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# A True Training Needs Analysis

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*True training needs are different from training wants. Here's a how-to approach for designing a questionnaire that can help you tell one from the other.*

**T**he first step in any training needs analysis is to differentiate between training wants and true training needs:

- A true training need exists when specific job tasks or behaviors are important and an employee's proficiency in them is low.

- A training want may arise when specific job tasks or behaviors are not important and an employee's proficiency in them is low.

Employees often want training in specific areas that are irrelevant to their jobs or inconsistent with organizational objectives. A well-designed questionnaire can weed out training wants to uncover an employee's true training needs.

## Importance and proficiency

The two main criteria on the questionnaire should be importance and proficiency.

Importance is defined as the relevance of specific tasks and behaviors in a particular job and the frequency with which they're performed.

Proficiency is defined as an employee's current demonstration of competence in a specific job task or behavior.

It's important to keep in mind that employees may be proficient in job skills that are not important.

The total training needs analysis process involves nine steps.

**By Kenneth M. Nowack**

## Step 1: Conducting a job profile

A job profile can help determine the specific tasks and behaviors that are important to a particular job.

The term "job profile" is used instead of the more common term, "job analysis," because the latter is traditionally more rigorous and more typically used for other HRD tasks such as compensation.

A job profile contains specific definitions of job requirements under which groups of related behaviors can be reliably classified. Typically, a job profile results in 12 to 15 categories or dimensions. The number of dimensions depends on the nature of the job, the complexity of the tasks, and the skills required for effective job performance.

The first step in the analysis is to clearly define the jobs for which true training needs are to be identified. Subject matter experts, or SMEs, provide input on important skills through interviews, focus groups, and surveys.

It may take two to three hours to conduct separate, homogeneous focus groups of employees in the target jobs and their supervisors. The groups complete and discuss worksheets containing a generic list of skills based on current job descriptions.

The groups then compile a list of dimensions in the following areas:

- relevant technical knowledge and experience
- interpersonal skills
- administrative skills
- supervisory or management skills

- decision making and problem solving skills

- communication skills.

Next, the groups rate the importance of each dimension to a particular job—"very important," "important," or "not important." The groups also indicate the amount of time that is spent on each dimension—"several times a day," "several times a week," "several times a month," or "several times a year."

The lists are carefully reviewed and combined. The resulting job profile names and operationally defines each of the dimensions required for effective job performance.

The same process can use structured interviews with a random or representative sample of SMEs. The interviews should be designed to elicit job-relevant dimensions in each of the six skills areas listed above. SMEs are also asked to rate the importance of and time spent on each dimension.

Finally, all data from the interviews are combined to prepare the job profile.

No matter what the method, the end product is a list of job-relevant dimensions that are behaviorally defined. Have a subject matter expert look over the final list to ensure that no dimension has been overlooked.

At this stage, you're ready to begin developing a training needs analysis questionnaire.

## Step 2: Developing the questionnaire

Developing the questionnaire is a crucial part of the process. The questionnaire should target specific job levels or positions within the organization. Subject matter experts who

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contribute to the questionnaire's content should include employees in the targeted jobs as well as their direct supervisors.

The questionnaire comprises three main sections:

- questions on climate or employee attitude
- job dimension summary ratings
- demographic information.

Climate or employee attitude questions pinpoint internal and external barriers that may influence training effectiveness. (Organizations that conduct annual climate surveys may choose to eliminate this section from the questionnaire.)

Typical items on a climate survey seek to identify employee attitudes about and perceptions of organizational policies and procedures, benefits, career opportunities, job satisfaction, work environment, and managerial practices.

The section on job dimension summary ratings includes a list of dimensions extracted from the job profile.

Two types of ratings are made for each dimension: how important the

dimension is to the job and how proficient an employee is in that dimension.

The demographic section includes information to be used in a statistical analysis of the questionnaire.

Typical demographic items include an employee's job position, location, years with the organization, and time in the current position.

Ask only those demographic items that are germane to the analysis. Irrelevant questions tend to quash an employee's motivation to complete and return the questionnaire.

For each job-relevant dimension listed, ask respondents to rate its importance and their proficiency in it, as seen in the figure.

### **Step 3: Administering the questionnaire**

First, determine whether all employees or only a sample will receive the questionnaire. The decision should be based on the size of the organization and the resources that are available for administering the questionnaire.

Include a cover letter that briefly describes the purpose of the questionnaire as well as how and when to return it. It's important to make it clear that participation is voluntary as well as anonymous or confidential. Also consider procedures for increasing compliance, such as sending follow-up letters and offering incentives.

Whenever possible, use a convergent approach, which allows for comparison of employees' perceptions of their own training needs with their supervisors' perceptions of those training needs.

For example, if your training needs analysis targets first-level supervisors, distribute a questionnaire that asks them to rate the importance of various dimensions of their jobs and their proficiency in those dimensions. But also send questionnaires to managers one level up to rate the same criteria for the first-level supervisory positions.

That gives the analyst two different perspectives on training needs. Such an overview can help in determining the final training objectives.

