

**From Required Competencies to Effective Training
Or, How to Determine Training Needs
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Abstract

The keys to determining training needs include: 1. Know your present situation, 2. Identify required competencies, 3. Involve employees, 4. Survey, discuss and analyze actual data, 5. Prepare specific employee development plans, and 6. Implement the plans.

While effective training is an important element of a successful business operation, training needs are rarely examined systematically while considering the required competencies for the jobs in the organization.

Too often training programs are bought simply because they are well advertised, well marketed, the latest “fad” or because other organizations are using them. By systematically reviewing the required competencies for each position evaluating the training needs to satisfy the competencies an organization can deliver training that is on target and effective. This approach fits nicely with the requirements of ISO 9001, AS 9100 and ISO 14001; and the methodology enables an organization to properly utilize its resources to develop training and interventions that are more effective because they meet the specific needs of the people, positions and situations.

Systematic Process

In a systematic process approach there are four types of analysis:

1. The competencies analysis answers the question, “What are the competencies that an individual must have to perform this job?”
2. The organization analysis answers the question, “Where is training needed in the organization?”
3. The task analysis answers the question, “What must the employee learn in order to satisfy the required competencies?”
4. The person or individual analysis answers the question, “Who needs this training and what specific training do they need?”

Conducting such an analysis is time consuming, but it is ultimately more cost effective. Since the major cost of training is the time and overhead of having people in a training session, the up-front analysis is an effective way to reduce the total cost of implementing an employee training and development process. This comprehensive process yields a thorough understanding of the training needs in the organization and pays dividends in the implementation phase.

The general approach for a training needs analysis consists of five phases:

1. Understanding the required competencies by job function or position.
2. Researching the present training programs/process.

3. Involving employees in surveys/discussion groups on a representative basis for the organization.
4. Analysis of the results.
5. Preparation of the specific employee development plans.

This analysis is most effectively accomplished when a small (3-7 people) cross-functional team is utilized. It is very difficult for the HR Manager or HR Assistant to accomplish such a comprehensive task. In many instances an outside resource can be effectively used to plan and facilitate the effort. Outside resources insure objectivity and a focus on results without the “baggage in relationships” that may be present within the organization. In any case it is vital to minimize disruptions to the organization’s work and to avoid creating false expectations among employees. Be realistic in planning each phase and allow time to do a complete job. Carefully document the process as you move through each phase.

Of course, before beginning a project like this, it is imperative that management support and involvement is insured. There should be built in periodic communications with senior management so there will be “no surprises” when the project is completed.

Competency Analysis

A thorough review of required competencies should be done by involving a variety of people in the various job functions in the organization. This should go far beyond the HR department. It should involve people who are actually doing the work as well as those responsible for the work being done and perhaps even the internal customers of various departments or functions.

An effective way to identify required competencies is to prepare a list of jobs or positions within the organization and then list the competencies that one must have in order to do that particular job. In many cases there will be “core competencies” that all employees must have. These may include basic competencies like being able to read and write, computer literacy, ability to interpret engineering drawings or basic math skills. Sometimes the core competencies could be as complex as an engineering degree from an accredited institution. In other cases they may include a basic understanding of the environmental impacts associated with each job, as in the case of an ISO 14001 Environmental Management System; or how each job affects quality as in the case of an ISO 9001 Quality Management System. When an ISO 9001 or ISO 14001 management system is in place, the system documentation should reference how competencies are identified, such as through a competency review, a matrix of required competencies or job descriptions, and how they relate to training needs and actual training that is conducted.

If an organization uses job descriptions, they may already have the required competencies identified and simply need to review these to be sure they are up to date.

As process improvements are made the required competencies should be reviewed to insure they are up to date. It is a good idea to review these at least annually anyway.

After the competencies are identified, then you are ready to begin identifying training needs/programs for the organization.

Organization Analysis

An organization analysis examines the organization as a whole. It includes investigation of internal and external environments, mission, organizational structure, objectives, markets, customers, policies, procedures and interfaces within the organization. The first question to be answered by this analysis, and coupled with the matrix of required competencies, "Where in the organization is training needed to insure required competencies are properly addressed?" The second question is, "In what areas will training be effective or successful if addressed?" Rarely will the needs be the same in every division of the organization, thus "mass training" or corporate wide efforts may not be very successful. Generally, the most successful training will be based around competencies and organizational needs and customized for the organization.

