





WHAT'S AMISS WITH YOUR MEASUREMENT AND EVALUATION APPROACH

If calculating learning outcomes and impact feels messy, overwhelming, and cumbersome, you are likely doing one thing wrong.

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will never forget the first time someone asked me to describe the difference between *strategy* and *tactics*. It was 20 years ago in an introduction to business class. I stared back at my professor with a baffled look. No coherent answer came to mind. I knew strategies and tactics were different, but I was unable to articulate how. More importantly, I didn't know why discerning the difference even mattered. In fact, the relationship between strategy and tactics matters a lot in the business world—companies thrive or fail based on that relationship's strength.

Similarly, the L&D function (as well as measurement and evaluation) thrives or fails based on the quality and relevance of its strategies and corresponding tactics. However, many learning professionals regularly confuse tactics with strategy in their approach to measuring and evaluating learning, which makes calculating the outcomes and impact of learning feel messy, overwhelming, and cumbersome.

Get clear on the difference between strategy and tactics

Most L&D practitioners believe that when they follow learning evaluation models—such as Kirkpatrick's four levels of evaluation, the learning-transfer evaluation model, the Phillips ROI (return on investment) model, or the Brinkerhoff success case method—that they are implementing a strategy. Learning evaluation models, however, are not a measurement and evaluation strategy. In truth, they simply give practitioners tactics: steps, activities, and detailed how-tos for calculating the relationship between the inputs, outputs, outcomes, results, and impact of L&D work.

A measurement and evaluation strategy outlines what you are doing and why at a high level. Measurement models don't do the work of determining the purpose of a learning program and its intended outcomes. In fact, most models assume an L&D professional already has clarity on the goals and outcomes.

Strategy is your big vision. It can be the vision of how the entire L&D department's activities support an organization's goals or how L&D intends one learning program to improve employee performance and a company's key performance indicators. A strategy is a carefully thought-out plan to help you achieve a specific goal.

Tactics are the steps you take to enact your vision. Often, L&D practitioners skip the strategy process altogether and jump into a measurement model. Without a clear strategy, however, measuring and evaluating learning is difficult and can sometimes feel impossible. To make it easier to map out

your big vision, work with a simple tool that researchers and public health professionals regularly use: the hypothesis.

Use the hypothesis framework to create your strategy

A hypothesis is a statement of belief informed by some pre-existing evidence. It is the story you hope to tell when your training initiative is over. For example: I believe when participants complete our leadership training program, they will become more self-aware; with more self-awareness, there will be less conflict among teams in the organization.

Creating a hypothesis doesn't require anything other than critical thinking and prior knowledge of your business's key performance indicators. After all, the value of L&D is not just knowledge acquisition. It's the ability of new knowledge and skills to result in changes in people's performance and to support critical business goals.

The hypothesis framework, which I created, is a simplified version of a logic model (commonly used in public health interventions), tailored specifically to L&D. Whenever I start a new learning initiative, I create a hypothesis statement for what I'm doing and why. That helps me refine the program goals from a business-value lens and map out relevant metrics to evaluate the program's effectiveness. Also, creating a hypothesis simplifies the process of determining the most important content, activities, and learning environment to help participants achieve the program's goals.

The hypothesis framework establishes a clear relationship among four essential variables:

1. Program completion rates
2. Changes in knowledge, skills, and attitudes
3. Short-term outcomes (often related to changes in a participant's behavior)
4. Long-term outcomes (often related to an organization's strategic goals)

Too often, learning professionals confuse outputs with inputs and mistake outcomes with outputs. What stakeholders

want to see is a positive relationship among inputs, outputs, and outcomes (see sidebar). Commonly, L&D only shares the inputs (“The L&D team developed a 40-hour training program”) and outputs (“Learners completed 75 percent of the 40-hour training program”). L&D teams need to be better at both identifying the strategic outcomes of their learning initiatives and demonstrating the program outcomes. The hypothesis framework helps L&D do so:

- Variable 1 (program completion rates) is an output.
- Variable 2 (changes in knowledge, skills, or attitudes) represents learning outcomes.
- Variable 3 (short-term outcomes) represents performance outcomes.
- Variable 4 (long-term outcomes) represents business- or social-impact outcomes.

