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How to Calculate Your ROI: A Step by Step Guide



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INVESTING IN QUALITY WIL ACROSS CANADA

How to Calculate Your ROI: A Step by Step Guide

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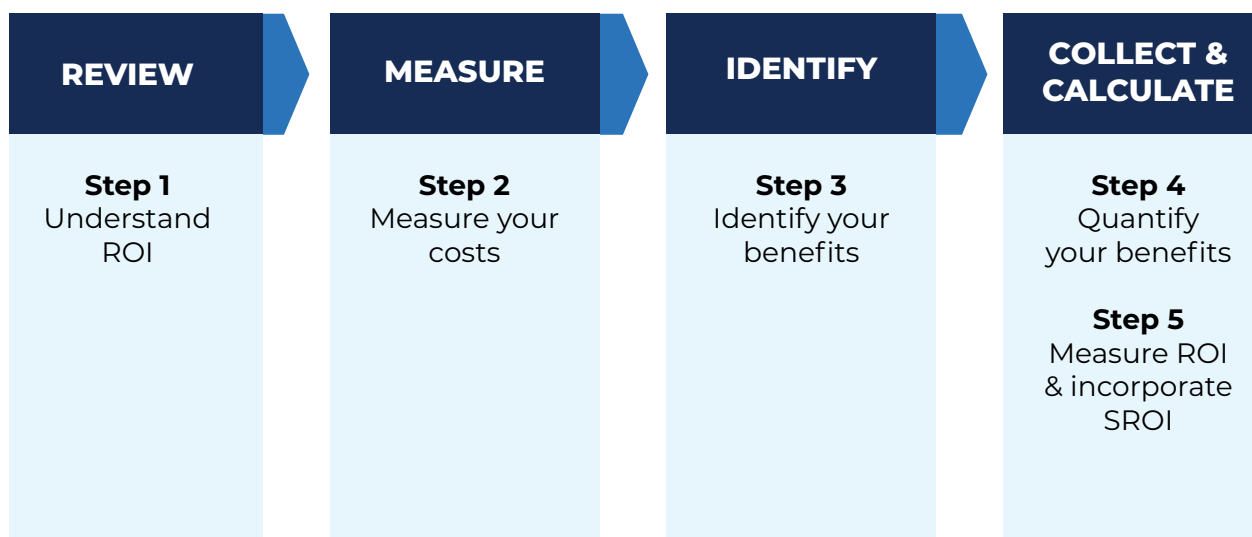
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ROI Guide Outline

This return on investment (ROI) guide was written to help steer employers through the process of calculating ROI—realizing that many benefits from work-integrated learning (WIL) are difficult to quantify. While an ROI calculation on its own may not capture all the benefits of WIL, the process of building a holistic ROI framework can be important for measuring the success of a WIL program.

This guide takes you through five key stages of developing an ROI framework (see below). Incorporating the broader social benefits received from WIL into your ROI framework can enable new ways of thinking about the value of WIL for your organization and community. At the end of this guide, we offer advice on how to incorporate a social return on investment (SROI) perspective into your ROI framework.



Step 1: Understand ROI

WHAT IS ROI AND HOW TO CALCULATE IT?

In terms of WIL, ROI measures the net benefit of a WIL program relative to the cost of the program. Specifically, the ROI formula is the benefits minus the costs divided by the costs of the WIL program. See the formula below. This formula provides the dollar amount gained for every dollar spent on a WIL program. This can also be converted to a percentage by multiplying by 100. More broadly, an ROI framework aims to determine and measure all of the costs (inputs) and benefits (outcomes) of a WIL program, providing vital information about WIL to guide an organization's decision-making process.

CALCULATING RETURNS ON INVESTMENT (ROI)

A diagram illustrating the ROI formula. On the left, a blue circle contains the text 'ROI'. To its right is an equals sign. Further right is a horizontal blue line. Above the line, the text reads 'Total value of **benefits** from WIL - Total **cost** of WIL'. Below the line, the text reads 'Total **cost** of WIL'.
$$\text{ROI} = \frac{\text{Total value of benefits from WIL} - \text{Total cost of WIL}}{\text{Total cost of WIL}}$$

Cost-benefit analysis is widely used across disciplines and industries to assess the desirability of projects and investments by enumerating and evaluating the relevant costs and benefits. However, not all cost-benefit analyses are the same since there are various factors to consider, including the timeframe being evaluated and the inclusion of broader social benefits. For this reason, organizations may calculate ROI in different ways.

