

Training Needs Assessment:

A Must for Developing an Effective Training Program

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Training needs assessment is an ongoing process of gathering data to determine what training needs exist so that training can be developed to help the organization accomplish its objectives. Conducting needs assessment is fundamental to the success of a training program. Often, organizations will develop and implement training without first conducting a needs analysis. These organizations run the risk of overdoing training, doing too little training, or missing the point completely.

There are four main reasons why needs analysis must be done before training programs are developed.

1. To identify specific problem areas in the organization. HR and management must know what the problems are so that the most appropriate training (if training is the answer) will be directed to those organizational problems. For example, if a manager approached the HR department with a request for a communications program, too often the trainer's response (eager to serve management) will be to proceed to look around for a good communications program and conduct training without conducting a needs assessment first. This approach will inevitably fail. Nodding their heads appreciatively, everyone says "That was a good program," but when they go back to their departments, work proceeds as usual because the training was not directed to the real needs of the participants. The proper response should have been, "Yes, but let us start by taking a look at the situation. We will talk to a few people to find out what the problems are. Then when we develop the program, we can zero in on a specific situation rather than just use a random approach."

2. To obtain management support. Management usually thinks training is a "nice thing to do." This stance can be laid directly at the doorstep of a poor (or nonexistent) needs assessment. The way to obtain management support is to make certain that the training directly affects what happens in that manager's department. Trainers should view themselves the same way that management does, making a direct contribution to the bottom line. Management will be committed to training when HR can show that it clearly improves performance on the job. As a result, training programs and budgets will not be the first things cut or trimmed.

3. To develop data for evaluation. Unless informational needs are developed prior to conducting training, the evaluations that take place after the program may not be valid. In conducting a needs analysis first, trainers can measure the effectiveness of a program.

4. To determine the costs and benefits of training. Training is usually looked upon as a nuisance rather than a contribution to the bottom line of the organization. This happens when trainers fail to develop a cost-benefit analysis for the training they conduct. Few managers would balk at spending \$20,000 to correct a problem costing them \$200,000 a year. Yet, most of the time trainers complain that management will not spend money on training. However, a thorough needs assessment that identifies the problems and performance deficiencies, allows management to put a cost factor on the training needs.

The major question trainers need to address in cost-benefit analysis is, "What is the difference between the cost of no training versus the cost of training?" This entails finding out what the costs (out-of-pocket, salary, lost productivity, etc.) would be if the need continues without being met. Next, an analysis must be made of the cost of conducting the training program that can change the situation. The difference between these two factors will usually tell both the trainer and manager whether or not the training should be conducted.

Human Resource (HR) professionals and line managers also need to be aware that training is not the "cure all" for organizational problems. Neither should it be used as a tool to reward excellent performance, or as motivation to correct poor performance. The purpose of training is to support the achievement of organizational goals by increasing the necessary skills of its employees.

Training is appropriate when your organization can expect to gain more benefit from the training than it invested in its cost. The value of any training investment to the organization must rely on the vision and judgment of line supervisors and managers. You may authorize training to build skills and knowledge levels that help employees better contribute to your organizational mission(s). In some cases, the need is immediate and the training remedial; in other cases, the aim is to update and maintain professional knowledge; and in still others, the goal is to prepare for requirements anticipated by higher level officials.

The following factors might indicate training or development needs of your employees:

A. Development of employee/management skills to fill a current need

- Trainee or intern training plans
- Reduction in Force (RIF) placements
- New Employees
- New supervisors
- Managerial competency assessments
- Reassignments
- Promotions

B. Employee relations/organizational problems

- Performance problems
- Production problems
- Safety problems
- Inspection deficiencies

C. Meet changing needs

- New technology
- New equipment or programs
- Modernization of equipment
- Mission changes
- Laws and regulations

D. Career Development

- Employees' requests
- Career enhancement plans

The Purpose and Objective for Conducting Needs Assessment

Identifying training needs for your employees requires careful scrutiny of mission objectives, personnel, production, raw materials, costs, and other factors. The training requirements you identify factor into the total training budget forecasted for your organization and your installation, and impacts the amount of funds that are allocated by senior management.

