

ONE Overview of Needs Assessment

PURPOSE

This chapter will enable you to accomplish the following:

- Describe what a needs assessment is.
- Identify the purposes and characteristics of a needs assessment.
- Define key terms.
- Describe four approaches to needs assessment.

OVERVIEW

Most experts agree that human learning, training, and performance-improvement initiatives should begin with a needs assessment. This chapter sorts through the confusing collection of ideas about what a needs assessment really is and the best ways to conduct one. As you read the following examples of typical requests that should lead to needs assessments, think about their similarities and differences:

- *“The vice president is ready to start his personal development program. How should he proceed?”*

- “*Team production is down! The engineers say the technician team is struggling with the new process. The team disagrees. Can you give them all training or something?*”
- “*We need to update our professional certification program. What should the new curriculum include?*”
- “*Which workforce development initiatives should we invest in to make our country more competitive in the global marketplace?*”
- “*Next year our plant will continue the projects in Six Sigma quality and culture change. We will also implement new manufacturing procedures, install new equipment, and introduce new product lines. If employees try to make all these changes at once, productivity will fall. Where do you recommend we start? How can these efforts be integrated?*”

These requests probably sound familiar to most human resource development (HRD) and human performance technology (HPT) professionals. Let’s consider their similarities first and then their differences. Along the way, we will discuss the characteristics of needs assessment and define some key terms.

SIMILARITIES AMONG NEEDS ASSESSMENT REQUESTS

First, did you identify *dissatisfaction with the current situation* and *desire for change* as similarities among the requests? Each request implies that a gap or discrepancy exists between what is and what could be or should be. A learning or performance gap between the current condition and the desired condition is called a need (see Figure 1.1).

Needs assessment is a process for figuring out how to close a learning or performance gap. It involves determining what the important needs are and how to address them. The process includes comparing the current condition to the desired condition, defining the problem or

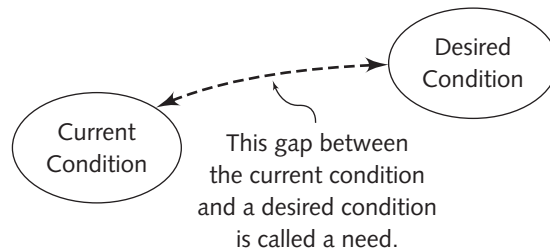


FIGURE 1.1 *Definition of a Need*

problems, understanding the behaviors and mechanisms that contribute to the current condition, determining if and how specific behaviors and mechanisms can be changed to produce the desired condition, developing solution strategies, and building support for action.

Second, did you notice the similar aims for the requests? They all focus on *addressing current issues* or on *specifying future learning or performance needs*. Needs assessment requests are typically aimed at the following situations:

- Solving a current problem
- Avoiding a past or current problem
- Creating or taking advantage of a future opportunity
- Providing learning, development, or growth

Third, did you notice that all the requests *imply a solution that requires training, learning, performance improvement, or a combination of these*? Needs assessment is a diagnostic process that relies on data collection, collaboration, and negotiation to identify and understand gaps in learning and performance and to determine future actions. Examples of actions that could be implemented as the result of a needs assessment include offering improved incentives, providing better information, engaging the appropriate people, enhancing the work design, supplying essential tools or technology, and implementing training or learning programs.

Fourth, did you also recognize that the requests are alike in including *little evidence* and *few clues* about whether taking the requested action will likely improve learning or performance? Important details about the situation and the expected course of action are unknown to both the persons who request a needs assessment and the persons who receive such requests.

Similar to the sample requests at the beginning of this section, most requests that lead to needs assessments include fuzzy goals, incompatible beliefs, flawed assumptions, and large leaps in logic. In addition, they contain *little diagnostic information* about the specific behaviors or mechanisms that produced the current condition, about what particular changes could create the desired condition, or about what support may be required from other people. Assessing needs in such situations before jumping in with solutions greatly increases the likelihood of success and avoids costly mistakes.



Throwing resources at problems or opportunities is like throwing a chocolate pie at the wall and hoping some of it will stick: the action is more likely to create a mess than an improvement; furthermore, it is a waste of good resources.

Finally, did you notice that all the sample requests include *challenging questions*? The right answers to these questions cannot be found in a book or on the Internet. Indeed, such questions do not have one right answer. Using commonsense solutions or throwing resources at such situations seldom work well either.

