

ASTD Training Basics Series

EARNING Sasics

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A Complete How-to Guide to Help You:

- Understand the Principles Underlying Informal Learning
- Promote and Facilitate Informal Learning in Your Organization
- Use Informal Learning to Improve Performance in Your Organization



How to Evaluate Informal Learning



What's Inside This Chapter

In this chapter, you'll learn

- ▶ why evaluation of informal learning differs from formal learning
- ▶ a framework for evaluating informal learning
 - ▶ techniques for evaluating informal learning at the individual level
 - ▶ techniques for evaluating informal learning across groups of workers
- ▶ unique issues in reporting evaluations of informal learning.

Curtis, the site supervisor for a construction firm, double- and triple-checks policies and procedures to make sure he's operating within his authority after losing an earlier job because he failed to do so. Losing that job shook Curtis's self-confidence, and even though he has studied the management policies and procedures of his new

employer closely and consults them frequently, he still feels that he does not know them. Curtis's manager, however, has noticed that when Curtis speaks to her about work situations, he uses the language of the policies and procedures in his conversation. For example, when discussing safety procedures for noisy areas, Curtis uses the term "hearing protection," which is used in the policies and procedures manual, rather than "ear plugs," which is more commonly used on the floor. Similarly, she recently overheard Curtis advise one of his workers that he's due for an annual hearing test—a week before the notices were sent by human resources. These signs suggest that Curtis has learned a lot about management policies and procedures in this organization.

Determining what workers have learned informally, the extent to which they learned it, and how they apply it are three fundamental questions that arise with informal learning. Similarly important questions concern the impact of learning activities, materials, and support provided by training and development professionals and others in the organization. Answering these questions is the purpose of evaluation, the last of the considerations for integrating informal learning into the workplace.

This chapter explores the evaluation of informal learning. It begins by explaining why evaluation is important, yet why you need to forget most of what you know about evaluation of formal learning when evaluating *informal learning*. Then, after explaining what you can't do, it presents a framework of what you can do to evaluate informal learning.

How Evaluation of Formal and Informal Learning Differ

Training and development professionals evaluate learning programs for three primary reasons: to assess effectiveness (that is, to determine the extent to which a particular program or set of materials achieved their objectives); to determine whether learning has occurred; and to provide accountability (to demonstrate that the resources invested in learning programs have been responsibly used). For many professionals in this field, the ultimate expression of accountability involves

demonstrating a return on investment (ROI), which shows not only that the learners have mastered the skills and knowledge presented in the training programs, but also that in doing so, the organization has realized a benefit that exceeds the cost of the training program.

Underlying this interest in evaluation is the assumption that training and development professionals have the primary responsibility for designing, developing, and implementing the learning program. But this assumption does not underlie informal learning. As noted earlier in this book, informal learning experiences are not always designed; they are often unplanned, impromptu extensions of work projects or supplemental lessons of formal learning programs.

One of the reasons for this is that workers themselves often have primary responsibility for informal learning; they identify what they need to learn, how to learn it, and whether they succeeded. For the most part, training and development professionals support this informal learning by making sure that workers have access to appropriate resources when the need arises and are supported in their efforts to learn. But most informal learning occurs without the direct involvement of training and development professionals.

These differences in the nature of formal and informal learning result in different issues driving evaluation. While measuring learning and its impact drives evaluation of formal learning, merely figuring out whether people learned anything at all and what they learned often drives the evaluation of informal learning. Researcher Victoria Marsick (Marsick and Watkins, 2011) labels the task "surfacing the learning."

As a result of these differences, Donald Kirkpatrick's (1994) four-level framework for evaluating training programs, which is the de facto standard for evaluating formal training programs among training and development professionals, does not provide an adequate framework for evaluating informal learning. Table 8–1 identifies challenges for evaluating informal learning in each of the four levels of the Kirkpatrick methodology.

Table 8–1. Challenges of Using the Kirkpatrick Methodology to Evaluate Informal Learning

