

# Logic Modeling for MPS Partnership for the Arts and Humanities Program



**MILWAUKEE  
PUBLIC SCHOOLS**

*Center for Urban Initiatives & Research*



# Topics

- Overview of Logic Modeling
- Building a Program Logic Model
  - Program Theory of Change

# Some terminology

- Logic model
- Theory of change
  - Process theory & impact theory
- Goals & outcomes
- Inputs & outputs

# Logic Model

- A ‘snapshot’ of your program
  - theory of change
  - outcomes
  - program activities
  - essential resources
  - external and internal challenges

# Theory of Change

“Stakeholders’ implicit and explicit assumptions on what actions are required to solve a problem and why the problem will respond to the actions.”

(Chen, 2005)

# Theory of Change In Programs

- Ideally, rooted in formal social or behavioral science theory or previous research
- Practically, rooted in experiences & observations of staff &/or “best practices”
- Theory of change is essential to outcome development
  - Foundation of a logic model

# Process & Impact Theories: Two Parts of a Theory of Change

- **Program Process Theory:** Describes the inner workings of your program – assumptions you make about how to reach your target population along with the services they need & how you will provide them.
- **Program Impact Theory:** Describes the cause & effect relationship between your services & the target population.

Process  
Theory

Impact  
Theory

Theory  
of  
Change

```
graph TD; PT[Process Theory] --> TOC((Theory of Change)); IT[Impact Theory] --> TOC;
