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ABSTRACT

This report is designed to provide human resource development professionals and their managers with a framework to help justify the costs of structured on-the-job training (OJT). The report begins by defining OJT as the one-on-one process of providing the knowledge and skills to perform a specific task within a job. These five features of OJT are described: OJT (1) occurs in the actual workplace; (2) makes use of training objectives and plans; (3) requires the active involvement of a trainer; (4) uses printed materials and job guides; and (5) employs a systems approach. The report goes on to suggest selection criteria when considering the use of structured OJT, including demands of the workplace, types of training outcomes, trainee characteristics, costs of the method and of the performance problem, and level of organizational commitment. Next discussed are the benefits of structured OJT in four major areas: effectiveness, efficiency, employee development, and organizational climate. Finally, a case-study example of the use of structured OJT in a large manufacturing organization is described, and the report concludes with brief discussions of future research opportunities. Appendixes include a list of 21 references, a comparison of unstructured and structured OJT, and tables of structured OJT selection criteria and structured OJT process. (YLB)

Structured On-The-Job Training

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Training and Development

Research Report

Graduate Program in Training and Development
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Introduction

Why is it that simple ideas are often the most complex to implement? Structured on-the-job training is a simple idea that makes good economic and humanistic sense. However, to get the commitment for implementing this approach, human resource development (HRD) professionals must sometimes "jump through hoops," just to get management acceptance.

As the author of this report so clearly states, structured OJT, similar to the "back to basics" skills of yesteryear, has the potential to take us into the global competitive marketplace of tomorrow. With the movement toward focused factories, zero-defect manufacturing, just-in-time manufacturing, vendor certification, Malcolm Baldridge awards standards, and EC92 impact, the shoot from the hip methods of unstructured OJT have no place in the expanding globalization effort.

The following report will provide a framework for you, the HRD professional and your managers, to help cost-justify this back-to-the-future training approach. So sit back and read through this approach of addressing individual and organizational performance problems.

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The most commonly used, and possibly abused, training method is on-the-job training (OJT) (Goldstein, 1986). It has been estimated that even in those organizations that invest a large portion of their human resource budgets in off-the-job training programs, 60% of all training still occurs on the job (Wehrenberg, 1987). OJT has been reported as the most frequently used training method across most job types and status levels, including skilled and semi-skilled industrial, sales, and supervisory-management positions (Utgaard & Davis, 1970; Churchill, Ford & Walker, 1985; Kirkpatrick, 1985).

In general, OJT involves assigning a new employee to accompany an experienced employee, either a peer or a supervisor, to learn the ropes in the actual workplace. New employees are considered those persons who have been recently hired, transferred, or promoted into a position and, thus, lack the skill and knowledge to perform some aspect of a job. The experienced employee demonstrates and discusses these new areas of knowledge and skill and then provides opportunities for practice and feedback. The experienced employee also plays some role in identifying the tasks to be learned and establishing the criteria for determining competent performance of those tasks. The process is repeated until all the new aspects of the job have been mastered.

The focus of this report is *structured* OJT, a training approach that, when used wisely and appropriately from a systems perspective, can be as effective as many off-the-job

training approaches. Many practitioners are mistaken in their belief that OJT is unstructured in nature. If informed decisions are to be made about the design and use of structured OJT, then there is a need for more information about this training approach, relevant to human resource development (HRD).

This report has been organized to achieve five goals: 1) define structured OJT; 2) identify selection criteria; 3) discuss the benefits of structured OJT; 4) describe a case-study example; and, 5) predict future research opportunities. This chapter is based upon the author's experiences setting up structured OJT in several organizations and a review of the human resource development literature.

Definition of Structured OJT

Similar to other training approaches, OJT can be divided into two primary forms: unstructured and structured (Cullen, Sawzin, Sisson, & Swanson, 1976). Unstructured OJT requires the trainee to "learn by doing" or "just pick it up" from an experienced employee during the work day. The trainee usually receives limited advance information about the tasks to be learned and how these tasks might relate to other parts of the job.