| Level | Issue |
|--|--|
| Reaction (Level 1) | Assesses learners' reactions to a formal learning event designed by a training and development professional. Nearly all informal learning programs, however, are designed (at least in part) by the workers themselves for their unique needs at the time. So this level would evaluate workers' satisfaction with their own customized, one-use-only learning program—assuming the worker was even aware that learning happened at all. |
| Learning (Level 2) | Assesses the extent to which learners achieved the observable and measurable objectives that a third party established for the learning program. In informal learning, workers establish their own objectives for learning, so learning must be assessed on a case-by-case basis. In many instances, objectives are not easily observable and measurable. One reason for this is that objectives for many informal programs fall into the affective or motivational realm, where assessment techniques still lack the rigor of those used for assessing learning in the psychomotor (physical skills) and cognitive (intellectual) domains. Also, informal learning often occurs incidentally or unconsciously, so much of it lacks formal objectives against which to measure. Even if training and development professionals could determine what learning to evaluate, because it often occurs in the context of everyday work activities, stopping to conduct a test of learning seems inappropriately disruptive. |
| Behavior or Transfer (Level 3) | Assesses the extent to which learners applied the lessons from training on the job. Like Level 2 evaluation, transfer is rooted in the learning objectives, but as just noted, much informal learning lacks formal objectives against which to measure. When objectives exist, they vary widely among workers based on their individual needs. As a result, training and development professionals would have difficulty devising standard measures of transfer to track. |
| Impact (including ROI) (Level 4) | Assesses the benefits from investing in a training program. To assess impact, training and development professionals must first establish the business objectives of the program. In most cases, however, an organization has no specific business objective in mind for particular informal learning efforts. Rather, organizations seek benefit from their overall support of a particular type of informal learning. For example, by providing comprehensive support for career development activities, an organization might contain recruiting and turnover costs. Although research has demonstrated that such links exist, it has not shown that actual financial benefits always accrue by offering training (Tharenou, Saks, and Moore, 2007). |



Basic Rule

The Kirkpatrick framework and related methodologies are incompatible with informal learning and therefore cannot be used for evaluating this type of workplace learning.

A Framework for Evaluating Informal Learning

With different questions guiding evaluation and without formal objectives and criterion-referenced tests, how do training and development professionals evaluate informal learning? Effective evaluation of learning programs starts with clear questions. Methods merely provide a means for collecting the data that answers those questions. The questions guiding the evaluation of informal learning include:

- ▶ What did workers learn informally?
- ▶ How do workers learn informally?
- ▶ How can workers receive recognition for their informal learning?
- ▶ What is the extent of participation in various informal learning activities?
- ▶ What is the extent of satisfaction with various resources used for informal learning?
- ▶ In what ways does the organization benefit from informal learning by workers?
- ▶ Which informal learning efforts that the organization formally supports are providing tangible benefits to the organization?
- ▶ How can organizations better support informal learning efforts?

A closer look at these questions suggests that some of them focus on learning at the individual level, while others help evaluate learning across groups of workers. Table 8–2 suggests a way to organize specific evaluation issues in these two categories—individual learning and learning across groups—to create a framework of evaluation for informal learning. The next sections explore each part of this framework in depth and suggest at least one activity (and often more) you can undertake at each level to evaluate informal learning.

Table 8-2. A Model for Evaluating Informal Learning

| Individual Learning | Learning Across Groups of Workers |
|--|---|
| Identify what workers learned, using these evaluation methods: • Self-assessments | Determine the extent to which individual resources for informal learning were used, using these evaluation methods: |
| Process portfolios | Analytics Compiling data from evaluations of |
| Coaching interviews | individual learning efforts |
| Identify <i>how</i> workers learned it, using these evaluation methods: | Assess satisfaction with individual resources, using these evaluation methods: |
| Process portfolios | Surveys |
| Coaching | Focus groups |
| Recognize acquired competencies, using these evaluation methods: | Identify the impact of individual resources, using these evaluation methods: |
| Employee education records | Rater systems |
| Skills assessments | Specialized reports |
| Certifications | Long-term studies |
| Badges | |



Basic Rule

Evaluating informal learning involves first assessing learning at the individual level and then exploring broader patterns in learning to determine how to best support it in the future.

Evaluating Individual Learning

As noted earlier, learning that happens as a result of individual initiative or serendipitous activity is difficult to identify, much less label and report. Getting at this information involves

▶ **Identifying what workers have learned.** Because workers establish their own objectives for some informal learning and other informal learning occurs unconsciously—and without objectives—often neither the workers

themselves nor training and development professionals are aware of what individual workers have learned. This type of evaluation helps unearth what learning occurred.

- ▶ Identifying how workers have learned. Training and development professionals can use this type of evaluation to find out whether the resources provided for informal learning were actually used, and if not, find out which resources were used instead and why.
- ▶ Recognizing acquired competencies. This type of evaluation lets employers label the skills, knowledge, and abilities learned by workers, and formally acknowledge it in employees' education records. Such formal acknowledgment is useful when assigning job tasks or deciding on raises and promotions. This recognition also motivates workers to continue their informal learning efforts because it provides them with a tangible "credit" for individual activities often undertaken without anyone's involvement or awareness.

Training and development professionals use the following evaluation methods to gather information about individual learning that occurs informally.

