidence-based practices, and expectations of impact. Content experts may be found in the MPS Central Office, faculty from universities, or renowned practitioners in the field.

Program Administrators: These individuals understand the big picture of successfully implementing a program as well as the day-to-day operations. They often serve as a bridge from content experts to program staff.

Program Staff: As the individuals most closely associated with implementation, their feedback can help to tailor the program plan and logic model to the intended setting. Program staff may be the individuals implementing the program activities on a day-to-day basis. Their involvement early in the process can also help with buy-in later.

Community Partners: Including the community-based partners will allow for a better end product, and for increased buy-in. In some cases, it may be the community partners who are doing some or all of the implementation later. As such, their feedback is invaluable in terms of what is realistic and what is not.

Intended Recipients: Although not always feasible, input from the intended recipients or beneficiaries can help improve the program plan. This is especially true with identification of problems, solutions, and activities for implementation.

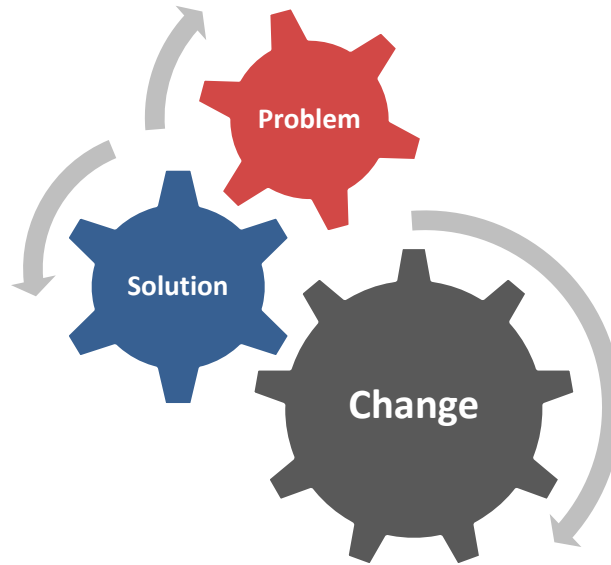
Evaluator: Having the evaluator involved with the process helps to clarify outputs and outcomes, especially when identifying specific measures and targets.

## The Problem, Target Population, and Solutions

---

A logic model should start with the key assumptions one has about the problem(s), the target population(s) to be served, and the solution(s).

**Figure 5: Relating Problem to Solution to Change**



**Problem Identification:** One must clearly define and describe the problem to be solved. This usually means conducting a root cause analysis, which identifies not only the root cause or causes but also the costs of the problem. From a pragmatic perspective, one must be sure that this view of the problem is rooted in the right cause.

**Target Population:** One must clearly define who is affected by the problems to better identify who is to be served by programs and services necessary to bring positive changes. By clarifying the population(s) to be served, one can bridge the gap between the problem and the solution.

**Solution Identification:** One must clearly operationalize exactly what it is one's program will do to solve or reduce the problem. This involves clearly tying program components and practices to not just the problem, but specifically to the positive change that can be expected. This is where the best practices and models are identified.

At this early stage, a comprehensive review of the relevant research<sup>2</sup> related to the root causes of the issue, how these issues are manifested (which helps show need for intervention), and possible solutions will be incredibly useful. It provides the stakeholders involved with the process to start from the same page, so to speak. This may be easiest for the content expert to prepare and share.

---

<sup>2</sup> Sources may include peer-reviewed journal articles, applied journals, relevant districts, and knowledge and opinions of content experts. The key is to review the current information on the issue to better inform decision making.

## Theory of Change

---

It cannot be stressed enough that, after identifying a problem to address and target population, the logic modeling process should always begin with development of the program’s theory of change. Dr. Huey-tsyh Chen (2005), a prominent evaluation theorist, described program theory as,

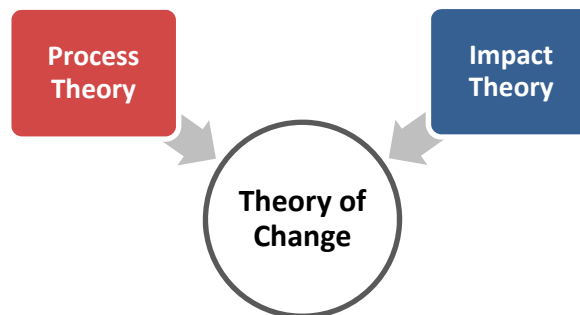
“...a set of implicit and explicit assumptions by stakeholders about what action is required to solve a social problem and why the problem will respond to the action” (p. 16).

