

# MILESTONE-BASED PATHWAYS: What they are and how to use them

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## A note on context

The development of milestone-based pathways for projects involving Indigenous peoples and communities requires an understanding of the context in which these initiatives operate. Canada's historic and ongoing legacy of colonialism – of which the residential “school” system is a major part – continues to have daily impacts on the lives of Indigenous peoples. Those interested in exploring the potential value of milestone-based pathways in workforce development initiatives for Indigenous youth – particularly non-Indigenous settlers – are encouraged to engage in ongoing listening and learning, continually reflect on their own power and privilege, and familiarize themselves with key documents. These include the Truth and Reconciliation Commission Final Report, Indian Act, Royal Commission on Aboriginal Peoples, United Nations Declaration on the Rights of Indigenous Peoples, Truth and Reconciliation Commission of Canada: Calls to Action, and Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls Calls for Justice. The research briefs complementing this document offer further information on wise practices for engaging Indigenous communities and youth, as well as for designing and implementing culturally-safe employment and skills training.

Funded by the Future Skills Centre, the Two-Eyed Seeing Network aims to engage a network of Indigenous communities, industry leaders, workforce and social development experts, and education and training providers to address barriers and establish a shock-proof pathway to work for Indigenous youth in British Columbia. Led by the Construction Foundation of British Columbia, project partners include Two Eyed Seeing Consulting CCC Inc., Foresight Cleantech Accelerator Centre, Vancouver Island University, the Electrical Joint Training Committee, and the Social Research and Demonstration Corporation (SRDC).\*

To support the Two-Eyed Seeing Network in its activities, this resource provides an introduction

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\*SRDC is an independent, non-profit social policy research and evaluation organization with staff located across Canada. The team supporting the Two-Eyed Seeing Project includes those of Indigenous and non-Indigenous ancestry, all of whom are located on the unceded and unsundered land of the Algonquin Anishnaabeg people, in the city colonially known as Ottawa.

to the concept of **milestone-based pathways**. Milestone-based pathways can be an effective tool to support the design of workforce development pathways, especially those that involve multiple components. They provide a useful way to structure and think about the selection and sequence of program activities and supports to support youth along their journey to meaningful employment, education, and other personal goals. They can also be used as a framework for measuring and evaluating progress and success, including short-term, intermediate-term, and long-term outcomes.

This is part of a series of three research briefs developed for the Two-Eyed Seeing Network. To learn more about the Two-Eyed Seeing Network, provide feedback on this resource, or ask questions about the project, visit [www.2esn.ca](http://www.2esn.ca) or send an email to [info@2eyedseeing.com](mailto:info@2eyedseeing.com).

# What is a milestone-based pathway?

When thinking about programs and workforce development initiatives, the focus is often on the final outcome - in this case, youth employment. Even where a program has multiple activities (e.g., skills training, work placement, wage subsidies) that support youth employment, how the gains and outcomes from each of these components work together to lead to labour market success is not always clearly spelled out. The role of additional supports in increasing the final outcome's chances at success can also be unclear.

Recognizing this, a milestone-based pathway is a sequence of interconnected milestones or outcomes that show how the achievement of earlier outcomes creates conditions that increase the chances of achieving later outcomes. Each milestone is a stepping stone to the next milestone leading to the final outcome or program goal. As shown in the figure below, each milestone can also be linked to specific program activities that are designed to support that milestone, as well as to specific measures designed to evaluate whether the milestone was achieved or not.

# Why this approach?

In the context of the Two-Eyed Seeing Network, using milestone-based pathways can support network members' efforts to develop and implement workforce development pathways to support Indigenous youth in obtaining meaningful employment. Often, we see that program success is measured by only looking at whether or not the final outcome was achieved (i.e., did youth obtain meaningful employment), not what happens leading up to it. Milestone-based pathways help us understand what happens leading up to the final outcome. They encourage us to ask: How do program components help achieve our goal? Which components are critical? Are we missing any important stepping stones? Are program activities working as intended and leading to expected outcomes? Are these outcomes responsible for the changes we see in the final outcome, rather than external or unrelated factors?

These important questions can help us to gain a better understanding of what success means, what factors lead to success, as well as what factors create barriers to success. Simply, it helps us to understand how the program works to achieve the final outcome.

