

Training Effectiveness

Accounting for Individual Characteristics and the Work Environment

by J. Bruce Tracey and
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To ensure the effectiveness of training programs, hospitality managers should look beyond the usual factors (needs analysis, program design, and implementation). In addition, managers must examine such external matters as the work environment and the characteristics of the trainees themselves.



Training is widely recognized as an important activity for hospitality organizations. Even in the face of the unstable economic climate of the early 1990s, many hospitality organizations recognized the importance of training and committed a great deal of money to training programs. The Mirage Hotel and Casino in Las Vegas spent about

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\$5.5 million on training in 1993, and ARAMARK spent over \$25 million during the same time period. These financial commitments to training were made in direct response to the multitude of challenges that almost all companies are confronted with today: changing demographics, new technology, increased competition, and downsizing, among others. Summarizing the point in a *Cornell Quarterly* article, Opryland's director of training, Marc Clark, wrote: "Training is a key to the success of the Opryland Hotel. From orientation on a new employee's first day to ongoing seminars in the employee's work area, at Opryland we stress training and education at every level."¹

The traditional view of training encompasses the following three features: (1) a formal and systematic assessment of training needs; (2) the use of appropriate training methods to deliver content based on needs; and (3) a comprehensive evaluation of the program using several different evaluation criteria and strategies.² While this perspective is quite useful, the focus is often too narrow. The emphasis is on training-specific features and excludes consideration of factors outside the training domain that may influence the effectiveness of any training effort.

It seems intuitively obvious that an employee's work attitudes influence preparation for a particular training program, or that an organization's reward system may affect the extent to which trainees use their newly acquired knowledge and skills. However, these and other

variables have been given little attention in the training literature, and training researchers in particular have not focused much attention on factors outside the learning or training environment.³ In fact, individual and work-related factors that are not directly associated with training have only recently been empirically studied.⁴

It should be noted that the instructional design and education literature has addressed the importance of various individual and contextual (i.e., classroom) factors that influence adult learning.⁵ In addition, the training literature includes a great deal of information on the importance of individual and contextual factors for performance during training.⁶ However, the focus remains limited to training-specific features that may influence training performance—typically, those factors that influence knowledge and skills that are acquired during training. We believe that factors outside the learning or training environment influence training performance, preparation for training, and skill transfer.

This paper describes individual and work-environment characteristics that are important to trainees' preparation for training, to knowledge and skill acquisition during training, and to subsequent transfer of training to the job. First, we present a brief description and critique of the traditional view of

training. Then, on the basis of interviews with training practitioners and the results from recent training research, we present a discussion of some of the individual and work-related characteristics that may influence training success or failure.

Traditional View of Effective Training

The traditional view of training begins with a needs analysis to ensure that a training program addresses substantive issues and problems. A thorough needs analysis employs multiple data-collection methods (e.g., observation, surveys, interviews, and individual and organizational performance) to determine where in the organization training is needed, which individuals require training, and what knowledge or skills are required. When this fundamental step is omitted, management may inadvertently believe training is needed when the symptoms stem from a different problem. For example, management may assume that poor guest service among front-desk employees is due to a lack of appropriate interpersonal skills. However, careful investigation may show that inappropriate staff scheduling, low employee morale, inadequate compensation, or lack of resources is the real cause of the problem.

Once training needs are identified, concrete learning objectives must be established and appropriate training methods defined and implemented. The training methods depend on the program's objectives. Methods include on-the-job training and on- or off-site classroom instruction through such means as lectures, demonstrations, exercises, games, role plays, and simulations. Each of these methods has its own advantages and is best employed under circumstances dictated by the desired outcomes.⁷ Moreover, the

¹ Marc Clark, "Training for Tradition at Opryland Hotel," *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 31, No. 4 (February 1991), pp. 46-51.

² K.R. Wexley and G.P. Latham, *Developing and Training Human Resources in Organizations* (New York: Harper Collins, 1991). See also: Florence Berger and Bonnie Farber, *The On-Track Trainer* (Ithaca, NY: Cornell School of Hotel Administration, 1992).

³ R.A. Noe, "Trainees' Attributes and Attitudes: Neglected Influence on Training Effectiveness," *Academy of Management Review*, Vol. 5 (1986), pp. 391-387.

⁴ S.I. Tannenbaum and G.A. Yukl, "Training and Development in Work Organizations," *Annual Review of Psychology*, Vol. 43 (1992), pp. 399-441.

⁵ See: R.M. Gagne and L.J. Briggs, *Principles of Instructional Design*, 2nd Edition (New York: Holt, Rinehart, & Winston, 1979); and R.M. Gagne and W. Dick, "Instructional Psychology," *Annual Review of Psychology*, Vol. 34 (1983), pp. 261-295.