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# Examples

- Theory of change: “Dance contributes to the positive emotional development of youth”
  - Process theory example: To be effective, the program should serve youths in grades 4-6 by providing dance instruction over an 8-week period.
  - Impact theory example: Learning dance helps youth develop the self-discipline, self-confidence & positive self-expression needed for success in adulthood.

# The difference between “goals” and “outcomes”

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

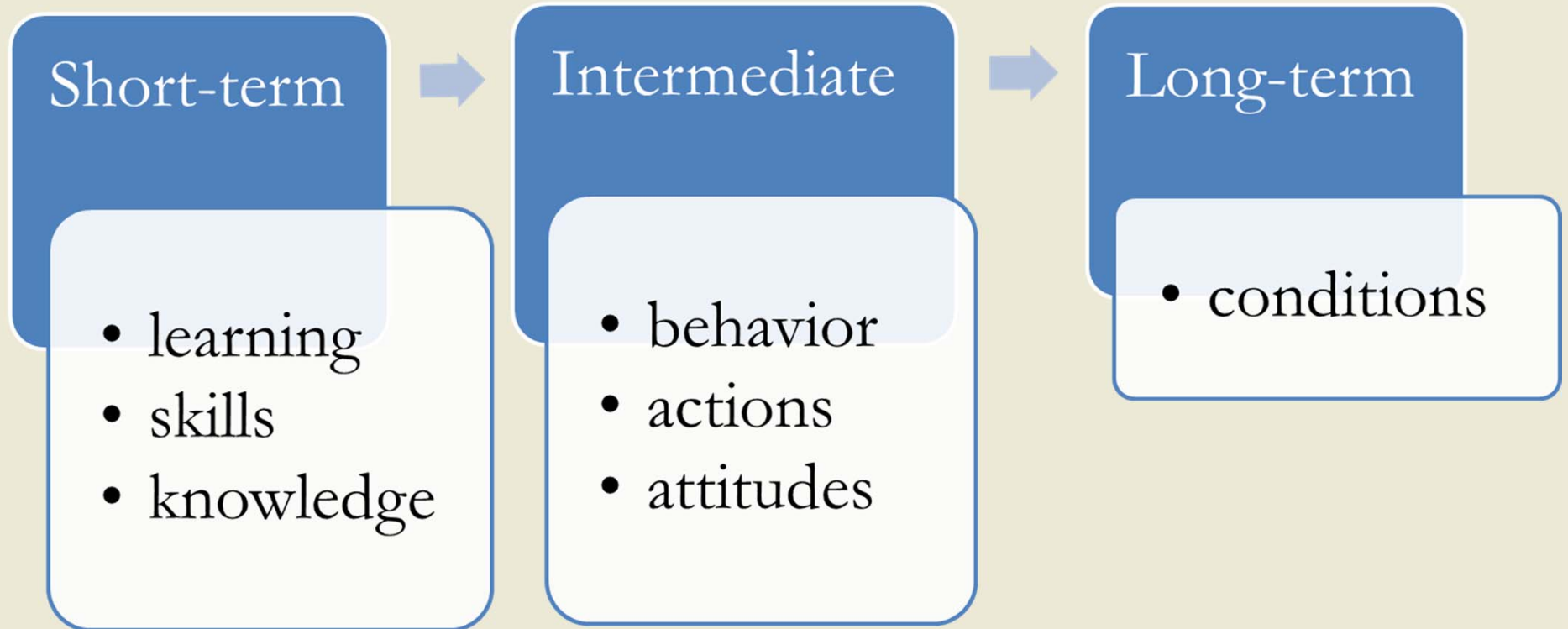
“Outcomes are the concrete, measurable aspects of these goals.”

(Chen, 2004)

# Two types of outcomes

- Process
  - Describe your program activities
- Impact
  - Describe the benefits to the individuals you serve
  - Most important

# Impact Outcome Types



# Impact outcomes are...

- Progressive & logically interconnected; start with the long-term outcome(s) first and then decide on the intermediate outcome(s), then short-term outcomes
- Reflected in your Logic Model, all 3 types whether you measure each or not; typically you would measure short-term and/or intermediate outcomes
- Concrete & measurable; before selecting outcomes, decide on how they will be measured as well as if they CAN be measured
- Expressed as a change (i.e.: increase or decrease)
- Targeted for measurement depending on the content of your program/project; outcomes should be supported by activities that are an INTENTIONAL part of your program