For example, ROI for apprenticeships tend to focus on the returns gained during the placement by examining productive contributions from students, whereas ROI for co-ops tend to focus on the returns gained after the placement by looking at future recruitment of co-op students. This guide aims to provide instruction on measuring ROI as part of the cost-benefit analysis for any type of WIL program, keeping these differences in mind.

WHY CALCULATE ROI?

Building a ROI framework can help you answer some key questions:

- What are the goals of your WIL program?
- What are the long-term and short-term benefits of your WIL program?
- How do the outcomes of your WIL program help achieve your goals?
- What are the costs of your WIL program?
- Is there a positive return on investment from your organization's WIL program?

ROI can be used to justify the expense of a WIL program and help your organization compare one WIL type to another. Ultimately, building an ROI framework provides a robust way to track the outcomes of your WIL program and evaluate its success in terms of achieving its goals.

According to our survey of stakeholders, 71 per cent of respondents reported ROI is important or extremely important when communicating the benefits of WIL.¹ Unfortunately, many employers do not leverage ROI since only 6 per cent of respondents currently estimate ROI for their WIL programs.² This guide helps employers to measure ROI in order to better communicate the benefits of WIL to their stakeholders.

WHO SHOULD USE ROI CALCULATIONS?

We encourage all organizations to try to calculate ROI. Simply going through the process of building an ROI framework can inform your organization about the various costs and benefits of your WIL program. Developing an ROI framework may be challenging, but it can also be rewarding and a powerful tool for your organization and its stakeholders.

1 Data collected from BHER's WIL Stakeholder Meeting questionnaire (n=90).

2 Data collected from BHER's Owner, Senior Executive, and Manager survey, and Stakeholder Meeting questionnaire (n=99).

Step 2: Measure Your Costs

To calculate ROI you need to understand and quantify all costs associated with your WIL program. Assigning the dollar value to the costs of a WIL program is generally straightforward since most costs have an inherent dollar value.

Remember, not all types of WIL programs have the same costs. Emerging WIL types, such as consulting, competitions, online projects, and micro-placements, can offer lower risk, low-cost options compared to the more traditional placement-based WILs (apprenticeships, internships, co-ops). Since these emerging WIL types tend to be shorter (e.g., a 2-week micro-placement instead of a 4-month co-op), and require less involvement from the employer, they have a smaller price tag attached. Consulting and competition WIL models can even offer “no cost” options since in some cases, consultancies are paid for by the post-secondary institutions and competitions do not involve any investment from the employer, aside from perhaps judging the results or offering feedback. Consider how much you are looking to invest in your WIL program when deciding on the type of WIL program to undertake.

LIST OF COSTS TO CONSIDER

Recruitment and administrative staff costs

This cost includes wage costs for administrative tasks and recruitment capital costs related to WIL.

EXAMPLE: One of your employees is spending 10 hours per week over 6 weeks recruiting WIL students, at an hourly rate of \$40/hr. They also incurred paid advertising costs of \$1,500 for the duration of the recruitment cycle. Your total recruitment and administrative costs are \$3,900 ($[\$40/\text{hr} \times 10 \text{ hr}/\text{wk} \times 6 \text{ wks}] + \$1,500$).

Training staff wages

This cost includes costs for full-time, part-time, and external training personnel for the period of their typical work hours spent instructing students.

EXAMPLE: Two of your supervisors spend 20 hours per week supervising and instructing WIL students during their 12 week placement, at an hourly rate of \$30/h. Your total training staff cost is \$14,400 (2 x [\$30/hr x 20 hrs/wk x 12 wks]).

Student wages

This includes regular wage payments, irregular wage payments, and compensation for food, travel costs or living expenditures.

EXAMPLE: If your organization hired 10 WIL students for 35 hours per week at an hourly rate of \$15/h for a total of 12 weeks, your total cost is \$63,000 (10x [\$15/hr x 35 hrs/wk x 12 wks]).

Training supplies

This includes the cost of supplies used for non-productive activities in the workplace, books, learning software and videos, working equipment. It can also cover the costs of exams, other educational fees, and external courses offered as part of a WIL experience.

EXAMPLE: One of your WIL students has been approved to complete a specialized Accessibility training course to design accessible documents for your organization. The cost of the training course is \$450.

Material and infrastructure costs

This includes the costs of outfitting students with essential equipment and software to work remotely or in person. It also includes infrastructure costs such as additional machinery or appliances for students and the rental or use of training premises.