## Milestone-based pathway: Template



## Example

Let's go through an example of a milestone-based pathway that relates to the goals of the Two-Eyed Seeing Network. The example below illustrates how a series of activities can support Indigenous youth toward meaningful employment. Using this example, let's unpack the milestone-based pathway:

### What are the program activities and what do they lead to?

As a first step, culturally-focused and community-driven activities engage youth and help build positive trusted relationships with program staff (**Milestone 1**). Once that foundation is built, wraparound supports help youth improve their life situation and stability (**Milestone 2**) to enable them to engage more fully and successfully in skills workshops. These workshops focus on strengthening social-emotional skills important not only for work but everyday life (**Milestone 3**). Youth can use these skills as they engage in technical

training and certification in their chosen industry, learning how to contextualize these skills in a work environment (**Milestone 4**). Finally, youth can secure employment (**Final Outcome**) with their new technical skills and industry credentials. The milestone-based pathway shows how these different activities and their associated outcomes build upon one another to help youth enter the labour market.

### How can we measure program progress and success?

The example also includes measures or indicators that allow us to evaluate if each component of the program is working and leading to the intended outcomes. We can also analyze the relationship between these outcomes. For example, do higher ratings of social-emotional skills predict higher technical skill ratings? Do higher skill ratings and completion of certification predict increase the probability of being hired? This helps us understand which parts of the program are effective and act as critical **tipping points** for youth on their path to meaningful employment.

## Milestone-based pathway example: A workforce development program for Indigenous youth



# Building a milestone-based pathway for the Two-Eyed Seeing Network

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As Two-Eyed Seeing Network collaborators work together to design new or improve existing Indigenous youth workforce development pathways, consider using the following three steps. Together, these can act as a guide to creating pathways that can be further customized to fit distinct regions, youth needs, industries, and other relevant factors. More detail on each of the three steps is shared in the following section.



## Step 1: Develop a theory of change

Develop a theory of change for the program or workforce development pathway. Start from the program's end goal (e.g., youth employment) and work backwards. Be able to explain how the various program activities and supports along the pathway will work together or in parallel to bring about key outcomes that will help youth move closer to the end goal.

### Further resources for developing a theory of change

- [How to Develop a Theory of Change](#) (Ann-Murray Brown)
- [Theories of Change and Logic Models: Telling them Apart](#) (Clark & Anderson)
- [How does a theory of change work?](#) (Center for Theory of Change)



## Step 2: Identify the main causal chain

Identify the main causal chain of outcomes or milestones that are critical for helping Indigenous youth reach the end goal using the program theory of change. This will form the milestone-based pathway.



## Step 3: Build a measurement framework

Build a measurement framework by identifying, selecting, or developing measures to evaluate whether each milestone in the pathway has been achieved.

## Diving deeper: The three steps

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### 1) Develop a theory of change

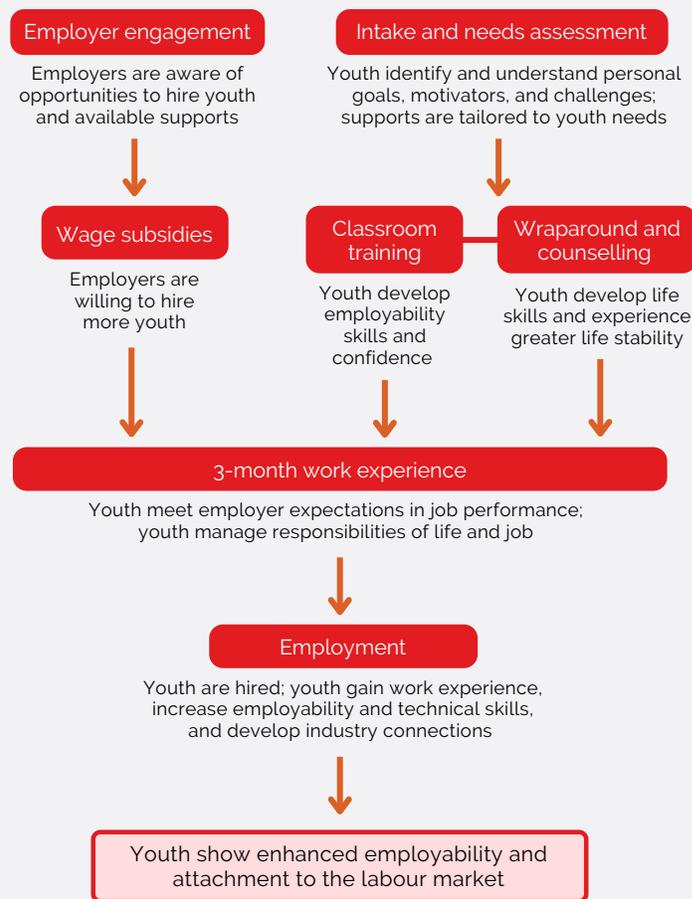
A **theory of change** is the explanation for why a program works, as well as how a program activities will work together to bring about the desired outcome (e.g., employment). This can be based on theory, data, and past evaluations, or informed by the expertise of experienced program or service delivery staff. It should be logical, realistic, and feasible. The theory of change helps to articulate how outcomes are related to each other, including how earlier outcomes can be necessary for some later outcomes.