Unstructured OJT has received much criticism for being haphazard, incomplete, and overly reliant on the trainer's interpersonal skills. It also causes disruptions in the workplace. The trainee is thrust onto the experienced employee without notice, making the trainee seem more of a

hindrance since training will undoubtedly take time away from the experienced employee's primary goal--production. How to reconcile the conflict between allocating sufficient time to train new employees versus maintaining the production levels of experienced employees is a problem in many organizations. This conflict seems to arise more frequently when production lead-time is short or when piece-rate or sales-commission compensation systems are used.

Structured OJT, on the other hand, explicitly defines the knowledge and skills required of new employees in advance. The results are more predictable since a systems approach was used to develop all aspects of the training program--a process that requires the planned involvement of many different individuals in the organization, including the HRD professional (Jacobs & McGiffin, 1987). Table 1 summarizes the differences between unstructured and structured OJT.

Specifically, structured OJT is the one-on-one process of providing the knowledge and skills to perform a specific task within a job and has the following five features:

- occurs in the actual workplace,
- makes use of training objectives and plans,
- requires the active involvement of a trainer,
- uses printed materials and job guides, and
- employs a systems approach.

Occurs in the actual workplace. With few exceptions, structured OJT is conducted in the actual workplace. Most

other structured training methods are conducted in off-the-job settings. Instructional contiguity is emphasized by having new employees observe the task, immediately repeat the task, and receive feedback about their performance of the task in the actual work setting. This feature appeals to many HRD professionals who view transfer of training as a crucial factor for training effectiveness.

Apprenticeships and mentoring programs are also conducted in the workplace, but they differ from structured OJT as defined here. Apprenticeships enable individuals to become skilled in one of many skilled trade areas, as opposed to learning specific tasks within a job. Apprentices receive shop instruction from a journeyman and attend formal instruction from a local technical school--a process requiring from two to four years to complete, depending on the trade. Mentoring programs are more career oriented in focus by clarifying the unstated norms, expectations, and culture of an organization--information that eases the new employee's continued advancement within the organization (Gilley and Eggland, 1989).

Uses training objectives and plans. Similar to other forms of structured training, structured OJT uses training objectives to describe the expectations of the new employee after the training program. Training objectives are statements about the conditions, behaviors, and standards that constitute the trainee's performance of a specific task. Training plans identify all the tasks within a job that

trainees must master, each of which may be accomplished using means other than structured OJT. Training plans are often displayed in the work area on a wall-chart, listing the names of employees along one axis and the tasks to be mastered along another. Check-offs in the respective cells track the progress of individuals and provide a basis for setting goals and obtaining feedback about job performance.

Requires the active presence of a trainer. Use of experienced employees as trainers is an important feature of structured OJT. However, not all experienced employees should be considered as potential trainers. Prerequisites for becoming a qualified trainer include length of time on the job, evidence of exemplary performance, interpersonal skills, and predisposition to share job knowledge and experience. Knowledge and skills in other areas are also required, such as use of an OJT delivery process, coaching skills, and questioning abilities. Special trainer-training sessions are usually conducted for this purpose.

Uses printed materials and guides. Printed materials such as procedure lists, troubleshooting tables, decision guides, and diagrams are an essential feature of structured OJT, and are used by both the trainer and the trainee during the training sessions. Printed materials are important for three reasons. First, they require that the training content be separated into easily understood "chunks" of information; that is, the discrete steps, safety and quality points, and problems that make up the task. Second, they help ensure

greater consistency in the way the trainer presents the training and in the way new employees are expected to perform the task afterward on the job. Third, they serve as job performance guides for reference after the training has been completed or as self-study materials by the trainee when a trainer is not immediately available.