### **Step 4: Analyzing the questionnaire**

A statistical software program, such as the Statistical Package for the Social Sciences, can aid in the analysis of the questionnaire.

To get a quantitative measure of the training needs, multiply each dimension's importance ratings by the proficiency ratings for each respondent. Then compare the mean importance times the mean proficiency scores (IxP) across all dimensions in the questionnaire. The higher the mean score, the more critical a training need is for a particular job.

For example, say a respondent rates "delegation skills" as "very important" (5) in his or her job, and rates his or her own proficiency in those skills as "none at all" (5). The IxP score for that skill and that respondent is 5x5 or 25, which indicates a critical need for training in delegation skills. See the figure for a sample survey.

With a convergent approach, you can directly compare the mean IxP scores of two or more groups. For example, you could compare the differences in mean scores between first-level supervisors and their managers.

Sometimes it's worthwhile to analyze the questionnaire according to



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### A sample needs assessment survey on importance and proficiency ratings

For each of the following areas of skill, knowledge, and ability, please make two judgments. First, rate the importance of each dimension to your current job requirements by circling a number from 1 to 5 (1=not at all important; 5=very important). Second, indicate your current level of proficiency in each area (1=a great deal; 5=none at all)

	IMPORTANCE Importance of the dimension in performing your job					PROFICIENCY Proficiency expressed in your current job				
	not at all important			very important		a great deal			none at all	
<b>Administrative/Managerial Dimensions</b>										
<b>Planning and organizing</b> — Ability to effectively schedule time, tasks, and activities and establish a course of action to accomplish specific goals.	1	2	3	4	5	1	2	3	4	5
<b>Delegation</b> —Ability to allocate necessary resources to subordinates in order to accomplish a task, and to establish procedures to monitor results.	1	2	3	4	5	1	2	3	4	5
<b>Administrative control</b> — Ability to develop procedures to monitor and evaluate job activities and tasks on an ongoing basis.	1	2	3	4	5	1	2	3	4	5
<b>Employee development</b> — Ability to develop the skills, knowledge, and abilities of subordinates through coaching and developmental approaches.	1	2	3	4	5	1	2	3	4	5

demographic items. For example, you could compare the scores of new hires with those of more senior employees. You may want to compare a ranking of the mean IxP scores for one department with the results in another. Statistical software can help determine the degree of significance.

#### Step 5: Interpreting the results

Once a statistical analysis is completed, you're ready to make some sense of the data.

First, the following questions should be answered:

- Do the top-ranked training needs contain common content?
- What is the meaning of any statisti-

cally significant differences in the way training needs are perceived by employees compared with managers?

- What is the meaning of the differences in training needs across any demographic factors?

For example, first-level supervisors may perceive certain training needs to be less important than do the managers above them. A possible interpretation is that managers have a more strategic, long-term view of the important skills than do supervisors, who are down in the trenches every day.

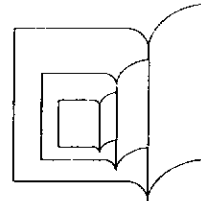
Such different perceptions generally emerge when a convergent approach is used. Often, the exact meaning of the differences is not immediately clear. An additional step can help to interpret the findings and

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eventually narrow down specific training objectives.

### Step 6: Small focus groups

Once the questionnaire is interpreted, more questions will probably arise. Small focus groups can help clarify the results. They can include employees from management and nonmanagement levels or they can be homogeneous within levels. Such groups can also help in plan-

ning specific training objectives for specific jobs.

A small focus group can review and discuss the IXP scores and the breakdown by demographics. It can then try to explain and clarify the findings based on members' experiences and observations. Finally, the group should write an executive summary to share with managers and trainees.

Small focus groups provide feedback that you can relay to some or all

of the respondents. (If climate survey items were included in the questionnaire, those results can be shared and discussed at this stage.)

### Step 7: Feedback

Feedback to both respondents and managers should be well planned. You can use such means as executive summaries, reports, briefings, employee feedback meetings, newspaper articles, and staff memos. Feedback can be given to all members of the organization or to selected groups.

A written summary report should include a brief description of the questionnaire's design and administration, information on its major findings, an interpretation of the results, and recommendations. It should also include an appendix of statistical analyses.

Documentation can be important in the long run. Down the road, you can use it to decide whether to use the same approach in other projects or to compare alternative methods.

### Step 8: Developing training objectives

The questionnaire findings and focus group summaries can be instrumental in determining the final training objectives.

Each objective should be tied to one or more of the dimensions defined in the questionnaire. At this stage, explicitly state the knowledge, skills, and abilities that are important to performance in the targeted jobs.