In developing a theory of change, it can be helpful to start with the end goal of the program or workforce development pathway, then work backward to determine the outcomes needed to get to the goal, followed by determining what kinds of activities could help reach each milestone. It is also important to consider the individual, program, and contextual factors that could impact whether the outcomes are achieved, and thus the success of a program. Individual and contextual factors could include barriers to employment and training for an individual or group, as well as where an individual is at in their employment journey (e.g., distant from the labour market, work-ready, or current employees upgrading skills). These factors help shape the activities and supports required to achieve the desired outcomes. Typically, theories of change are presented in a flow diagram, such as in the example to the right.

When illustrating a program's theory of change, it is helpful to focus on program **outcomes rather than outputs**.

- **Outcomes** are the observed short-, medium-, or long-term effects of the activities on youth or other participants and stakeholders, and includes changes that are often more difficult to measure, such as increases in skills, knowledge, or attitudes. They should help explain how different parts of a program build on each other to help youth.
- **Outputs** are achieved immediately after delivering an activity and are relatively easy to measure and report, such as the number of youth served or the number of workshops held. While these can be important data to track, they often do not explain why a program works as well as outcomes.

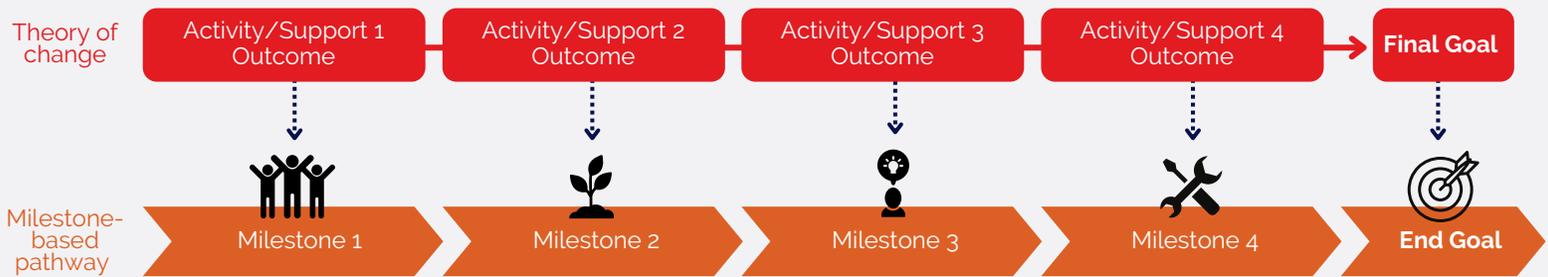
## Theory of change example: A workforce development program for Indigenous youth



## 2) Identify the main causal chain

Once a theory of change and comprehensive understanding of how a program works is developed, the next step is to **identify important milestones** by looking at the key program activities and their associated outcomes. The milestones selected to measure should be part of a **causal pathway** to the final outcome, and be linked to program activities that support it. That is, these outcomes each contribute to and are responsible for helping youth reach their final goals. A program's theory of change may have multiple activities and outcomes – focus on the ones expected to really drive change and that should therefore be measured and tracked.

## Moving from theory of change to a milestone-based pathway



### 3) Build a measurement framework

Once the critical sequence of milestones to focus on have been selected, a **measurement framework** for the pathway can be built. A measurement framework will involve identifying suitable measures by:

- Scanning existing measures online (e.g., reports, measures inventories, tools developed by other organizations);
- Exploring the academic literature (e.g., tools developed by researchers); and
- Speaking with partners and other stakeholders (e.g., what have they successfully used in the past).

In some cases, you may find promising measures that can be adapted or tailored to

the program's particular context (e.g., population of youth, industry, region). If measures do not exist, they may need to be homemade. In such cases, it may be helpful to work with partners who have experience developing measures or collecting data.

## References

Palameta, B., Myers, K., & Conte, N. (2013). Applying performance funding to Essential Skills: State of knowledge review. Social Research and Demonstration Corporation. <https://www.srdc.org/media/199660/pbf-report.pdf>

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