EXAMPLE: You hired 10 new WIL students, all of whom require laptops for the duration of their placement, costing \$1,000 each. Five of those students also need computing software installed, costing \$500/installation. Finally, your organization is renting out a space in order to conduct a 1 day orientation for all of the students, costing a total of \$8,000. Your total material and infrastructure cost would be \$20,500 ($[10 \times \$1,000] + [5 \times \$500] + \$8,000$).

Opportunity cost, insurance, and taxes

Opportunity costs represent the value of production that will be foregone as staff and other resources are used for the WIL program instead of other productive tasks. Insurance costs and taxes associated with hiring WIL students can vary depending on the organization.

FUNDING

Consider the funding available for your industry and/or region. Funding may allow you to hire a student at a subsidized rate, which will increase the profitability of the work the student does during your WIL program. For more information refer to BHER's [Financial Supports Catalogue](#).

Begin tracking the costs of your WIL program at the beginning of the program. This can speed up the data collection process and help prevent missing costs in the end.

Step 3: Identify Your Benefits

Determining the ROI for your WIL program is a way of measuring the success of the program. However, a successful WIL program looks different for every organization. It is important to review the short-term and long-term benefits of your WIL program before you begin trying to calculate ROI. Reflect on these by reviewing program documents, such as logic models, or recruitment or planning documents. To take a deeper dive into the factors informing ROI and the benefits of WIL, refer to BHER's [ROI: Beyond the Numbers Guide](#).

Short-term benefits will relate to the benefits you expect to receive while a student is participating in the WIL placement at your organization. Long-term benefits will relate to the benefits you expect to experience after a student finishes their WIL placement. Our series of discussions with stakeholders has shown organizations place more emphasis on the long-term benefits of WIL. Shorter-term benefits offer marginal returns, which help offset the cost of WIL programs before the long-term benefits are fully realized. See below for long-term and short-term benefits to consider.

SKILLED TALENT PIPELINE

When reviewing long-term benefits related to building a skilled talent pipeline through WIL, consider the following opportunities:

- Are you looking for a new strategy to recruit in a tight labour market?
- Is there a lack of awareness of your organization and/or industry among students?
- Are you looking for a low-risk way to assess potential future employees?
- Are you looking to develop a talent pool of candidates with specific skills who can hit the ground running?
- Are you looking for a way to retain talent in your organization?
- How many post-secondary student placements have you converted into employees at your organization?

Beyond talent pipeline development, additional workforce management benefits of WIL include improved employee engagement, development of future managers, and succession planning.

EQUITY, DIVERSITY, AND INCLUSION

As part of your skilled talent pipeline, WIL can also be used to attract, identify, develop, and retain talent from equity-deserving communities. When reviewing long-term benefits related to equity, diversity, and inclusion, consider the following questions:

- Do you have specific equity, diversity, and inclusion goals or targets at your organization that you must meet?
- Do you want to confront systemic barriers and cultivate inclusivity, belonging, and accessibility at your organization?
- Are you eager to tap into new perspectives and innovative approaches that come from having diverse teams?
- Do you want to attract new talent by recruiting international students?
- Would recruitment of talent from historically underrepresented groups help you address labour gaps?
- Depending on your organization's region and industry, would a commitment to hiring local Indigenous talent support economic growth and talent pipelines in your organization and local community?³

³ Mining companies operating in the North, as an example, are required to meet commitments outlined in Impact Benefit Agreements (confidential agreements between the mining company and local Indigenous communities) and Socio-Economic Agreements (agreements between the company and the territorial government) that require them to mitigate the negative impacts of their projects and support the local economy and employment. Mining Industry Human Resources Council. "Northern Territories Mining Hiring Requirements and Available Talent Forecasts: An Overview of Canada's Three Territories." Kanata, Ontario, February 2015.



As part of your skilled talent pipeline, WIL can also be used to attract, identify, develop, and retain diverse talent in your organization.

PRODUCTIVITY

Productivity benefits are attained when students produce output for your organization during their placement. These benefits are generally seen as bonus benefits by stakeholders and are rarely the main goal of a WIL program. However, they are generally more important for small and medium sized enterprises (SMEs) and organizations offering apprenticeships or other longer placements.

When reviewing short-term benefits such as the productivity benefits of WIL, consider the following questions:

- What is the role of WIL students in your organization?
- What projects do you want to be completed as part of your WIL program?
- What tasks will be done by students in your WIL program?
- Are you looking to alleviate the workloads of other staff?
- Are you looking for students to fill short-term vacancies?