⁶ Tannenbaum and Yukl, 1992.

⁷ Wexley and Latham, 1991.

When evaluating the effectiveness of training, individual employee characteristics and the work environment must be considered along with program content, design, and implementation.

trainer's own personal characteristics and qualifications have a substantial impact on the presentation, the trainees' receptiveness, and the extent to which the trainees learn from the experience.⁸

Finally, training efforts must be systematically evaluated to determine whether the desired outcomes have been achieved. Donald Kirkpatrick, a pioneer in the field of training evaluation, established four primary criteria for evaluating the effectiveness of any formal or informal training program.⁹ These criteria are (1) reactions to training (trainees' affective responses to the training experience and their perceptions of its value); (2) knowledge acquisition (the extent to which trainees know more after training than before); (3) changes in job-related behavior and performance that result from training; and (4) improvements in organizational-level results, such as increased customer satisfaction and greater profitability.

While Kirkpatrick has provided a comprehensive and user-friendly guide to evaluating training programs, few hospitality organizations have made full use of this tool. A recent article by Conrade, Woods, and Ninemeier indicated that fewer than 10 percent of the hospitality companies surveyed conducted formal evaluations of their training programs.¹⁰ In their study, Conrade and his colleagues surveyed a number of corporate executives, general managers, department heads, supervisors, and employees of lodging

companies to examine their perceptions of the value of training. In addition, the authors attempted to examine the relationship between perceptions and actual training expenditures. Although it may be useful to know whether perceptions about training are consistent with companies' financial commitments to this activity, we believe the study addressed the wrong question. The question of whether corporations were spending money in accord with their beliefs on the importance of training begs the issue of what makes training effective.

We observe that those companies might have difficulty assessing training's effectiveness. To begin with, the findings were based primarily on the respondents' personal experiences and "common sense." Since under 10 percent of the participating organizations actually conducted formal and systematic assessments of their company's training programs, little can be said about the direct impact of training, regardless of the respondents' perceptions about the value of training. The authors did not directly examine the relationship between perceptions about the value of training and actual training expenditures. The authors reported that 62 percent of the companies they surveyed spent between 0.5 and 1.0 percent of their payroll on training activities.

We believe the training question goes beyond how much is spent. Simply because an organization spends a certain percentage of its payroll on training does not tell us whether that money is well spent. The study by Conrade, Woods, and Ninemeier did not make that assertion, but the assumption appears to be implicit in their analysis.

The spending question puts the cart before the horse. Such an approach suggests that if desired results are not achieved with a considerable level of training expenditure, man-

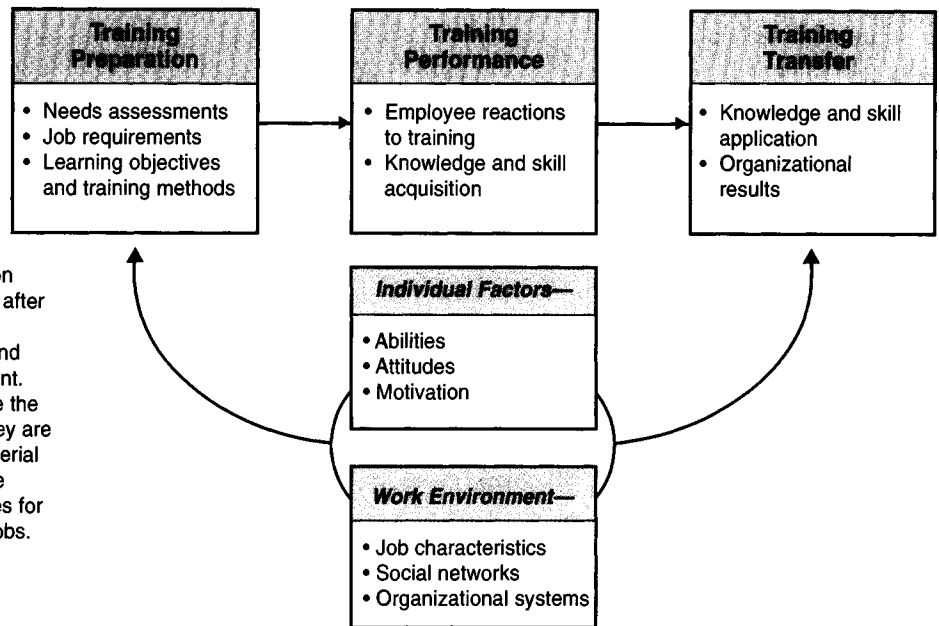
⁸ See, for example: Berger and Farber, pp. 132-138.