# Examples of Process Outcomes

- 70% of youths in the program will attend  $\frac{3}{4}$  of the sessions
- The program will increase the number of youths it serves by 20%
- 100% of teaching artists in the program will participate in professional development

# Examples of Impact Outcomes

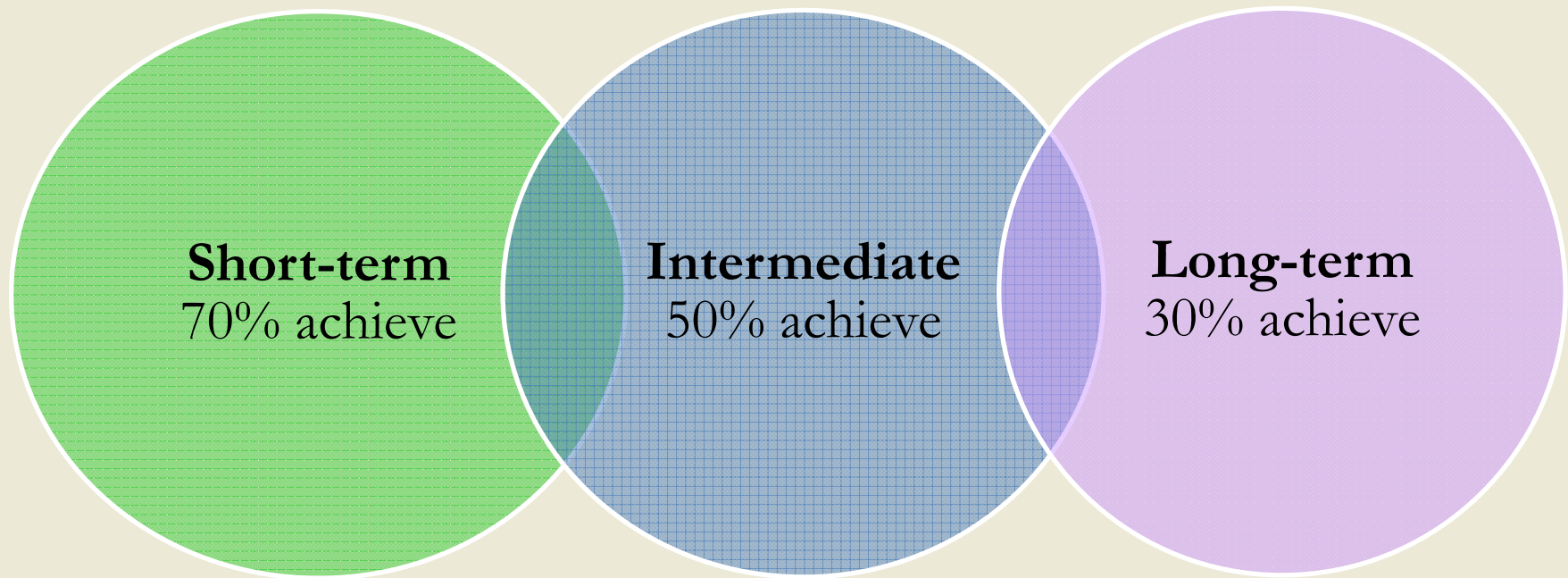
- 50% of youths will increase their self-confidence
- 20% of “at-risk” youths will increase their ability to positively express themselves by decreasing their behavior problems
- 60% of youths will increase their self-discipline by demonstrating the ability to coordinate dance steps with others in the group

# Inputs & Outputs

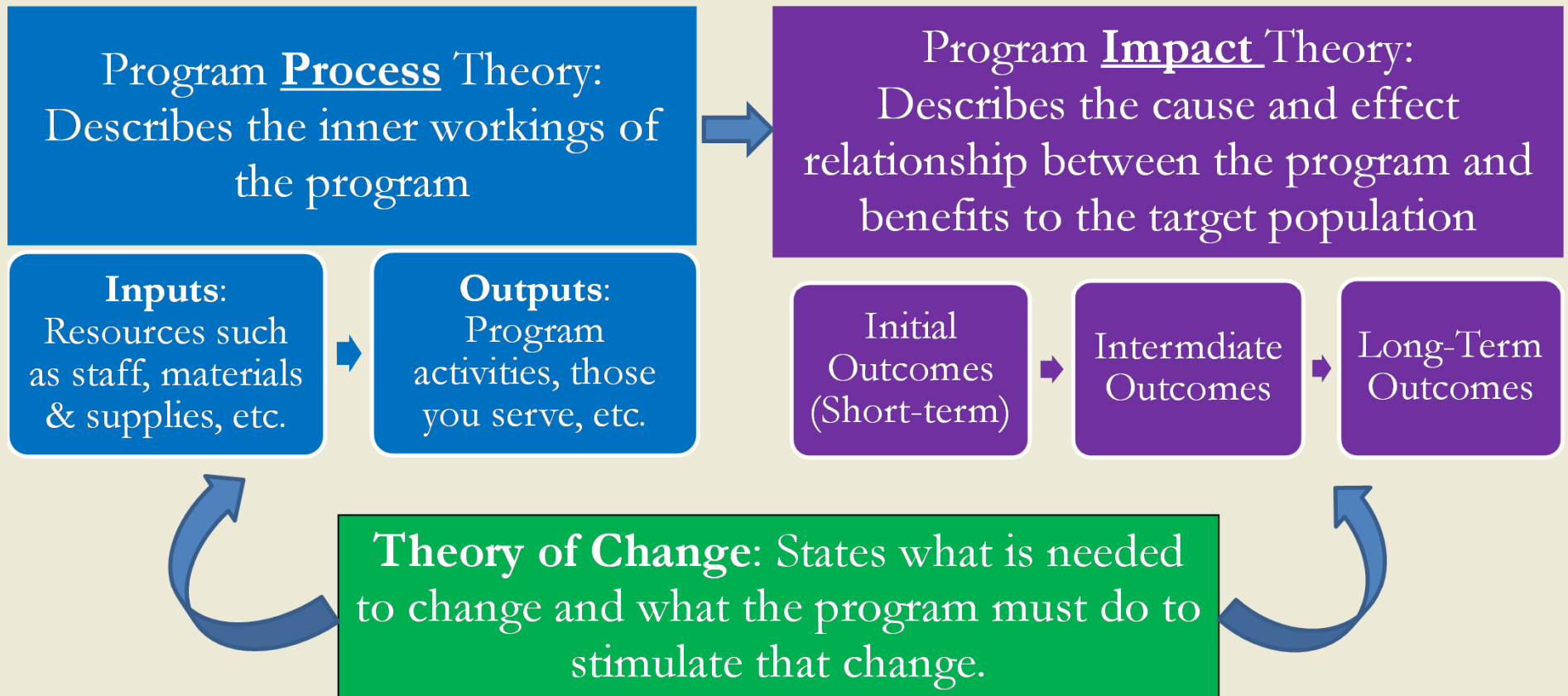
- Inputs
  - What you need: resources such as staff and materials, contributions, physical space, etc. that go into delivering the program
- Outputs
  - What you do: activities, services, events, etc. that reach targeted participants



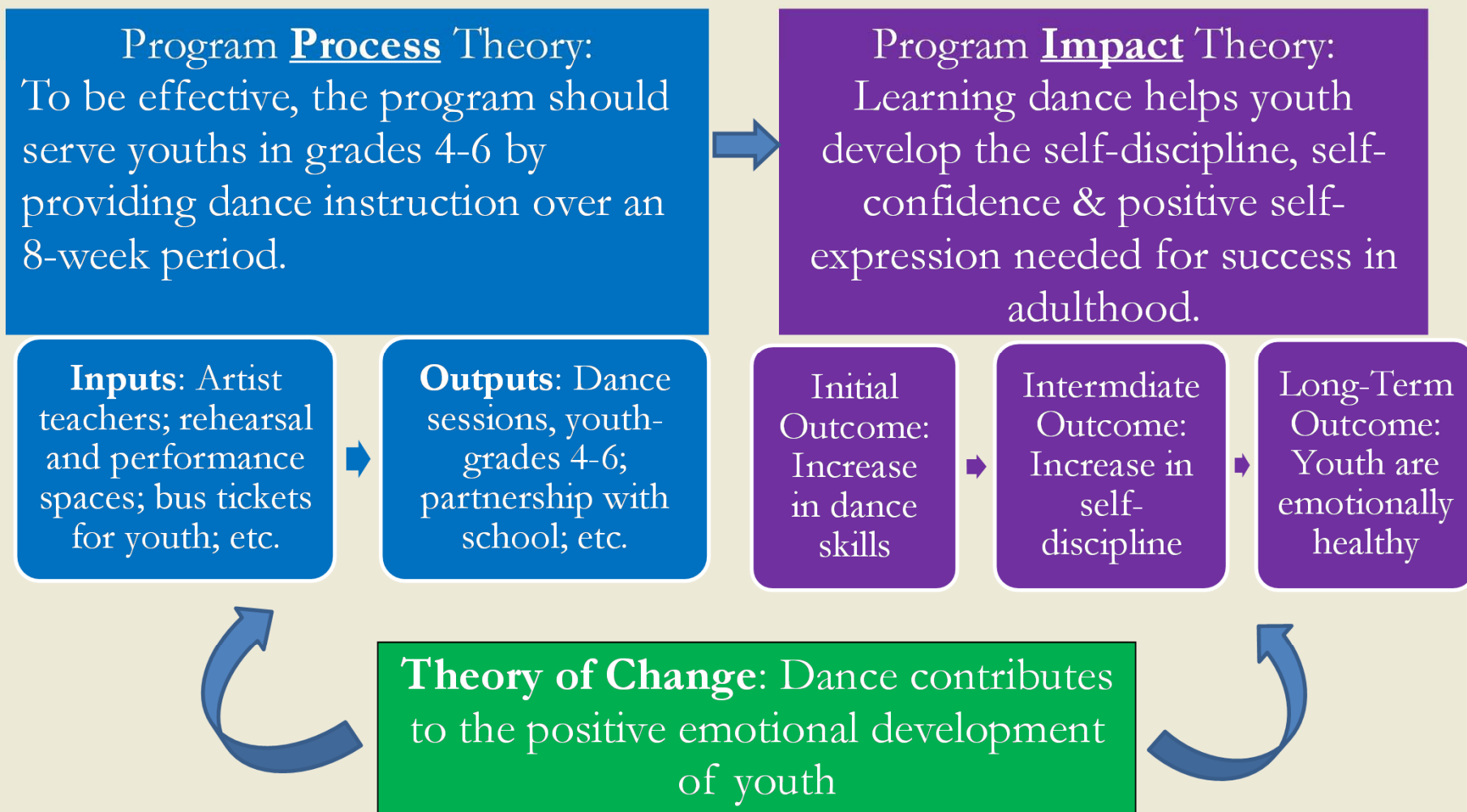
Keep in mind that as outcome levels increase from short-term to intermediate to long-term, the difficulty of achievement also increases. (Below is an example)



# Components of a Logic Model



# Arts Logic Model Example (Dance)



# Measuring Student Outcomes

- Surveys, pre- & post-test or post-only
  - Students or parents
- Student reflection logs
- Secondary data
  - WKCE test scores, report cards
- Instructor / staff perceptions
- Observations