What you want to see is a positive relationship among inputs, outputs, and outcomes. You’ll notice that variables 2, 3, and 4 are similar to Levels 2, 3, and 4 of Kirkpatrick’s four evaluation levels, the Phillips ROI model, and Kaufman’s five levels of evaluation. That is by design. The purpose of all measurement models is to help show positive relationships among inputs, outputs, and outcomes. Of course, each model is different, which is why it is essential to select a measurement model that aligns best with your learning initiative’s goals (more on that later).

Here is an example hypothesis created for a new-manager training initiative: Anecdotally, our learning team heard that new managers hired internally were working 50–60 hours weekly after receiving a promotion. Many new managers felt like quitting, and some wished they never took the promotion. Investigating further, we found that new managers were still working many hours on their former individual contributor tasks in addition to new managerial activities. Leadership research suggests that delegation is a critical skill for new managers. We believed (our hypothesis) that if new managers increased the practice of delegating individual contributor tasks to team members, they would allocate more time to strategic manager activities and work fewer hours each week.

Using the framework, the hypothesis for the new-manager training program looks as follows.

Variable 1 (output). New managers hired internally will complete 80 percent or more of a four-week delegation training program.

Variable 2 (learning outcome). Participating in the program will improve their delegation skills.

Variable 3 (performance outcome). Improving their delegation skills will lead to these short-term behavior changes:

- Reduce the amount of time they spend working on individual contributor activities every week.
- Increase the amount of time they spend working on strategic manager activities each week.
- Reduce the total number of hours they work every week.

Variable 4 (business outcome). Improving the short-term outcomes will retain internally hired new managers longer than the average new-manager turnover rate.

The hypothesis framework is a quick way to storyboard what you want to see happen after participants engage in a learning experience. The example above resulted from one 15-minute

conversation with a training manager and senior manager.

Another reason the hypothesis framework is beneficial is that it aligns expectations among the learning designer, subject matter experts, and stakeholders. The training team now has a clear charge for the type of learning experience to design. The training team’s goal for the new-manager training program was to build delegation skills. Therefore, the team elicited the support of senior managers and other employees who were exceptional

at delegation to help determine what content, activities, practice, and reinforcements to feature in the training program.

Translate the strategy into tactics

After mapping out a hypothesis (your strategy), you must ask one important question to translate your measurement strategy into tactics: What data do I need to collect to prove the hypothesis?

Remember that a hypothesis is just a statement of belief based on some evidence—it’s not a guarantee. When I develop a hypothesis, if I don’t have institutional knowledge or experience with problems

KEY TERMS

Inputs: Resources used to design and deliver a learning initiative

Outputs: Immediate results after participants complete a learning initiative

Outcomes: Medium-term effects of participants completing a learning initiative

Impacts: The longer-term consequences if the team achieves the program outcomes

Results: The combination of outputs, outcomes, and impact; determines overall project success

commonly affecting a business’s operations and goals, I complete a needs assessment. I also turn to research from reputable sources to inform my understanding of problems and possible solutions.

For the new-manager training program, the training team explored research on problems new managers ordinarily experience that lead to burnout. That helped us to identify delegation skills as a possible performance improvement solution. We validated that idea by speaking with new and tenured managers and cross-referencing the problems sourced in the needs assessment.

A hypothesis is only as good as the data you collect to put your hypothesis to the test. The training team identified the following data for the new-manager training program.