Self-assessments are instruments that workers use to assess the extent to which they have learned material in a particular domain. In many ways, self-assessments are like quizzes, in that they involve answering a series of questions or demonstrating a skill and then receiving feedback on performance. Self-assessments work best for identifying *what* workers have learned in domains that are well defined, or for content that has been externally defined.

With self-assessments, however, workers generally administer the "test" on their own, and the results are intended to reflect what workers have learned and where they need to continue their efforts. The results may or may not be recorded.

Effective formal self-assessments usually

- assess objectives that would be covered in a formal training program on the subject
- ▶ focus on how workers might respond to various work-related situations, so that the self-assessment seems relevant and engaging to them
- ▶ provide correct answers to questions and then explain why the answer was correct, so workers can learn from the experience.

The activity at the end of chapter 1 ("Are You an Informal Learner?") is an example of a self-assessment that follows these guidelines.

For broader skills that cannot be addressed in a simple written assessment, responses tend to focus on distinctions in ways of thinking—such as a worker who has fully integrated the learning, a worker who has partially integrated the learning, and a worker who has not yet integrated the learning.

Process portfolios are collections of work accompanied by reflections and commentary about how the worker created the work samples, what the worker learned in the process of doing so, and how he or she felt about the learning process (Carliner, 2005). Portfolios are usually created in collaboration with the worker's manager, mentor, or another senior colleague.

The portfolio is called a *process portfolio* because its primary focus is on the means by which workers created the work samples. Portfolios grow with time and provide workers with opportunities to reflect not only on individual assignments but also on learning and development that occurred over time. They are often used in career development and counseling discussions.

A process portfolio contrasts with the better-known *showcase portfolio*, which highlights workers' best work and merely states how they contributed to a project, rather than what they learned from it. Workers use showcase portfolios to provide evidence of qualifications for a position.

There are two components to a process portfolio, in which the worker provides commentary on his or her work samples. Figure 8–1 presents the template for the first part of the commentary. Workers use this part of the commentary in both process and showcase portfolios. It provides general information about the project and their contribution to it. Figure 8–2 presents the template for the second part of the commentary—specific information about workers' professional development in the context of a project. Workers use this part of the commentary only in process portfolios; it is separated so that workers can easily create showcase portfolios from the same materials used to create the process portfolios. The templates can be adapted for different types of work assignments.

Figure 8–1. Template for the First Part of the Commentary for a Process Portfolio—General Information About a Project and Workers' Contributions to It

| Title | |
|--------------------|---|
| Type of Program | |
| Client | |
| | (Only provide the relevant information. If something does not apply, do not include it.) |
| | Authoring tool: |
| Production Tools | Graphics tool: |
| Used | Animation tool: |
| | Learning management system: |
| | Learning content management system: |
| | Content management system: |
| About This Sample | In 100 words or less, describe the purpose and audience of the sample. |
| Unique Issues | Using bullets, list as many as five issues or challenges faced when developing this course. |
| Your Contributions | In 100 words or less, describe the contributions you made and the assistance you received. |

Figure 8–2. Template for the Second Part of the Commentary—Specific Information About Workers' Professional Development During a Project and Their Feelings About It

| In your own words, what was the purpose of this assignment? | |
|--|--|
| Which skills were you supposed to develop through this project? | |
| Which skills were you already good at? How could you demonstrate that? | |
| Which skills did you need for this project? What specifically did you need to learn? How did you learn it? How do you feel about your ability to demonstrate this skill? | |

(continued)

Figure 8-2. Template for the Second Part of the Commentary (continued)

| What was the most challenging aspect of this project? | |
|--|----------------|
| What was the most fun? | |
| How confident do you feel about your ability to handle a project like this on your own? How many tries would you need before getting the assignment right? Why do you feel this way? What could further build your confidence? | |
| What are the three most significant lessons you'll take away from this project in your work? | 1. 2. 3. |
| What are the next steps you are planning to take to strengthen the skills addressed by this assignment? | |

The two parts of the commentary help to elicit lessons informally through a project. The discussion of the role and tools used to develop the project, for example, help workers identify what they knew starting the project and what they learned as a result of working on it (Teja, 2011).

Process portfolios can help training and development professionals determine how workers learned in addition to helping identify what workers learned. In particular, when responding to the second part of the commentary, some workers might identify parts of the process that provided learning opportunities. This commentary also asks workers to share their feelings about the learning process so that those reviewing the portfolio gain insights into the feelings of support and frustration the worker felt.

Coaching interviews with managers, mentors, senior workers, and similarly experienced and trained co-workers provide learners with the opportunity to get a

second opinion on their learning processes. An effective coach helps workers gain a realistic perspective on the extent of their learning, not only asking workers to state what they have learned, but also asking them to provide concrete evidence that demonstrates that learning actually occurred.