INNOVATION

Stakeholders recognize that students bring new ideas during their WIL placement and that their organization is better because of it. Innovation and knowledge transfer at an organization are viewed as valuable short-term benefits of WIL, especially by tech start-ups, manufacturers, finance and insurance firms, and professional, scientific, and technical services.

When reviewing short-term benefits related to innovation, consider the following questions:

- Are you looking to gain new ideas from students in your WIL program?
- Do you want to cultivate the energy and drive of students in your WIL program?
- Are you looking to develop a collaborative work environment?

Step 4: Quantify Your Benefits

In order to measure the benefits outlined in step 3, you need to identify performance indicators that will measure and track a WIL program's progress. Without these indicators, it will be impossible to know how well your WIL program is performing and to assign any monetary value to its outcomes. Consider the following questions:

- What activities are you currently undertaking to achieve your short and long-term benefits?
- What are the most important outcomes of your WIL program?
- What program documents best record the major program activities and outcomes?

IDENTIFY PERFORMANCE INDICATORS

For each benefit identified in step 3, determine an indicator that can be used to measure these benefits. It is important for indicators to be relevant, understandable, unbiased, and easy to interpret and measure. Some benefits will have straightforward indicators such as sales, production, or retention rates.

To help you measure an indicator's progress, identify all program documents and databases that record recent program activities and related benefits. These could include (but are not limited to) the following:

- New projects undertaken by WIL students
- Work placements offered to underrepresented students
- Markers of skills development and other related learning outcomes during a work placement
- Students hired from your WIL program after graduation



EXAMPLE: Retention in the WIL context refers to the number of former WIL students an organization is able to retain or hire once their post-secondary studies are complete.

Retention is one of the most important benefits of WIL cited by employers providing WIL. Former WIL students typically have skills specific to an organization, making it faster and easier to onboard them. This ultimately reduces the costs of recruiting, hiring, and training external applicants.⁴ It is important to measure retention in order to understand the extent to which your organization is realizing these WIL related benefits. Consider using the following indicator:

CALCULATING RETENTION RATE

$$R = \frac{\text{Total \# of students hired}}{\text{Total \# of students completed WIL program}}$$

NOTE: It can take a couple years before the students who have gone through your WIL program have finished their post-secondary studies. As a result, it may only be possible to start calculating ROI several years into the launch of WIL programming at your organization. Following, your organization may want to calculate retention on an annual or quarterly basis.

Other outcomes will be less straightforward to measure and may involve student learning assessments or performance evaluations. These assessments, though, play a vital role in measuring the less tangible outcomes of a WIL program, such as developing students' social skills or encouraging innovation.

⁴ Samuel Muehleemann, and Stefan C. Wolter. "Return on Investment of Apprenticeship Systems for Enterprises: Evidence from Cost-Benefit Analyses." *IZA Journal of Labor Policy* 3, no. 1 (November 28, 2014): 25, <https://link.springer.com/article/10.1186/2193-9004-3-25>.

EXAMPLES:

1. A WIL student takes on some of the lower intensity tasks of a more senior employee, allowing the senior employee to dedicate their time to higher value/more productive tasks.
2. You increase your productivity by having a WIL student complete work that would have been outsourced to an external vendor at a higher cost.

NOTE: These calculations are overly simplified but give a sense of how to calculate productivity benefits.

ASSIGN MONETARY VALUE TO YOUR BENEFITS

Assigning a dollar value to the benefits received from your WIL program is an important but often difficult step. But certain benefits of WIL, especially those related to production, developing skilled talent pipelines, and workforce management, can be quantified.

EXAMPLE: Your organization has determined that it saves \$1,000 for each WIL student it hires versus hiring someone external. This value was calculated as the difference between the cost to attract, interview, onboard, and train external applicants compared to your WIL students. You've hired 6 students out of the 12 that interned at your organization and you therefore saved \$6,000.

Assigning dollar values to the intangible benefits received from your WIL program, such as innovation or improving equity, diversity, and inclusion, can be very challenging. Your indicators could measure the presence of innovative ideas or the engagement levels of WIL students from equity-deserving groups in your workplace.

External research can be a useful tool in quantifying these types of benefits. Remember, even if you cannot assign a dollar value to some benefits received from WIL that does not mean those benefits are not worth measuring and reporting. Building an SROI (social return on investment) framework can be beneficial for framing the non-financial benefits of WIL (see step five for more information on SROI). A WIL program can still be successful if it achieves its goals even if you are unable to integrate these benefits into your ROI calculations.

