

# Logic Models and Systems Models: Two Sides to the Same Coin?

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# What Do We Mean by System?

- Any group of interacting, interrelated, or interdependent parts that form a complex and unified whole that has a specific purpose
- Defining characteristics:
  - Boundaries
  - Perspectives
  - Relationships
  - Dynamics over time

# Why model?

- Represent reality
- Clarify complexity
- Articulate program theory and program logic
- Situate program within greater context



# What do models tell us?

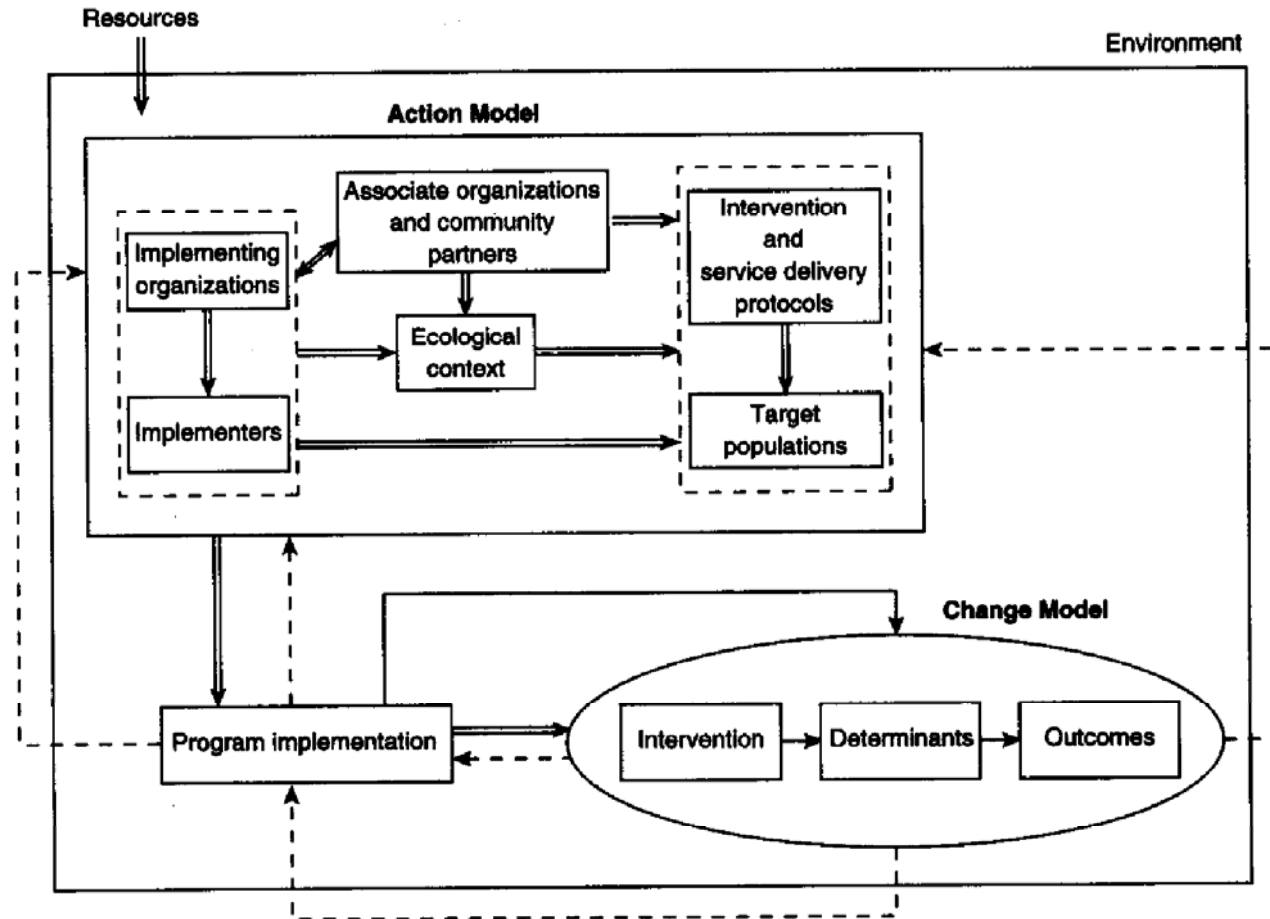
- Systems models: an “idea” about the real world as a physical/graphical description of relationships among the parts, between the parts and whole, and between the whole and its environment
- Logic models: defined sequence of expected events and relationships between inputs, strategies, outputs, and outcomes; they bridge the gap between where the project is and where the project wants to be; describe relationships between stakeholders, investments, activities, and results similar to systems models



# Program Theory

- Systematic process for defining what a program must do to achieve desired goals, anticipated impacts, and the process by which goals and impacts are realized (Chen, 2005)
- Simultaneously descriptive and prescriptive, with a resulting focus on identifying action-oriented, rather than causal, explanations of program assumptions, processes, and activities

# Modeling: The Big Picture



Source: Chen, H. (2005) Practical Program Evaluation, p. 31.





# Two Types of Program Theory

- Theory of action: very basic articulation of key program elements; the first step in defining overall program logic
- Theory of change: specific details for each element in the theory of action



# Change (aka Logic) Models

- Identify descriptive assumptions defining the causal processes underlying a program's ability to successfully impact participants
- Articulates the logic of the program or intervention (inputs, outputs, outcomes, impact)
- A road map for program design, implementation and evaluation



# Action (aka System) Models

- Lay out assumptions regarding program components and activities that stakeholders view as essential for program success
  - What are the crucial elements of the program?
  - What organizational structures and processes are necessary to deliver services?
  - Who is the target audience for these services?
- A prerequisite for the change model
  - Establishes the base context within which a change model will be implemented
- Define the system and context

# Why Do Both?

- Tempting to jump right to evaluating outcomes and impact without first examining the systemic, policy, organizational, and implementation processes of the action model that are necessary for success
- BUT, if the elements of the action model not interacting appropriately, may be impossible to effectively implement the transformative processes defined by the change model
- SO, critical that contextual and organizational elements of the action model be examined prior to evaluating outcomes and impact



# Questions to ponder

- What are the strengths and weaknesses of each approach to modeling in terms of their ability to show system attributes (boundaries, perspectives, relationships, dynamics over time)?
- How can the two approaches to modeling be improved and integrated to provide a framework for understanding both the program and the system within which it functions?
- How can both types of models be used to inform a systems-based evaluation design?
- How can you use models to capture critical elements of process, context, content, and program theory in your own work?

# Group Discussion

- Layers – theory, description, implementation, causation
- Policy studies – differs from program theory described here in that how to do it is defined first before determining the players, funders, etc.
- Do providers/programs have what they need to do what they're planning to do?
- Large program – chain of assumptions needs to be highly conceptualized; systems take place between layers of logic model; that is where management activities take place

# Discussion

- Reconciling is part of what we are trying to do – reconcile complexity, scale – getting everyone thinking about same thing in terms of evaluation (add layer driven by multiple perspectives – need to recognize, accommodate? Reconcile? Not always)
- What is *raison d'être*? Logic model supports exploration of this, what does model of system tell us that is any different?
- Interplay between elements/members of a system can influence changes in what program is trying to achieve or what program does

# Discussion

- Stuart Donaldson – model on Claremont University website (need to find URL)
- Limitations of flatness – way to address this in 2D way – Inspiration – vision mapping program – frees you from the letter sized sheet of paper
- How do we get away from flatness? Even layered models are typically shown via multiple pages in a document