Theory of Change Basics
A PRIMER ON THEORY OF CHANGE

Dana H. Taplin, Ph.D.
Hélène Clark, Ph.D.

March 2012
Introduction

Theory of change is a rigorous yet participatory process whereby groups and stakeholders in a planning process articulate their long-term goals and identify the conditions they believe have to unfold for those goals to be met. These conditions are modeled as desired outcomes, arranged graphically in a causal framework.

A theory of change describes the types of interventions (a single program or coordinated initiative) that bring about the outcomes depicted in the outcomes framework map. Each intervention is tied to an outcome in the causal framework, revealing the often complex web of activity required to bring about change. The framework provides a working model against which to test hypotheses and assumptions about what actions will best produce the outcomes in the model.

Adherence to the theory of change method keeps the processes of implementation and evaluation transparent so that everyone involved knows what is happening and why. To be clear, every outcome in the theory is explicitly defined. All outcomes should be given one or more indicators of success. As implementation proceeds, organizations collect and analyze data on key indicators as a means of monitoring progress on the theory of change. Indicator data show whether changes are taking place as forecast or not. Using the indicator data program staff can adjust and revise their change model as they learn more about what works and what does not.

Rationales in a theory of change explain the connections between the outcomes and why one outcome is needed to achieve another. Assumptions explain the contextual underpinnings of the theory. Often, rationales and assumptions are supported by research, strengthening the plausibility of the theory and the likelihood that its stated goals can be achieved. The graphic model in theory of change is accompanied by a written narrative that explains the logic of the framework.

Theory of change can be both a planning and issue-framing tool and a monitoring and evaluation tool. In articulating long-term outcomes, preconditions, and interventions, ToC forms the basis of visioning papers, strategic and/or annual plans, and goal-setting processes. As an evaluation tool ToC identifies the specific goals of the program and ties those goals to particular interventions. Data can then be collected to evaluate progress toward the stated goals as well as the effectiveness of interventions in producing outcomes.
ToC maps out your initiative through stages:

- Identifying long-term goals and the assumptions behind them
- Backwards mapping from the long-term goal by working out the preconditions or requirements necessary to achieve that goal--and explaining why.
- Voicing your assumptions about what exists in the system without which your theory won’t work, and articulating your rationales for why outcomes are necessary preconditions to other outcomes.
- Weighing and choosing the most strategic interventions to bring about your desired change.
- Developing indicators to measure progress on your desired outcomes and assess the performance of your initiative.
- Quality review should answer three basic questions: Is your theory 1) plausible, 2) “doable” (or feasible), and 3) testable?
- Writing a narrative to explain the summary logic of your initiative.

2. Long-term Outcome

An outcome is a state or condition that does not currently exist but must be in place for your initiative to work. An outcome may represent a change in a group of people, organizations, or places. Outcomes are the building blocks of your Theory of Change. The Long-term Outcome (LTO) is the goal you want to reach, which is the purpose of your program, e.g. academic achievement for youth, or employment for a certain group. All other outcomes on your framework are preconditions for achieving this outcome.

Often, a group has a vision of change that transcends what they can achieve through their own efforts. In that case we put a dashed line, called an “accountability ceiling,” above the LTO (e.g. stable employment) and have an ultimate goal (e.g. end of poverty in the community). Your group will not hold itself accountable for this goal, but it may be important to link your efforts to it in the causal framework to communicate your vision to your own staff and partners as well as to a broader audience. Perhaps the most important step in the entire ToC process is getting the long-term outcome right. The long-term outcome is what you are trying to achieve. A clear, compelling long-term outcome helps keep people focused and motivated. It is for this that stakeholders are doing all the hard work. Your entire first ToC meeting may be spent getting everyone to agree on the long-term outcome.

In facilitating ToC-building sessions, we often start with trying to elicit a problem statement from the group. The problem statement is the core
issue that everybody at the table is trying to address, such as poverty or poorly achieving students or neighborhood crime. We have the group get very specific about that the problem and its boundaries (where and for whom) for the purposes of this initiative.

Once the group has decided on the appropriate problem statement, they should use the statement to derive its positive opposite. Since all outcome statements should be positive statements about a condition, the group can ask what condition will result from the removal of the problem. A safe neighborhood, for example, is the long-term outcome for a problem statement about neighborhood violent crime. Make sure that everyone has the same definition of the long-term outcome. In the example about making a neighborhood safe, it is critical that everyone agree on what “safe” means, and on the boundaries of the neighborhood. When the group reaches consensus about the long-term outcome and how it is defined, record it.

