



# Turning Logic Models into Research Questions

## Session 2

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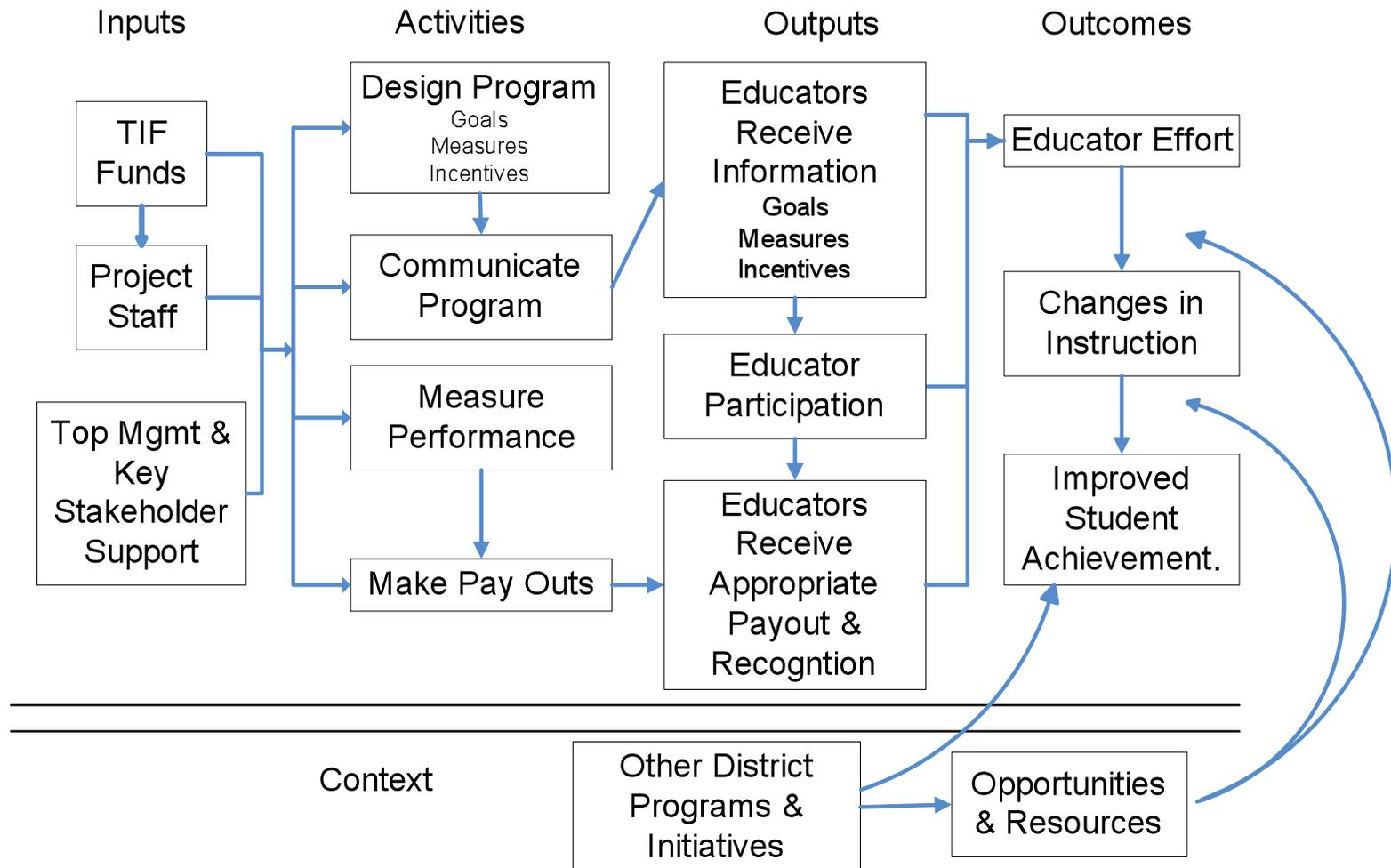
## Purposes of Research Questions

- Focus the evaluation work
- “Prove” causal chain
  - Confirming that events in the causal chain can give some evidence of causation if expected outcomes are achieved
- Provide formative information
  - How well has program been implemented?
- Diagnose reasons for apparent failure
  - Which links in the causal chain were broken?

# Logic Model as Template for Research Questions

- Questions about inputs
  - Were resources provided & used?
- Questions about activities & outputs
  - Did the activities occur as planned?
  - How many, how much, how often?
- Questions about outcomes
  - Intermediate outcomes
  - Ultimate outcomes
- Questions about context
  - Did the context suppress or reinforce effects?

# Logic Model Style 2



## **Input Questions**

- Were TIF funds spent as intended?
- Was the project adequately staffed?
- Did the program have support from top management & other key stakeholders?

## **Activity & Output Questions**

- Did goals get set & performance measured as intended?
- Did target educators receive communications about the program?
  - What communication mechanisms were used?
  - How detailed & accurate were the communications?
  - How many communication sessions were held?
  - How many educators asked for or received information?
- How many schools/educators chose to participate?
- Were payouts made on time & in amounts intended?
  - How many educators received payouts?
  - How many payout errors were there?