Employs a systems approach. At least two related implications result from using a systems approach. First, it ensures that the training was orderly developed, which includes the following phases: an in-depth analysis of the entire problem area, tasks, and trainees; development and try-out of the solutions before full implementation; and, evaluation and improvement of the system. Second, it recognizes that the result of this process should be considered more than simply a training program. The perspective should be that the existing or anticipated problem exists within a larger context, a human performance system, requiring the consideration of an array of solutions, including training (Jacobs, 1988).

Selection Factors

In general, training programs are the appropriate solution only when a lack of knowledge, skills, or attitudes exist among persons in a work situation. The specific method of training can be selected after this initial determination has been made. Structured OJT is appropriate for use in some training situations, but not for all. Selection of a particular training method involves combining the dual

influences of considering a set of objective criteria and professional judgment. Table 2 presents suggested selection criteria when considering the use of structured OJT.

Demands of the workplace. Possibly the most critical selection factor is the demand of the workplace. If structured OJT interferes with the on-going work, then the training obviously has to assume a secondary role, lowering its potential effectiveness. When this occurs, an alternative training method should be considered. For example, structured OJT would be inappropriate where use of specialized equipment for training would seriously disrupt production. Or, structured OJT would be inappropriate where hazardous materials must be handled, putting untrained employees at risk. Finally, structured OJT would be inappropriate where the workplace is inherently too noisy, stress-inducing, or activity-oriented--all can easily distract the attention of the trainer and trainee.

Some caution, however, should be taken when considering the demands of the workplace. All workplaces can be considered inconvenient training settings, leading many managers and supervisors to prefer off-the-job training for their new employees. Deciding whether a particular workplace is appropriate for structured OJT requires consideration of several selection criteria, in addition to the preferences of the managers or supervisors involved. Involvement of these individuals in the planning process helps allay their immediate fears of workplace disruption.

Types of training outcomes. Structured OJT seems best suited where the training outcomes are a close match with the outcomes expected when the trainees work independently afterward on-the-job. These skill-oriented outcomes might involve the following activities: doing the steps of a procedure, conducting a quality inspection, troubleshooting problems, or identifying parts of a process. On the other hand, structured OJT seems less well-suited to helping trainees understand the cognitive aspects that underlie a task. These training outcomes might best be presented in a group-setting off the job site, in which concepts, principles and, examples and non-examples can be introduced.

These selection guidelines are based on a study by Kondrasuk (1979), who found that managers retained MBO-related information longer when using an off-site seminar than when the same topics were presented using on-the-job coaching. The resulting discussion in the literature, especially the points made by Rackham (1979), concluded that, in general, off-site training methods were better for attaining "knowledge" outcomes while on-the-job training methods seemed better for "skill" outcomes. Adhering strictly to these rules, however, can unnecessarily limit creative instructional planning. For example, structured OJT might be integrated with other training methods, such as a presentation, when trainees are required to learn abstract concepts. Using structured OJT could provide trainees with more concrete examples and non-examples of the concepts,

after the definitions and features have been first presented in the group setting.

Trainee characteristics. Trainee characteristics refer to those individual aspects which might in themselves deter or help the effectiveness of structured OJT. Trainee characteristics can describe something that is unique about one individual or that can be generalized to describe groups of individuals. Three categories of trainee characteristics will be discussed: prerequisite knowledge and skills, previous success in learning situations, and personality variables.

Regardless of the training method selected, the most effective and efficient training occurs when trainees have the prerequisite knowledge and skills. Having the prerequisites allow the trainer to avoid long explanations and discussions, a situation that should be avoided at all costs. The workplace is not the appropriate setting for having the trainee learn large amounts of new background information.

Structured OJT seems most preferable, though not exclusively, for those persons who have experienced limited successes in traditional classroom settings. Often these persons will exhibit an unwillingness to learn new information before the training or become physically anxious or defensive during the training. Structured OJT can counteract these problems since the content is relevant to job expectations--that is, no extraneous content is included,

abstract concepts and principles are made more concrete, and a high degree of active trainee responding is required. All can result in higher levels of trainee motivation (Walker, 1965).