Taking the time to carefully and mindfully develop a good program theory of change helps stakeholders to (1) examine assumptions each person has about the problem to be addressed; (2) identify alternate ways to impact that problem; and (3) agree upon the eventual program intervention, creating essential “buy-in” for successful implementation. A program theory of change is the foundation of a program’s design, and is the basis upon which the logic model is constructed and is vital to designing subsequent program evaluation. Moreover, the program theory of change acts as the foundation for all interconnecting components of the logic model.

A good logic model is simply a summary of a program’s theory of change along with a description of the outcomes, resources and activities that are needed to support that theory. Ideally, a program’s theory of change is rooted in formal social or behavioral science theory or previous research. However, a program theory of change often comes out of the experiences and observations of staff or “best practices” of specialists in the field. In either case, developing a solid theory of change is essential to program development, as well as logic modeling and consequential outcome development.

The program theory of change is a combination of two related theories: process and impact. (Donaldson, 2007) Ideally, process theory and impact theory should be considered and developed together.

**Figure 6: Theory of Change is a Combination of Process Theory and Impact Theory**

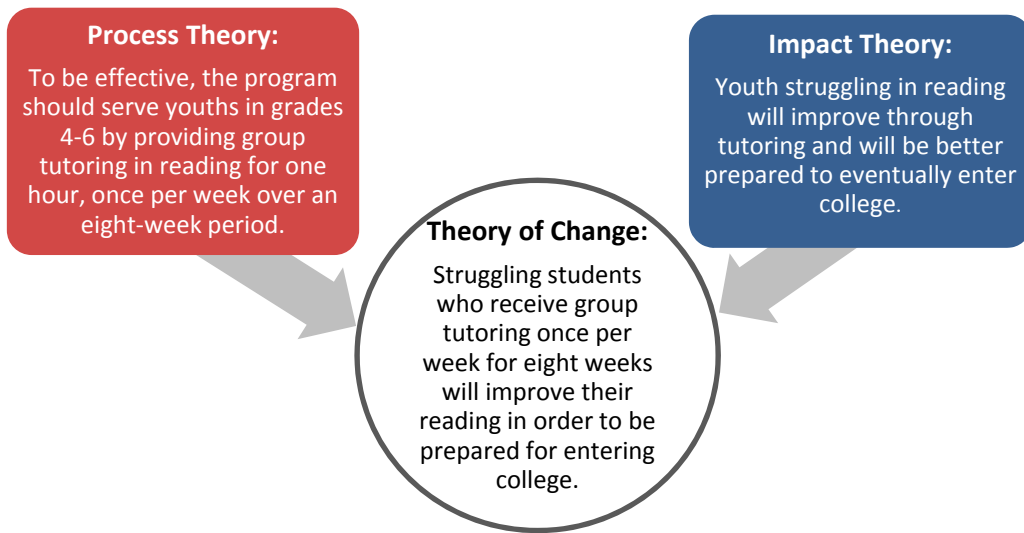


Process theory relates to the program itself, describing the inner workings of a program and includes the assumptions that are made about an appropriate target population, the services they need and how those services will be provided. It incorporates a description of the target population, type of intervention used by the program and length of time needed to impact the target population (also known as the “intensity of the intervention”). Assumptions of all stakeholders about the appropriate program and components should be considered when forming a process theory, especially assumptions of those who have expertise on the issue. Current, relevant research on best practices (what type of program has proven to be effective in addressing the problem) is essential.

Impact theory addresses specifically the benefits to the target population itself; it expresses a causal relationship between the target population and program intervention. Impact theory is focused exclusively on the change in the lives of the target population.

