Education Innovation Theory of Change

Launching a health science education (HSE) innovation idea is ripe with uncertainty as to how you will achieve your desired future state. A Theory of Change (ToC) provides a framework for visioning, exploring, and learning throughout an innovation cycle. ToC is not a general theory of how change happens; it is a process for designing a visual model that explains how and why *your* innovation intends to bring about change. Therefore, the ToC approach starts with identifying your innovation's vision—i.e. the desired the future state— and works backwards to identify the changes, activities, and resources necessary to achieve this vision.

Design Your ToC Model

The following steps outline an approach to designing a ToC model. These steps should be used as a guide only, as your ToC model should be developed to meet the unique needs of your education innovation**.**
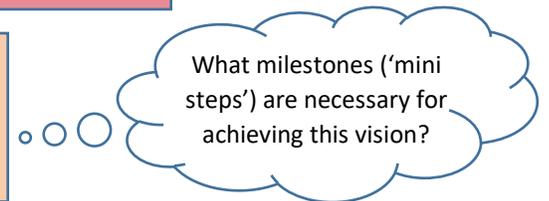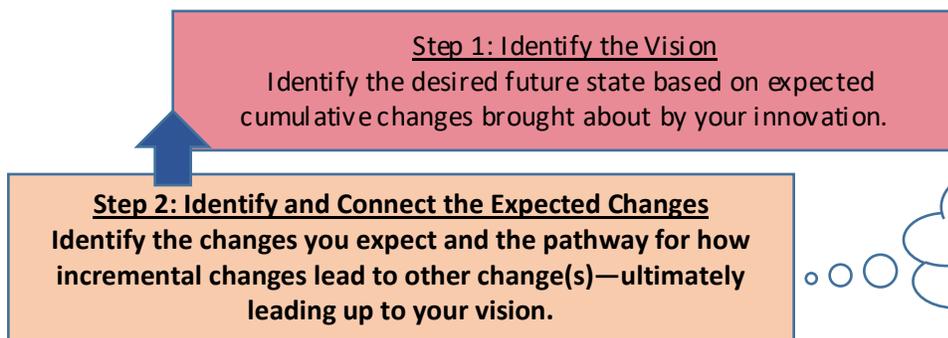
Step 1: Identify the Vision

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Identify the desired future state based on expected cumulative changes brought about by your innovation.

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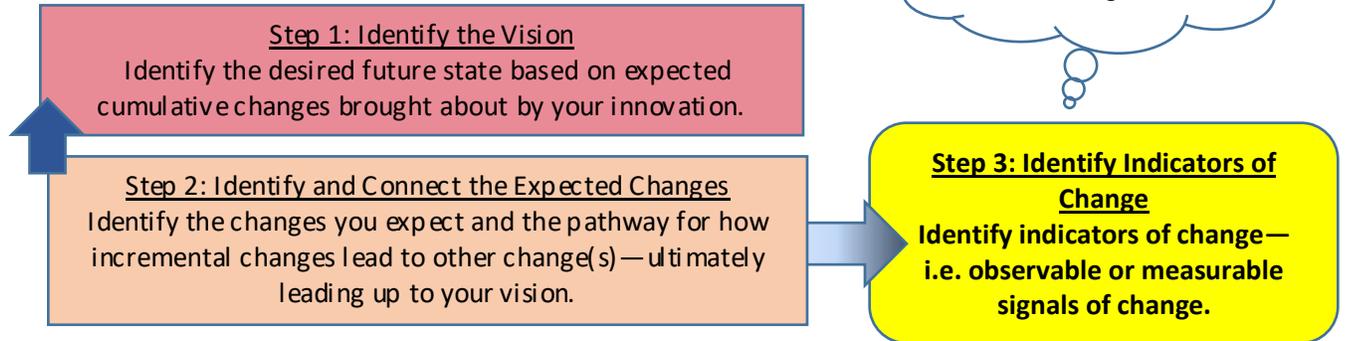What is the "North Star" for this innovation?

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- Keep in mind, the vision depicted by your ToC model does not imply that your innovation is *solely* capable of, or responsible for, huge changes (e.g. broad educational reform). However, you can depict how the innovation can potentially contribute to these bigger, broader changes.

Step 2: Identify and Connect the Expected Changes

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Step 2: Identify and Connect the Expected Changes
Identify the changes you expect and the pathway for how incremental changes lead to other change(s)—ultimately leading up to your vision.

