

Unanticipated Consequences Among Trainers Delivering S-OJT: The Literature Review

DaeYeon Cho
Ronald L. Jacobs
The Ohio State University

This study reviewed trainers' actions in the design and delivery of S-OJT and the preparation of S-OJT trainers. Trainers' behaviors and their preparation of S-OJT trainers tend to create the leaning and developmental opportunity for the trainer through social interactions between the trainer and the trainee/stakeholders. This study discussed possible unanticipated consequences on S-OJT trainers that can be resulted from their behaviors beyond explicit expectations of S-OJT on the trainee. To understand this flow, this study proposed a conceptual framework to depict the relationships between four constructs.

Keywords: Structured On-the-Job Training (S-OJT), Unanticipated Consequences, S-OJT Trainer

A recent primary theme of HRD is the blending between working and learning in the workplace. Furthermore, the necessity of more planned and systematic training approach on the job has been recently highlighted (Poell & Van der Krogt, 2003). S-OJT is good fit on these trends. Some researchers (e.g., Burkett, 2002; Jacobs et al., 1992) have demonstrated the effectiveness of S-OJT on the aspect of both the individual trainee and the organization as a whole.

However, a review of the literature shows that limited attention has been given to the consequences on those employees who serve as a trainer, specifically employees who serve as an S-OJT trainer. The consequences of training have been explained on trainees, not trainers. This emphasis can be expected given that the trainee is the target of the training. But the focus on the consequences on an S-OJT trainer can be expected based upon the unique demands of this job compared to being a trainer using most other training opportunities.

In S-OJT, the experienced employees (e.g., supervisors and frontline employees) are more likely to serve as a trainer (Jacobs, 2003; Johnson & Leach, 2001). The experienced employees are asked to perform another job as a trainer beyond their daily routine work to manufacture products or provide services. Besides, S-OJT means more than just delivering knowledge and skills as planned (Jacobs, 2003). Thus, S-OJT trainers are expected to play multiple roles as coach, master, and tutor as well as deliverer.

S-OJT takes place through the intense level of social contact and social process between a trainer and a trainee because of the one-on-one nature of S-OJT (Jacobs, 2003; Osman-Gani & Zidan, 2001; Semb et al., 1995; Stein, 2001). All events to deliver S-OJT are based on widely mutual interactions between the trainer and the trainee. According to viewing S-OJT as a system, trainers also can be regarded as a subsystem and must interact with other subsystems or systems. As such, to make S-OJT more effective, trainers are expected to build mutual interactions with co-workers, managers, HRD staff, and other S-OJT trainers (Jacobs, 2003; Stein, 2001).

Much of learning takes place through a social process in the workplace. The social process can be facilitated through interactions within networks (Imel & Stein, 2003). If all members within a network share common issues, they would acquire knowledge and skills through mutual interactions (ibid.). Such interactions can be called 'developmental interactions' (D'Abate et al., 2003) or 'learning interactions' (Kilpatrick, et al., 1999). S-OJT trainers have the authentic learning and development opportunity through social processes and interactions with the trainee and stakeholders within S-OJT.

If there has been a greater recognition of the experienced employees who serve as an S-OJT trainer, if trainers' behaviors during the design and delivery of S-OJT have been built on mutual interactions within networks consisted of the trainee and stakeholders, and if trainers have had the learning and development opportunity through such interactions, then more needs to be known about the unanticipated consequences of S-OJT on trainers.

The main purpose of this study is to propose a conceptual framework to investigate how the preparation of S-OJT trainers and trainers' actions in the design and delivery of S-OJT can be connected with possible unanticipated consequences of S-OJT on trainers. Through a review of the literature, this study identified trainers' behaviors in the design and delivery of S-OJT. This study also found some possible unanticipated consequences of S-OJT on trainers that can be resulted from trainers' learning and development opportunities through the preparation of S-OJT trainers and their behaviors before and during S-OJT.

