THE TRANSFER OF LEARNING PROCESS: FROM OUTDOOR, ADVENTURE-BASED PROGRAMS TO THE PRACTICE SETTING

by

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(Under the direction of SHARAN B. MERRIAM)

ABSTRACT

The field of training and development has experienced tremendous growth during the past decade. Outdoor adventure-based programs represent a sizeable percentage of this marketplace. Despite an increase in popularity, however, little is known about how adult learners transfer adventure-based learning to the practice setting. Therefore, the purpose of this study was to understand how adult learners transfer outdoor adventure-based learning to their workplace environments.

Utilizing a qualitative methodology relying primarily upon in-depth interviews, data were collected from eighteen respondents, representing three companies, who met specific sample-selection criteria. Each of the three groups of employees participated in a one-day outdoor adventure-based learning program. The first group of employees, representing a small advertising firm, participated in a low ropes training day. The second group, from the accounts payable department of a large construction agency, participated in a training day that included various high ropes activities. The final group, a leadership team from a regional healthcare center, took part in a training day consisting of various portable group initiatives.

Each of the eighteen interviews was audio-taped and later transcribed. Transcripts were then analyzed using the constant comparative method of data analysis. Analysis revealed that participants gain significant insights into themselves, their colleagues, and their entire work group through participating in outdoor adventure-based training programs. In transferring outdoor adventure-based learning to the workplace, participants employed a process consisting of reflecting, strategizing, implementing, and evaluating. Finally, certain factors including trainee perceptions, supervisory support, and group dynamics, were discovered to influence the transfer of outdoor adventure-based learning.

Three conclusions were reached based upon the above findings from this study. First, participants do experience meaningful yet unintended learning during outdoor adventure-based programs. Next, participants employ a deliberate process in an effort to transfer this learning to the workplace settings. Finally, there are several factors that have an impact upon this transfer process.

Learning transfer, Outdoor education, Experiential learning, Ropes course, Training INDEX WORDS:

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DEDICATION

This project is dedicated in loving memory of my mother Anne Jean Leahy.

Thank you, Mom, for your unwavering faith in my ability to achieve.

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CHAPTER 1

INTRODUCTION

Corporate and organizational training appear to have reached an all time high in this country. An increasing number of employees are now required to take part in some form of team building or leadership development program each year. This demand has fueled the explosive growth of an industry comprised of private consultants and training organizations aimed at designing and presenting various forms of corporate and organizational developmental training programs. In fact, training has become such "big business" that it can no longer be measured in terms of millions of dollars spent annually. Rather, recent surveys suggest that billions of dollars are now devoted to training annually in the United States (Noe, 2000). One of the fastest growing segments of this expanding market is outdoor, adventure-based experiential programming.

This particular training format is referred to by many names throughout the training and development literature. Some of the more frequently observed labels include wilderness training, experiential learning, adventure-based learning, and outdoor management education. Despite the fact that there are multiple terms found throughout the literature, this particular type of training has several unique features that distinguish or set it apart from other formats. Outdoor, adventure-based experiential programming "consists of a series of structured exercises, or 'initiatives,' which are undertaken outdoors by groups of program participants and which by their design require risk-taking,

problem solving, and teamwork for successful completion" (McEvoy, 1997, p. 235). In addition to physical activity, this training format is characterized by post activity discussion or debriefing sessions "in which participants analyze their experiences and share their learning... with colleagues" (McEvoy, 1997, p. 235). In short, through this particular training format, groups of employees are taken from their workplace environment to ropes courses, white water rafting facilities, rock climbing facilities, and just about any other outdoor setting imaginable "to develop leadership, problem solving, self-awareness or team skills" (Fenwick, 2000, p. 22). In addition, "these programs are offered in corporate training to help people develop more creativity, risk-taking, and communication skills by recognizing the barriers to their own potential and productivity" (Fenwick, 2000, p. 22).

Experiential Learning Theory

While such programs appear to be mostly physical and recreational in nature, outdoor, adventure-based programming is supported by widely recognized educational theory. Experiential learning theory underlies adventure-based programming. One conceptualization of this theory emphasizes the more informal and self-directed nature of adult learning, and maintains that experiential learning represents those things that adult learners learn "from their work and leisure, from their experience in social and domestic contexts, and from their personal relationships" (Miller, 2000, p. 71). A second definition which underlies this particular study, describes a more deliberate educational practice, one that is used by trainers within the context of more purposeful, adventure-based learning environments. Fenwick (2000) maintains that experiential learning as a deliberate educational practice can take many forms within the field of adult education

including "kinesthetic directed instructional activities in the classroom, special workplace projects interspersed with 'critical dialogue' led by a facilitator, learning generated through social action movements, and even team-building adventures in the wilderness" (p. 13).

There are several theoretical frameworks or models used to describe such an experiential learning process. One of the most commonly referenced models is Kolb's (1984) "experiential learning cycle." According to the author, learning "is a process whereby knowledge is created through the transformation of experience" (p. 38).

This definition emphasizes several aspects of the learning process as viewed from the experiential perspective. First is the emphasis on the process of adaptation and learning as opposed to content and outcomes. Second is that knowledge is a transformation process, being continuously created and recreated, not an independent entity to be acquired or transmitted. Third, learning transforms experience in both its objective and subjective forms. Finally, to understand learning, we must understand the nature of knowledge, and vice versa. (Kolb, 1984, p. 38)

In Kolb's model experiential learning is a process involving four distinct phases. According to the experiential learning cycle, learning begins in a "concrete experience." The second phase of the cycle engages the learner in a process of "reflective observation" focused on what occurred during the experience as well as how the particular experience relates to the learners' past experiences. This reflective process leads the learner to the third phase of the cycle referred to as "abstract conceptualization." Through abstract conceptualization, a learner develops a deeper understanding of the significance of what

occurred during the learning activity. New insights are then tested during the "active experimentation" phase of the cycle, which brings the learner back to yet another "concrete experience." This cycle "shows that experienced based learning involves some steps, some phases, a going out and coming back, and above all, a process of reflection" (Davis & Davis, 1998, p. 367).

Kolb's widely referenced learning model is based, in large part, on the work of Lewin (1951). Like the experiential learning cycle, the Lewinian experiential learning model details a cyclical learning process involving four distinct phases. The model holds that all learning originates in a concrete experience. During this learning experience, the learner moves on to the next phase of the process that involves making observations and reflecting upon what has been observed. These reflections lead the learner to the formation of abstract concepts and generalizations. These concepts and generalizations are then tested in the final phase of the learning process in which the learner applies insights and implications to new situations.

The central components of the experiential models, namely experience, activity, reflection, and application, can be found throughout related general educational and adult education theory. It is clear that the Kolb model, and probably every other model of its kind, was heavily influenced by an American educational philosophy known as Pragmatism. This educational theory is most often closely associated with Dewey. According to Dewey (1910; 1938) the most effective education is rooted in scientific inquiry or methodology for the purpose of problem solving and self discovery. In this model, active experimentation emerges as being more crucial to learning than passive exposure to a static curriculum. Within this particular view, "the methods of criticism,

full public inspection, and testing [are] the moral principles to guide educational work" (Elias & Merriam, 1995, p. 50).