3. Causal Pathways and Backwards Mapping

A pathway is the sequence in which outcomes must occur to reach your long-term goal. Pathways are depicted by vertical chains of outcomes connected to one another by arrows, proceeding from early outcomes at the bottom to longer-term outcomes at the top. Pathways represent a causal logic; each level along the pathway depicts the chain of outcomes that must come into being for the next outcome up the chain to be achieved.

A key component of the ToC experience is the process of “backwards mapping,” beginning with your long-term outcome and working back toward the earliest changes that need to occur. This is the opposite of how we usually think about planning, because it starts with asking “What preconditions must exist for the long-term outcome to be reached?” rather than with “What activities can we be doing to advance our goals?” That comes later in the process.

Most initiatives have multiple pathways that lead to the long-term outcome. For example, there might be a law enforcement pathway, a community involvement pathway, and a community resources pathway that together lead to safe neighborhoods via a series of preconditions.

Sometimes in an outcomes framework we represent certain preconditions that belong together in a category as a cluster. The clustering shows a group of preconditions that belong together conceptually and that interact with one another. All together, they function as a joint precondition to outcomes farther along on the framework. Rendering them in a cluster avoids the need to draw arrows from each precondition to outcomes farther up the hierarchy. The cluster shows interdependence among the individual preconditions without requiring us to diagram the internal causal relationships.
4. Assumptions and Rationales

In ToC, assumptions are conditions or resources that your group believes are needed for the success of your program, and which you believe already exist and will not be problematic to maintain. Assumptions and preconditions are both conditions that are necessary for your program’s success. The difference between them is that assumptions are already in place and do not need to be brought about—in other words, conditions you take for granted. It is important to air and discuss the assumptions going in as wrong assumptions can undermine your theory of change.

Probing for often-implicit assumptions in a group setting can reveal the different understandings and beliefs that people bring to the effort. Bringing assumptions to the surface and developing a consensus on which assumptions are true is a critically important foundation for constructing an achievable theory of change. So, for example, in a ToC about creating employment in a community, a precondition may be that suitable, decent-paying jobs exist. Your initiative will take action to bring that about. The group may also be assuming that the existing public transportation which people need to get to the job locations will continue to operate. That doesn’t need to be a precondition; the transportation is there. But if it weren’t the theory wouldn’t work, because the lack of transportation would become a barrier to employment.

During the process of creating the long-term outcome and drilling down into precondition pathways, participants should articulate as many of their assumptions about the change process as they can so that they can be examined and even tested to determine which key assumptions may be hard to support or unrealistic. The facilitator needs to be listening for assumptions and challenging the group to discuss them. You may be able to capture these assumptions as they come out in conversation. You should also do this when you think the outcomes framework is complete, as a check on the logic of the pathways and as another chance to make clear the assumptions your group is making about the world for your theory to be successful.

Rationales explain the logic behind each causal relationship on the pathway. Many of these will come out naturally in conversation when someone suggests a precondition. Try to capture these as they come out. You may want to elicit clear rationales when there is disagreement among the group about whether something truly is a precondition. After all the preconditions in the framework have been identified, review the logic with the group to capture any rationales that did not come out during the pathway development process.
5. Interventions

Interventions are the things your program or group of stakeholders will undertake to bring about outcomes. Sometimes people use the terms “strategy” or “activity.” We use strategy to mean a coordinated sequence of interventions, using a variety of tools and calculated for optimal leverage, to bring about the desired outcomes. We use activity to describe all the specific actions that make up an intervention. So, for example, an intervention might be “literacy classes” and the various activities needed to make that happen would be things like identifying space and teachers, choosing a curriculum, screening students, etc.

Interventions can be located on an outcomes framework by means of symbols positioned along the connectors. The appropriate place to locate an intervention symbol is on the connector that leads from the precondition to the outcome that precondition helps to produce. Some interventions may contribute to multiple outcomes. In that case, you should locate those interventions in all the appropriate places.

In the TOC process, we deliberately ask groups to hold off on interventions—i.e., what they’re going to do—until they have identified what needs to happen (what outcomes need to be produced). This way, only those interventions that best contribute to the accomplishment of outcomes are included in the theory. This also allows the group to see just where each intervention fits into the big picture.

After the outcomes framework has been completed the group can meet to plot the interventions. If the program is already operating, you can start by mapping all the interventions your program is currently undertaking to the outcomes they are meant to contribute to. Don’t force interventions that do not readily directly contribute to the outcomes on the framework. Existing programs may find a home in the theory but if they don’t, it’s best not to shoehorn them in. You may have to concede that the program or activity does not help advance toward your long-term outcome. Or, it may suggest that you have missed an outcome in developing your framework. After mapping existing interventions, or if your program is new, walk through the framework to identify places where an intervention is necessary and decide which intervention would best accomplish this.
6. Indicators

Indicators are the measurable evidence of meeting a goal, usually visible signs, (e.g. reading scores, attendance) that demonstrate that the outcome has been fulfilled. Indicators can involve quantitative measures or qualitative information. Each indicator needs to have four targets: How many of who or what will reach what level by when?