Instead, the requests for learning, training, and performance improvement initiatives must be evaluated and the “merit, worth, or value” (Scriven, 1991, p. 139) of the various options must be analyzed. Thus, needs assessment is a type of evaluation.

The Systems Model of Evaluation (Preskill & Russ-Eft, 2003; Russ-Eft & Preskill, 2005) identifies various factors that affect the success and the outcomes of an evaluation, including a needs assessment (see Figure 1.2). Factors in the needs assessment or evaluation project itself (such

as the approach to managing the project) are shown in the model's inner circle; factors within the organization (such as the organization's mission, vision, and strategic goals) are shown in the model's outer circle; and factors that are outside the organization (such as customer expectations) are shown in the shapes that encircle the ring of organizational factors. Thus many factors can influence how the challenging questions raised by a needs assessment are answered.

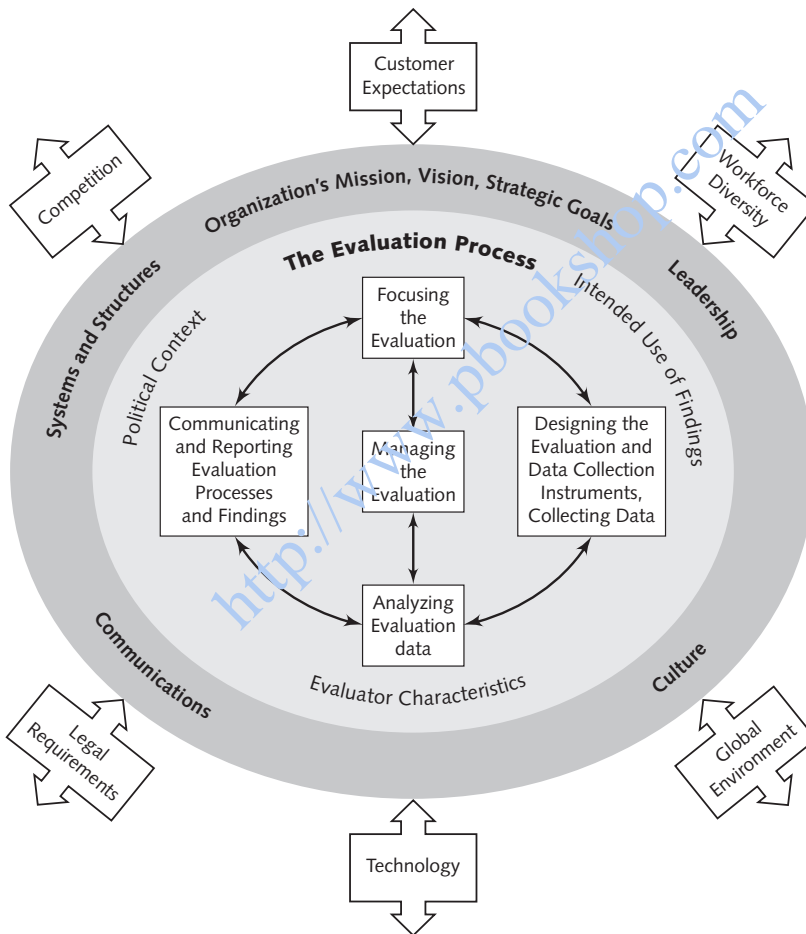


FIGURE 1.2 *A Systems Model of Evaluation*

Reprinted with permission from Sage, appearing in Russ-Eft, D., and Preskill, H. (2005). In search of the Holy Grail: ROI evaluation in HRD. *Advances in Developing Human Resources*, 71–85.

We have considered the similarities among the requests that lead needs assessment. Next, we consider their differences.

DIFFERENCES AMONG REQUESTS THAT LEAD TO NEEDS ASSESSMENT

First, did you notice that the sample requests *target different levels of learning and performance*? Needs assessment can be used to diagnose the learning and performance needs of individuals, teams, functional units, and whole organizations. They can also be used to diagnose the people-related issues of interorganizational groups, communities, countries, and even international efforts.