These same basic principles are further developed in the writings of such progressive adult educators as Knowles, Rogers, Houle, Tyler, Lindeman, Bergevin, and Freire (Merriam, 1995). Within adult education circles, however, it is Malcolm Knowles (1980) who is most often identified with the progressive education movement.

The most widely accepted and referenced progressive educational model is Knowles' (1980) model known as "andragogy." Knowles' model embraces the active scientific experimentation proposed by Dewey. Knowles (1980), however, maintains that this experimentation should be applied by adult learners in an effort to address "real life tasks or problems" (p. 44). In this way, the adult learner drives the learning process him or herself. In short, such a model removes the instructor and curriculum from the center of the learning process and replaces them with the adult learner. What then becomes most central to the learning process is the adult learner's self-directedness, experiences, motivation to learn, and desire "to apply newly acquired skills or knowledge to their immediate circumstances" (Knowles, 1980, p. 44). The instructor, having been removed from the central position of the learning process, now takes on the role of facilitator, simply assisting the learner in his or her efforts to learn from various experiences.

The word facilitate is derived from the Latin *facile*, which means "to make easier; assist" (American Heritage, 1998, p. 251). Facilitation, within the context of adult education, calls upon the instructor not to teach but rather to assist in the learning process. Stephen Brookfield (1986) presents a model of learning that is based exclusively on the practice of facilitating adult learning. Effective facilitation, according

to Brookfield (1986), is characterized by mutual respect between learners and instructors, collaborative learning endeavors, learning activities, critical reflection, and the nurturing of self-directed learning.

There are numerous other educational models that embody the central elements of experiential learning. One such learning model is referred to as active learning (Bonwell and Eison, 1991). Such a model is the product of a body of research revealing the traditional classroom-based lecture to be less than adequate in addressing the learning styles of most learners. Several characteristics often associated with active learning include learners as actively involved in the learning process, an emphasis upon skill development as opposed to the transmission of information, higher order thinking such as analysis, synthesis, and evaluation, and, most importantly, learning activities.

Other models, which embrace experience, activity, reflection, and application include social constructivism (Vygotsky, 1978; Zahorik, 1995), holistic learning (Apps, 1991; Davis & Davis, 1998; Fishbach, 1994), praxis (Friere, 1970a, 1970b, 1973, 1985, sited in Brookfield, 1986), and reflection-in-action (Schon, 1983, 1986).

The Promise of Outdoor Adventure-Based Experiential Programs

In addition to aligning themselves with respected educational theory, providers of outdoor experiential-based learning opportunities claim that what they do is "nothing less than magic" (Long, 1987). Facilitators in the field often site a largely anecdotal body of literature espousing the widely held belief that adult education programs conducted in an outdoor adventure-based venue have certain added benefits when compared to more traditional classroom-based programs. An outdoor adventure-based experiential program, Barker (1995) claims, "can accomplish a lot in a relatively short period of time

because 'it pulls you into [the learning process]" (p. 91). Others within the field, such as Veal (1995), cite advantages of outdoor adventure-based experiential training programs:

One distinct advantage is that it provides a realistic platform to review the management of human resources. Decisions made or actions taken during the outdoor exercises have an important and immediate effect on the participants involved. The effects of properly developed exercises make people think about how the situation was handled. Another advantage is that whatever decisions are made, there is no detrimental effect to the company. It makes a good practice environment. By constructively reflecting upon the exercise, participants broaden and enhance their management skills. (p. 16)

Another advantage, according to Gall (1987), is that these experiences can have a profound and lasting impact upon individual trainees. Gall (1987) refers to one corporate manager who claims that a training experience "in the woods" can profoundly impact individual trainees' "whole attitudes about how they approach life, how they approach work, how they approach managing" (p. 54). The impact may not only be upon individual trainees, but upon an organization's bottom line figures as well. Steinfeld (1997) argues that "physical challenge activities can teach [trainees] worlds about working together. And that can translate into better team relationships, group dynamics and cooperation, communication, and profits" (p. 12).

As a direct result of a perception of educational legitimacy and the claims made by providers of this type of training, employers send their employees to participate in outdoor adventure-based programs not simply for an "exciting" and "fun" time away from the office. Rather, employers have much higher expectations when investing large sums of money in training for their employees. In short, employers invest in this type of program in the hopes that they will see tangible returns within the workplace.

The Transfer of Training Debate

Critics of outdoor adventure-based experiential training claim that these programs are little more than "an excuse for desk-bound executives to play Indiana Jones for a day" (Wagner, Baldwin, & Roland, 1991, p. 51). Still others maintain that outdoor adventure-based experiential programming is just "an excuse for busy managers to take 'vacations' on company time" (Buller, Cragun, & McEvoy, 1991, p. 58). These critics often site research which seems to indicate that as much as 90% of what is invested in training fails to transfer back to the workplace environment (Baldwin & Ford, 1988; Broad & Newstrom, 1997; Hoffman, 1983; Mosel, 1957; Newstrom, 1985). Baldwin and Ford (1988) describe such a lack of transfer to the workplace environment as a significant problem:

There is a growing recognition of a "transfer problem" in organizational training today. It is estimated that while American industries annually spend up to \$100 billion on training and development, not more than 10% of these expenditures actually result in transfer to the job...Researchers have similarly concluded that much of the training conducted in organizations fails to transfer to the work setting. (Baldwin & Ford, 1988, in Broad & Newstrom, 1992, p. 7)

At the heart of this debate is the process referred to as transfer of training. Such a transfer process is one of the most powerful measures by which the quality or effectiveness of an adult education program can be measured. Transfer of training, as defined by Broad and Newstrom (1997), "is the effective and continuing application, by

trainees to their jobs, of the knowledge and skills gained in training — both on and off the job" (p. 6). The lack of effective and continual trainee application of knowledge and skills gained in training is considered to be a "problem" (Baldwin & Ford, 1988; Broad & Newstrom, 1992; Michalak, 1981). Within the field of adult education, Sork (1991) has gone so far as to say that such a lack of transfer is not only a problem, it is one of the primary reasons many training programs can and have been considered to be outright failures. This lack of transference has resulted in an effort to identify those variables that affect the transfer to practice of what has been learned in training.

Detterman (1996) identified at least two distinct types of transfer of training. The first of these, referred to as *near transfer*, pertains to those training situations in which the training environment closely resembles the practice setting to which trainees will return following a particular training program. The second type of transfer of training, referred to as *far transfer*, refers to those training situations in which the training environment does not at all resemble the practice setting to which trainees will return. It is this latter form of transfer that appears to be the most controversial. This controversy stems from the fact that certain researchers maintain that, in order for transfer of training to occur, there must be close similarities between the training setting and the actual professional practice environment (Reed, 1993; Dempster & Ettinger, 1985).