Finally, personality variables refer to one of several psychological constructs that can be related to different training outcomes. Cronbach and Snow (1977) have shown that some persons will learn more and better than others, merely because the training method used was better suited to their preferred style of learning, based on some personality variable. While many of these relationships remain under study, at least one linkage of interest can be described. Field dependent individuals--persons who have less ability to disembed simple figures from a complex field--have greater difficulty in identifying the criterial cues during concept attainment tasks and rely more on others to help them structure their environments, compared to field independent individuals (Misanchuk & Schwier, 1981). One might predict that since structured OJT imposes a high degree of structure on how to do tasks, field dependent trainees would benefit more from this training method than field independent trainees. Many of these relationships remain speculative, but the notion of attempting to match people with their preferred methods based on some stable psychological construct, remains an important selection consideration.

Costs of the method and performance problem. Cost factors can be divided into two considerations: cost of the

training method and cost of the performance problem. Mangum (1985) states that, all things being equal, if training is to be provided to a large number of individuals, then the fixed costs of classroom-based training can be spread across many trainees, making it more economical than OJT. Conversely, if fewer trainees are involved, then OJT becomes more economical. These basic principles seem true, making the basic costs of developing and delivering a particular training method an important selection factor for consideration.

More recently, some HRD professionals have proposed an additional criterion when considering cost (Swanson & Gradous, 1988). This criterion involves comparing the costs of different training methods, but only after the cost of the performance problem is first considered. The reasoning here is that the costs of different training methods are relative to the benefits expected to be received after their use. Consider the situation where the costs of unstructured OJT are compared with those of structured OJT. Unstructured OJT would be less costly of the two approaches because fewer resources would be invested up-front for implementation. Yet, one could show that unstructured OJT is more costly in the long-term. By using structured OJT, trainees could acquire the job knowledge and skills faster, resulting in fewer errors during their first few months on the job. Making the employees more productive in less time using structured OJT would discredit any cost advantage related to

using unstructured OJT.

Level of organizational commitment. Structured OJT requires a high level of commitment from many different individuals, representing both line and staff positions. For example, executive-level staff must be prepared to commit financial and human resources to allow trainers time from their regular job duties to help prepare, deliver, and evaluate the training. Managers also might be expected to implement incentive systems that recognize and possibly reward the achievements of trainers and trainees. Supervisors must be prepared to either function as trainers themselves or provide support to others who would be the designated trainers. Hourly-level employees must be prepared to be trainers or participate in the analyses of the tasks.

Support staff must be involved in the effort, including engineers, safety specialists, and the HRD professional. The HRD professional frequently assumes the role of project manager. Some organizations also will designate an individual, usually an exemplary trainer from the line, as the structured OJT coordinator, to update the printed materials, maintain a data-base of trainees' progress, and provide training and feedback to new OJT trainers. If this level of commitment and support is not forthcoming, then another training method, or even a review of the performance problem, might be in order.

Benefits of Structured OJT

Benefits of using structured OJT can be categorized into

four major areas: effectiveness, efficiency, employee development and involvement, and organizational climate.

Effectiveness. Effectiveness is based on whether OJT will help trainees achieve the outcomes as planned and whether the OJT can do this better than another training method. Making a definitive conclusion about these questions is difficult because of the limited number of empirical studies. However, the results of the available studies suggest that trainees receiving structured OJT can quickly learn information and transfer that information to meet on-the-job requirements. Some studies have shown that OJT is superior when compared to another training method. For example, several military studies have shown that trainee performance is superior using OJT when compared with providing the same technical information in a classroom setting (Black & Bottenberg, 1973). Gomersall and Myers (1966) found the following results when OJT was used to help accomplish job enlargement goals: decrease in training time, lower training costs, fewer incidents of absenteeism and tardiness, fewer rejects, and lower production costs. Nemesh (1971) showed that typewriting speed and accuracy were greater when community college students received OJT than when they received traditional copy materials. Cullen et al. (1976) showed that college students receiving structured OJT had fewer production losses when operating a plastics extrusion machine than those receiving unstructured OJT.