## **Intermediate Outcome Questions**

### **1. Educator Motivation**

How did incentives affect motivation?

### **2. Educator Efforts**

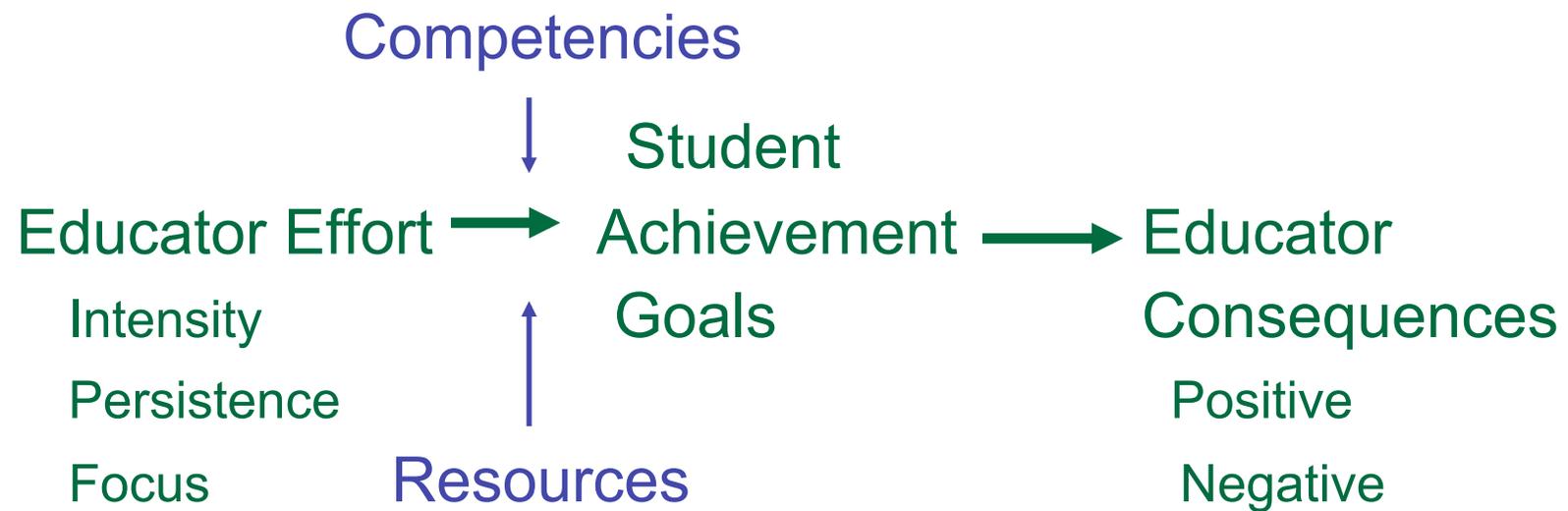
Have schools changed how they are organized to support instruction?

Have teachers been motivated to change their practice?

### **5. Has instruction changed?**

How did teachers change instructional practices?

# When are Educators Motivated?



## Intermediate Outcome Questions Derived From Motivation Model

1. Did the target educators understand the goals, measures, and rewards?
2. Do educators value the rewards?
  - Is the incentive amount meaningful?
  - Does the value of the incentive outweigh the negatives such as stress, less freedom to teach, and working harder?
4. Do they perceive that if they achieve the goals they will experience positive consequences?
  - Receive \$ rewards, recognition
  - Avoid negative consequences
  - Not rewarded if they don't achieve?

3. Do educators believe that if they try, they can meet the goals?
  - Do they know what to do to meet goals?
  - Do they believe they possess the competencies & resources needed to succeed?
  
5. Do educators perceive program as fair?
  - Fair process
  - Fair outcomes

## Intermediate Outcome Questions – Effort

- Is motivation taking place?
  - Do educators say they have focused their efforts on student achievement goals?
  - What actions have educators taken to improve their chances of receiving the incentive?
    - Instruction
    - Other
  - Do educators say that the *incentive* motivates them to focus their efforts, expend more effort, or persist in their effort?

## Has instruction changed?

- Have schools or teachers increased time allocations to tested subjects?
- Have teachers spent more time with struggling students?
- Has the curriculum changed?
- Have teaching practices changed?

## Ultimate Outcome Questions

- Has student achievement changed?
  - Define “student achievement”
    - Value-added
    - Attainment trend
    - Achievement gap reduction
- Other Outcomes

## Context Questions

- Were competing communications or initiatives introduced?
- Were resources needed to improve practice available?
- Were there sufficient opportunities to apply improved practice?
- Were other initiatives aimed at student achievement operating at the same time?
  - How well was the TIF program aligned with other efforts to improve student achievement?

## **Unintended Consequences**

- Turnover differences in tested vs. untested subjects & grades
- More turnover in schools not earning incentives
- Curriculum narrowing/teaching to the test
- Corruption of measures

## Your Turn...

- Further refine your logic model
- Develop research questions
- Share logic models & research questions with the whole group