An example of a Theory of Change with both the process theory and impact theory for a tutoring program is shown in Figure 6a.<sup>3</sup> Note that this process theory is limited to the program activities only, and does not address benefits for students involved at this point. In addition, impact is focused exclusively on improvement in the lives of the students.

**Figure 6a: Tutoring Program: Theory of Change Example**



---

<sup>3</sup> The Tutoring Program example used in this guide is based on the *Candidate Outcome Indicators: Youth Tutoring Program* created by the Urban Institute's Outcomes Indicators Project in Washington, D.C.

## Outcomes

---

In terms of developing the logic model, the next component and elements for identification are related to impact theory: Outcomes. These are the concrete and measurable result of the activities. These differ from goals:

“Goals reflect the desire to fulfill unmet needs...”

“Outcomes are the concrete, measurable aspects of these goals.” (Chen, 2004)

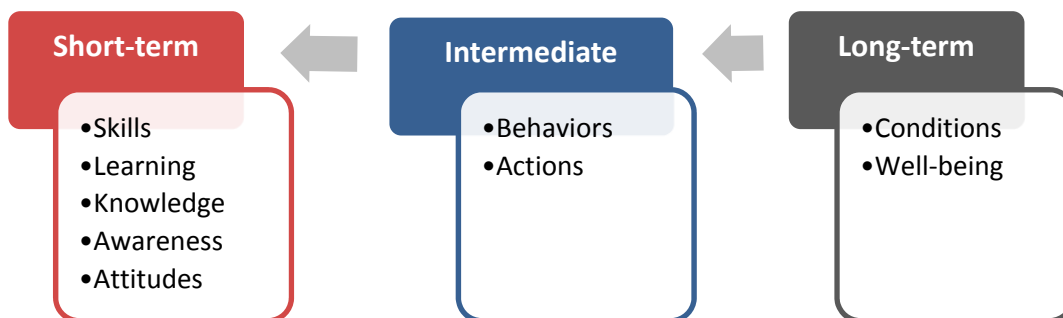
There are two kinds of outcomes:

- **Process Outcomes** describe the results of program activities.
- **Impact Outcomes** describe the benefits to or changes in the individuals served. These are the outcomes usually described in logic models, and will be the focus in this guide.

Outcomes should be progressive, logically interconnected, and represent specific types of change anticipated for the target population. In addition, outcomes should clearly reflect the theory of change and activities. They should be expressed in terms of a desired change (increase or decrease) one expects to see in the program participants. Outcomes should be SMART: Specific, measurable, attainable, realistic, and time-bound; and should be identified from long-term to intermediate to short-term.

- Long-term outcomes identify the ultimate desired change in conditions and/or well-being for the target population, at large – the main purpose of the program. Long-term outcomes are the most important and most closely associated with the program’s impact theory of change.
- Intermediate outcomes are the behaviors or actions that the target population needs to change in order to achieve the long-term outcomes. This is also known as second-order change: behavioral change.
- Short-term outcomes are the skills, learning, knowledge, or change in attitudes the target population needs to gain in order to bring about change in their behaviors or actions (intermediate outcomes). These are first-order change. Typically, short-term outcomes are most directly connected to program activities.

Figure 7: Results: Short-term, Intermediate, and Long-term Outcomes



## *Developing Logic Models Through a Program Theory of Change*

The arrows move from right to left because the long-term outcome should be developed first, followed by the intermediate outcome, and then the short-term outcome. It should also be noted that one may have multiple intermediate and short-term outcomes for a single long-term outcome. However, all should be logically able to “roll up” into the next level.

Outcomes should be based on substantive evidence, preferably previous research or prior experience of program implementers or the opinions of other experts in the field. If the program activities are research-based models, then not only will outcomes be identified, but also realistic indicators of effectiveness. Often the outcomes are identified in the literature, and can be adopted or adapted for one’s activities or model.

Outcomes should not be based merely on stakeholders’ presumptions.

Using the example of the tutoring program, possible long-term, intermediate and short-term outcomes are displayed below. Note that each is logically interconnected and reflect the theory of change.