Jacobs and McGiffin (1987) showed that lab technicians

could successfully master 18 lab tests when supervisors were used as structured OJT trainers. Finally, Wexley (1988) discussed how OJT might be made more effective by understanding the congruency of trainees' descriptions of their managers (trainers) and managers' self-descriptions. When these measures are correlated, then trainees' also report higher satisfaction about their work and the supervision received, factors that can result in more effective OJT.

Additional support for the effectiveness of structured OJT, although indirect in nature, comes from Bloom (1984) and his colleagues. Their analyses of studies from the past twenty years or so have shown that mastery learning strategies have improved measures of student performance on the average by one standard deviation, when compared to traditional instructional strategies. One-on-one tutoring strategies, on the other hand, have been shown to be superior to mastery learning strategies, improving measures of student performance on the average of two standard deviations, when compared to traditional strategies. The problem from their perspective is how to identify and apply the advantages found in tutoring situations to mastery learning situations. From another perspective, however, these findings further advance the potential effectiveness of one-on-one tutoring situations, which are similar to OJT.

Efficiency. Efficiency is based on the questions of whether OJT requires less development time and whether it

requires less delivery time to achieve the same objectives. No studies were found that document the amount of time required to develop structured OJT. Yet, it is unlikely that the time to develop structured OJT should differ from the time required to develop any other type of structured training. Thus, no development-time advantage was found for structured OJT.

On the other hand, there is an advantage when efficiency is defined as requiring less delivery time to achieve the same outcomes. The studies asking this question have been limited, for the most part, to comparing the delivery time required for structured OJT versus unstructured OJT. Jacobs and McGiffin (1987) showed that using structured OJT versus unstructured OJT reduced the time required for Lab Technicians to master 18 critical lab procedures to 3 weeks from 12 weeks. Cost savings of over for the nine-week difference in training time were calculated. Cullen et al. (1976) showed that training time was reduced to 4.6 hours from 16.3 hours using structured OJT versus unstructured OJT. Numerous military studies have also shown the case for increased efficiency of OJT (Black & Bottenberg, 1973).

In addition, anecdotal evidence gathered by the author during the past five years also support the case for the increased efficiency of structured OJT. For example, the time to train experienced tool-and-die makers on how to repair a new type of die was reduced to eight weeks from 24 weeks when a combination of structured OJT and off-the-job

lab experiences was used versus the previous exclusive use of unstructured OJT. And, using structured OJT reduced the time to train newly-transfered employees to operate a highly-complex robot line to one week from at least three months when unstructured OJT was used.

Employee development and involvement. Employee development and involvement are promoted by many contemporary organizations. Employee development encourages employees to participate in training and education experiences to help them achieve individual and organizational goals. Use of structured OJT provides a visible means for organizations to develop their new and exemplary employees. New employees have open access to developing new skills. Exemplary employees also can develop skills beyond those required for performing their jobs, such as analyzing tasks and identifying quality and safety standards. These new skills provide exemplary employees a greater appreciation for the complexity of their work.

Employee involvement is the process of using the contributions of all employees to improve the organization. As stated, structured OJT requires the involvement of many different individuals during all phases of its development and implementation. For example, by participating in the development of structured OJT, employees are also helping set their job performance standards--a change from the frequently-held perception that job standards are more likely imposed on employees, without regard to their opinion.

Increased use of self-directed work groups and continuous quality improvement efforts have elevated the importance of employee development and involvement and, thus, the potential benefits of structured OJT. For example, structured OJT has been used to help cross-train group members so that each person can perform all or most all tasks required to complete a product or process. In most instances, individual group members are designated to train other group members.