Copyright © 2003 DaeYeon Cho & Ronald L. Jacobs

Definition of S-OJT

On-the-job training (OJT) is a form of individualized training and can be designed and delivered using two basic approaches: structured OJT and unstructured OJT (Sullivan & Smith, 1996). Structured OJT differs from unstructured OJT in that a systematic planning process is used to design and carry out the training (Jacobs, 2003; Rothwell & Kazanas, 1994). Unstructured OJT occurs on the worksite but is not logically sequenced. Therefore, learners are expected to learn by watching and doing the work. On the other hand, structured OJT takes place with planned instruction on the job and during the work.

Jacobs (2003) defined S-OJT as “the planned process of developing competence on units of work by having an experienced employee train a novice employee at the work setting or a location that closely resembles the work setting” (p. 28). There are critical characteristics of structured OJT (Jacobs, 2003): (1) S-OJT achieves training objectives reliably and predictably like other planned training approaches; (2) S-OJT is not about learning to perform an entire job but a subset of the job; (3) it occurs on one-on-one basis (social contact & process); and (4) it occurs in similar work settings beyond the actual work setting.

Participation in the Design of S-OJT

Involving work analysis. The targeted job must be analyzed in depth to identify units of work. Work analysis is very critical step to gather useful information before determining training content and delivering the training. Work analysis refers to “the process of making explicit the behaviors, performance outcomes, prerequisite knowledge, skills, attitudes, and other relevant information to a unit of work” (Jacobs, 2003, p. 83). Work analysis is often performed by occupational, educational, and training specialists in conjunction with subject matter experts (Semb et al., 1995). This phase involves management, training professionals, and line experts working together to produce a needs and a comprehensive implementation plan (Black et al., 1996).

Preparing the module. The information driven from the work analysis uses to prepare the S-OJT modules. The preparation of a S-OJT module refers to “the integration of training content and type of training” (Jacobs, 2003, p. 126). The module guides the trainer during the delivery of the training, and the trainee uses it as a reference during and after the training. Jacobs (2003) strongly suggests that trainers need to be engaged in the stage of developing modules: “it does have at least two advantages. First, having a meaningful context may well help experienced employees become more effective trainers. Second, experienced employees often have greater feeling of ownership since they participate in the development of the training” (p. 106).

Preparing delivery. The trainer should do three basic actions for preparing the delivery of S-OJT: “The training has to be scheduled, training resources has to be secured, and the S-OJT module has to be reviewed. The most of these activities are the responsibility of trainers” (Jacobs, 2003, pp. 133-134). Preparing the delivery of S-OJT is essentially a social activity between the trainer and stakeholders. When trainers decide training location and time, and obtain training resources, the various conflicts often take place between the trainer and stakeholders. Therefore, how to negotiate such complex conflicts should be taken into consideration as a crucial part of preparing the delivery of S-OJT. Success of this stage depends on collaborative interaction and support among training professionals and line management (Black et al., 1996; Jacobs, 2003). More specifically, the work of workplace trainers always includes socio-political aspects when they make decisions regarding where, when, and how to conduct S-OJT in a group and/or an organizational context.

Trainers’ Actions to Deliver S-OJT

Jacobs (2003) identified the five training events to deliver S-OJT as follows:

Prepare the trainee. The main purpose of this event is to prepare trainee to be learned. This event is the trainer’s first action to deliver the training. Like formal classroom training, this event is important to provide an effective introduction to the trainee (Johnson & Leach, 2001).

Present the training. This event requires “the trainer to demonstrate a set of behavioral actions to the trainee” (Jacobs, 2003, p. 148). S-OJT trainers must be aware that their behaviors may be automated and so fast that the trainee cannot follow them (Yang & McLean, 1996). Therefore, the trainer should explain and then show each step at a time (Johnson & Leach, 2001). It is helpful for the trainee to understand and draw a big picture what she or he is learning.

Require a response. During this event, the trainee must participate and respond actively. The trainer prompts the trainee to perform (Semb et al., 1995). For instance, the trainee may have listened the trainer’s explanation about the unit of work, observed the trainer’s demonstration, been asked specific questions to ensure his or her understanding,

and has had an opportunity to ask questions (Johnson & Leach, 2001). The trainer believes that the trainee should have enough confidence to demonstrate what she or he has learned. Therefore, the trainee needs to be encouraged to try units of work and describe as the trainer has performed.