✓ How many of your population do you expect will change based on your initiative? For example, do you expect 80 percent of students in a school to reach your goal? Or do you expect to find jobs for 100 residents? As with all components of indicators, the goal for your population should be set by combining your vision for change with a realistic assessment of your resources. Indicator targets should be based on how many or what proportion of people or behavior need to change for the outcome to be fulfilled.

✓ Who or what needs to change? For example, are we talking about third graders in a particular school district, or maybe health clinics in the state?

✓ How much does your target group need to change? In other words, how good is “good enough”? For example, if students improve reading scores by one grade, is that sufficient? Or how many sessions must participants attend of a class or workshop to attain the skill being taught? Again, the level or quality of necessary change is determined by what you believe is needed to fulfill the outcome.

✓ By when does the outcome need to be reached at the level and for the number of people you have specified? The timeline for reaching any given outcome depends on the timeline for reaching the outcomes above and below it on the pathway. So, for example, if residents will not have completed a literacy class until the end of the year, it is unrealistic to expect to see an increase in literacy rates any earlier. Likewise, if the long-term outcome is that parents read to their children within three years, you can work backwards to determine by when they need to have increased literacy and motivation.

Ideally each outcome in the theory will have multiple indicators and the initiative will have the capacity to collect data on them all. In reality, an organization or collaborative will have limited resources for monitoring and evaluation. While ActKnowledge recommends that basic indicators be identified for all outcomes in the theory, we realize that groups may choose to fully develop and collect data on a chosen subset of indicators. The choice of which indicators to put into operation will depend on your means, availability of data, and whether the outcome associated with this indicator can be assumed to serve as a proxy for other outcomes on the pathway.

Factors to be considered in identifying indicators include what data are readily accessible as well as what types of information will be most convincing, both within the group and to outside audiences. For each indicator that you develop, remember to develop all of its targets (i.e. how many, who or what, what level, by when). Your indicator should make it extremely clear to everyone what you will consider success for a given outcome. For example, if better equipped classrooms are a precondition to improving a school’s reading scores, the indicators for that might be to have two new computers and a new set of class books for 8 of 12 classrooms within a year.

Typically, indicators are determined at two different times during the TOC construction phase. One is during the construction of the precondition pathways. Sometimes, it can be very helpful to stop and develop an indicator for an outcome that the group may be unclear about or there is some disagreement about. Developing an indicator spelling
7. Quality Review

Quality review should answer three basic questions: Is your theory 1) plausible, 2) “doable” (or feasible), and 3) testable?

**Plausibility** refers to the logic of your pathways. Does it make sense? Are the outcomes in the right order? Are preconditions actually preconditions to the outcomes you’ve indicated? Are there big gaps in the logic?

**Feasibility** refers to how realistic it is that your program and/or initiative can achieve your long-term outcome. Do you have the resources to implement all the interventions you’ve specified? Do you need to bring in additional partners? Do you need to adjust the scope, expectations or timeline of your theory?

**Testability** refers to how well you have crafted your indicators. Have you identified solid, measurable indicators that can be evaluated in a timely manner?

Will these indicators be sufficient to make corrections in your course toward the LTO and to evaluate success of your program? Will they be convincing to necessary audiences?

Quality review should be an ongoing process during the construction of your theory. Your group should constantly be referring to the appropriate quality review questions. During the construction phase, you may want to invite outside reviewers, either with content-specific expertise or as key power brokers, to provide feedback on your theory. Finally, there should be a formal quality review going over the entire theory after you have finished all the components.

8. Narrative

The narrative is a summary of your theory that explains the pathways of change, highlights some of your major assumptions, rationales, and interventions, and presents a compelling case as to how and why your initiative expects to make a difference. The narrative may also contain some information that is additional to what is in your theory, such as your overall vision, the history of how your initiative came to be, and some community context. The purpose of the narrative is twofold: (1) to convey the major elements of your theory easily and quickly to others; (2) to better understand how the elements of the theory work as a whole. Narratives should be kept to one or two pages.

After you have completed all the elements of your ToC, have someone try to draft an executive summary, in plain English, that describes the highlights of your ToC. Then, have the group review it to see if it does capture key elements and explanations of the theory that are enough to make a compelling case without all the details.