Organizational climate. Managers have increasingly recognized the influences of the organizational climate. Using supervisors, or exemplary employees, as trainers can help strengthen the climate in the following ways. Trainees receive their job information directly from those persons who will be evaluating or coaching their performance later, reducing ambiguity about job expectations. Respect for co-workers is enhanced since employees are viewed as knowledgeable resources. Supervisors can model the more implicit behaviors, customs, and approaches that they view as important to the organization, directly to the trainee. Supervisors have a better sense of the knowledge and skill levels of trainees making goal-setting and feedback sessions more specific and directed. Finally, the new employee and supervisor can simply become better acquainted with each other--all the while discussing topics and problems that are of common interest.

Case-Study Example

The following case-study example is based on the recent use of structured OJT in an actual organizational setting. Managers of a large manufacturing organization expressed concerns about the costs of maintaining high product quality. These concerns seemed particularly critical in view of the organization's flexible job-bid policy for hourly employees. Employees can easily transfer to more desirable and higher-paying jobs based on seniority, supervisor ratings, and availability of replacements. Most hourly jobs involved some aspect of assembling large trucks. In a positive sense, the job-bid policy helps provide employees opportunities for growth. In a negative sense, the resultant turnover frequently increases the number of "gigs" or defects found in those work areas, thus increasing product costs.

A needs analysis showed that employees entering selected work areas presently require an average of three weeks to reach minimum competence. Even after this time, employees could not be expected to work independently without committing errors. The present training method was unstructured OJT delivered by a more experienced employee selected by the supervisor, then followed by informal coaching as required. It was decided that a more effective and efficient approach was required. As presented in Table 3, a three-part "employee development system" was devised. The system first provided employees with general information by the supervisor through the Work Overview. Job Training

was then provided using both structured OJT and technical training in a lab setting. Finally, Job Performance helped maintain and continually improve the employee's performance.

Selected exemplary employees and supervisors attended a twelve-hour training program to help them better understand structured OJT, develop job guides, and deliver structured OJT using a five-step process. Participants were certified as OJT trainers only after being observed successfully using the process in their actual work area. Certified OJT trainers were given recognition stickers for their name badges. OJT trainers also helped develop the initial drafts of their job guides. Subsequent drafts were then circulated among quality engineers, safety specialists, and managers by the HRD professional. Job guide formats varied from procedure lists, troubleshooting guides, inspection/adjustment guides, decision tables, or flow-charts.

Presently, the employee development system occurs as follows. When an employee enters a new work area the supervisor presents the work overview and explains the training plan that lists all the tasks required of employees in that area. The employee identifies those tasks are unfamiliar and training is scheduled. Table 4 presents the process used for delivering structured OJT. Trainers first reacquaint themselves with the task and the OJT process. Then, the trainer prepares the trainee by assessing present knowledge and skills and providing a copy of the job guide.

The trainer asks the trainee to review the guide before training since it will be used as reference during the training. The trainer then demonstrates the task, making certain to show and tell one step at a time as printed on the guide. The trainee is then asked to repeat the task, making certain to show and tell each step and referring to the guide as necessary. These two steps are repeated until the trainee can exhibit a complete error-free chain of behaviors. The trainer then probes the trainee about key points, with special emphasis on quality and safety information. The trainer concludes the session by recognizing the trainee's accomplishment.

Follow-up evaluation results show that the time to reach minimum competence was reduced to an average of two hours from the previous average of three weeks. Product defects were also significantly reduced. Obviously, the improvements cannot be linked to using structured OJT alone. The additional components of the employee development system, such as providing work expectations and feedback, also contributed to the improvements. However, the case-study example illustrates how successful results can be obtained using structured OJT, and how structured OJT must be viewed from a wider systems perspective.