⁹ Donald L. Kirkpatrick, "Evaluation of Training," in *Training and Development Handbook: A Guide to Human Resource Development*, ed. R.L. Craig (New York: McGraw-Hill, 1967).

¹⁰ George Conrade, Robert H. Woods, and Jack D. Ninemeier, "Training in the U.S. Lodging Industry: Perception and Reality," *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 35, No. 5 (October 1994), pp. 16-21.

Exhibit 1 Factors influencing training effectiveness

Training effectiveness is dependent on events that occur before, during, and after the actual training, and is influenced greatly by individual characteristics and factors related to the work environment. For example, employees may not use the information they learn in training if they are overworked or unmotivated, if managerial support for training is lacking, or if the organization fails to reward employees for transferring new knowledge to their jobs.



agement will search for a reason for the failure, probably focusing on the root processes of training: needs assessment, training design, and implementation. Unquestionably they should examine such factors, because such training-specific information can go far toward explaining a training program's failure.

Nevertheless, the reasons for failure may actually have nothing to do with the training itself, because other variables—outside of the training program—affect training effectiveness. This is why we believe the time has come to go beyond such research as that presented by Conrade *et al.* Their point was a simple one: to wit, it appears that the industry does not emphasize training, based on expenditure levels. The problem is that training could be a success by all commonly used measures, but the job performance may not improve because external factors stand in the way. As an example of an external factor, the failure to link rewards with the use of newly acquired knowledge and skills on the job is commonly responsible for the lack of training

transfer.¹¹ It stands to reason that employees will find it difficult to apply their training if there is no incentive to do so. Let us examine the factors outside the training domain that appear to influence training preparation, performance, and transfer.

Individual Characteristics and the Work Environment

To ascertain which individual and work-related factors may be important in training transfer, we conducted interviews with 21 training and human-resources professionals from ten diverse, service-sector organizations of varying size (e.g., large, multinational telecommunications firm; 500-room resort property; regional hotel management company). Our primary question was: Besides training content, design, and implementation, what additional factors can influence the effectiveness of training in your organization?

¹¹ T.T. Baldwin and J.K. Ford, "Transfer of Training: A Review and Directions for Future Research," *Personnel Psychology*, Vol. 41 (1988), pp. 63-105.

We also examined prior research to determine whether the findings have given any support of the importance of individual and work-related factors for training effectiveness. As noted above, research in this area is relatively new. However, we did find some evidence that showed a link of individual and work environment characteristics with an employee's training preparation and performance, as well as transfer of knowledge.

Our interviews and research review revealed at least two general factors beyond training content, design, and implementation that probably influence the effectiveness of training. Those factors are individual characteristics and the work environment (Exhibit 1).

Individual Characteristics

Almost universally, the training professionals stated that an individual's ability to learn and acquire new knowledge and skills can have a direct influence on training preparation and performance. Many of the training programs designed and implemented by those we inter-

viewed, particularly supervisory and managerial programs (e.g., leadership, strategic-action planning), require participants to synthesize and evaluate complex information. If trainees possess critical-reasoning, problem-solving, and decision-making abilities, learning will be relatively quick and efficient. Consequently, a trainer should account for individuals' abilities in the program design and implementation.

We acknowledge the difficulty of measuring many kinds of abilities. Nevertheless, an individual's ability is assessed in some manner during the selection process, if nowhere else. One of the primary objectives of selection is to maximize the person-job "fit."¹² To make sound selection decisions we must know something about the knowledge, skills, and experience required to perform the essential tasks, duties, and responsibilities of the job. For the purposes of training, we can use the applicant information gathered during the selection process to assess a person's "trainability." This information may also be useful for revising programs to make them more "learner-friendly." In addition, this information may also be useful in determining whether a particular individual may benefit from existing training programs, or should be directed to specialized programs that are designed to accommodate the individual's limitations.

An individual's attitude toward work can also affect her or his preparation for and application of training. If individuals possess a high degree of commitment to their jobs and the organization, it is likely they will view training as worthwhile and be committed to the opportunity to acquire new knowledge and skills. Accordingly, such individuals will take the necessary steps to pre-

pare for training, such as discussing with their immediate supervisor the ways in which training may enhance job performance. This commitment may also influence one's willingness to apply the newly acquired knowledge and skills on the job after training has been completed. As such, it is necessary to identify individuals' organization and job commitment so appropriate action can be taken to enhance unduly low commitment levels.