In some instances, workers might not believe that they learned anything at all. By actively listening to workers, however, coaches might gain an alternate perspective. For example, a worker might not feel that he or she learned anything on the job or through a developmental experience, but then display knowledge that would not have been intuitive—and could only have resulted from the learning experiences. The coach uses these clues to suggest that learning has indeed occurred.

Coaching also provides an opportunity to explore *how* learning occurred after identifying what workers learned. To find out how workers learned, coaches should specifically ask workers about critical incidents in the work process, identifying what occurred at each of these junctures and then exploring how workers felt about these learning opportunities.

Employee education records track training completed by employees. Organizations use this information to acknowledge skills maintained and added. Nearly all large organizations and many medium and small organizations keep these records.

Most organizations have established ways of automatically crediting workers for completing classroom, self-study, and virtual e-learning programs by tracking these through learning management systems, which transfer the information to employee education records.

Other information must be entered manually into the employee education record, such as completions of training offered by third-party providers, completion of academic courses, and completions of informal learning efforts. Organizational policies vary on who can update records and the evidence that must accompany the updated records. Some organizations let workers update their own education records and operate on an honor system. Others only let managers or human resources specialists update records and require that workers provide concrete evidence of completions.

Skills assessments are another means of recognizing informal learning by crediting workers for developing skills partially or completely through informal means. Many learning management systems provide the capability for tracking skills, but

few organizations actually take advantage of this capability. That's because most skills assessments involve rating workers on a list of specific skills that often exceeds 100 items. Some of the skills on these lists are general ones that apply to all jobs, such as the ability to work cooperatively with others and the ability to use common software applications, like word processing, spreadsheets, and email. Other skills are specific to a class of jobs, such as skills associated with litigation and managing intellectual property among legal advisers, and the skills associated with providing technical support and correcting software problems among information technology professionals.

Although some skills assessment schemes ask people to rate skills in general terms, such as excellent, very good, or poor, more effective skills assessment schemes use rating schemes based on concrete and observable measures, such as "I have never heard of this skill," "I can describe this skill but have never demonstrated it," "I have demonstrated this skill once or twice," "I have demonstrated this skill three or more times," and "I advise others on how to acquire this skill." This prevents workers from under- and over-rating their skills.

Skills assessment efforts face these challenges:

- ▶ Identification of skills. Some organizations choose to identify and assess broad skills, which often fail to provide specific information. Others identify highly specific skills, but the lists become so long (some exceeding 150 skills) that the assessments are too time-consuming and intellectually exhausting to complete.
- ▶ Self-reported data, usually entered by the worker with little or no verification. A second evaluation from a manager helps, but it is still opinion-based data.
- ▶ Timeliness, because the skills assessment represents the list of skills identified in a particular worker at a particular point in time. Some skills may atrophy with disuse, and workers may have acquired other skills that will not be reflected unless they have updated their skills assessments.

Certifications are another valuable evaluation tool for recognizing competencies. Workers demonstrate their competency through one or more of these means:

- passing examinations that demonstrate familiarity with a body of knowledge central to the field
- demonstrating competencies according to criteria identified and assessed by external assessors
- preparing a portfolio for evaluation by external assessors, that validates the originality of the work and provides evidence of competency to perform the work.

Although to be eligible for some certification exams, workers must have completed required formal training, the certification exam itself focuses on competence, regardless of how workers actually acquired it. As a result, certifications recognize informal learning by providing external, third-party recognition of skills and knowledge developed partially or completely through informal means.

Certifications are offered by several groups: professional and trade associations, who usually certify competence in a profession; technology providers, who usually certify the ability to competently install, use, or repair a machine or software; and internally within organizations to certify the ability to perform a job that is vital to the organization.

Learning badges are another type of recognition offered by some websites and independent learning organizations (such as the open courses at MIT) that provide external verification that a participant has completed a particular learning activity, and identify the skill that the learner has acquired. Learning badges are a relatively new development (announced as this book was going to press), so their impact on the evaluation of informal learning is not yet known.

Additional ways to evaluate and recognize individual learning exist. For details, check the *European Guidelines for Validating Non-formal and Informal Learning* published on the web by the European Centre for the Development of Vocational Training (CEDEFOP).

Learning Across Groups of Workers

Although evaluating individual efforts to learn informally helps individual workers identify what they have learned and receive recognition for it, it does not provide insights into broader informal learning patterns across all workers in the organization, much less the extent or impact of those efforts. Only a second category of evaluations can determine whether organization-wide efforts to support informal learning are having an impact, and which efforts provide the most benefit, which provide the least, and where opportunity exists to strengthen support.