In an attempt to identify those variables that affect program outcomes, specifically variables having to do with improved work performance as a result of training, Cervero (1985; 1988) introduced a transfer framework that offers four sets of variables. The first set of variables addresses the specific characteristics of the training program itself. The second set consists of those variables the individual learner brings to the training and

work environment. The third set of variables is related to the "nature of the proposed change" (p. 145). The final set of variables addresses the "social system in which the professional works" (p. 145), which is also commonly referred to within the literature as the "transfer climate."

Another model of the transfer process (Baldwin & Ford, 1988; Ford & Weissbein, 1997), presents variables similar to those found within Cervero's framework. According to this model, there are three sets of variables that have a direct impact upon the transference of information and skills acquired during training to the professional work environment. The first set of variables identifies specific individual trainee characteristics. These characteristics take into account such variables as individual ability, personality traits, and motivation. The second set highlights those variables presented by the design of the training program itself and includes such variables as principles of learning, sequencing, and training content. The final set of variables emphasizes the work environment the professional will return to after the training. This final set of variables addresses such factors as organizational support of the transfer process and opportunities for the trainee to utilize newly acquired skills.

The variables presented within both the Cervero framework and the Ford model are the basis for a wide body of research on the transfer process of professional training. In addition to these models which identify and highlight specific variables, other models can be found throughout the transfer literature detailing the process by which skills and information acquired during training can be effectively applied within the practice environment. One such a framework is referred to as the "Before, During, and After" model of transference (Broad & Newstorm, 1992; Fox, 1994; Milheim, 1994; Rossett,

1997). The Before, During, and After model maintains that there are certain measures which managers, trainers, and trainees can take before, during, and after the training program that will increase the likelihood of transfer resulting in the desired organizational and trainee change. Such measures include increasing trainee expectations before the training (Broad & Newstrom, 1992), utilizing active learning techniques during training (Tallman & Holt, 1987), and assigning trainees to work on projects that require newly developed skills after training (Milheim, 1994).

Despite the controversy surrounding it, outdoor adventure-based organizational training has the potential of becoming an accepted and legitimate form of adult education. There are many authors maintaining that such programs are profoundly effective while others voice lingering doubts. This type of programming does, however, appear to be based upon a solid foundation of widely recognized educational theory. Though research has been conducted focusing upon those variables than can and do affect the transfer process of training in general, few studies have focused specifically upon the transference from outdoor adventure-based programs. The overwhelming majority of transfer studies focus upon the near transfer of surface structure information (the use of identical skills within identical contexts). They fail to address the attempt of outdoor, adventure-based programming to promote far transfer of deep structure material (the use of general skills within differing contexts). In addition, while the transfer literature does appear to delineate a transfer of training process, such a process is based almost entirely upon "helpful hints" from practitioners in the field and not upon actual research. Therefore it is absolutely necessary that more work be done in investigating the transfer of training process as it relates specifically to this particular training format.

Statement of the Problem

In 1990, forty-six billion dollars were spent on training in the United States of America. Of the forty-six billion, two hundred thirty million dollars were spent directly on outdoor adventure-based experiential programming (Noe, 1999). By 1998, these figures had jumped to a staggering one hundred billion spent on training, with five hundred million going directly to outdoor adventure-based experiential programming (Noe, 1999). There is currently every indication that these figures will continue to grow (Noe, 2000).

Despite these huge sums of money, however, little is known about the process through which employees take learning from outdoor adventure-based programs and apply it within their workplace environments. In short, there are few insights into the transfer of training process as it relates directly to this particular type of program. The current transfer literature does identify certain variables thought to impact the transfer process. Much of this literature, however, is based upon research involving a wide range of populations attempting to transfer learning from specific experimental activities to other controlled experimental situations. The current body of literature, though informative, reveals certain variables in isolation as they affect the transfer efforts of varying populations within controlled experimental situations. In addition, these variables have been applied mostly to traditional forms of training programs. There are very few examples of transfer research efforts involving adults attempting to transfer the learning from an outdoor, adventure-based training program to their professional practice environment. Therefore, the purpose of this study is to understand how adult learners transfer adventure-based experiential learning to their workplace environments.

The following questions will guide this study:

- 1. What do participants learn during this type of program?
- 2. Through what process do adult learners, individually and collectively, transfer this learning to the workplace?
- 3. What learner, instructor, program design, and workplace factors influence this transfer process?

Significance

This study provides additional theoretical explanations of the transfer process as it relates to adult learners transferring newly acquired skills and insights from outdoor adventure-based training programs to professional practice contexts. The collective body of research in this area has provided glimpses into those factors that facilitate, promote, and hinder this process. However, the process through which adult learners transfer the learning from these types of training programs to their practice environments has not yet been clearly delineated. Therefore, additional research efforts, contributing to knowledge about the process through which adults transfer learning from outdoor adventure-based training to practice, are required.

This particular study will contribute to several areas of theory and knowledge. The first of these is the field of adult education. This study will provide glimpses into the learning and transfer processes of adult learners engaged in a context not frequently discussed within the adult education literature. Next, this study will contribute to the field of experiential learning. The field of experiential learning will benefit from a deeper understanding of the nature of learning that occurs as a direct result of specific forms of experiential programs. Finally, this study will contribute to the transfer of

training literature. Much of the transfer literature is devoted to those measures that can be taken in an effort to increase the likelihood of training transfer. These measures, however, are primarily the product of "helpful hints" from practitioners within the field of training and development. This study will reinforce "helpful hints" with data revealing what adults learn from these programs and how and why they transfer this learning to their workplace settings.

A deeper understanding of the process through which trainees transfer learning from adventure-based training programs to professional practice settings will inform practitioners within the field of training and development, organizations intending to invest in this type of training, and adult learners who will be trainees within this particular training format. This study will also provide information toward the development of organizational initiatives that could maximize the benefits of these training programs. Finally, this study will contribute to creating meaningful training experiences for individuals who are looking to gain personal and professional benefits from this particular training format.

Definitions

Within this particular study, the following definitions will be used:

Experiential Learning – "The process whereby knowledge is created through the transformation of experience" (Kolb, 1984).

Outdoor, Adventure-Based Training – A series of outdoor activities, attempted by groups of learners, promoting teamwork, communication, and other interpersonal collaborative skills during which learners reflect upon and share learning with others (Fenwick, 2000; McEvoy, 1997).

<u>Transfer of Learning</u> – The degree to which learning, that takes place within a training context, is later applied within the workplace.