**Figure 8: Tutoring Program: Short-term, Intermediate, and Long-term Outcomes**



## **Indicators**

---

Outcomes must be made concrete and measurable, with realistic targets or benchmarks to achieve for success. Indicators are the measures through which the effects of the program will be measured. Indicators are concrete operations that reflect the outcomes, and are also commonly referred to as measures or objectives. In short, they are:

“...an observable and measurable marker that a certain condition or circumstance exists, and that certain outcomes have been achieved. Indicators tell how much progress or change has been made toward a particular goal, outcome, or output (Silverman et al, 2009, p. 18).”

To identify outcome indicators, one needs to move from the idea to the process to the measure. The concepts are identified in the outcome statement as the aspect of knowledge, behavior or condition that is targeted for change. These general concepts are often vague or difficult to measure concretely. As such, one must develop an operational definition, which moves from the abstract to the concrete. Operational definitions are one or more specific, observable events or conditions that can be independently assessed, measured, or tested within the context of the program. From here one is able to identify the variables and targets for success in the indicators.

Consider the tutoring program example moving from concept to operation to indicator. The outcome statement is the intermediate outcome from the tutoring program: *Students achieve higher reading proficiency.*

The first step is the identification of concepts, and what is meant by those concepts. Questions to consider:

- What does "reading proficiency" mean in the context of the program?
- How does this connect with short-term and long-term outcomes?

In this outcome statement, "reading proficiency" could simply be the ability to achieve "proficiency" on the MAP or the state standardized test. Or, it may mean increased comprehension, fluency, vocabulary, or other skill areas. For this example, reading proficiency is defined as the level of competency and skill that youth demonstrate in reading skill areas as defined by research and best practices.

The next step is to operationalize the concept – move from the abstract to the concrete. Questions to consider:

- How would the concept of "reading proficiency" be measured?
- How does this connect with short-term and long-term outcomes?
- How does this connect with program activities?

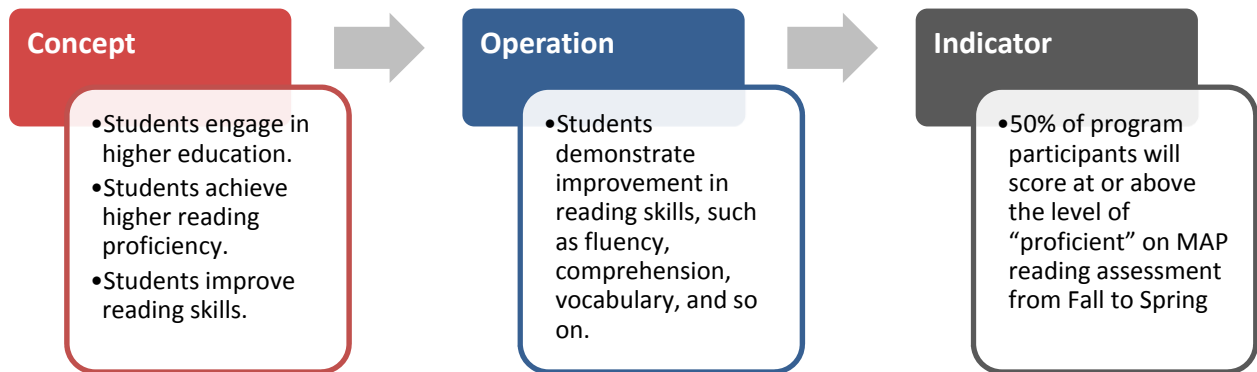
Being mindful of the short-term outcome: *Students improve reading skills* a number of things could be used to concretely define "reading proficiency": fluency in reading text or ability to read aloud, for example. For this example, reading proficiency is operationally defined as a youth's level of fluency and comprehension in reading text.

Lastly, one needs to determine the exact indicators for the outcome. Questions to consider:

- How does one measure "reading proficiency"?
- What is the level needed to reach "higher reading proficiency"?
- How does this connect with short-term and long-term outcomes?

Considering the indicator, one needs to define the measure as well as the standard for success. Possible measurements may be standardized test scores, report cards, or program-specific assessments. The level or standard for success can be based on national standards, comparison with peers, or relative to each participant. For this example, the indicator for this outcome could be: 50% of program participants will score at or above the level of “proficient” on MAP reading assessment from Fall to Spring. See Figure 9.