Provide feedback. Based on the trainee's responses, the trainer should try to correct errors. The trainee is not expected to perfectly perform units of work during the first attempt. Therefore, the trainer should give appropriate feedback and encouragement based on "an objective assessment of the adequacy of the trainee's response" (Jacobs, 2003, p. 156).

Evaluate performance. The final event to deliver S-OJT is to evaluate whether the trainee has achieved the training objectives. To do this, the trainer can use the trainee's self-report, which is the trainee's own evaluation of his or her learning progress, and objective performance tests, which refers to the trainer's judgment of the adequacy of the trainee's responses (Jacobs, 2003). To obtain the trainee's self-report, the trainee needs to be asked to critically reflect on the training experience in general (Johnson & Leach, 2001) and what he or she has accomplished (Jacobs, 2003).

Preparation of S-OJT Trainers

As S-OJT is increasingly used in industry, there is an obvious need of qualified S-OJT trainers. Experienced employees (e.g., supervisors and frontline employees) or expert workers are more likely to serve as an S-OJT trainer (Jacobs, 2003). Johnson & Leach (2001) addressed the use of subject matter experts. However, we cannot assure that expert workers possessing a high level of expertise to perform the job have other competencies required to effectively share his or her knowledge with trainees (Williams, 2001). As such, S-OJT trainers should complete a train-the-trainer course so that they understand good training technique and how to facilitate learning (Filipczak, 1996). Fortunately, today's many organizations are recognizing the necessities of the formal train-the-trainer program (Jacobs, 2003).

Swanson & Falkman (1997) indicated that most beginning trainers have often prepared informally—by trial and error. Rae (2002) indicated workplace trainers must possess potential to learn to train. Williams (2001) addressed a claim that it is evident that previous training participation and trainer experience become an important factor to be an effective trainer.

On the other hand, trainers' involvement of networks with other trainers is a means of preparing S-OJT trainers and developing their professional competencies. Harris et al., (2000) indicated informal opportunities where trainers have chances to discuss their work and share problem with other trainers. Jacobs (2003) addressed the importance of learning network with other trainers at different locations in terms of "exchanging training information or generating training information that does not currently exist" (p. 65). For example, "[chat room] discussions could be used to share training ideas, training goals, to discuss barriers to transfer, and to provide positive reinforcement [among members]" (Barnard & Hawley, 2003, p. 117). The participation into networks influences trainers' perspective of the training and their delivery strategies of S-OJT. In addition, members can be updated with regard to the current initiatives, policy changes or development. Too often trainers are unaware of how critical involvement of learning network with other trainers is to successful S-OJT.

Unanticipated Consequences of S-OJT on Trainers

As trainers are deeply engaged in the preparation and delivery of S-OJT, they have the opportunity to learn and develop their new knowledge and skills. For example, Dymock (1999) found that "mentors were learning from the structured mentoring process" (p. 316). Black et al., (1996) also indicated that one of strengths of S-OJT is that there are a great number of developmental opportunities for S-OJT trainers.

Knowledge and Skill Acquisition

The authors of this study reviewed three ways for trainers to acquire knowledge and skills in S-OJT as follows.

Social learning and networks. From the perspective of social situated learning, much of learning takes place in social interactions with others in the workplace (Stein, 2001). S-OJT is based on social process and social contact through the relationships between a trainer and a trainee (Jacobs, 2003; Semb et al., 1995; Stein, 2001). S-OJT is a special case of one-on-one communication (Osman-Gani & Zidan, 2001). All events used for delivering S-OJT are based on widely mutual interactions between the trainer and trainee (Stein, 2001). Although trainees are novice employees who lack appropriate competence to fully perform their job, they have some degree of rich experience and knowledge derived from their lives (Merriam & Caffarella, 1999). The trainee often lacks context knowledge rather than subject matter expertise in S-OJT (Yang & McLean, 1996). Analytic and reflective conversation between the trainer and the trainee enables them to share what they know and can do each other.