CHAPTER 2

LITERATURE REVIEW

Corporate and organizational training, in virtually all of its many forms, has experienced tremendous growth during the last decade in the United States (Noe, 2000). Outdoor, adventure-based programming is no exception to this trend. This is why many corporate trainees now find themselves, instead of being in formal meeting rooms and conferences, aboard sailing vessels, climbing trees, and hiking through the wilderness in the name of personal growth and organizational development. This study seeks to gain certain insights into the process through which trainees take what they have learned within these outdoor adventure-based learning environments and apply it within their professional practice settings. Therefore, a review of diverse bodies of literature is needed to provide the necessary background information to the transfer process as it relates to adult learning, adventure-based programming, and corporate and organizational training.

This particular review begins with an exploration of the term experiential learning. Such an exploration will involve a review of some of the most widely referenced experiential learning theories and models. In addition, this review will also explore the research pertaining to the transfer process as it relates to formal training programs. A review of the transfer process will also highlight those variables, such as trainee characteristics, program design, and work environment factors, which have been

found to influence the transfer of training process. Next, a review of the transfer literature pertaining, specifically, to outdoor, adventure-based programs will be provided. Finally, the review will conclude with a synopsis of a body of works produced by practitioners, which provides measures for increasing the likelihood that transfer of training will occur.

Experiential Learning

In recent years there appears to be an increase in attention to educational models that emphasize experience, activity and reflection as the basis for effective learning. Many trainers, facilitators, and educators are incorporating experiential learning activities into their instructional design; likewise, many adult learners now find themselves on ropes courses, whitewater rapids, camping trips, sailing excursions and other adventures. In addition, the traditional classroom environment has been modified to reflect an emerging emphasis on engaging students in their own learning as opposed to passive instruction. This has resulted in learning environments that look more like experiential initiatives, simulations, and role-plays than lecture halls. There are many who criticize this shift toward experiential learning activities, arguing that, though they may be fun and exciting, no significant learning actually takes place. There does, however, appear to be a solid foundation of learning theory that supports the inclusion of various forms of learning models that involve activity, collaboration, and reflection. In addition, certain teaching and learning techniques, such as active learning, have been shown to increase the transfer to practice of what has been learned through training (Detterman, 1996).

The term "active learning" is found primarily within the higher education literature. It is the product of a body of research aimed at measuring the overall

effectiveness of the most common form of instruction in higher education, the traditional lecture. Through such research, it has been found that most common form of instruction, the traditional lecture, is an ineffective form of instruction for most learners (Lloyd, sited in Penner, 1984; Stuart & Rutherford, 1978; McLeish, sited in Penner, 1984; Verner & Dickinson, 1967; Bligh, 1972; Costin, 1972). Bonwell and Eison (1991) claim that if the needs of most students are to be met, active learning techniques must be incorporated into every higher education classroom.

Bonwell and Eison (1991) offer some general characteristics often associated with active learning. For example, learners are required to do more than just listen during the learning process. Such a requirement is supported by evidence suggesting that learners appear to retain more information when they are actively involved than when they are passive recipients of information (Cross, 1987). A second characteristic of active learning is an emphasis upon skill development as opposed to the transmission of information. Another characteristic of this approach to teaching and learning is that learners are involved in higher order thinking such as analysis, synthesis, and evaluation and not simply memorization and recitation. Also, and most importantly, learners are physically involved in learning activities. They are required to do more than sit in a seat and absorb information. Finally, through active learning, learners are encouraged to explore their own attitudes and values as they relate to what is being learned. In short, the primary emphasis in active learning is the requirement of learners to actually "do things" while they are learning. Bonwell and Eison (1991) conclude that active learning "involves [learners] in doing things and thinking about the things they are doing" (p. 2).

Through their educational model, Bonwell and Eison (1991) are attempting to avoid what Freire (1974) referred to as the "pedagogy of the oppressed." Such oppression, according to Freire (1974) is based upon the "banking" model of education:

Education thus becomes an act of depositing, in which the students are the depositories and the teacher is the depositor. Instead of communicating, the teacher issues communiqués and makes deposits which the students patiently receive, memorize, and repeat. This is the banking concept of education, in which the scope of action allowed to the students extends only as far as receiving, filing, and storing deposits. They do, it is true, have the opportunity to become collectors or cataloguers of the things they store. But in the last analysis, it is men themselves who are filed away through the lack of creativity, transformation, and knowledge that in this (at best) misguided system. (p. 58)

Knowles' (1980) theory of andragogy presents several points or ideas that are central to any discussion regarding learning involvement and reflection. Andragogy is based on five assumptions. Knowles' first assumption, which is widely held by many in the field of adult education, is that adults have a strong desire for self-directedness. In other words, knowledge acquisition is directly related to the adult's sense of control. Learning is most evident in situations in which "the decision to learn is the learner's" (Brookfield, 1986, p. 10).

Knowles also maintains that experiences are a powerful source of learning for adults. Because of this belief, he recommends the use of experiential leaning techniques. "Adults learn more effectively through experiential techniques of education such as discussion or problem-solving" (p. 43). According to Knowles' (1980) third assumption,

adults are motivated by learning needs that are the direct result of "real life tasks or problems" (p. 44). Based on such an assumption, it would be beneficial if adult learning and training programs were based on "real life" problems the adult learners face in their personal and professional lives.

The fourth assumption of andragogy holds that adults are "competency based learners" (p. 44). Because of this, they are motivated by a need to "apply newly acquired skills or knowledge to their immediate circumstances" (p. 44). Knowles (1980) concludes that adults are "performance centered" (p. 44). Therefore, training programs should emphasize the development of skills that can be immediately applied to the professional and personal lives of trainees. Finally, Knowles includes an assumption addressing the adult learner's internal motivation. According to the author, adults, unlike children, "are motivated to learn by internal factors rather than external ones" (Knowles, 1984 in Merriam & Caffarella, 1991, p. 249).

There exist other educational models that emphasize experience, activity, and reflection as the basis for effective learning. One of these is the educational model referred to as constructivism. Constructivism maintains that humans construct knowledge. "Knowledge is not a set of facts, concepts, or laws waiting to be discovered" (Zahorik, 1995, p. 11). Instead, humans create knowledge during a process through which they attempt to apply meaning to their experiences (Zahorik, 1995). Similarly, Vygotsky (1978) concluded that social interactions and early experiences have a profound impact upon an individual's ability to speak, read, and write. The constructivist model places a strong emphasis upon such processes as experience, reflection, and

meaning making. Zahorik (1995) presents the five basic elements of constructivist teaching practice.

Activating prior knowledge – Because new information is acquired in relation to what one already knows, it is important to help the learner become fully aware of prior knowledge. "Students and teachers need to be aware of students' knowledge structures, because these structures accommodate the new experience and guide the perception of new experience" (p. 14).

Acquiring knowledge – According to this model, the best way to approach the delivery of new knowledge is to provide the "big picture." "Only after some sense of the whole is acquired would the parts that need attention be treated" (p. 16).

Understanding knowledge – Within this phase of the model, experience and reflection are emphasized. "Teachers can assist the development of understanding by providing experiences that cause students to explore thoroughly the new content and to share their interpretations of the new content as it relates to their knowledge structures" (p. 17).