**Figure 9: Concept to Operation to Indicator Example**



Like the outcomes they describe, indicators should be progressive, logically interconnected, and represent specific types of change anticipated for the target population. In addition, it is possible to have multiple indicators per outcome, particularly if there are multiple targeted populations.

Indicators should be SMART:

- S**pecific
- M**easurable
- A**ttainable
- R**ealistic
- T**ime-Bound

An indicator is the combination of what will be measured and how success will be judged. It is a statement that combines two key pieces of information - the Criterion and the Standard. In short, Indicator = Criteria + Standard.

Criterion: Provides the delineation of characteristics of successful program or implementation (how to judge the program or element – the measure)

Standard: Provides the level of performance on the criterion needed for success, typically expressed as a number (how to judge the results)

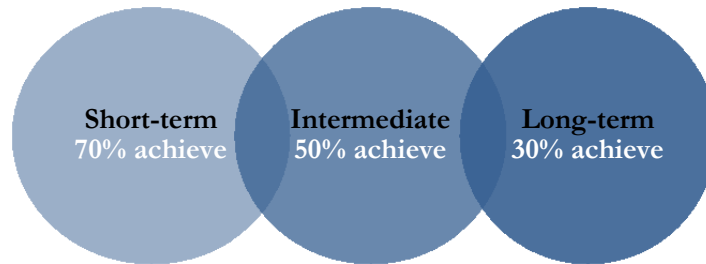
It is important to consider that achievement of outcomes becomes increasingly difficult for participants, and takes longer to happen, as outcomes progress from short-term to long-term. Acquiring knowledge is much easier than changing a behavior. Moreover, the acquisition of knowledge does not necessarily equate to a behavior change, and a change in behavior does not necessarily mean improvement in everyone’s overall condition or well-being.



For example, a student can be taught all of the letters of the alphabet, along with related phonetics and rules of usage (knowledge). However, the student will not become adept at spelling and reading (behavior) without practice, which takes much more time. Furthermore, if the student becomes skilled at spelling and reading, this does not inevitably lead to success as a writer (overall condition) without even more practice (and time).

Given these factors, projected achievement standards would logically be higher for short-term outcomes than intermediate outcomes, which in turn will be higher than long-term outcomes. Standards should be targets that are challenging, but attainable. Figure 10 below is merely *an example*, but demonstrates how the standards change across the targeted outcomes when projecting achievement.

**Figure 10: Example of Progressive Achievement Standards across Outcomes**



A caution to consider is the avoidance of standards that are 100% or 0%. These equate to “all” or “none” standards, and are generally considered to be poor standards. These are rarely achieved, and if they are it is probably not a good indicator of success. If the standard is 100% and achieved, then the measure is likely too easy.<sup>4</sup> Conversely, if it is not met, then it is likely too difficult and not realistic. In addition, simple “made it/missed it” measures do not allow for any evidence related to how close (or far) actual achievement was from targeted achievement.

If the program activities are research-based models, then not only will outcomes be identified, but also realistic indicators. These are easily adoptable or adaptable.

---

<sup>4</sup> In this scenario, it may not be a truly an outcome, but a “soft” measure which over-estimates impact and is essentially “filler.” For example: 100% of participants who requested information about the program received a program brochure.

## **Activities**

---

Program activities are all of the actions that must take place in order to implement the program successfully toward the intended outcomes. These should include all components of the program, from intake to discharge (and beyond). These should be operationally defined, specific and concrete, with a sound rationale for each activity.

Ideally, activities should be selected based on formal social or behavioral science theory or research. This allows for the activities to be considered “evidence-based” or best-practices.” This strengthens the model, and increases the chances for successful outcomes.