S-OJT trainers have access to and participate in networks in and out of workplace. A primary function of networks is to disseminate knowledge to generate new ideas and new information through interaction of members within the network (Rothwell, 2002). Poell & Van der Krogt (2003) found that networks enable trainers to interact with other trainers and to learn from one another. Barnard & Hawley (2003) indicated that a network built during the workshop for trainers was continued to share and get other ideas beyond its content. Consequently, S-OJT trainers, who have access to networks with other trainers as well as with co-workers in and out of workplace, can tap into learning resources easily and/or engage in learning that may carry over to their roles.

Reflective practice. Reflective practice can be defined as “a mode that integrates or links thought and action with reflection” (Imel, 1992, p. 1). It involves thinking about our practice and critically examines our beliefs and assumptions that lead to our actions. Osterman (1990) summarized some advantages of reflective practice: “it can positively affect professional growth and development [...], to the development of new knowledge about practice, and to a broader understanding of the problems” (recited from Imel, 1992, p. 2). Reflective practice is an example of learning to gain new knowledge and improved practice.

S-OJT enhances the trainer’s attention to and reflection upon his or her own works. For instance, the design of S-OJT requires trainers’ reflective practice (Stein, 2001). When trainers participate in developing S-OJT module, they can talk about adding new components to the module and changing events in a different order or through different activities. Such talks may result from the trainer’s reflective practice.

Trainers often possess in-depth knowledge of the work (Jacobs, 2003). However, they may be unable to describe what they do to accomplish an activity because their knowledge has accumulated as a form of tacit knowledge. Tacit knowledge has been characterized as follows: “personal, difficult to articulate fully, experience based, contextualized, job specific, held within, both known and unknown to the holder, transferred through conversation and narrative, and capable of becoming explicit knowledge and vice versa” (Imel, 2003, p. 1). In S-OJT, trainers deliver their tacit knowledge by trying to make explicit knowledge (Stein, 2001). An important role of reflection on practice is to develop the ability to articulate tacit knowledge in order to share professional skills and enhance the body of professional knowledge. Such a process of transition can be viewed as a meaningful learning opportunity for trainers.

The training-the-trainer. Trainers are expected to develop training-related skills, instructor-related skills, and work units related to training content through the train-the-trainer (Johnson & Leach, 2001). Burkett (2002) reported the effectiveness of train-the-trainer programs: ninety percent of respondents indicated an intention to apply S-OJT skills on the job within the first 30 days of completing the workshop. This training has usually been conducted in a classroom setting (Jacobs, 2003). Trainers also believe that formal classroom based training as a form of the train-the-trainer program would be of great benefit (Harris et al., 2001). Such a setting makes it possible for trainers to establish another learning network with other trainers during and after the training. They receive feedback from peers and discuss some issues related to the preparation and delivery of the training and the organizational implications of using S-OJT.

Occupational Commitment

The process through which individuals become committed to their jobs has been interested in the area of work attitudinal research, because it is evident that organizations benefit from occupationally committed employees who continue to invest in their own occupational knowledge, skill and job experience (Heckett, et al., 2001). Blau et al., (1993) defined occupational commitment as “one’s attitude, including affect, belief and behavioral intentions, toward his or her occupation” (p. 311).

Weaver (2002) found that higher levels of formal education and training are significant predictors of occupational commitment. Amounts of management learning experience for newspaper editors positively affect higher levels of occupational commitment (Sanet, 1992). Jones (1991) found that participants who worked in networks had higher occupational commitment than those who did not. Lowrey (2001) asserted that occupational commitment could be enhanced by creating a social bond.

Individual Performance

There is a belief that employees should maintain and develop appropriate competence to perform better on their job through training and learning activities. Some researchers have explored the effectiveness of training and learning activities on individual performance. The literature suggested that training and learning enable employees to improve their performance through employees’ knowledge and skills acquisition (Farrell & Hakstian, 2001; Roman, 2002). Particularly, Roman et al., (2002) found among various training delivery methods, on-the-job training has positive impact on individual performance as well as in house courses. Some researchers (e.g., Handzic & Tolhurst, 2000; Kasvi & Vartiainen; 2000) have provided empirical evidences that the effect of social interactions on performance exists.