Using knowledge – This particular phase of the learning process emphasizes the use of learning activities to facilitate the acquisition of new knowledge. "The most effective activities for knowledge use are authentic, holistic, long-term, and social" (p. 19).

Reflecting on knowledge – Reflection, the final phase of this learning model, plays an important role in the learning process. "Reflection refers to understanding what one knows...It is one thing to use knowledge to solve a problem, but it is another to become aware of the strategy one employed that led to the solution" (p. 21).

One of the most widely referenced educational models emphasizing learning activities, reflection, and the application of new knowledge is Kolb's (1984) experiential learning cycle. According to Kolb (1984), experience is the source of learning and development. In fact, a learning experience marks the first phase of his learning cycle. Throughout the second phase of the cycle, the learner is encouraged to engage in a process emphasizing reflection and observation. These reflections and observations are to be focussed on the experience at hand as well the experience's relationship to prior knowledge and understandings. Such a process aids the learner in developing general themes or categories of understanding known as abstract conceptualizations. These new themes are tested during the phase of the cycle requiring active experimentation, which requires the learner to explore yet another learning experience. According to the model, learners are involved in a continuous process of experience, reflection, developing understandings, and testing these understanding in still more experiences.

Miller (2000) maintains that experiential education is directly linked to adult education. "A common assumption underlying much of the theory and practice of adult education is that adults learn throughout their lives, from their work and leisure, from their experience in social and domestic contexts, and from their personal relationships" (p. 72). To illustrate this point, Miller applies the components of Kolb's (1984) model, concrete experience, reflective observation, abstract conceptualization, and active experimentation, to her personal experiences as an adult learner. The author concludes that adult educators should concern themselves with experiential learning and that the growing emphasis upon learning from experience should have meaning for the practice of

adult education. Despite this, however, Miller offers four areas of concern. These include:

The politics of experiential learning and the need to understand power relationships between learners and promoters of learning; the ethics of experiential learning and issues of negotiation and consent; the management of the emotional dimensions of learning; and the constraints placed on the experiential learning by the social, cultural, economic, and technological contexts in which learning takes place. (84)

Brookfield (1986), like Bonwell and Eison (1991), maintains that effective instruction involves more than lecturing and passive absorption of information:

A mass lecture to an audience of adults in which there is no opportunity for discussion, no time for questions, no time for collaborative exploration of differing viewpoints, and no attempt to make some links between the learners' experiences and the topic under discussion is poor practice. (p. 9)

According to Brookfield (1986) there are six principles of effective practice in facilitating learning. The first of these principles is that participation in learning is voluntary and that adult learners arrive at the decision to learn of their own free will. The author maintains that facilitation cannot occur in situations in which the learning is mandatory and the learners are coerced, bullied, or intimidated. Second, effective facilitation, according to Brookfield (1986), is characterized by respect. This respect should exist between the facilitator and the learners, as well as between the learners themselves. "Foreign to facilitation are behaviors, practices, or statements that belittle others or that involve emotional or physical abuse" (p. 10).

This model also maintains that effective facilitation is a collaborative endeavor. "Facilitators and learners are engaged in a cooperative enterprise in which…leadership and facilitation roles will be assumed by different group members…[ensuring that] competing claims are explored, discussed, and negotiated" (p. 10). Brookfield (1986) maintains that effective facilitation involves learning activities. He describes two distinct forms of activities. One type requires that the learners actually "do" something and literally become engaged in physical activity. The second form of activity described by the author is cognitive activity. Such activity does not necessarily involve the learners in observable acts, but engages them in such processes as "exploring a wholly new way of interpreting one's work, personal relationships, or political allegiances" (p. 10).

Facilitation also involves engaging the adult learner in critical reflection (Brookfield, 1986). Through learning activities, learners "come to appreciate that values, beliefs, behaviors, and ideologies are culturally transmitted and that they are provisional and relative" (p. 10). Through such critical reflection, the adult learner will "come to question many aspects of his or her professional, personal, and political lives" (pp. 10-11). Finally, according to Brookfield (1986), effective facilitation should strive towards the "nurturing of self-directed, empowered [learners]" (p. 11). Such learners will "see themselves as proactive initiating individuals engaged in a continuous re-creation of their personal relationships, work worlds, and social circumstances rather than reactive individuals, buffeted by uncontrollable forces of circumstance" (p. 11).

Other models of teaching and learning depend, at least in part, upon learning activities, and other related active learning techniques. One such model is holistic learning. Such a model is rooted in brain-based and educational research. Holistic

learning is a form of instruction that literally involves the "whole person" in the learning process. According to Davis and Davis (1998), such a whole person approach involves virtually all aspects of the learner including "sight, sound, touch, taste, and smell, as well as mind, body and soul — simultaneously" (p. 374). Such instruction is holistic because it reflects the capacity of the brain to take in and synthesize many aspects of experience at once (Davis & Davis, 1998).

There are others within the field of adult education who advocate the involvement of the whole learner in the learning process. Jerold Apps (1991) detailed an approach to instruction that "involves all of the learner...feelings, thoughts, relationships, backgrounds, values, beliefs — everything that makes a person unique" (p. 1).

Almost all of today's educational models that emphasize the importance of active learning, critical reflection, and higher order thinking instead of passive observation and memorization, can be traced back to earlier educational models based on the philosophy now known as pragmatism. Pragmatism is considered an American philosophy of education that can be traced back to the writings of Dewey, Charles Pierce, William James, and Chauncy Write (Merriam, 1995). This philosophy attempts to apply scientific inquiry or methodology to the process of solving human problems (Dewey, 1910). This philosophy emphasizes the centrality of human experience. Human experience is considered to be a more effective approach to arriving at knowledge than other more authoritarian ways of teaching and learning (Merriam, 1995).

With such a philosophy that de-emphasizes authoritarian methods, there can be no absolute knowledge. Instead, knowledge is considered to be relative. Experimentation is a key step in the learning process as it allows the individual learner to discover truths for

him or herself. This philosophy calls for "an education that entailed the critical and controlled type of learning exemplified in science. The methods of criticism, full public inspection, and testing [are] the moral principles to guide educational work" (Merriam, 1995, p. 50).

Paulo Freire (1970a, 1970b, 1973, 1985 in Brookfield, 1986) detailed an approach to literacy instruction that fits closely with this discussion of educational models that involve learning activity and reflection. Freire referred to this educational approach as "praxis." The term praxis represents a cyclical form of learning that begins with a learning activity. The next phase of the learning involves reflection upon what occurred during the learning activity. Such a reflective process can and should entail a collaborative analysis of the activity. Collaborative analysis embraces such active learning techniques as group discussions, sharing of ideas, debates, and brainstorming. The cycle then begins again with a new learning activity, more reflection and collaborative analysis. According to Brookfield (1986), this cycle is designed to engage the learner in a process "of investigation and exploration, followed by action grounded in this exploration, followed by reflection on this action, followed by further investigation and exploration, followed by further action, and so on (p. 15)." In short, praxis "means that explorations of new ideas do not take place within a vacuum but are set within the context of the learners' past, current, and future experiences" (Brookfield, 1986, p. 15).