Second, did you notice that the requests focus on *various aspects of learning and performance*? Learning is the act of gaining knowledge or skills. It can exist in the individual and it can reside in an organization's systems, databases, technologies, and culture. Training supports individual learning (that is, a gain in knowledge and skills) through specialized instruction and practice. The terms *knowledge* and *skill* have different meanings:

- *Knowledge*: The body of facts about a subject matter and the understanding that a person acquires through study or experience
- *Skill*: Knowledge that one proficiently applies in appropriate situations

The goalie in Figure 1.3 may have in-depth knowledge of soccer rules and the various plays allowed in the game. His role on the team is to prevent the ball from going into the net and allowing the opposing team to score. The picture shows that he has failed to block several balls.

Performance includes accomplishments, the processes that result in accomplishments, and the capacity for future performance. Let us consider each of these aspects of performance for our soccer goalie:



FIGURE 1.3 Soccer Player Who Knows Game's Rules but Lacks Game's Skills

- *Accomplishment:* The major accomplishment desired for the goalie during the game is to save the goal by preventing the ball from going into the net.
- *Process:* To save the goal, the goalie integrates his knowledge of how to play the position with such skills as deflecting the ball and falling on it. His knowledge and skills interact with other factors (such as the defensive skills of his teammates) to affect how well he carries out the process of playing goalie.
- *Capacity:* The goalie's capacity for performance includes his bundle of skills and resources that can be applied to future play. They indicate his abilities to apply his mental, physical, and social skills to add value to the team.

The goalie's accomplishments, processes, and capacity could affect the team's accomplishments (for example, the number of games won), their processes (such as the strategies the team uses while playing the game), and their capacity (that is, the team's bundle of skills and resources that can be applied to future play).

Some people see learning and performance as separate activities. We see them as interconnected. As seen in the example of the goalie, learning in the form of knowledge and skills can affect performance and vice versa. Although, learning is not directly observable, the behaviors that create performance can often be observed. Thus, changes in behavior are often used to infer that learning has occurred. For example, if our goalie observed a new technique, practiced the technique, and in subsequent games effectively used that technique, we could infer that learning had occurred.

This section has described the similarities and differences among sample requests that lead to needs assessments, and in the process described the characteristics of needs assessments and defined some key terms. Next we focus on the benefits of needs assessment.

BENEFITS OF A NEEDS ASSESSMENT

A needs assessment frames the problems or opportunities of interest and builds relationships among the people and groups who have a stake in the issue. It also provides the foundation for planning and action to improve learning, training, and performance. More specifically, a needs assessment can align resources with strategy, build relationships among those who have a stake in the situation, clarify problems or opportunities, set goals for future action, and provide data for decision making. A needs assessment can also identify leverage points and resources for making changes, establish objectives for initiatives, prioritize actions, determine who must be involved for the HRD and HPT efforts to be successful, and provide baseline data for later evaluation of results.

Equally important, a needs assessment can build support for HRD and HPT efforts. The processes of using accurate data and negotiating among differing points of view can engage and mobilize decision makers and others who have a stake in the situation. By sharing their knowledge, insights, and resources, those who are closest to the situation contribute to creating solutions that are practical, credible, and appropriate for the situation.

Given all of these benefits, it is obvious why so many training, learning, and performance improvement models advocate systematic needs assessment: it ensures that interventions are relevant and address the needs.

FOUR APPROACHES TO NEEDS ASSESSMENT

Needs assessments are particularly important to HRD and HPT professionals who must align their work with strategic individual, organizational, or community needs. In today's competitive climate, improving learning, training, and performance is emphasized more than ever before.

At the same time, individuals, organizations, and communities guard their resources. Today's decision makers want HRD and HPT initiatives to focus on their critical priorities and to drop the non-value-added work. Needs assessments can provide such a focus, but politics will affect how needs assessments are actually conducted.

Consider the situation facing Ruth Duple, the new manager of learning and organization development for an international firm that manufactures computer equipment. The firm's management team recently speculated that poor supervisory performance was causing quality problems, increased turnover, and missed production deadlines. They handed the problem to Ruth. When she reviewed this new challenge, Ruth realized that she did not know how the poor supervisory performance related to the organization's strategic goals, the cause or causes of the problems, or the management team's vision for supervisory performance.

**Tip**

Some people focus on the problems in a situation, while others recognize that the same problems present opportunities for improvement.