Conducting a needs assessment is useful in identifying:

- Organizational goals and its effectiveness in achieving these goals.
- Gaps or discrepancies between employee skills and the skills required for effective job performance.
- Problems that may *not* be solved by training. If policies, practices, and procedures need to be corrected or adjusted, this is a concern for top management, not a training concern.
- Conditions under which the training and development activity will occur.

In addition to providing a clear direction for identifying training needs, a needs analysis also serves as a basis for evaluating the effectiveness of the training program. Upon completion of the analysis, you have a basis for comparison. In the absence of a needs analysis, training results are usually subjective and might not be attributable to the training.

Implementing and developing training programs can be expensive, so it makes sense to analyze training needs at the onset so that training can be tailored to focus on specific needs and withstand evaluation after training.

Types of Analysis

A thorough needs analysis examines training needs on three levels:

1. Organizational
2. Task
3. Individual

Organizational Analysis

Organizational analysis examines where training is needed in the organization and under what conditions the training will be conducted. It identifies the knowledge, skills, and abilities that employees will need for the future, as the organization and their jobs evolve or change.

Analysis of HR data can indicate areas where training could improve performance. For example, departments or divisions with high turnover, high rates of absenteeism, poor performance or other problems can be tagged. After a thorough analysis, training objectives can be determined and the appropriate training developed. An organizational needs analysis may also deal with employee grievances, customer complaints, quality control issues, accident records, and so on.

HR and line management also need to anticipate and plan for changes. Three such changes that should be carefully considered are:

- Future skill needs
- Labor pool
- Changes in laws and regulations

Future skill needs: How is your organization changing? Examples of situations that will affect planning for training needs on the organizational level include:

- Compliance with affirmative action plans. Affirmative action guidelines require HR and management to be aware of equal employment opportunity (EEO) regulations and understand compliance goals.
- Installation of new equipment. New equipment creates the urgent need to train employees so that the new equipment can be running productively and safely.
- Changes in standards and procedures. Whenever performance standards or procedures change, the need for new skills will occur.
- Working in a team environment. New interpersonal skills and decision-making will be needed with this type of cultural change.

Changes in the labor pool. Organizations have to plan for adjustment as the labor pool changes. As more women, minorities, immigrants, and older workers join the workforce, employers must plan how to accommodate employees' diverse needs and still get the job accomplished.

Changes in laws and regulations. Laws and regulations may dictate training needs. For example, the decision in the 1998 *Oncale v. Sundowner Offshore Services*,

Inc. held that same-sex harassment is forbidden by Title VIII of the Civil Rights Act of 1964. In addition to a policy statement, training would be particularly important in instructing employees about blatant and subtler forms of same-sex discrimination.

Task Analysis

Task analysis begins with job requirements and compares employee knowledge and skills to determine training needs. Examining job descriptions and specifications provides necessary information on expected performance and the skills employees need to accomplish their work. Any gaps between performance and job requirements indicate a need for task training.

A good task analysis identifies:

- Tasks that have to be performed
- Conditions under which tasks are to be performed
- How often and when tasks are performed
- Quantity and quality of performance required
- Skills and knowledge required to perform tasks
- Where and how these skills are best acquired

Individual Analysis

Individual Analysis targets individual employees and how they perform in their jobs. Using information or data from an employee's performance review in determining training program needs is the most common method. If an employee's review reveals deficiencies, training can be designed to help the employee meet the performance standard.

Employees can also be surveyed, interviewed, or tested to determine their training needs. They can indicate problems they have or provide recommendations to solve problems. These interviews can be conducted on an individual basis or in a group setting.