The theory of reflection-in-action can be found throughout the work of Donald Schon (1983, 1986). Schon (1983) presents a case for the use of experience and reflection in place of other formal direct instruction techniques. According to the author, "technical rationality" has dominated the field of professional training for years. This

model provides trainees with a standardized body of knowledge and information that is to be uniformly applied to all possible professional problems. Schon (1983) maintains that such a model does not adequately prepare learners with the skills they will need to address the vast array of problems they will encounter in their professional lives. In short, a neatly packaged collection of standardized information does little to help the learners navigate the "swamp" of professional practice. "There are too many cases that are not in the books, too many unique and unpredictable elements, too many unstable contexts for the old formulas to work" (Davis & Davis, 1998, p. 369). Professional training, according to Schon, needs to offer more.

Professional training needs to provide a model of instruction that takes the learners beyond simple rote memorization. Professional training, if it is to meet the demands of professional life, needs to provide learners with the skills of "reflection-inaction" (p. 49). This is a model in which trainers, instead of providing a set of facts, provide trainees with the skills they will need to critically think about what they are doing in their professional lives. This model helps trainees to deeply think about learning and professional experiences. Reflection-in-action is a way of knowing and learning "that grows out of experience. It is a kind of knowing that is in our action. Professional practitioners must think about what they are doing while they are doing it, and it is in this way that they learn from experience" (Davis & Davis, 1998, p. 370).

Fenwick (2000) presents a model of experiential learning emphasizing the fact that this particular form of learning also takes place in the absence of teachers and formal instruction. In light of this particular viewpoint, the author attempts to "disentangle the notion of experiential learning from experiences commonly associated with formal

education" (pp. 243-244). In an attempt to break from the "colonial" attempts of formal education to claim experiential learning, the author presents five broader perspectives on this type of learning. The first perspective is referred to as reflective (constructivist). The focus of this perspective holds that individuals construct meanings from their experiences to produce knowledge" (p. 267). Another perspective is referred to as the interference (psychoanalytic). This perspective focuses upon the self and "how it is crafted, repressed, recovered, and understood" (p. 267). The next perspective is identified as participation (situative). This particular perspective takes into account those practices in which individuals have learned to participate" (p. 267). The fourth perspective is referred to as resistance (critical cultural). This particular perspective focuses upon the question "how does power circulate to repress or enhance experience and learning?" (p. 267). The final perspective of this model is identified as coemergence (enactivist). This perspective takes into account the "co-emergence of social systems" and is focused upon the question of "how do cognition and environment become simultaneously enacted?" (p. 267).

There are many who argue that outdoor, adventure-based training programs are a waste of valuable time and resources. Such an argument is made, in large part, because of the fact that these programs lack many of the surface characteristics, such as lectures and classrooms, of more formal "traditional" learning programs. There does appear to exist, however, a body of educational philosophy and thought emphasizing the importance of experiential learning, active learning, critical reflection, and other higher-order thinking skills, which can be linked to the learning that occurs in adventure-based training programs.

Transfer of Training

Experiential learning activities are not what are considered to be the most valuable aspect of outdoor, adventure-based training programs. Rather it is the learning, which takes place as a direct result of these adventure-based activities, which is emphasized by practitioners within the field. It is this learning that is said to affect individuals and the organizations of which they are a part. The process through which trainees take the learning from a particular training program and apply it within their professional work environments is referred to as "transfer of training."

Within the transfer literature, there can be found many definitions of the concept of transfer. One definition, presented by Baldwin and Ford (1988), holds that transfer of training is "the degree to which trainees effectively apply the knowledge, skills, and attitudes gained in a training context to the job" (p. 63). Others, such as Detterman (1996), offer an even simpler definition of the term. According to the author, "Transfer is the degree to which a behavior will be repeated in a new situation" (p. 4). Detterman (1996), however, goes on to present several other important definitions central to any discussion of training and learning transfer.

In an effort to provide a more detailed definition of transfer of training, Detterman (1996) presents several distinctions. The first distinction is drawn between the terms "near transfer" and "far transfer." According to the author, "the more similar the original learning situation and the new situation, the more likely the transfer is to be called near transfer" (p. 5). Conversely, "the more difficult the original and new situations, the more likely the transfer is called far transfer" (p. 5).

The second distinction drawn by Detterman (1996) is between the terms specific transfer and nonspecific transfer. It is through specific transfer that trainees "transfer the contents of learning to a new situation" (p. 5). This is done on a very literal level. In other words, those practices and skills exhibited in training are later exhibited, in much the same way, within the workplace environment. Through general transfer, however, trainees transfer "general skills or principles" (p. 5) to new situations. This is also referred to as general transfer.

Detterman (1996) makes one final distinction between the terms deep structure transfer and surface structure transfer:

The main distinction is between the deep and surface structure similarities of a situation. An example is that all car dashboards give the same information, but that their dial configurations are different. Deep structure is the same but the surface structure is different. On the other hand, an airplane dashboard contains dials similar to a car's, but the information presented by those dials is different. For car and plane dashboards, there is similar surface structure but a different deep structure.

According to Detterman (1996), the greatest interest is in "far or general transfer of deep structure and not in near transfer of surface structure" (p. 5). Detterman continues "transfer of general principles between markedly different situations is most important to those who explain individual differences in terms of transfer" (p. 5). "It is transfer of deep structure that most researchers would characterize as typical of highly intelligent behavior and an important adaptive mechanism of the human species"

(Detterman, 1996, p. 5). The author concludes, however, "it is also far transfer of deep structure that is most difficult to get" (p. 5).

Variables Impacting Transfer of Training

According to the Cervero model of training transfer (1985; 1988), there are at least four sets of variables that impact the transfer process. The first set of variables identified within the Cervero model addresses specific characteristics of the training program. Next, the model specifies individual trainee characteristics thought to impact the transfer process. The model also addresses the nature of the proposed change as having an influence upon the transfer process. Finally, the model takes into account certain work environment variables that could, potentially, influence this process.

Another commonly referenced model, known as the model of the transfer process (Baldwin & Ford, 1988; Ford & Weissbein, 1997), offers similar sets of variables, which are thought to influence the transfer process. According to the model of the transfer process, there are at least three sets of variables which impact or influence this process. These include trainee characteristics, program design variables, and work environment variables.

For the purposes of this particular literature review, major variables impacting the transfer of training process are divided into four primary categories. The first category is individual professional / trainee characteristics. The second category addresses characteristics of the training program and design of the training program. The third category identifies work environment, social system, and transfer climate variables. Finally, a set of variables, identified as "barrier variables," are identified and discussed.