To aid her thinking, Ruth sketched a simplified systems diagram of her firm (see Figure 1.4). The large oval represents the firm. Note that it is bordered with dashed lines to acknowledge that changes from outside the firm (such as government regulations, politics, and raw materials) can affect the firm, and that changes from inside the firm (such as increased wages) can affect the larger environment. Inputs to the firm's performance system include the employees, tools, and raw materials (such as gears).

Within the firm, each gray box represents a distinct unit or department that contributes to the production process. Of course the firm actually has many more units than are shown in Figure 1.4. Employees in each unit use work processes (shown by the darker gray horizontal boxes) to convert materials and other inputs into unit outputs. The outputs of one unit become the inputs for other units. When all the production processes are complete, the firm's output—computer equipment—is loaded on trucks for shipment to customers.

The employees in each unit report to a supervisor who in turn reports to a manager. The managers and some other executives report to the firm's CEO.

For the sake of simplicity, Ruth did not include in her sketch the collaborative efforts that span units, the feedback that supervisors receive from internal and external customers and from managers, or the firm's

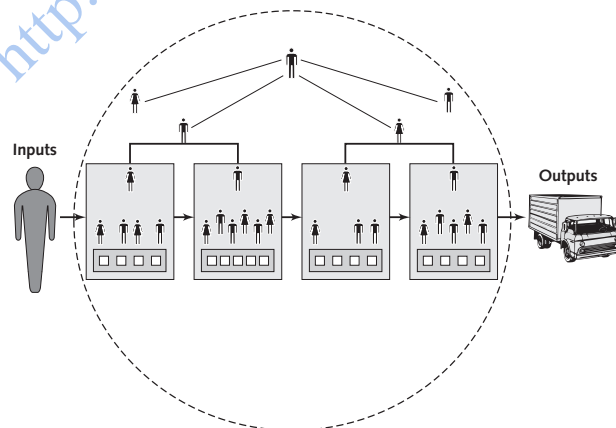


FIGURE 1.4 *Ruth's Sketch of a Simplified Systems Diagram*

structure, politics, and culture. However, her sketch does provide a focus for thinking about the needs assessment.

As an experienced HRD professional, Ruth knows many needs assessment models, each with its own jargon and unique steps. She is also familiar with the needs assessment study by Mathews et al. (2001). It focused on organizations in the United Kingdom, Finland, and Portugal that were implementing quality management practices such as ISO 9001:2000. The study ranked the importance of the following elements to assessing training needs within an organization:

- Senior management decisions
- Supervisors' opinions
- Skills inventory
- Employee surveys
- Analysis of projected business or service plans
- Customer opinions
- Training audits
- Requests from work groups
- External consultant
- Advisory committee

The study found that senior management decisions and supervisors' opinions received much higher rankings than the other elements, indicating the importance of the senior management and supervisors in determining training needs. The authors recommended that objective and formal methods of assessing needs be more widely adopted. This study highlights that while management and supervisor perspectives are important, using objective data and formal methods could ensure broader support for addressing quality management practices.

Ruth's firm must address its quality problems, increased turnover, and missed production deadlines to remain competitive in today's marketplace.

Given the competitive importance of these issues, Ruth decided to use a formal needs assessment approach to gain more knowledge about the gap between actual and desired supervisory performance and to figure out how to close it. She considered four formal needs assessment approaches that can be used separately or in combination.

The first approach, *knowledge and skills assessment*, focuses on the knowledge and skill needs that may exist. If such needs do exist, they can be addressed with training. Ruth could survey the supervisors themselves to obtain a list of their knowledge and skill needs or she could talk to managers. Ruth could then implement training programs that address the needs. This approach to needs assessment is described in Chapter Four.

The second approach, *job and task analysis*, focuses on information about the scope, responsibilities, and tasks of particular job functions. Because Ruth knows that supervisors regularly mishandle performance reviews, she could implement a job and task analysis to gather specific information about how this supervisory job task should be conducted in the firm. Ruth could use this needs assessment approach to prioritize the knowledge, skills, and other improvements that are required to close the gap between the way the performance reviews are conducted and the way they should be conducted. This approach to needs assessment is described in Chapter Five.

The third approach, *competency-based needs assessment*, focuses on determining the competencies needed for specific job functions. Competencies are the knowledge, skills, attitudes, values, motivations, and beliefs that people must have to be successful in a job. Ruth knows that successful supervisors are those whose teams continually outperform other teams and whose subordinates tend to remain with the organization. Ruth could use this needs assessment approach to identify specific behaviors that are exhibited by successful supervisors and not exhibited by less successful supervisors. This approach to needs assessment is described in Chapter Six.