This second category of evaluation techniques provides these insights. These evaluations consider informal learning across groups of workers and specifically focus on:

- ▶ Determining the extent to which individual resources are used. One of the first challenges of evaluating learning across groups of workers is determining which resources they are consulting—and which ones they're avoiding. Analytics and compiling data from evaluations of individual learning efforts provide data to address this issue.
- Assessing satisfaction with individual resources. Training and development professionals can use this information to provide more satisfying informal learning resources and experiences in the future. Two types of evaluations solicit general information about satisfaction with informal learning resources: surveys and focus groups.
- ▶ Identifying the impact of individual resources. This type of evaluation assesses whether these resources are collectively making a difference among workers. Three methods intended to identify the impact of resources are rater systems, specialized reports, and long-term studies.

Training and development professionals use the following evaluation methods to gather information about learning that occurs across groups of workers.

Analytics refers to the reports provided by information systems that contain statistics on the use of various online resources, including those that are typically used for informal learning, such as self-study courses, online manuals, and websites. Such statistics reveal the number of workers who use these resources as well as the extent to which they do so.

No single system is likely to provide reports on all of the online resources for informal learning. Learning management systems only provide reports on materials made available through these systems. Typically, these include tutorials, webinars, face-to-face events requiring preregistration (such as a lecture), related resources such as job aids, and online discussions associated with these events, including discussions occurring through discussion boards and email messages.

But much informal learning that occurs online involves the use of resources that were not intended for learning, nor posted through a learning management system. In light of this, many organizations post and track websites using either their enterprise content management system or Google Analytics (tools provided by Google for tracking use of websites).

Other statistics are provided through social networking. When organizations use private social networking software to connect people inside the organization, rather than generally available social networking platforms like LinkedIn and Twitter, they can also generate reports that describe the use of those networks.

Although the information might come from several sources, the nature of the information needed is often similar across systems and types of content. Here's a breakdown of the type of information provided through analytics:

- Number of uses. How many times were the online materials accessed? Most systems can provide information on access to individual pages rather than just to the website, so training and development professionals can see which parts of a website are more widely used than others.
- Number of unique users. This identifies the number of people who visited a page, whether the person visited the page one or 100 times. Identifying the number of unique users helps put the number of uses into perspective, revealing whether single users typically visited several times or users typically visit a page just once.
- Extent of use, or how long people stayed on the webpage. Some web experts call this *stickiness*, assuming that people who stay on a webpage for a long time feel engaged with it. But another explanation exists; people might have switched to another session on their computer without closing the page. In such instances, the analytics show that the page was in use, when in actuality, the user did not even look at it most of the time.

Although analytics may provide facts about the use of online resources for informal learning, they cannot explain why workers choose to use certain resources and abandon others, and they cannot indicate workers' satisfaction with these resources.

Compiling data from evaluations of individual learning efforts involves looking at patterns of usage and behavior among the portfolios, coaching notes, skills assessments, and certifications compiled in the evaluation of individual learning efforts. In other words, you are taking an inventory of learning methods and content from these resources. This inventory might explore how workers learned through individual efforts (like reading, taking self-study courses, and experimentation) and collaborative efforts (such as mentoring and work projects).

Although each worker usually sets his or her own unique learning goals and chooses how to learn, similarities in objectives and methods will likely exist among workers. For example, several workers might have learned how to perform certain technical procedures through coaching from a more experienced worker, even though formal courses exist on those procedures. This could prompt training and development professionals to find out why workers prefer this method to the already available formal course. Figure 8–3 suggests a template you can use to start such an inventory.

Because learners rarely track the time they spend on these activities and lack resources to measure their effectiveness, such an inventory cannot provide definitive data on the success of informal learning efforts. Furthermore, because portfolios and coaching tend to focus on learning as it relates to particular projects, this type of inventory could overlook certain types of informal learning, especially those not related to a current work project.

Even with this limitation, however, such an inventory provides insights into some of the informal learning processes in the organization that might not have been easily uncovered through other means.

Surveys are tools meant to quickly and unobtrusively collect data about satisfaction with informal learning resources. Two types of surveys provide insights into satisfaction with informal learning: those focused on individual resources and those focused on broader informal learning processes.