For the tutoring program example, activities might descriptions of -

- Referral process from teachers and school staff;
- Intake assessment of potential participants and parents;
- Volunteer recruitment, induction, and training process;
- Student / Tutor matching procedures;
- Tutoring sessions, including:
  - Length of each session
  - Number of sessions offered and minimum number of sessions needed for success
  - Content of tutoring sessions
  - Maximum size of the tutoring groups
- Student Tutoring Planning

## **Inputs**

---

Inputs are any resources needed by the program to carry out the program activities. Input is simply everything that goes into the implementation of your program. It is important to include everything needed to make the program happen.

“Resources include the human, financial, organizational, and community resources a program has available to direct toward doing the work. Sometimes this component is referred to as *Inputs*.”  
(W. K. Kellogg Foundation, 2004, p. 2)

Funding, of course, is a primary resource needed by any program and would be included as an “input.” Other resources include staff, staff training, partners, transportation for the target population, facilities, equipment or supplies, and anyone’s time that would be required to implement the program. Consider other partners who could be resources or resource providers.

## **Outputs**

---

Outputs are...

*"...the direct results of program activities. They are usually described in terms of the size and/or scope of the services and products delivered or produced by the program. They indicate if a program is delivered to the intended audiences at the intended "dose." A program output, for example, might be the number of classes taught, meetings held, or materials produced and distributed; program participation rates and demography; or hours of each type of service provided." (W. K. Kellogg Foundation, 2004, p.2)*

Program outputs are simply the tangibles that happen as a result of the implementation of your program. These are the deliverables of the activities; often the "beans" being counted. Funders typically require grantees to report on a standard set of outputs, which can include the number of participants served, the number of sessions offered, the number of persons trained, and so on.

Outputs are unique in that they are considered a process element, and yet can be also considered results of implementation. These should be based in the process theory and are often used to evaluate implementation. Put simply, outputs describe how the program will be implemented and with whom. Each output is chosen because it supports achievement of the targeted impact outcomes for the target population. One way to think about outputs is anything that might shed some light on why the target population may fail to achieve outcomes in the end. In this way, outputs are at the heart of process evaluation of the program.

## **Obstacles and Challenges**

---

On any important trip, it is important to know the pot-holes and road blocks before one starts to travel – it eases planning and makes the traveling easier. These are the obstacles to development, implementation, or achievement of outcomes which may work against your efforts. The better one is in recognizing a potential obstacle or barrier, the better one will be in overcoming that obstacle or barrier. This process is also important in developing a logic model.

These barriers can be internal or external. The blockages may come from a variety of sources: individuals, groups, systems. These can be barriers to development of the effort, implementation of the program, or achievement of outcomes. Obstacles or challenges can be passive (e.g., Students do not believe school is important; Parents are unaware of tutoring resources at the school) or active (e.g., Students refuse to participate or cooperate with tutoring; Teachers have deflected responsibility for student preparedness; or Community has devalued education through cuts in funding).

## **References**

---

Chen, H. (2005). *Practical Program Evaluation: Assessing and Improving Planning, Implementation, and Effectiveness*. Sage Publications, Thousand Oaks, CA.