# Data Sources

- Weakest (unless a standardized instrument is used by all staff and for each individual student)
  - Instructor / staff perceptions
  - Observations
  - Post-test only survey
- Better
  - Student surveys (matched pre- and post-test & reflection logs)
- Strongest
  - Secondary / existing data (such as test scores)

# The level of outcomes to measure...

- Depends on the length & intensity of program
  - Short-term outcomes: One to three session projects
  - Intermediate outcomes: Multiple session projects over a longer period of time
  - Long-term outcomes: Intense, possibly multiple year projects

# Things to think about...

- Importance of matching student data on pre- and post-tests
- Using post-test **ONLY** surveys; very difficult to measure change
- Consider reading & comprehension level of youth in respect to surveys; no more than a 3<sup>rd</sup> grade reading for students 5<sup>th</sup> grade and up; very young students should not be surveyed at all
- Make sure program activities support targeted outcomes
- “Ceiling effect” on pre-test surveys; if students measure high at pre-test, an increase at post-test is not possible so it will appear there’s no benefit from the program
- Surveys should be short and contain **ONLY** relevant items to measure outcomes
- Self-assessment skills can be an outcome, but must be intentionally incorporated in the program activities
- Process outcomes are useful for program improvement (increase in attendance, for example), but these do not measure outcomes