The fourth approach, *strategic needs assessment*, focuses on learning and performance gaps within the context of an organization's business

strategy. Ruth could use this needs assessment approach to learn how supervisors do and do not contribute to the unit's and the firm's strategic goals and about the work mechanisms that contribute to their current performance. She could also consider factors in the firm's external and internal environments. Ruth could use the information she gathers to map the desired work processes and outcomes, to develop supervisory training, and to address non-training issues. This approach to needs assessment is described in Chapter Seven.

Figure 1.5 is a graph of the time and labor required to complete each of the four approaches. The approaches in the lower portion of the chart are less time- and labor-intensive. Figure 1.6 summarizes the approaches presented in Figure 1.5, starting with the lower-most approach, describing when to use each approach and its advantages and disadvantages.

Regardless of which approach you decide to use, consider the realities of conducting needs assessments in the workplace. First, time will always be a critical factor, as most clients or sponsors will be more concerned about implementing the actual improvement than about spending time analyzing needs. Second, line managers may be reluctant to release personnel to participate in interviews or focus groups, especially if operations will be affected. Third, needs assessments are political. Individuals hold differing and sometimes conflicting opinions, and they use power and influence to achieve their own ends. Therefore, a needs assessment usually involves negotiating cooperation among people to achieve a common task.

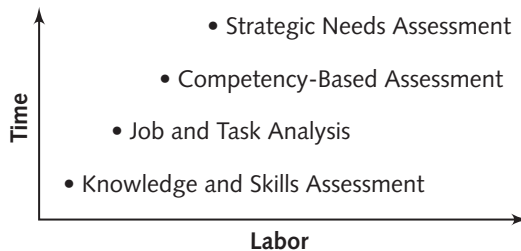


FIGURE 1.5 *Effort Required for the Needs Assessment Approaches*

Approach	Purpose	When to Use	Advantages	Disadvantages
Knowledge and Skills Assessment	Identify the knowledge and skills required to perform a job	Implement new technology Identify training needs Develop a training plan	Ensures training is linked to the learner's needs Easiest to implement	Has a limited focus
Job and Task Analysis	Determine responsibilities and tasks necessary to perform a job	Develop new job descriptions or revise existing position profiles Identify task listings for new or redesigned job functions: knowledge, skills, abilities, and standards Develop consistent training requirements, especially for technical and specialized jobs	Stimulates interest because people have opportunity to do fine jobs Defines skill requirements for entry-level versus senior positions Identifies additional knowledge, skills, and abilities to move across or upward within a job function	Does not take into account the external factors that may affect job performance Time-consuming Costly Assumes that the work is static Assumes that there is one best way to perform the work

Competency-Based Needs Assessment	Identify knowledge, skills, and attitudes for superior job performance	Identify competencies that are required for jobs Measure proficiency levels of people Develop standardized training Develop performance management systems (recruiting, hiring, promoting, or career planning)	Determines qualities that distinguish average from superior performance Provides information about current and future predictors of job performance	Time-consuming Requires high involvement of many people within an organization Costly Requires good project management system for large projects
Strategic Needs Assessment	Examine existing performance problems (reactive) or address new and future performance needs (proactive) within the context of the organization's or the community's business strategy Develop long-term performance improvement plan	Link performance improvement needs to business strategy of the organization or community Identify performance improvement opportunities at various levels (such as individual, process, and organizational)	Develops long-term solutions to existing performance problems or new performance needs Solves problems that affect core business processes Eliminates non-value-added activities	Time-consuming Costly Requires that a business strategy exist

FIGURE I.6 Matrix of Needs Assessment Approaches

After considering the four approaches, Ruth concluded that this could be a high-stakes needs assessment both for the firm and for her career. Because of the project's importance, Ruth decided to review the needs assessment tools presented in the next chapter before selecting a needs assessment approach.

CONCLUSION

Needs assessment involves carefully analyzing a situation and building support for action. Regardless of which needs assessment approach you choose to implement, the message is simple: needs assessments set the direction for learning, training, and performance improvement initiatives. The next chapter describes some practical models and thinking that can contribute greatly to a successful needs assessment.