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What milestones ('mini steps') are necessary for achieving this vision?
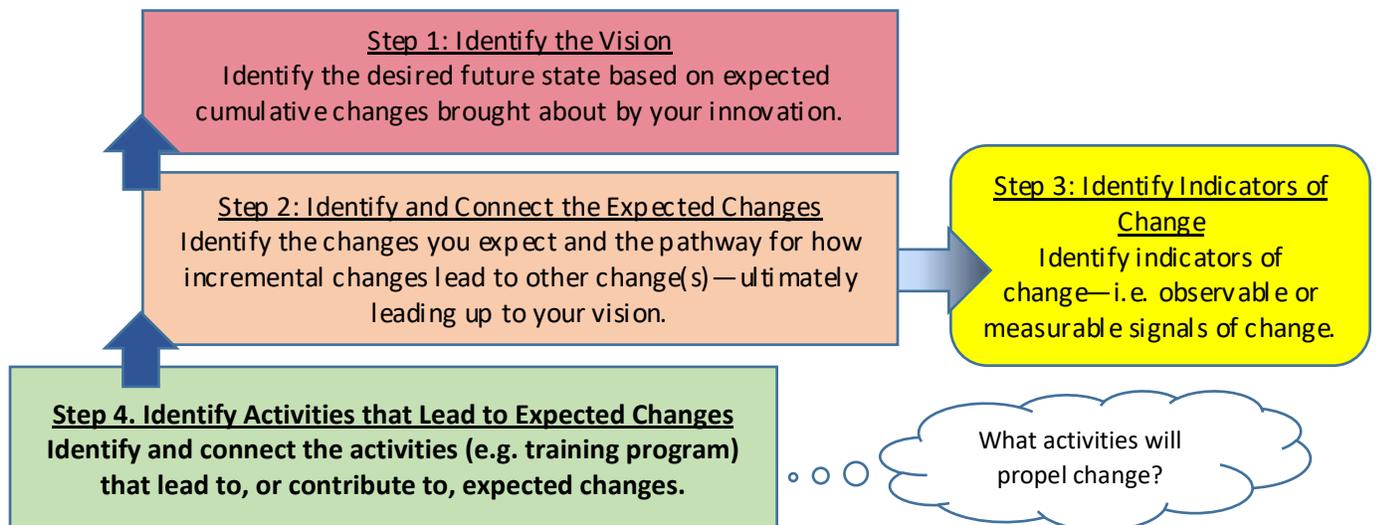
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- The "causal pathway" of your ToC—i.e. the pathway for how incremental changes lead to other change(s), ultimately leading up to your vision—is depicted through a series of arrows. When drawing connections in the causal pathway, note the following:
  - There may be bi-directional influence among expected changes; this can be depicted with a bi-directional arrow.
  - Developing an innovative idea is complex—there may be multiple, different causal pathways that depict change as it leads back to the vision.

Step 3: Identify Indicators of Change

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What metrics will provide evidence of change?

Step 3: Identify Indicators of Change
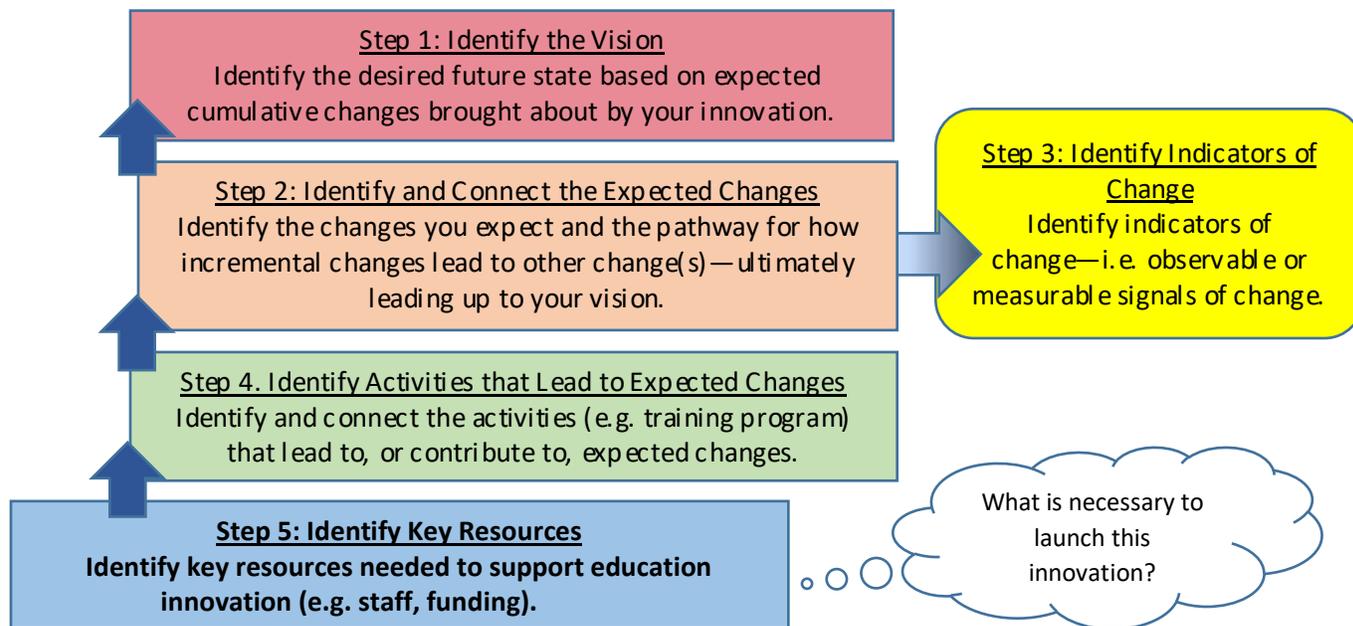Identify indicators of change— i.e. observable or measurable signals of change.