- Variable 1: attendance rates, activity completion rates, final role-play completion rates
- Variable 2: pre-post delegation skills aptitude test
- Variable 3: weekly report on percentage of total hours worked each week on individual contributor activities

during training and one month after training; weekly report on percentage of total hours; weekly report on number of hours worked each week during training and one month after training

- Variable 4: six and 12 months after training, comparison of turnover rates for trainees versus average new-manager turnover rate before the training program

Figure 1 presents additional examples of data you could collect to show a positive relationship among the hypothesis framework’s four variables.

Get help from the right measurement and evaluation model

You don’t have to create the tactics to support your measurement strategy on your own, because measurement and evaluation models come into play. Lean into the wisdom and practices of one of the many great measurement models to refine your strategy and tactics.

Figure 1. Sample Data to Collect to Prove a Hypothesis

Note that these are just examples. The best data for your hypothesis will depend on your unique variables and relevance to the learning experience.

<p>Variable 1: Completion rates</p> <ul style="list-style-type: none"> • Attendance • Percentage of homework completed • Duration of videos viewed • Time spent reading materials • Number of downloads 	<p>Variable 2: Change in knowledge, skills, or attitudes</p> <ul style="list-style-type: none"> • Pre-post simulated skill demonstrations • Pre-post performance self-evaluations • Pre-post 180- or 360-degree performance evaluations • Pre-post psychometric tests (e.g., intelligence, beliefs, personality, aptitudes) • Pre-post observations of performance on the job
<p>Variable 3: Short-term outcomes</p> <ul style="list-style-type: none"> • Time to value (i.e., how long it takes a new employee to be self-sufficient on the job) • Number of hours worked • Productivity rates • Employee engagement • Quality of relationship among managers and their teams • Presence of conflict among teams • Psychological safety 	<p>Variable 4: Long-term outcomes</p> <ul style="list-style-type: none"> • Revenue • Retention • Sales • Cost reduction • Safety incidents • Customer satisfaction • Referrals

Figure 2. Evaluation Models to Consider

Here is a sample of evaluation models among the many that exist. Find additional measurement models matched to your learning goals and measurement challenges at bit.ly/3NDV3uD.

Model	Ideal Use Case
CIRO (context, input, reaction, output) model	Evaluating programs designed specifically for managers
Anderson's value of learning model	Evaluating the effectiveness of an entire learning department's strategy
Balanced score card	Evaluating whether a company's operations activities align with its business strategy
Brinkerhoff's success case method	Evaluating what worked well and poorly so that you can improve future program design using a qualitative approach
Kirkpatrick model	Evaluating how learning influenced specific behavior or performance changes
Learning-transfer evaluation model	Evaluating how training transferred to performance changes on the job using eight levels of data
Measurement map	Identifying the best metrics to demonstrate how training changed employee performance
No-goal evaluation	Piloting a new program without any specific goal or outcome to discover possible outcomes and impact
Phillips ROI (return on investment) model	Evaluating the financial returns that training specifically contributed via revenue generation or risk management
Talent Development Reporting Principles Framework	Offering evaluation tactics for the following learning goals: to inform, monitor, evaluate, and manage

Remember: Not all models are created for the same purposes. Therefore, use the one that most closely matches your program goals and measurement strategy (see Figure 2).

Build your own hypothesis

To create a strategy for your next learning initiative with the hypothesis framework, use the following prompt and guiding questions to map out the four variables.

- Briefly describe your learning initiative and its target audience.
- How will the learning initiative change participants' knowledge, skills, or attitudes?
- If participants grow their knowledge, skills, or attitudes, so what? What is the immediate desired outcome of this growth?

- If participants accomplish the immediate desired outcome, so what? What is the longer-term outcome? (Ideally, it's a positive influence on one or more of a business's key performance indicators.)

Next time you feel stuck or overwhelmed measuring the outcomes or impact of learning, stop and ask yourself, "What am I doing and why?" Take out a piece of paper and write out the changes you currently envision for participants who complete your program using the steps above. If you are struggling to demonstrate learning outcomes and impact, it's likely because you need a clear strategy and the right tactics to bring that strategy to life.

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