Figure 8-3. Template From Which to Start an Inventory of Topics and Methods of Informal Learning

| Topic Areas (based on specific phase in life span of the job) | Objective (to be added, based on needs of the particular job) | Conscious of Learning or Not? | Individual Learning | Learning | | | | Group Learning | arning | |
|--|--|-------------------------------------|---------------------|-------------|-------------|-------------|--------|----------------|-------------|-------------|
| | | | Method 1 | Method 2 | Method 3 | Method 4 | Method | Method 6 | Method 7 | Method 8 |
| Orientation | | | | | | | | | | |
| Resource 1 | | | | | | | | | | |
| Resource 2 | | | | | | | | | | |
| Onboarding | | | | | | | | | | |
| Resource 1 | | | | | | | | | | |
| Resource 2 | | | | | | | | | | |
| Building proficiency | | | | | | | | | | |
| Resource 1 | | | | | | | | | | |
| Resource 2 | | | | | | | | | | |
| Addressing undocumented issues | | | | | | | | | | |
| Resource 1 | | | | | | | | | | |
| Resource 2 | | | | | | | | | | |

(continued)

Figure 8-3. Template From Which to Start an Inventory of Topics and Methods of Informal Learning (continued)

| Topic Areas (based on specific phase in life span of the job) | Objective (to be added, based on needs of the particular job) | Conscious of Learning or Not? | Individual Learning | Learning | | | | Group Learning | arning | |
|--|---|-------------------------------------|---------------------|-------------|-------------|-------------|--------|----------------|-------------|-------------|
| | | | Method 1 | Method 2 | Method 3 | Method 4 | Method | Method 6 | Method 7 | Method 8 |
| Updating skills | | | | | | | | | | |
| Resource 1 | | | | | | | | | | |
| Resource 2 | | | | | | | | | | |
| Choosing the next job or career | | | | | | | | | | |
| Resource 1 | | | | | | | | | | |
| Resource 2 | | | | | | | | | | |
| Preparing for the next job or career | | | | | | | | | | |
| Resource 1 | | | | | | | | | | |
| Resource 2 | | | | | | | | | | |
| Addressing ongoing initiatives | | | | | | | | | | |
| Resource 1 | | | | | | | | | | |
| Resource 2 | | | | | | | | | | |

Surveys focusing on individual resources are useful when organizations seek feedback on web-based material that serves an instructional purpose. Figure 8–4 provides a template for feedback that can be placed on individual webpages created to provide user assistance.

Figure 8–4. Template for Feedback on Instructional Webpages Did this page answer your question? ☐ Yes ☐ No If no, what information did you seek that was not provided?

Organizations can use such specific, targeted feedback to strengthen individual pages of their online content. However, my research suggests that response rates are low and that users who have difficulty with the online content tend to respond more frequently than those who felt that the content was helpful to them, so the feedback received can be a bit one-sided.

Training and development professionals should also seek feedback on satisfaction with resources created for managers and other coaches to support workers in the learning process. Such surveys might ask managers and other coaches these questions:

- ▶ Did they use the materials? Why or why not?
- ▶ Did they follow the guidance provided? Why or why not?
- ▶ Did they feel the guidance was complete? If not, what could be added?

Surveys focusing on broader informal learning processes can include employee opinion surveys or customer surveys. Organizations might conduct an employee opinion survey to get a sense about which aspects of the workplace are satisfactory, which ones need attention, and how engaged employees feel with the organization. Specifically, employee opinion surveys might explore these issues concerning informal learning:

Awareness. The survey might ask workers about their awareness of specific programs offered, such as mentoring, self-study e-learning courses, and lecture series, as well as perceptions about the appropriateness of workers' use of work time to learn informally.

- ▶ Participation. The survey might ask about workers' participation in a variety of activities intended for informal learning, as well as the extent to which they feel they can learn from existing job assignments and activities (like meetings).
- Satisfaction. The survey might ask workers about the extent to which they feel the organization supports not only formal learning efforts, but also the need to learn outside the classroom and on work time.

Customer surveys play a similar role to employee surveys in that they assess customer perceptions of, and satisfaction with, the entire customer experience. Some organizations do not have customers, nor do they sell products and services; but they serve external constituencies and provide them with support for informal learning before and during use of the service. Training and development professionals who work in such situations might adapt the customer survey to this type of situation.

Focus groups are structured conversations with a limited number of people (usually eight to 12 per group) that provide rich insights into particular situations. Focus groups can address the same types of issues as employee and customer surveys, except that the responses are open rather than selected from a predetermined list of items, as is typical on surveys. Furthermore, because the facilitators and participants are meeting at the same time, facilitators can ask participants to clarify and expand on their responses if they believe that doing so might shed additional light on an issue raised.

Some organizations use a combination of focus groups and surveys to gather information on learning processes. They start by conducting focus groups, which provide descriptive information about an aspect of informal learning. As part of the analysis of the focus group, facilitators identify patterns that seem to dominate the discussion. Using those patterns to form the basis of questions for a survey provides organizations with an opportunity to determine whether the patterns were limited to the participants in the focus group or apply to many members of the organization.

