Using a Theory of Change Process and Logic Models to Support Faculty Research and Program Development

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Theory of Change (TOC) vs. Logic Model (LM)

- Terms are often used to describe similar processes, but in practice are different and serve different purposes.
- TOCs and Logic Models can complement each other and many funders are requiring its grantees to develop a TOC.
- A TOC provides a blueprint explaining an organization’s beliefs about how change will occur.
  - The primary component of a TOC is the pathway of change diagram.
  - TOCs explain the change process by outlining casual linkages in a major project (short-term, intermediate, and long-term outcomes) and the relationship of these outcomes to each other.
- A logic model examines the relationship among inputs, outputs, and outcomes.
TOCs and Logic Models

Benefits

• Both TOCs and LMs are powerful processes, which can help inform programs (e.g., NSF or NIH grant programs)
• Both terms, in the past, were poorly articulated—better operationalized in the literature in recent years
• TOCs can help inform the planning of an initiative
• TOCs allow the developers to make informed decisions about strategies and activities
• TOC’s power lies in its differentiation between actual and desired outcomes
• LMs can be used to chart implementation components of a TOC
Formats for TOCs and LMs

• Logic Model - United Way format is most widely used format
  – Three decade year history
  – Clearly identified inputs, outputs, activities, and outcomes
  – First broad scale approach illustrating program components matching activities to outcomes

• Theory of Change – less standardized, but has key components
  – Made popular in the 1990s to address complex initiatives
  – Outcomes-based (focused on desired outcomes)
  – Casual Model
  – Specifies underlying assumptions
## Logic Model—United Way Format

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Activities</th>
<th>Outputs</th>
<th>Intermediate Outcomes</th>
<th>Long-term Outcomes</th>
</tr>
</thead>
</table>

Basic United Way format, 1996
Constructing a Theory of Change?

Faculty Research and Program Development

Explain WHY here

Show Strategies here

Discuss backward mapping

Long-term Outcome

Necessary Pre-Condition

Necessary Pre-Condition

Necessary Pre-Condition

Necessary Pre-Condition

All outcomes that must be achieved before long-term

How are they different?

• “Logic models graphically illustrate program components, and creating one helps stakeholders clearly identify outcomes, inputs and activities

• Theories of Change link outcomes and activities to explain HOW and WHY the desired change is expected to come about”

How are they different? (cont.)

- “Logic Models *usually* start with a program and illustrate its components.”

- “Theories of Change may start with a program, but are best when starting with a goal, before deciding what programmatic approaches are needed.”
How are they different? (cont.)…

“Logic Models require identifying program **components**, so you can see at a glance if outcomes are out of sync with inputs and activities, but they don’t show WHY activities are expected to produce outcomes.”

“Theories of Change also require **justifications** at each step – you have to articulate the hypothesis about why something will *cause* something else (it’s a causal model, remember!)”

How are they different? (cont.)…

**WHY?** Because, you need to know HOW WELL a precondition needs to be met in order to get to the next goal.

What does that mean? Example: How often do students need to attend the OU Writing Center to demonstrate improvements in their writing assignments?
A Logic Model would tell you that the campus writing center is a university program activity and improved writing on student papers is an outcome. It might also tell you that attendance at the writing center is an intermediate outcome.
How are they different? (cont.)…

But it wouldn’t tell you that students need to attend the writing center at least 3 days per week for a minimum of 60 days and that the tutoring received must focus on types of writing, theme, central idea, thesis statement, and editing for syntax, semantics, and content FOR grades to improve on written assignments.
How are they different? (cont.)

<table>
<thead>
<tr>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Logic Models</strong></td>
</tr>
<tr>
<td>Representation</td>
</tr>
<tr>
<td>List of Components</td>
</tr>
<tr>
<td>Descriptive</td>
</tr>
</tbody>
</table>

Helene Clark and Andrea A. Anderson, Theories of Change and Logic Models: Telling Them Apart, Presentation at American Evaluation Association, Atlanta, Georgia, November 2004
When and/or Where to Use?

Logic Models are great when you need to:

- Show someone something they can understand at a glance
- Demonstrate you have identified the basic inputs, outputs and outcomes for your work
- Summarize a complex theory into basic categories
When and Where to Use?

Theories of Change are best when you need to:

- Design a complex initiative and want to have a rigorous plan for success (NIH, NSF, foundations, e.g. John Templeton Foundation)

- Evaluate appropriate outcomes at the right time and the right sequence

- Explain why an initiative worked or did not work, and what exactly went wrong

Helene Clark and Andrea A. Anderson, Theories of Change and Logic Models: Telling Them Apart, Presentation at American Evaluation
Now What?

What are the implications for using a TOC process to articulate a *casual road map for a research agenda on specific issues/topics*?

1. What are your long-term research goals?
2. What are the desired research outcomes—short-term, intermediate, and long-term?
3. What are the root cause issues contributing to the problems/challenges?
4. What pre-conditions must occur to achieve the long term outcomes?
5. What casual links exist between and among these pre-conditions?
Discussion Questions

1. How might TOC and Logic MODEL processes help faculty create a roadmap conceptually for their research agenda?

2. How might a TOC process be used by faculty to acquire external funding?

3. What benefits might be derived from using a TOC process to articulate a more formal roadmap for a research agenda or a new program initiative?

4. Have you ever used a TOC in your research/grants? If yes, what challenges did you face in creating this roadmap of desired outcomes? What additional information or support might you need?