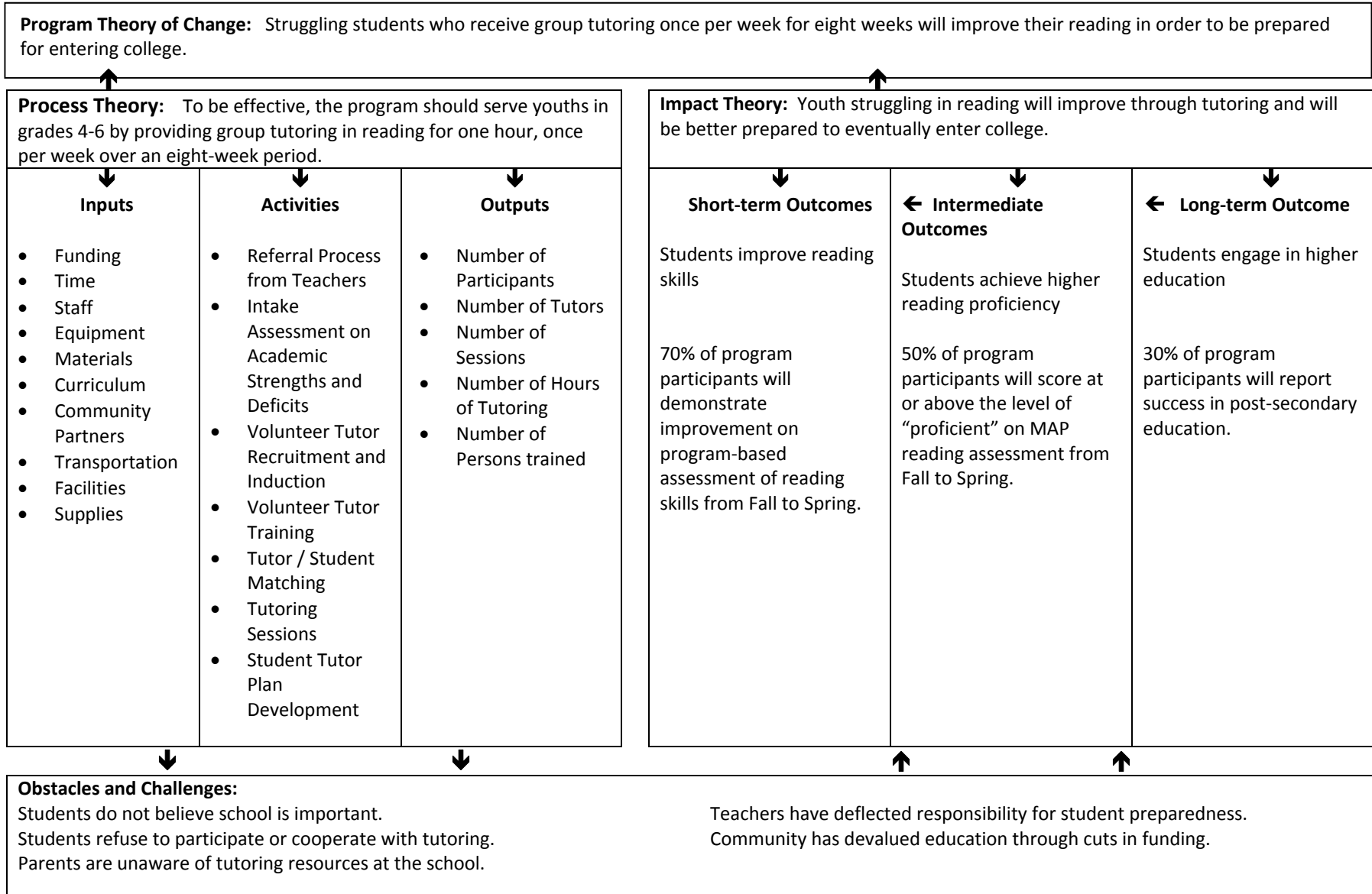
Donald, S. I. (2007). *Program Theory-Driven Evaluation Science: Strategies and Applications*. Psychology Press, Taylor & Francis Group, New York.

Silverman, B., Mai, C., Boulet, S., & O'Leary, L. (2009). *Logic Models for Planning and Evaluation: A Resource Guide for the CDC State Birth Defects Surveillance Program Cooperative Agreement*. Downloaded on 3/7/2012, <http://www.cdc.gov/ncbddd/birthdefects/models/Resource1-EvaluationGuide2009.pdf>