For S-OJT, knowing that trainers take responsibility to deliver appropriate and accurate work content to the trainee motivates them to work harder on the job (Hollister, 2001). For structured mentoring, trainers are often forced to open their eyes about what they have done, reexamine their own performance, and evaluate their outcomes (Schulz, 1995). In the same vein, S-OJT can give trainers a fresh perspective on their work and new insight into their job.

Interpersonal Skills

Stevens & Campion (1994) defined interpersonal skills as the capability of individuals to successfully manage and create friendly interpersonal relations with others. S-OJT allows trainers to strengthen their interpersonal skills by working with trainees from different backgrounds and with different personal types. The preparation and delivery of S-OJT often occurs in the context of actual work structure. However, trainers do not necessarily act completely in line with the existing structures (Poell & Van der Krogt, 2003). To achieve S-OJT objectives, trainers may have to negotiate the use of equipment and tools for S-OJT with managers or other workers. Decision-making regarding where and when to conduct the training sometimes seems to pose problems to managers, supervisors, and trainers. S-OJT trainers should be involved in interpersonal processes, including decision-making, negotiation, conflict resolution, and problem solving (Hellenbeck, et al., 1995). In this situation, those stakeholders should put a collaborative effort to discuss on it and find possible solutions (Jacobs, 2003).

Organizational Commitment

Organizational commitment refers to “an individual’s feelings about the organization as a whole” (Ensher, et al., 2001, p. 56). According to Bartlett (2001), “organizational commitment can be thought of as the level of attachment felt toward the organization in which one is employed” (p. 336). Meyer & Allen (1997) defined organizational commitment as an individual’s dedication and loyalty to an organization.

Researchers have studied which antecedents influence organizational commitment. Particularly, several studies (e.g., Bartlett, 2001; Kontoghiorghes & Bryant, 2001) have focused on a relationship between workplace *training and learning* and organizational commitment. These studies indicated that individual’s readiness to learn, the participation of *training and learning*, and social support for training and learning enhance employees’ organizational commitment. Several studies (Heffner & Rentsch, 2001; Kontoghiorghes & Bryant, 2001) have reported a positive relationship between organizational commitment and social interactions with members.

Organizational commitment can be developed through social exchange mechanism as a result of positive work experiences (Bartlett, 2001). Being a S-OJT trainer means that an organization acknowledges the trainer’s level of competence. In addition, S-OJT enables trainers to develop their reputation as a leader and an expert with knowledge and wisdom to share. Consequently, such positive experiences given from organizations are valued by trainers. In turn, they can be committed to the organization that provided these experiences.

Self-Efficacy

The concept of self-efficacy contains an individual’s judgment of what she or he can do. It strongly has to do with an individual’s belief whether or not an employee thinks he or she can perform successfully by using their skills and knowledge (Orpen, 1999). Once employees participate in training programs and/or learning activities, they have the opportunity to put the knowledge and skill they acquired into practice, and to develop their knowledge and skills over time (Washington, 2002). Some empirical studies (e.g., Orpen, 1999; Prieto & Meyers, 1999) have revealed that there is the positive relationship between training or learning activities and self-efficacy belief. Self-efficacy can be increased as a result of learning, experience, and feedback (Washington, 2002). Additionally, Keith (2001) found that individuals’ participation of social interactions and social process has an impact on self-efficacy.

Willingness to Share with Other

Some researchers have reported that pedagogic relationship has occurred among workers in the workplace. For example, Bierema (2002) pointed out that “workplace is the only context where the worker has the opportunity to learn about and develop vocational knowledge” (p. 73). Unwin & Fuller (2003) asserted that when a worker explains a process or procedure to a colleague, they are engaged in a ‘teaching and learning’ relationship and “use a range of skills common to teachers and trainers” (p. 21). In general, trainers prepare for, deliver and review training programs. However, these roles are small part of their overall work. Harris et al., (2000) found the workplace trainer undertakes various functions to help others’ learning beyond their explicit roles within structured training systems such as S-OJT. Therefore, teaching experience as a S-OJT trainer influences his or her willingness to share ideas with others beyond formal training situations in the workplace.