A third individual characteristic that was identified as important for training effectiveness was motivation. Several training practitioners stated that motivated trainees take a more active role in training and get more from the experience than individuals who are not motivated. In addition, the research literature provides some convincing evidence that those who are motivated to attend training are more likely to learn and apply their newly acquired knowledge and skills once training has been completed. For example, a recent study by Mathieu, Tannenbaum, and Salas showed a direct link between trainees' pretraining motivation and the learning they acquired during training.¹³

Enhancing motivation. Managers can enhance their employees' motivation for training, but to do so they must understand their employees' values and needs. Individuals enter training with differing expectations and desires.¹⁴ As such, it is vital for managers to determine which extrinsic factors (e.g., monetary rewards) and intrinsic factors (e.g., autonomy) motivate each

employee.¹⁵ To determine which factors may be relevant, managers must continuously observe and interact with their employees.

Managers can motivate employees for training by making the critical link between employee needs and training outcomes. As an illustration, suppose an employee participates in an organization-sponsored customer service skills training program. If that employee values promotion, the manager must clearly communicate to him or her that using the newly acquired customer-service skills will contribute to higher levels of overall job performance, and in turn, that exceptional performance may result in a promotion. If employees recognize that training will enable them to achieve their goals, they will be more likely to participate fully in training and use their newly acquired knowledge and skills in their jobs.

To identify and understand whether employees are prepared for training, managers should ask the following questions:

- How trainable are these employees?
- What types of cognitive and learning abilities do employees possess?
- What are the employees' feelings toward the organization?
- Do employees care about the organization's long-term prospects?
- Would these employees accept different job assignments to keep working for the organization?
- What are employees' attitudes toward their jobs?

¹³ J.E. Mathieu, S.I. Tannenbaum, and E. Salas, "Influences of Individual and Situational Characteristics on Measures of Training Effectiveness," *Academy of Management Journal*, Vol. 35 (1992), pp. 828-847.

¹⁴ A. Hoiberg and N.H. Berry, "Expectations and Perceptions of Navy Life," *Organizational Behavior and Human Performance*, Vol. 21 (1979), pp. 130-145.

¹⁵ For an example of monetary motivation, see: Timothy Weaver, "Theory M: Motivating with Money," *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 29, No. 3 (November 1988), pp. 40-45. Motivating factors are discussed in: Robert C. Mill, "Upping the Organization: Enhancing Employee Performance through an Improved Work Climate," *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 25, No. 4 (February 1985), pp. 30-37.

¹² R.D. Gatewood and H.S. Field, *Human Resource Selection* (New York: Dryden, 1990).

- Do the employees feel that attending training is a reward for their efforts, or a punishment for performing below standard?
- Do employees feel that successfully participating in training will prepare them for increased job responsibilities?
- Are employees willing to apply what they learn in training?

If the answers to these questions are negative, then the time, energy, and resources devoted to training will be wasted on unprepared, unwilling, and unmotivated employees.

Work Environment

The second major factor that may influence training effectiveness beyond content, design, and implementation, is the work environment.¹⁶ The training professionals we interviewed and recent research literature both indicated that the work environment may have a significant impact on one's preparation for and transfer of training. Lewis Forrest, for one, has argued that hospitality managers must be concerned with factors such as individual perceptions about the work environment and systems as they influence learning and performance.¹⁷ Indeed, a number of research studies support this argument. A study by Baldwin and Magjuka examined the effects of three organizational "signals" about the relevance of training. They found that trainees reported greater intentions to use their training when they received relevant information before a training program, recognized they would be held accountable for learning, and perceived the training

as mandatory.¹⁸ Another study by Tracey, Tannenbaum, and Kavanagh found a direct relationship between an organization's culture and climate and the use of skills that were acquired in a formal training program.¹⁹ The two studies demonstrate that the work environment may have a significant impact on preparation for training and the eventual transfer of training to the job.

Essential components. The training professionals and the recent training research suggested at least three major components of the work environment that may support or impede training effectiveness. Job characteristics represent the first element of the work environment that can influence training effectiveness. Many jobs in the hospitality industry, for instance, embody an infinite number of demands and pressures, which, in turn, can have a significant impact on the extent to which individuals can adequately prepare for training or use newly acquired skills. An individual cannot apply what has been learned if she is continually engaged in "fire-fighting" activities, for instance, or if the daily routine is so hectic that she cannot practice those new skills. To transfer skills after training, employees must have an opportunity to practice and refine them. Otherwise, any knowledge learned will likely be forgotten.

Social networks are the second major element of the work environment that can influence training effectiveness. Organizations' social norms and values that support learning can have a positive influ-

Individuals enter training with different expectations and desires. As such, it is vital for managers to determine which extrinsic and intrinsic factors motivate each employee by continuously observing and interacting with them.