The Individual Professional / Trainee Characteristics

Individual trainee motivation has been identified as one variable that could affect transfer of training (Howard, 1989; Frazis, Gittleman, Joyce, 2000). Factgeau, Dobbins, Russell, Ladd, and Kudisch (1995) conducted a study involving 976 managers and supervisors taking part in a management development program. Survey results after the program revealed a higher level of perceived transfer of training among those participants who reported a greater degree of pre-training motivation. Survey results led the researchers to several conclusions, including that individual pre-training motivation was one of several variables that predicted transfer of training. Similar results have been found, with regard to individual motivation, throughout the transfer literature (Quinones, Ford, Sego, & Smith, 1995; Mathieu, Tannenbaum, & Salas, 1992; Tannenbaum, Mathieu, Salas, & Cannon-Bowers, 1991; Warr & Bunce, 1995).

A second individual trainee variable thought to affect transfer is self-efficacy (Ford & Weissbein, 1997). The results of several studies identified by Ford and Weissbein (1997) suggest a relationship between individual trainee self-efficacy levels and training transfer. There appears to be a greater degree of training transfer by those individuals who report a higher level of self-efficacy (Gist, Bavetta, & Stevens, 1990; Gist, Stevens, & Bavetta, 1991; Ford, Quinnones, Sego, & Sorra, 1992; Tannenbaum et al., 1991). In short, those trainees who believe they have the ability to apply specific information and skills to the workplace are more likely to attempt to do so.

A third variable associated with the individual trainee is job involvement (Baldwin & Ford, 1988). Several researchers have claimed to have identified a connection between job involvement levels and transfer of training. These researchers

report a greater degree of transfer of training by those trainees who have been found to have a high job involvement level (Mathieu et al., 1991). Noe and Schmitt (1986) conducted an analysis of the training literature. The researchers' analysis "integrates important motivational and situational factors from organizational behavior theory and research into a model which describes how trainee's attributes and attitudes may influence the effectiveness of training" (p. 736). According to this transfer model, job involvement is an indicator of potential transfer:

Individuals who are highly involved with their jobs are more likely to be motivated to learn new skills because participation in training activities can increase levels of skills, improve job performance, and elevate feelings of self-worth... These cues are more salient because the self image of individuals who are more highly involved with their jobs is tied directly to their success or failure at work. (p. 742)

Within the transfer literature, several other individual trainee-related variables have been identified. These variables include trainee ability (Brown & Kane, 1988; Detterman, 1993; Ford et al., 1992; Robertson & Downs; 1989), trainee perception that the training program is relevant (Axtell & Maitlis, 1997, Hicks, 1984; Howard, 1989, Keller, 1983; Vroom, 1964), a belief in the value of the training (Baumgartel, Renolds, & Pathan, 1984), and high expectations of results from the training (Eden & Ravid, 1982; Eden & Shani, 1982; Kemerer, 1991), which also involves a belief in the fact that training efforts will be rewarded (Howard, 1989, Kemerer, 1991; Vroom, 1964).

Broad and Newstom (1992) place a heavy emphasis upon the importance of trainee expectations. According to them, "one's expectations about a future event can

often affect the likelihood of its occurrence" (p. 112). This happens because a trainee's "expectation that something will happen [as a result of training] affects the priorities and energies [the trainee] devotes to making it happen" (p. 112). The authors refer to this phenomenon in the context of training as the "Pygmalion Effect." There is also evidence to suggest that just the opposite of the Pygmalion Effect will occur if trainees exhibit cynicism and an apparent belief in the improbability that the training will have any impact (Tesluk, Farr, Mathieu & Vance, 1995).

Barrick and Mount (1991) identified the "big five" personality factors that predict job performance. These include "conscientiousness, openness to experience, extraversion, emotional stability, and agreeableness" (Baldwin & Ford, 1988, p. 33).

According to Ford and Weissbein (1997), these personality factors will also have an impact upon other tasks as well, including the transfer of training.

Broad and Newstrom (1992) offer a similar list of trainee characteristics.

According to the authors, trainees will be more likely to transfer skills and information from the training environment to the work environment if they "have abilities and aptitudes for the new skills, personality traits such as high achievement needs and internal locus of control ('self-starters'), and a motivation to use new skills on the job" (p. 10).

While transfer of training is influenced by many factors, there is strong evidence to suggest that those variables found within individual trainees can have a profound impact upon the transfer process. Apparently, those trainees categorized as having a "good attitude" and positive work ethic are very likely to attempt to transfer learning from a training setting to their work environment. Conversely, those employees

identified as having "bad attitudes" are likely to perceive the training in a negative light and, more likely than not, will make little or no effort to attempt to transfer.

Characteristics of the Training Program / Design of the Training Program

Within the transfer literature, there is evidence to suggest a connection exists between certain characteristics as design features of the training program and transfer of training. Baldwin (1992) conducted a study involving 72 business students enrolled in a course designed to develop assertive communication skills. The researchers discovered that groups exposed to multiple instructional methodologies (scenario variability and model competency variability) demonstrated a greater ability to generalize desired communication skills to other contexts immediately after the program as well as one month later. This particular design feature is also referred to as stimulus variability (Ellis, 1965) and has been found elsewhere in the literature as a tool for improving transfer of training (Duncan, 1958; Ellis, 1965; Shore & Sechest, 1961).

Gist, Bavetta, and Stevens (1990) conducted a transfer study involving 68 MBA students who were taking part in a negotiation skills development training. The experimental design called for the control group of graduate students to be exposed to only the training program, while the treatment group was also exposed to post-training maintenance, during which personal goals were set and methods for self-management were taught. Gist, Bavetta, and Stevens (1990) concluded that the treatment group exposed to both the training as well as follow-up maintenance demonstrated a greater degree of training transfer two weeks after the program.

The introduction of post-training relapse prevention (RP) also appears to be a variable that has an impact upon transfer of training (Ford & Weissbein, 1997). Such a

session is designed to cause trainees to think about possible situations where newly acquired skills could be abandoned back in the professional environment. During such a session, trainees are also asked to develop strategies to combat relapsing into old patterns or behaviors. Tziner, Haccoun and Kadissh (1991) conducted a study involving 81 Israeli military instructors who were taking part in the "Advanced Training Methods" training program, designed to teach officers to plan and develop instruction schedules and training packages" (p. 4). Forty-five of the officers were randomly assigned to participate in a RP module. The remaining trainees were not exposed to the RP program so as to serve as controls. Data collected via questionnaires revealed that trainees who were exposed to post-training RP reported a greater degree of mastery and usage of newly acquired skills in their professional environment ten weeks after the completion of the training program. Supervisor ratings of the same trainees also demonstrated a greater degree of skill mastery and transfer to the workplace environment.

Another training design feature that appears to be related to transfer is the use of advanced organizers. Kraiger, Salas and Cannon (1995) conducted a study involving 40 undergraduate students taking part in a Naval TANDEM decision-making training program. Through their experimental design, the authors found that those subjects who received an advanced organizer before the training outperformed their control counterparts within a simulated decision-making situation.