Conclusion and Implications

Trainers’ actions in the design and delivery of S-OJT and the preparation of S-OJT trainers can be built upon mainly social interactions with trainees and stakeholders. Much of learning takes place in such social interactions in the

workplace. As such, there is a high level of possibility to occur mutual learning and development between them. Specifically, trainers have opportunity to learn new or updated knowledge and skills through interactive process and social networks with stakeholders, reflective practice, and the train-the-trainer program. Consequently, these learning and development opportunities take place when trainers perform actions in the design and delivery of S-OJT and when they are prepared to be an S-OJT trainer.

Previous research has conceptually and empirically reported consequences, which can be resulted from such learning and development opportunities. In other words, trainers' actions in S-OJT and the preparation of the trainer enable trainers to learn and develop their professional competences, and in turn produce unanticipated consequences on trainers, such as knowledge and skills acquisition, occupational commitment, sales performance, interpersonal skills, organizational commitment, self-efficacy, and willingness to share with others. Based on the literature review, complex relationships exist among trainers' actions in the design and delivery of S-OJT, the preparation of S-OJT trainers, and possible unanticipated consequences on trainers. To understand this, the authors proposed a conceptual framework to depict the relationships in Figure 1 below.

The framework will assist organizations, managers, and HRD researchers to expand their perception about S-OJT on the aspect of the trainer beyond its explicit expectations on the trainee. The conceptual framework indicates additional strengths of S-OJT in terms of creating informal learning opportunity for trainers within a formal training situation. As a result, S-OJT can be viewed as an employee development method for the trainer as well as the trainee. In addition, S-OJT can be regarded as an investment for their experienced employees. As such, managers would recognize the long-term benefits of S-OJT in favor of trainers.

As reviewed above, trainers are engaged in various behaviors in the design and delivery of S-OJT. Using this framework proposed, HRD researchers could investigate which trainers' certain behaviors can strongly affect certain unanticipated consequences on trainers. Figure 1 introduces possible relationships between the four constructs. Empirical research needs to be conducted to examine the framework.

References

- Barnard, J. K., & Hawley, J. D. (2003). Work environment characteristics and implications for training transfer: A case study of the Nuclear Power Industry. In S. A. Lynham & T. M. Egan (Eds.), *Proceedings of the 2003 Academy of Human Resource Development Conference*. Minneapolis, MN: Academy of Human Resource Development.
- Bartlett, K. R. (2001). The Relationship between training and organizational commitment: A Study in the health care field. *Human Resource Development Quarterly*, 12(4), 335-52.
- Bierema, L. L. (2002). The sociocultural contexts of learning in the workplace. In M. V. Alfred (Ed.), *Learning and sociocultural contexts: Implications for adults, community, and workplace education. New Directions for Adult and Continuing Education*, no. 96. San Francisco: Jossey-Bass.
- Black, J. A., Zenner, F. J., Ezell, E. (1996). A case study of the development and implementation of a structured on-the-job (SOJT) training program in the coil processing industry. In E. F. Holton (Ed.), *Proceedings of the 1996 Academy of Human Resource Development Conference*. Minneapolis, MN: Academy of Human Resource Development.
- Blau, G. J., Paul, A., & St. John, N. (1993). On developing a general index of work commitment. *Journal of Vocational Behavior*, 42(3), 298-314.
- Burkett, H. (2002). Leveraging employee know-how through structured OJT. In R. L. Jacobs (ed.), *Implementing on-the-job learning: Thirteen case studies from the real world of training*. Alexandria, VA: ASTD.
- D'Abate, C. P., Eddy, E. R., & Tannenbaum, S. I. (2003). What's in a name? A literature-based approach to understanding mentoring, coaching, and other constructs that describe developmental interactions. *Human Resource Development Review*, 2(4), 360-384.
- Dymock, D. (1999). Blind date: A case study of mentoring as workplace learning. *Journal of Workplace Learning*, 11(8), 312-317.
- Ensher, E. A., Grant-Vallone, E. J., & Donaldson, S. I. (2001). Effects of perceived discrimination on job satisfaction, organizational commitment, organizational citizenship behavior, and grievances. *Human Resource Development Quarterly*, 12(1), 53-72.
- Farrell, S., & Hakstian, A. R. (2001). Improving salesforce performance: A meta-analytic investigation of the effectiveness and utility of personal selection procedures and training interventions. *Psychology and Marketing*, 18(3), 281-316.
- Filipczak, B. (1996). Training on the cheap. *Training*, 33(5), 28-34.