A part of this analysis includes studying what each unit or department is striving to achieve and the current training programs, plans and objectives. Without this knowledge it is not possible to understand the training needs. When objectives are stated and compared to actual performance results, it is clear whether the training needs are short term, long term or preventive. Short term training focuses on solving immediate problems, long term focuses on solving chronic or continuing problems and preventive needs maintain the critical knowledge and skill levels required in today's changing workplace. The preventive needs may include recurring needs such as safety training, ISO Quality or Environmental refreshers or basic HR training.

If an organization is not meeting its objectives, it must understand why before simply throwing money at training. There could be other barriers to meeting objectives such as maintenance issues, procedural confusion, high turnover, unclear objectives, inadequate facilities, management problems or a lack of resources to name a few likely barriers.

The final step in the organization analysis is the manpower analysis. This simply involves determining how many employees in each job classification need training now and how many will need training in the next year, two years and three years. This becomes a key component of the action plan.

Task Analysis

The task analysis provides the information necessary to identify the specific content of the training programs for each job. First, conduct a job analysis which will include the required competencies identified earlier and how they relate to the specific job and tasks. Job descriptions, if available will usually help in this process. However, it is not

necessary to have formal job descriptions to do this effectively. Simply clarify and understand the expectations for each job, any procedures involved and observation of the actual work being done. Many times we find that the actual work being done has changed over time and the procedures and systems no longer match the work.

The task analysis can be accomplished simply by observing and discussing in a smaller organization, or by using a team of employees and a group process such as a storyboard in a larger organization. Where multiple locations are involved there needs to be a clear understanding among the locations of differences that may exist as well as the common factors.

Appropriate performance objectives for training programs should be identified as a part of the task analysis. These can then be used later to aid in assessing the effectiveness of training.

Person Analysis

The final phase involves the person analysis, which determines who needs training and what training is needed by each person. It is the result of the other three phases of the analysis and is what brings it all together into a functional plan to implement. However, it is sometimes the most difficult.

This can be done through performance reviews, work sampling, quality reports, safety assessments, scrap reports, or supervisory and employee knowledge of the specific situation. Proficiency patterns may differ greatly within an organization and even within a given department. This is especially the case when an organization has experienced turnover in several long term employees or in a specific department.

Sometimes an instrument like a “job factor analysis” can be utilized, and this generally works best with repetitive jobs. These are usually completed by both the supervisor and employee. Then differences in the two are addressed to identify gaps and how best to overcome the gaps.

While performance reviews may be used, if they do not contain specific information and results it is usually more effective to look to the actual economic indicators such as productivity, on time deliveries, customer satisfaction, scrap, quality, safety or other measures the organization considers important.

Implementation Plans

Developing the implementation plan to actually use the results of this analysis is often the most difficult part of the process and often gets short-changed for inexplicable reasons. Without a detailed implementation plan that is followed up on by management, the preceding efforts have been wasted.

This is where the current training programs that have been researched during the overall analysis link with the results of this comprehensive analysis. Many times training

programs have just “hung around” because they were effective ten years ago. It could be time to let them go. Also, now is a good time to review the objectives and content of current training modules or programs and be sure they address the required competencies for today’s reality. Results of these reviews are considered in developing the comprehensive implementation plan.

Specific training programs, events, modules or systems should be defined for each employee with a timetable for implementation. The objectives for each program should be defined along with the delivery method for the training. Remember, “Just in time” applies to training as well as to manufacturing. Employees should have a use for the training, it should not be done just to satisfy a plan or because someone thinks everyone needs to have it without a firm basis for that determination.

In finalizing the implementation plan, it is important to address effectiveness of the training and to provide feedback to all those who were involved in the total needs assessment process.

Proficiency tests are gaining in popularity, especially in computer based training programs, as a way to assess the effectiveness of training. The real issue is whether or not an employee knows how to do their job correctly and performs on the job. In some cases this is easy, such as when process simulations can be run or the job observed directly. In others, it may not be as easy, but can be addressed through meeting objectives or goals for the job. Some organizations take a “macro” view of training effectiveness by simply looking at customer satisfaction indicators and on-time deliveries of products or services that meet customer requirements.

Also, remember the ultimate question: “Can he/she perform this job if their life depended on it?” If the answer is “yes” a training program is not needed. If the answer is “no” then training is required. If the answer is “yes” but it is not being done, the problem will not be corrected by training. There are other barriers to performance that must be identified and corrected.

Benefits

By following a systematic process an organization can prepare a development plan that meet its needs now and in the future. Careful documentation of the process and records of training can be used to satisfy ISO 9001, ISO 14001 and certain OSHA and GMP requirements. Being specific with needs, objectives, content, delivery and documentation enables the organization to focus on being the low cost, high quality producer.