- Each expected change should have an indicator of change that includes three parts:
  - Population—Who is changing? (e.g. interns)
  - Target—How many do we expect will succeed? (e.g. 95% pass the in-training exam)
  - Timeline—By when does this outcome need to happen? (e.g. first attempt at exam)
    - *Indicator of Change: 95% of interns pass in-training exam on the first attempt.*
- If no direct indicator(s) exist, consider:
  - Are there indirect (or "proxy") indicators that directly relate to your innovation? —e.g. institutional trends/data
  - Are there qualitative indicators that may explain change? —e.g. description of an evolving partnership

Step 4. Identify Activities that Lead to Expected Changes

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Identify indicators of change—i.e. observable or measurable signals of change.

Step 4. Identify Activities that Lead to Expected Changes
Identify and connect the activities (e.g. training program) that lead to, or contribute to, expected changes.

What activities will propel change?

- Consider differentiating between activities you will develop (e.g. a new training program) and those that already exist in your environment (e.g. established online training modules) using different shapes or colors.

Step 5: Identify Key Resources

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Step 5: Identify Key Resources
Identify key resources needed to support education innovation (e.g. staff, funding).

What is necessary to launch this innovation?

- Key resources directly support your innovation activities.

Using Your ToC to Guide Your Innovation

Designing a ToC model is well worth the effort—especially given the complexity of innovation. Having a visual model allows you to iteratively step back, review, and identify patterns or gaps that require further exploration. For example, your ToC might identify:

- An activity that is <u>not</u> connected to any expected change (i.e. activity in your ToC model with no arrow(s) leading from it).
  - Was something simply left out of the ToC model? Or, is this an activity that does not really address your innovation's goals?
  - In the case of unconnected activities, consider whether the activity is serving an intended purpose or whether it was included because it has always been done.
- An expected change that is <u>not</u> connected to any activities (i.e. change in your ToC model with no arrow(s) leading to it).
  - Was something simply left out of the ToC model? Or, is the innovation expected to lead to change(s) not supported by your current or planned activities?
  - In the case of unconnected changes, consider whether you should add additional activities in order to lead to the expected change(s).
- Causal pathways (i.e. arrows in your ToC model) that dead-end *before* connecting to the vision.
  - Does this pathway of change truly contribute to the vision? If so, what is missing?

Review and discuss your ToC with stakeholders—including intended recipients of your innovation and people external to your innovation's primary area of focus. Each stakeholder of your education

innovation should bring their unique expertise and a distinct perspective into these conversations. They should discuss and challenge one another's understanding of how change will happen and what must hold true for the innovation to achieve its intended vision. These discussions should include assumptions, which represent one's understanding about the innovation based on knowledge, values, experiences, or beliefs that underlie the anticipated change; e.g.:

- Relationships and power dynamics among people
- Paradigms and belief systems of society
- Organizational culture and context
- Abilities, interests, and motivations of people involved with the innovation
- Operational and administrative functions

This iterative review and discussion drives ongoing exploration and discovery, which should inform how you revise and evolve components of your education innovation idea.

References

- Impact Evaluation in Practice. Gertler PJ, Martinez, S, Premand P, Rawlings LB, Vermeersch C., 2016 September 12.
- Center for Theory of Change. 2019. *Setting Standards for Theory of Change*. Accessed August 6, 2020: https://www.theoryofchange.org/