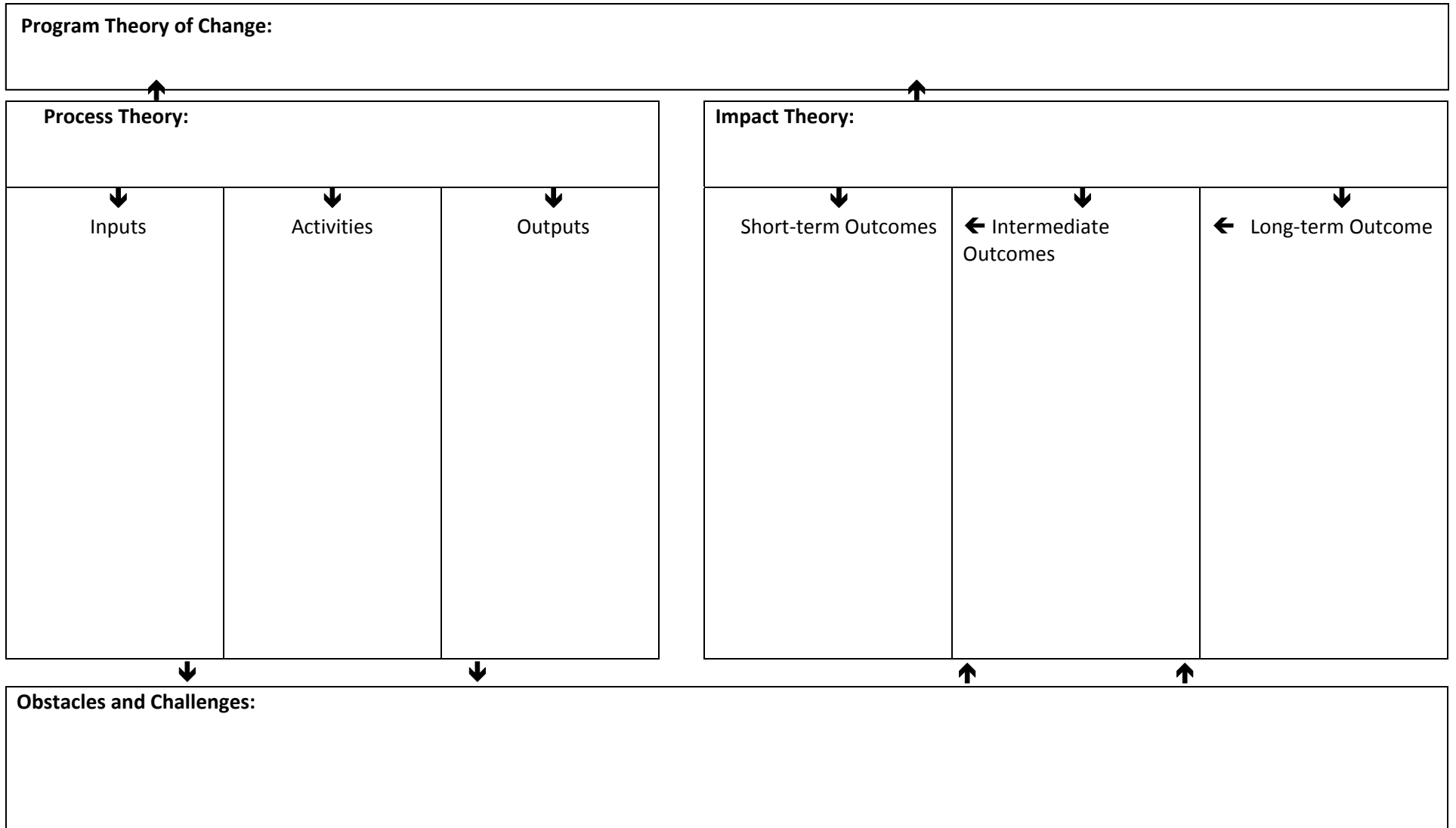
University of Wisconsin – Milwaukee – Center for Urban Initiatives and Research. (2012). *A Guide for Developing Programs for Grant Applications: Approaching Logic Modeling Through a Program Theory of Change*. (A sponsored resource for Milwaukee Public Schools).

W.K. Kellogg Foundation (2004). *W.K. Kellogg Foundation Logic Model Development Guide*. Downloaded on 3/7/2012, <http://www.wkkf.org/knowledge-center/resources/2006/02/WK-Kellogg-Foundation-Logic-Model-Development-Guide>

**Example: Tutoring Program: Logic Model and Theory of Change Template**



### Appendix: Logic Model Template



#### About Research & Development

The mission of the department is to support the use of evidence to inform policy and practice. The department is responsible for facilitating the district's research agenda, working with the Grants Office to develop grants, approving research applications, developing administering surveys for the district, and completing reports in collaboration with others in the district.

You can contact us at 414-475-8520 or [mpsresearch@milwaukee.k12.wi.us](mailto:mpsresearch@milwaukee.k12.wi.us)