- Hackett, R. D., Lapiere, L. M., & Hausdorf, P. A. (2001). Understanding the links between work commitment constructs. *Journal of Vocational Behavior*, 58(3), 329-413.
- Handzic, M., & Tolhurst, D. (2000). *The role of personal experience and social interaction in knowledge creation and utilization*. In Proceedings of the International Academy for Information Management Annual Conference (15th, Brisbane, Australia, December 6-10), (ED 473384).
- Harris, R., Simons, M., & Bone, J. (2000). *More than meets the eyes? Rethinking the role of workplace trainer*. Australia: NCVER.
- Heffner, T. S., & Rentsch, J. R. (2001). Organizational commitment and social interaction: A multiple constituencies approach. *Journal of Vocational Behavior*, 59(3), 471-490.
- Hellenbeck, J. R., Ilgen, D. R., Sego, D. J., Hedlund, J., Magor, D. A., & Phillips, J. (1995). Multilevel theory of team decision making: Decision performance in teams incorporating distributed expertise. *Journal of Applied Psychology*, 80, 292-316.
- Hollister, L. R. (2001). The benefits of being a mentor. *Healthcare Executive*, Mar/Apr, 49-50.
- Imel, S. (1992). *Reflective practice in adult education*. ERIC Digest No. 122, Columbus, OH: ERIC/ACVE.
- Imel, S. (2003). *Tacit knowledge*. Trends And Issues Alert No. 46, Columbus, OH: ERIC/ACVE.
- Imel, S., & Stein, D. S. (2003). Creating self-awareness of learning that occurs in community. In T. R. Ferro & G. J. Dean (Eds.), *Proceedings of 2003 Midwest Research to Practice Conference in Adult, Continuing, and Community Education*, (pp. 116-121).
- Jacobs, R. L. (Ed.). (2001). *Planned training on the job*. *Advances in Developing Human Resources*, 3(4). Thousand Oaks, CA: Sage.
- Jacobs, R. L. (2003). *Structured on-the-job training: Unleashing employee expertise in the workplace*. (2nd ed.). San Francisco, Berrett-Koehler Publications, INC.
- Jacobs, R. L., & Osman-Gani, A. M. (1999). Status, impact, and implementation issues of structured on-the-job training: A study of Singapore-based companies. *Human Resource Development International*, 2(1), 17-24.
- Jacobs, R. L., Jones, M. J., & Neil, S. (1992). A case study in forecasting the financial benefits of unstructured and structured on-the-job training. *Human Resource Development Quarterly*, 3(2), 133-139. .
- Johnson, S. D., & Leach, J. A. (2001). Using expert employees to train on the job. *Advances in Developing Human Resources*. 3(4), 425-434.
- Jones, K. F. (1991). *Job satisfaction, commitment to professionalism, and perceived support systems in family day care providers*. (ED353038).
- Kasvi, J. J. Jr., & Vartiainen, M (2000). Performance support on the shop floor. *Performance and Improvement*, 39(6), 40-46.
- Keith, P. M. (2001). Support from others and efficacy of volunteer ombudsmen in long-term care facilities. *International Journal of Aging and Human Development*, 52(4), 297-310.
- Kilpatrick, S., Bell, R., & Falk, I. (1999). The role of group learning in building social capital. *Journal of Vocational Education and Training*, 51(1), 129-144.
- Kontoghiorghes, C., & Bryant, N. (2001). Exploring organization commitment in a non-profit service organization. In O. A. Aliaga (Ed.), *Proceedings of the 2001 Academy of Human Resource Development Conference*, Tulsa, OK: Academy of Human Resource Development.
- Lowrey, W. (2001). *Socialization as a determinant of occupational commitment: Do high school and college activities matter?* A paper presented at the Annual Conference of the Association for Education in Journalism and Mass Communication, Washington, D. C.
- Merriam, S. B., & Caffarella, R. S. (1999). *Learning in adulthood*. San Francisco : Jossey-Bass.
- Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace*. Thousand Oaks, CA: Sage Publications.
- Orpen, C. (1999). The impact of self-efficacy on the effectiveness of employee training. *Journal of Workplace Learning*, 11(4), 119-122.
- Osman-Gani, A. M., & Zidan, S. S. (2001). Cross-cultural implications of planned on-the-job training. *Advances in Developing Human Resources*. 3(4), 442-460.
- Poell, R. F., & Van der Krogt, F. J. (2003). Learning-program creation in work organizations. *Human Resource Development Review*, 2(3), 252-272.
- Prieto, L. R., & Meyers, S. A. (1999). Effects of training and supervision on the self-efficacy of psychology graduate teaching assistants. *Teaching of Psychology*, 26(4), 264-266.
- Rae, L. (2002). *Trainer assessment: A guide to measuring the performance of trainers and facilitators*, (2nd ed.). Burlington, VT: Gower Publishing Company.
- Roman, S., Ruiz, S., & Munuera, J. L. (2002). The effects of sales training on sales force activity. *European Journal of Marketing*, 36(11/12), 1344-1366.