¹⁶ See, for example: John B. Knight and Charles A. Salter, "Some Considerations for Hospitality Training Programs," *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 25, No. 4 (February 1985), pp. 38-43.

¹⁷ Lewis C. Forrest, *Training for the Hospitality Industry*, 2nd Edition (East Lansing, MI: Educational Institute of the American Hotel and Motel Association, 1990).

¹⁸ T.T. Baldwin and R.J. Magjuka, "Organizational Training and Signals of Importance: Linking Program Outcomes to Pre-Training Expectations," *Human Resource Development*, Vol. 2 (1991), pp. 25-36.

¹⁹ J.B. Tracey, S.I. Tannenbaum, and M.J. Kavanagh, "Applying Trained Skills on the Job: The Importance of the Work Environment," *Journal of Applied Psychology*, Vol. 80 (1995), pp. 239-252.

ence on an individual's willingness to attend and learn during training, as well as to transfer learning back to the job. In addition, the use of training may be facilitated when managers or peers openly encourage the use of newly acquired knowledge and skills.²⁰ The positive, open support of training tells employees that the acquisition and application of new knowledge and skills is important and beneficial. However, if managers or peers downplay, ridicule, or pay mere lip service to training, individuals will go into training with negative attitudes, will not put forth effort during training, and will not incorporate what they have learned in their jobs.

Formal organizational systems, particularly the appraisal and reward systems, represent the third element of the work environment that can influence training effectiveness. The training professionals definitively stated that there must be some type of accountability for trainees to use their newly acquired knowledge and skills. Performance-appraisal systems should also be used to account for the training employees are expected to demonstrate. If trainees are expected to demonstrate their new knowledge or skills, then appraisal forms and guidelines must comprise that training. Those who successfully apply their training should be rewarded. Compensation and benefits systems must provide valued incentives to those who demonstrate what they have acquired through training. Finally, additional learning opportunities (e.g., mentoring programs, apprenticeships) and support for external professional development activities (e.g., attending professional conferences, continuing education workshops and seminars) can also influence the

²⁰ Tracey *et al.*, pp. 239–252; and J.Z. Rouiller and I.L. Goldstein, "Determinants of the Climate for Transfer of Training," *Human Resource Development Quarterly*, 4 (1993), pp. 377–390.

effectiveness of training, especially when these learning opportunities complement what has been gained through training.

To determine whether the work environment is conducive for training effectiveness, managers should consider the following questions.

Job Characteristics:

- Are job assignments challenging and designed to promote personal development?
- Do work assignments include opportunities to learn and apply new techniques and procedures?
- Is there flexibility in the way tasks can be performed?
- Are there opportunities to practice new ways of performing job responsibilities?
- Is continuous improvement an essential part of everyone's job?

Social Networks:

- Do supervisors support and encourage employees to apply knowledge and skills acquired during training?
- Do supervisors provide recognition to those who apply new skills?
- Do employees at the same peer level encourage each other to apply knowledge and skills acquired during training?
- To what extent do employees share information about new methods for performing work and solving problems?

Organizational Systems:

- Are performance-appraisal systems designed to account for the use of knowledge and skills acquired during training?
- Does the organization provide rewards and incentives for acquiring and using new knowledge and skills in one's job?
- Does the organization have clear policies to reinforce the importance of continuous learning?
- Are employees provided with the necessary resources to acquire and use new knowledge and skills?

- In addition to training, does the organization provide other types of opportunities to acquire new knowledge and skills?

Not in a Vacuum

Training does not occur in a vacuum, but it is inextricably related to factors beyond the immediate training context. Simply put, effective training depends on events that occur before, during, and after a training program, which do not necessarily relate directly to training activities. Second, it highlights the importance of examining factors beyond those associated with the traditional view of effective training that may influence the extent to which individuals ultimately transfer training to their jobs.

It should be evident that there is more to training than the assessment of needs, the design and implementation of programs, and proper evaluation. For training efforts to be fully realized we must look beyond content, design, and implementation issues, and examine the individual and work-related factors which also have a significant impact on training preparation, performance, and transfer. If properly designed, executed, and supported, training can be an invaluable investment for organizations that desire to develop and maintain skilled employees. An understanding of these variables can be used to guide managers toward techniques for facilitating the application of newly acquired behavior and skills, and thus enhance the likelihood that money, time, and effort devoted to training efforts is indeed well spent.

Practitioners and researchers alike must embrace a more comprehensive view of this very costly, yet critically important human-resources function, so that they understand how and why training can be made to succeed. **CQ**