Step 5: Measure Your ROI & Incorporate SROI

COLLECT DATA AND CALCULATE YOUR ROI

After identifying your costs and benefits, you are able to enter your data and calculate the ROI of your WIL program. Once the WIL program is finished and/or the assessments are completed, the indicator for each benefit can be evaluated and assigned the monetary value determined above.

Ideally your costs (as determined in step 2) have been tracked throughout the WIL program and this final step simply involves adding all the costs together. Make sure you record all the financial supports received from the government and other organizations. Financial support received from the government or other organizations should be subtracted from the cost of your WIL program.

Use BHER's [Interactive ROI Calculator](#) to put together all of the data. Once the value of all the costs and benefits have been estimated, ROI can be calculated using the following formula:

CALCULATING RETURNS ON INVESTMENT (ROI)

$$\text{ROI} = \frac{\text{Total value of benefits from WIL} - \text{Total cost of WIL}}{\text{Total cost of WIL}}$$
$$0.12 = \frac{\$65,000 - \$58,000}{\$58,000}$$

EXAMPLE: Company X's WIL program provided a \$1.12 return on investment for every dollar invested.

INCORPORATE SROI

SROI stands for social return on investment. SROI and ROI are both cost-benefit frameworks, however, SROI emphasizes the social value of investment by translating social objectives into financial and non-financial measures. Unlike ROI, SROI analyses should not be restricted to one metrics since it presents a framework for understanding a program's broader social benefits, in which monetization plays an important, but not an exclusive, role.⁵

After going through the steps for determining ROI, you may have experienced broader social benefits from your WIL program, such as improvements to diversity on your team or improved relationships with post-secondary programs. These are difficult to quantify and harder to include in your ROI measurement. Consider taking an SROI approach when reporting these benefits.

Establishing quantitative and qualitative indicators will be essential to measuring, tracking, and reporting social benefits. Consider the following examples of indicators you could use for measuring equity, diversity, and inclusion.

⁵ Eilís Lawlor, Eva Neitzert, and Jeremy Nicholls. "Measuring Value: A Guide to Social Return on Investment (SROI)." London, UK: New Economics Foundation, 2008.



MEASURE EQUITY, DIVERSITY, AND INCLUSION

- **Quantitative indicator:** Number of employees on staff that identify as Black, Indigenous, and/or person of colour prior to your WIL program compared to after you launch your WIL program.
- **Qualitative indicator:** The degree to which students from equity deserving communities feel like they are able to make meaningful, valued contributions to their teams or projects, as reported in peer, supervisor, or anonymous evaluations.
- **External resources** are also important for understanding the value of broader social benefits of factors such as innovation, diversity and inclusion, and corporate social responsibility, etc.

Overall, creating an SROI framework involves:

- Talking with stakeholders within and outside your organization to identify what broader social benefits are being derived from your WIL program
- Understanding how those social benefits are created through a set of WIL activities and outcomes
- Finding appropriate indicators to track what changes have taken place because of your WIL program
- Putting financial proxies on those indicators that do not lend themselves to monetization, based on internal evaluation or external research.
- Comparing the value of social benefits to the financial cost of your WIL program.⁶

SROI enables employers to examine the outcomes of their WIL program and recognize how those outcomes lead to broader social benefits, which help their organization, industry, and community.

6 Derived from Eilís Lawlor, Eva Neitzert and Jeremy Nicholls, "Measuring Value: A Guide to Social Return on Investment (SROI)." London, UK: New Economics Foundation, 2008.

Additional resources & tools

BHER is committed to ensuring every post-secondary student has a work-integrated learning (WIL) experience before they graduate from their first diploma or degree. In order to advance meaningful WIL opportunities and build employer capacity and infrastructure, BHER has developed a WIL Hub. This one-stop-shop contains resources and tools for employers to explore, invest in, and create quality WIL placements.

Additional ROI resources currently available include:

- **ROI: Beyond the Numbers:** a supplement to this ROI guide to help you understand in more detail what factors inform ROI.
- **An interactive ROI Calculator:** calculate your estimated ROI with this calculator, following the steps you've learned about in this ROI guide.
- **An ROI Calculator Template:** download a shareable ROI calculator spreadsheet to calculate the ROI of your WIL program offline.

Our WIL Hub will grow, so check back often at bher.ca/wil-hub.



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