Future Research Opportunities

Given the emergence of structured OJT, its future research opportunities should be of interest to many HRD professionals. Much new information is required if use of

this training method is to advance. Several areas are of immediate importance, of which three will be presented here. First, no conceptual models exist that fully describe all aspects of a structured OJT system. Having such a conceptual model would help researchers begin to identify the variables involved and provide insights about why certain phenomena seem to occur, such as why some trainee-trainer relationships are more conducive for learning than others Second, most structured OJT concerns the acquisition of observable, clearly defined tasks. Yet, more and more jobs require the acquisition of tasks that are non-observable, making them more illusive to describe. In fact, some observers view the project as the most appropriate unit of work analysis as opposed to the task, which does not represent the expectations of today's workplace. These changes will likely place greater demands on how jobs are analyzed and how the training content is presented. For example, advancements in generating heuristics within expert systems for troubleshooting or decision-making seem promising. One outcome of this thought might require rethinking the role of the trainer.

Finally, little is known about the unanticipated effects of using structured OJT. For example, use of structured OJT may play a part in changing the culture of many organizations. Some researchers hypothesize that it is desirable to encourage what is called a learning organization--that is, an organizational setting that values

continual reflection on present practices and discovery of new practices. By placing an emphasis on learning and teaching in the workplace, structured OJT might well precede any intentional efforts in this regard.

Conclusion

Structured OJT has much promise for use in a variety of training situations. Several studies have confirmed the effectiveness and efficiency of structured OJT, though more research in this regard is required. Yet, it does not necessarily follow that structured OJT is the most appropriate training approach for all situations and outcomes. Use of structured OJT must always be viewed from the larger perspective of being one of several solutions to address individual and organizational performance problems.

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Table 1
Comparison of Unstructured and Structured OJT

Unstructured OJT	*Structured OJT*
▪ Systems approach not used	▪ Systems approach used
▪ Outcomes not defined in advance, resulting in unpredictable results	▪ Outcomes defined in advance, resulting in predictable results
▪ Experienced worker not trained to be a trainer--over-dependence on natural "communication skills"	▪ Experienced worker trained to be a trainer--equal dependence on job guides
▪ Viewed simply as a training program	▪ Viewed as one solution within the human performance system
▪ No role for the HP technologist	▪ Defined role for the HP technologist

Table 2
Structured OJT Selection Criteria

- *Demands of the Workplace*

  Use of specialized equipment
  Potential safety hazards
  Too much noise
  Too much stress
  Too much background activity

- *Types of Training Outcomes*

  Close match with job expectations
  Little theory presented
  Used to present examples
  Integrated with other training

- *Trainee Characteristics*

  Prerequisite knowledge and skills
  Previous success in learning settings
  Personality variables

- *Costs of Training Method/Problem*

  Comparison with other training methods
  Comparison with the benefits forecast

- *Level of Organizational Support*

  Upper-level commitment
  Supervisor-management involvement
  Employee involvement

Table 3
Employee Development System

Work Overview -------->	*Job Training* ------>	*Job Performance*
▪ Describe work flow ▪ Identify expectations ▪ Identify quality and safety requirements	▪ Structured OJT ▪ Lab training	▪ Measure performance ▪ Provide coaching ▪ Encourage continuous improvement

Table 4
Structured OJT Process

1. *Trainer prepare yourself*

   Review structured OJT process
   Obtain job guide
   Obtain equipment, tools, materials
   Determine trainee outcomes

2. *Prepare the trainee*

   Assess present knowledge/skills
   Provide job guide
   Summarize what will be presented
   Put trainee at ease performance?

3. *Trainer present the task*

   Position trainee
   One step, point at a time
   Repeat quality and safety points

4. *Have trainee repeat the task*

   Show and tell one step at a time
   Repeat quality and safety points
   Require a complete chain

5. *Trainer diagnose and reinforce learning*

   Probe trainee for understanding
   Pose questions about key points Praise appropriate behavior