Rater systems provide workers with a means of rating the usefulness of various online resources for informal learning. Typical rater systems let users rate the quality of resources from five stars (outstanding or extremely useful) to one star (poor or of little to no use). Any worker who registers with the rater system can provide an assessment; most systems also let workers explain the reasons for their assessment.

Rater systems are best known among online retailers. For example, Amazon.com lets customers rate products, and TripAdvisor.com lets users rate hotels and other tourist attractions and services. But professionals also use rater systems. For example, the eServer for Technical Communication—an online repository of articles about professional and technical communication—lets users rate each article, and MERLOT—an online repository of resources for teaching in schools and colleges—also lets users rate each resource. Some learning and content management systems let workers rate courses and informal learning materials, too.

Specialized reports assess the impact of individual resources or groups of materials. Gathering these specialized reports primarily involves collecting information from different evaluations in a single place.

A single report on the impact of individual resources should probably focus on a limited number of resources—particularly those of high interest. For example, suppose the organization invested in a mentoring program. The evaluation might just focus on the impact of the mentoring program. Or a human resources department might have produced several hundred resources for informal learning about personnel policies and procedures, and might be interested in learning which ones had the most impact. Such a report might identify the most useful resources (and would start by defining what the report means by *useful*, such as the resources receiving the highest evaluations or the ones used most frequently by workers, or some formula that encompasses the two).

The report would combine information about the extent of use, responses to surveys about the items, and ratings of the resources, as well as answers to broader questions about awareness of, and satisfaction with, broader informal learning processes. If workers provide permission to share quotes from individual evaluations, the report might be supplemented with this descriptive information about how particular resources have made an impact on individual workers.

Long-term studies follow the learning journeys of workers over a sustained period of time (anywhere from two to 10 years or longer). At various intervals during that time, these studies report on the progress of that learning journey and the impact that learning has made thus far.

One way of doing this might be to ask workers involved in the study to prepare a process portfolio or to participate in a series of coaching sessions with a training and development professional. Both approaches are intended to "surface the learning" and learning processes. But rather than focusing on learning in a particular assignment, the evaluations of the portfolios or coaching discussions would focus on all learning related to the job, both formal and informal. Training and development professionals would review the portfolios or conduct coaching conversations with all workers in the study at certain milestones, such as the one-, two-, and five-year service anniversaries. The evolving story about these workers provides insights into learning processes at the organization and the impact of this learning on a personal level. It would not indicate a return on investment.

What About ROI?

Although the evaluation methods just described let you report some numerical data about informal learning programs, they do not provide a means for determining the return on investment (ROI) of informal learning.

Sometimes training and development professionals can use program evaluation techniques to assess returns on certain structured efforts provided through informal learning, such as new employee orientation and onboarding and mentoring. But most informal learning efforts defy the techniques used in formal training and program evaluations. Part of the challenge is that calculating the initial investment for many informal learning efforts is nearly impossible. As noted several times in this book, much informal learning starts when a worker recognizes a need within the scope of a work assignment, or it happens unconsciously, when the worker is focused on some other activity. The learning has no official beginning or end, nor does it have well-defined, observable, and measurable learning objectives. So how can an investment realistically be determined?

Some people might suggest asking workers whether they feel they are more productive or have reduced errors in their work, and then to estimate the resulting savings. Such data is self-reported, and studies suggest that some workers tend to overestimate their learning and its impact. Using these self-reported techniques to assess the ROI of *formal* learning programs lacks credibility—and that's when learners are aware of the objectives against which they are being measured and the time frame for doing so. Such self-reported measures lack credibility even more in informal learning, when learners are not aware of their objectives or the time frame of learning.

Instead, experts suggest reporting broader data on the use of and satisfaction with informal learning, which appeals to those who feel the need to report numbers, and

providing descriptive data about the impact of these efforts on individual employees. Evidence suggests that executives will find such a combination of numerical and descriptive data compelling because they are aware of the challenges in demonstrating return on this type of investment (Carliner, 2007; Marsick and Watkins, 2011; O'Driscoll, Sugrue, and Vona, 2005).

Unique Issues in Reporting the Results of Evaluation

In many ways, the considerations for reporting the results of evaluations of informal learning are the same as those for formal learning. These include

- determining how the recipients of the evaluation results intend to use them, such as validating their investments in training or determining whether to pursue a particular approach to training
- presenting the evaluation results as clearly and concisely as possible
- putting the results into the context of the audience.

In addition to these general considerations, one of the unique challenges in presenting results of evaluations of informal learning is that many people do not understand it. These people do not have a clear definition of informal learning and cannot differentiate among formal and informal learning processes.