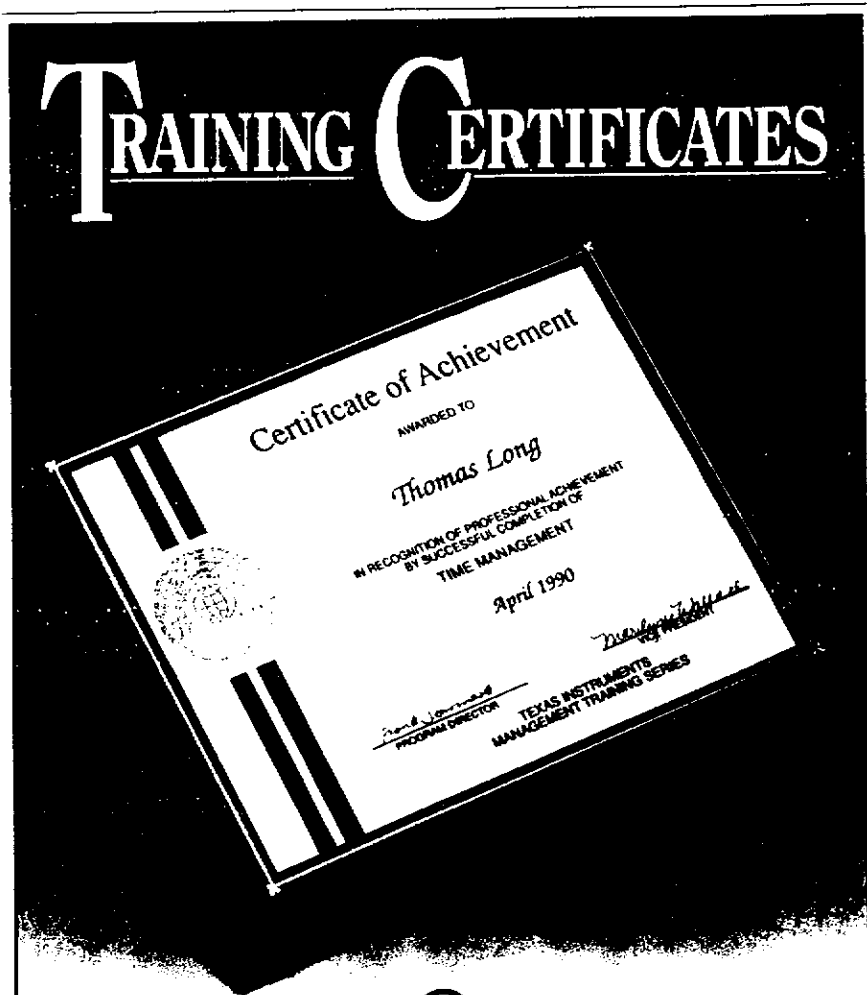
For example, if delegating, planning, and interpersonal sensitivity emerge from the questionnaire as true training needs for a particular job, trainers should develop specific objectives based on those needs.

First, the person designing the training program should determine whether each training need imparts knowledge, modifies attitudes, or improves behavior. (Again, additional input from SMEs can help provide clarification.)

Once that step is complete, you can define the criteria for training success.

For example, in setting a training goal to increase interpersonal sensitivity, first determine what an employee will know, do, or feel differently after the training in order to demonstrate more sensitivity.

Such behavior-based training objectives tend to focus on developing



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more effective listening and feedback skills. Each objective should include the following:

- a description of what a trainee should be able to know, do, or feel after training
- the conditions under which a trainee will demonstrate the skills, knowledge, or feelings targeted in training
- the criteria for identifying the successful transfer of training over time.

Having designed the training, you're now ready to schedule a program review meeting. After you make any necessary revisions, it's time to select an audience for the pilot training program.

### Step 9: Evaluating training effectiveness

Your pilot program serves as an evaluation tool. The test run helps to refine the training program's content and methods. Reactions from your pilot audience, written evaluations, and focus group follow-up sessions can provide information on the effectiveness of your training program.

A summary evaluation can determine whether trainees feel that training objectives were achieved with a "Post-Then" approach. A summary evaluation compares a trainee's perceptions on knowledge, skills, and feelings after training (Post) to those before training (Then).

Post and Then perceptions are best collected after the training program has ended. That helps to minimize the inherent bias in evaluations taken before training is completed. Differences between the two kinds of perceptions should be calculated, averaged, and summarized for all trainees.

For example, at the end of a program, an employee may rate his or her confidence level on a specific skill as it was before the training and as it is after the training. In the summary evaluation, trainees may also answer questions that measure their reactions to the training material and site as well as other factors.

In a summary evaluation, the questionnaire may be administered long after employees have completed training—as much as 8 to 12 months later, for example. This approach helps to assess perceived changes over time.

Statistical analysis of the mean IXP scores can provide a quantitative

measure of training needs at two stages.

■ When trainees and managers perceive greater proficiency on the job several months after training, it offers some evidence that the training content has been successfully transferred to the job.

■ Supervisors' ratings can be collected and analyzed in separate post-training surveys, focus groups, or telephone interviews.

### Truth or consequences

We all sometimes want things we don't need. It's only human. But the consequences of designing training to meet wants instead of true training needs are costly and time-consuming. It's important to distinguish between wants and needs in a training needs analysis before you construct a training program. A quantitative questionnaire can help. ■

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