Conducting a Needs Analysis

In selecting which training needs analysis techniques to use, one requires answers to questions such as the following:

1. What is the nature of the problem being addressed by instruction?
2. How have training needs been identified in the past and with what results?
3. What is the budget for the analysis?
4. How is training needs analysis perceived in the organization?
5. Who is available to help conduct the training needs analysis?

6. What are the timeframes for completing the exercise?

7. What will be the measure of a successful training needs analysis report?

The time spent and the degree of formality will differ according to particular needs and the organization involved. There are, however, four basic steps:

1. Gather data to identify needs

This can be accomplished through:

- Surveys/Questionnaires
- Interviews
- Performance Appraisals
- Observations
- Tests
- Assessment Centers
- Focus Groups
- Document reviews
- Advisory Committees

As illustrated in the chart below, each method has special characteristics that can affect both the kind and quality of the information obtained. For instance, an interview can reflect the interviewer's biases, while a questionnaire can have sampling biases if only a few participants return the survey. It is best to use more than one method to help validate the data, as you can get different types of information from the different methods. For example, you can use questionnaires to gather facts and utilize follow-up interviews to delve more into why people answered questions the way they did.

It is also important to include persons from a cross-section of the target employees for training. Sample people with varying experience levels or you will not have a valid sample, and training will only be effective for a certain part of the total population you targeted.

Advantages and Disadvantages of Needs Assessment Methods

	Method	Advantages	Disadvantages
Surveys/ Questionnaires	May be in the form of surveys or polls of a random or stratified sample or an entire population. Can use a variety of question formats: Open-ended, projective, forced-choice, priority ranking.	Can reach a large number of people in a short time. Are inexpensive. Give opportunity of response without fear of embarrassment. Yield data easily summarized and reported.	Make little provision for free response. Require substantial time for development of effective survey or questionnaire. Do not effectively get at causes of problems or possible solutions.
Interviews	Can be formal or casual, structured or unstructured. May be used with a representative sample or whole group. Can be done in person, by phone, at the work site, or away from it.	Uncover attitudes, causes of problems, and possible solutions. Gather feedback; yield of data is rich. Allow for spontaneous feedback.	Are usually time-consuming. Can be difficult to analyze and quantify results. Need a skillful interviewer who can generate data without making interviewee self-conscious or suspicious.
Performance Appraisals	May be conducted informally or systematically. Conducted by manager; appraisal developed by HR. Should be conducted on a regular basis and separately from merit discussions.	Indicate strengths and weaknesses in skills, and identify training and development needs. Can also point out candidates for merit raises or promotions.	Can be costly to develop the system, implement the appraisals, and process the results. May enable managers to manipulate ratings to justify a pay raise. May invalidate the appraisal because of supervisor bias. May be prohibited for union employees.
Observations	Can be technical, functional, or behavioral. Can yield qualitative or quantitative feedback. May be unstructured.	Minimize interruption of routine work flow or group activity. Generate real-life data.	Requires a highly skilled observer with process and content knowledge. Allow data collection only in the work setting. May cause "spied on" feelings.
Tests	Can be functionally oriented to test a board, staff, or committee member's understanding. Can be administered in a monitored setting or "take home."	Can be helpful in determining deficiencies in terms of knowledge, skills, or attitudes. Easily quantifiable and comparable.	Must be constructed for the audience, and validity can be questionable. Do not indicate if measured knowledge and skills are actually being used on the job.

Advantages and Disadvantages of Needs Assessment Methods (cont.)