Furthermore, stakeholders who have been trained by training and development professionals to accept evaluations following the Kirkpatrick methodology—reporting on satisfaction, learning, transfer, and impact—now have to be made to understand that the nature of informal learning does not lend itself to the same types of evaluations as formal learning.

Start the education process at the beginning of the effort to evaluate informal learning. Make stakeholders aware of the issues involved and provide a mock-up of an evaluation report that might result from the evaluation. Doing so sets stakeholder expectations early.

This also surfaces possible objections. For example, a stakeholder might comment that a proposed plan for evaluation does not report on ROI. Rather than claim this is impossible, the training and development professional might ask the stakeholder to suggest how they might track ROI. Perhaps that person will have a useful suggestion, but it is likely that he or she will be as stumped as the training and development professional. Because that stakeholder cannot devise a means of evaluating ROI, he or she can better understand the inherent difficulty in doing so.



Getting It Done

Worksheet 8–1 serves as a quick reference for you to see which evaluation methods are appropriate for the different types of evaluations you may want to conduct.

Worksheet 8-1. Matching Evaluation Needs With Methods

| What you want to evaluate | Methods available to evaluate it | Which methods suit your evaluation needs and why? |
|---|---|---|
| Informal learning at the in | dividual level | |
| Identify <i>what</i> workers learned | Self-assessmentsProcess portfoliosCoaching interviews | |
| Identify <i>how</i> workers learned it | Process portfoliosCoaching | |
| Recognize acquired competencies | Employee education recordsSkills assessmentsCertificationsBadges | |
| Informal learning across g | roups of workers | |
| Determine the extent to which individual resources for informal learning were used | AnalyticsCompiling data from evaluations of individual learning efforts | |
| Assess satisfaction with individual resources | SurveysFocus groups | |
| Identify the impact of individual resources | Rater systemsSpecialized reportsLong-term studies | |

How might you evaluate informal learning programs in your organization? Try the exercises in Worksheet 8–2 to find out.

Worksheet 8-2. Exercises

| 1. | In his conversations with workers in his focus group who have fewer than 10 years' |
|----|--|
| | work experience, the Director of Research and Development heard several of the |
| | workers discussing mentoring. Some workers mentioned that they felt someone in |
| | the organization had meaningfully mentored them, while others felt as if no one in |
| | the organization had mentored them. The director is aware that the company has |
| | no formal mentoring program but would like for you to find out how much mentor- |
| | ing goes on within the organization and how workers feel about it. |
| | So what do you do? |
| | |
| | |
| | |
| | |

Debriefing of exercise 1: This is an example of evaluating learning at the collective level. The evaluation focuses on two issues: "How much mentoring is occurring in Research and Development?" and "What is the satisfaction with the mentoring that workers receive?"

Two methods can provide insights into the answers. Focus groups let workers identify whether they have been mentored and how they have felt about being mentored or being overlooked in mentoring. But the data only applies to the people who participate; it does not provide insights into mentoring throughout the entire Research and Development department. An employee survey given to the group of interest—workers with 10 years or fewer of work experience—and that specifically addresses questions on mentoring—can provide numerical data on the extent of mentoring and an assessment of satisfaction with it.

But the ideal solution might be a two-part approach. Start with a focus group to learn more about specific mentoring issues in the organization and use the insights gained there to create a survey intended for all Research and Development workers with 10 years or fewer of work experience.

| Colleen, your colleague in the Human Resources department, has asked you to help her with a challenge. A manager and her employee disagree over the qualifications of the employee to serve as a project manager. The manager notes that the worke has not completed any formal training in project management. Although this is a preferred qualification, the responsibilities do not explicitly require it. The worke has argued that "I'm self-taught. I've read a lot about this and have practiced on my own." How can you help resolve the stalemate? |
|--|
| |

How to Evaluate Informal Learning

Debriefing of exercise 2: This is an example of evaluating learning at the individual level. Your instinct might lead you to explore the claims of the worker that he or she has actually participated in learning. Because the worker has not yet used the skills on the job, providing a process portfolio might prove challenging. You might therefore use a coaching interview to determine how the worker studied project management and what the worker learned.

But what the worker really wants is formal recognition for the informal learning so he or she can be eligible for this new role. This chapter suggested three means of providing recognition. The first would involve adding the informal learning to the employee education record. But because the worker claims to have studied on his or her own, any data entered into the system could not be verified. A skills assessment, specifically focused on management skills, would provide more specific feedback. But in the end, it's just self-reported data with no evidence to support the claim. That leaves certification, which involves demonstrating competence to a third party. By choosing certification, the argument changes from "the worker feels qualified, the manager feels otherwise" to "in the eyes of an independent third party, the qualifications of this worker are. . . . "

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