- Rothwell, W. (2002). *The workplace learner: How to align training initiatives with individual learning competencies*. New York: AMACOM.
- Rothwell, W., & Kazanas, H. (1994). *Improving on-the-job training: How to establish and operate a comprehensive OJT program*. San Francisco: Jossey-Bass.
- Sanet, T. C. (1992). *How management training relates to newspaper editors' professional commitment*. A paper presented at the Annual Meeting of the Association for Education in Journalism and Mass Communication (75th, Montreal, Quebec, Canada) (ED349567).
- Schulz, S. F. (1995). The benefits of mentoring. In M. W. Galbraith & N. H. Cohen (Eds.). *Mentoring: New strategies and challenges*. *New Directions for Adult and Continuing Education*, 66, San Francisco: Jossey-Bass.
- Semb, G. B., Ellis, J. A., Fitch, M. A., Parchman, S., & Irick, C. (1995). On-the-job training: Prescriptions and practice. *Performance Improvement Quarterly*, 8(3), 19-37.
- Stein, D. S. (2001). Situated learning and planned training on the job. *Advances in Developing Human Resources*, 3(4), 415-42.
- Steven, M. J., & Campion, M. A. (1994). The knowledge, skill and ability requirements for teamwork: Implications for human resource management. *Journal of Management*, 20, 503-530.
- Swanson, R. A., & Falkman, S. K. (1997). Training delivery problems and solutions: Identification of novice trainer problems and expert trainer solutions. *Human Resource Development Quarterly*, 8(4), 305-314.
- Washington, C. L. (2002). *The relationships among learning transfer climate, transfer self-efficacy, goal commitment, and sales performance in an organization undergoing planned change*. Unpublished Doctoral Dissertation of The Ohio State University.
- Weaver, R. H. (2002). Predictors of quality and commitment in family childcare: Provider education, personal resources, and support. *Early Education and Development*, 13(3), 265-282.
- Williams, S. W. (2001). The effectiveness of subject matter experts as technical trainers. *Human Resource Development Quarterly*, 12(1), 2001.
- Yang, J. C., & Mclean, G. N. (1996). Structured on-the-job training competencies. In E. F. Holton (Ed.), *Proceedings of the 1996 Academy of Human Resource Development Conference*. Minneapolis, MN: Academy of Human Resource Development.

Figure 1. Conceptual Framework