	Method	Advantages	Disadvantages
Assessment Centers	For management development. Require participants to complete a battery of exercises to determine areas of strength that need development. Assess potential by having people work in simulated management situations.	Can provide early identification of people with potential for advancement. More accurate than "intuition." Reduce bias and increase objectivity in selection process.	Selecting people to be included in the high-potential process difficult with no hard criteria available. Are time-consuming and costly to administer. May be used to diagnose developmental needs rather than high potential.
Focus Groups/Group Discussion	Can be formal or informal. Widely used method. Can be focused on a specific problem, goal, task, or theme.	Allow interaction between viewpoints. Enhance "buy-in"; focus on consensus. Help group members become better listeners, analyzers, problem solvers.	Are time-consuming for both consultants and group members. Can produce data that is difficult to quantify.
Document Reviews	Organizational charts, planning documents, policy manuals, audits, and budget reports. Include employee records (accidents, grievances, attendance, etc.). Also include meeting minutes, program reports, and memos.	Provide clues to trouble spots. Provide objective evidence or results. Can easily be collected and compiled.	Often do not indicate causes of problems or solutions. Reflect the past rather than the current situation. Must be interpreted by skilled data analysts.
Advisory Committees	Secure information from people who are in a position to know the training needs of a particular group. Supply data gathered from consultants by using techniques such as interviews, group discussions, and questionnaires.	Are simple and inexpensive. Permit input and interaction of a number of individuals with personal views of the group's needs. Establish and strengthen lines of communication.	Carry biased organizational perspective. May not represent the complete picture because the information is from a group that is not representative of the target audience.

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2. Determine what needs can be met by training and development

If there is indication of performance deficiency, the next step is to determine what needs can be met by training and development. If the problems relate to employee relations such as poor morale, lack of motivation, or inability to learn, training is *not* a solution. Human resource professionals who use training as a motivator misunderstand the purpose of training, which is simply to pass on missing skills and knowledge to employees who are willing and able to learn. Problems arising from non-training issues such as insufficient rewards or obsolete equipment can be identified and referred to management.

3. Proposing solutions

After determining that training is a potential solution, HR professionals will need to closely examine if formal training is the best way to meet the need. You might find that practice or feedback is all that is needed.

- **Practice** is useful if a particular skill was taught but not used. For example, an employee might be trained in all aspects of a word processing program but use only a small portion of those skills. If the job requires expansion of those skills, the employee may need time to review additional word processing material and practice using them.

- **Feedback** to employees concerning their work is critical in maintaining quality. Managers and supervisors need to periodically evaluate job performance and tell employees what they are doing correctly or incorrectly to avoid work skills diminishing. If an employee was not able to perform a certain skill, using an existing program to retrain or designing a new program may be the appropriate solution.

Identifying the Next Step

Once needs have been analyzed and identified, the next step is to develop the training proposal itself. It should spell out the need for training, the expected results, the people to be trained, and the expected consequences if training is not conducted. A key decision is whether to use an existing program or design a new training program.

Conclusion

We have seen that the rationale for developing a training program relies heavily on identifying training needs, and justifying the costs and benefits to the organization. Without a clear understanding of needs, training efforts are at best randomly useful and at worst, useless. The trainer will only be successful and perceived as such to the extent that needs are carefully assessed, and programs developed and carried out that meet those needs. The end result is a more precise picture of training needs, which can lead to a performance improvement oriented training program and better results from training.

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References

Needs Assessment Matrix

http://mime1.marc.gatech.edu/MM_Tools/NAM.html

Training Needs Analysis: A Broad View

http://brookebroadbent.mondenet.com/broad_v.htm

Getting results from a Management Training needs Analysis

<http://www.alumni.caltech.edu/~rouda/ASTD.html>

Techniques for Evaluating Training Programs by Donald Kirkpatrick

http://www.astd.org/CMS/templates/template_1.html?articleid=20840

Was it the Training? by Jack J. Phillips

http://www.astd.org/CMS/templates/template_1.html?articleid=11016

How Much is the Training Worth? by Jack J. Phillips

http://www.astd.org/CMS/templates/template_1.html?articleid=11019

Return on Investment in Training and Performance Improvement Programs, Gulf Publishing, 1997; ASTD Infoline Series, Level 5: ROI (1998); Consultant's Scorecard, McGraw-Hill, 2000.

S. Bartram and B. Gibson (2000). *Training Needs Analysis*. Published by Gower.

Ulrich, David (1997). *Human Resource Champions: The Next Agenda for Adding Value and Delivering Results*