Providing trainees feedback during a training program also appears to be a factor that can increase training transfer. Lintern, Roscoe, Koonce and Segal (1990) conducted a study of 42 flight students enrolled in an aircraft landing-skills program. The researchers found that those subjects who received feedback (adaptive feedback and

guidance) during their training were better able to transfer their training to a real flying context and needed fewer pre-solo flights before they attempted a solo flight. The provision of feedback has been identified by other researchers as a tool for enhancing learning transfer (Blum & Naylor, 1968; Broad & Newstrom, 1992; Wexley & Thorton, 1972).

Training programs that present training environments that closely resemble the transfer environment have been found to better promote transfer. A century ago, Thorndike and Woodworth (1901) referred to such similarities between the training and transfer environments as "identical stimulus and response elements" (Baldwin & Ford, 1988, p. 66). Other research presents the use of identical elements as an effective means through which to promote transfer of training (Crafts, 1935; Duncan & Underwood, 1953; Gagne, Baker, & Foster, 1950; Reed, 1993; Reed, Dempster, & Ettinger, 1985; Underwood, 1951).

Other research emphasizes the importance of training programs that, instead of teaching specific skills that are identical to those skills utilized on the job, present general rules, theories, and principles (Baldwin & Ford, 1988). This approach is referred to as teaching through general principles (McGehee & Thayer, 1961). Novick (1990) conducted research using a sample of 30 undergraduates with math SAT scores from 630-680. Fourteen of the students were given a series of mathematical problems to solve, one of which emphasized a general approach to problem solving requiring the use of a mathematical matrix. The remaining group completed a series of mathematical problems not involving the use of such a matrix. A review of the exams revealed that those students in the treatment group who were exposed to the general matrix, overwhelmingly

applied this approach to other unrelated problems. Researchers concluded that results indicated an ability to apply principles from what seems to be an unrelated situation to solve problems in another. "The ability to make use of these more general similarities means that the source problem need not be analogous, or even very similar, to the target problem to affect solvers' solutions for the target problem" (p. 131). Teaching trainees general principles has been found in other research to be an effective method through which to promote transfer of training (Berstien, Hillix, & Marx, 1957; Brown & Kane, 1988; Crannell, 1956; Hendrickson, & Scroeder, 1941; Gick & Holyoak, 1980; Judd, 1908; Woodrow, 1927).

Research suggests that training programs that are divided into relatively short segments delivered over a prolonged period of time are more effective in promoting transfer than "one shot" training designs. Baldwin and Ford (1988) refer to this training format as "distributed training" (p. 67). There have been several studies conducted demonstrating the increased transferability of distributed training over massed training formats. Naylor and Briggs (1963), in an effort to build upon earlier research (Briggs & Naylor, 1962), conducted an experiment involving 112 female undergraduate students, each randomly assigned to eight groups of equal size. Treatment group participants were trained how to complete prediction problem-solving tasks via a progressive-part training approach (distributed in three one-hour sessions during the course of three days). Control group participants, conversely, were exposed to a whole training method. Data drawn from the completed prediction tasks revealed that "the relative transfer indices showed that the progressive-part training group actually exceeded the whole training group in transfer performance on the high-complexity, low-organization task" (pp. 222-223).

Programs that are followed by one-on-one coaching with trainees appear to show a greater degree of transfer of training. Olivero, Bane and Kopelman (1997) conducted a study involving 31 managers from a public agency. The 31 managers took part in a conventional managerial training program. This training program was then followed by eight weeks of one-on-one executive coaching. Analysis revealed that the traditional training increased manager productivity by 22.4 percent while coaching, which involved goal setting, problem solving, practice, feedback, supervisory involvement, evaluation, and public presentation, increased manager productivity by 88 percent.

Research clearly suggests that the transfer of training process is directly influenced by variables within the design of the training program. It is evident that certain types of training designs and formats are more effective in promoting the transfer process than others. Several design features, such as distributed training and trainee coaching, that can be included within training programs, increasing the likelihood that transfer of training will occur.

Work Environment, Social System, and Transfer Climate Variables

There is evidence to suggest that variables associated with a trainee's work environment profoundly affect the transfer of training process (Baldwin & Ford, 1988; Bennett, Lehman, Frost, 1999; Ford & Weissbein, 1997). Brinkerhoff and Montessino (1995) found that management support was an important determinant in the transfer process. Through their research, which involved 70 trainees from one Fortune 200 company assigned to five training courses, researchers found that trainees who had discussions with their managers before and after a training experience self-reported a

greater degree of transfer of training one and a half months after training. The authors refer to this type of support as a trainee/management transfer partnership.

The importance of trainee/manager discussions before and after a training experience was also found by Huczynski and Lewis (1980) to be an important variable in the transfer process. The researchers compared two groups of training course members. Both groups took part in a training program designed to "train them in the use of network analysis and encourage them to use this technique in their work" (p. 231). Data were collected via questionnaires distributed to all (48) respondents before and after the training program. The entire sample was assigned to one of two groups; those who reported an attempt to transfer learning (experimenters) and those who had not attempted to transfer learning (non-experimenters). Data from the questionnaires revealed the fact that the majority (69 percent) of the experimenter group reported having had discussed the training with an immediate supervisor.

Facteau, et al. (1995) also found trainee support to be an important variable in the transfer process. Their study focused on 967 managers and supervisors involved in a management training course. Through the analysis of survey results, the researchers discovered that those trainees who reported feelings of support from their subordinates, peers, and supervisors in trying to utilize new skills in the practice setting self reported a greater degree of transfer.

In a similar study, Ford, et al. (1992) found supervisory attitudes, as well as colleague support, to be important variables in the transfer of training process.

Researchers conducted a study involving 180 Airforce graduates of a technical training program and their immediate supervisors. Surveys focusing upon opportunities to

perform newly acquired skills in the practice setting were distributed four months following the training event. The authors concluded that those trainees who reported to have colleagues and supervisors with positive attitudes toward training reported to have had more opportunities to utilize new skills within their practice setting four months after the completion of the training.

Quinones et al. (1995), in a similar study involving surveys of Airforce trainees and their supervisors found that supervisor attitudes as well as colleague support were important variables in the transfer of training. In fact, the authors found that those trainees who had supervisory as well as colleague support in trying to apply new training, self reported more opportunity to perform newly acquired skills four months after the training program. Supervisory support, workgroup support, and positive transfer climate were found to be important variables in several other studies (Rouiller & Goldstein; 1993; Tesluk, Farr, Mathieu, & Vance, 1995; Tracey, Tannenbaum, & Kavanagh, 1995; Tziner et al., 1991, Xiao, 1996).

A final transfer climate variable that has been identified in the literature is trainee incentives to apply new skills in the practice environment (Kemerer, 1991). Hand, Richards and Slocum (1973) conducted a study focusing on a human relations training program involving 136 central Pennsylvania steel plant trainees. Multi-trait job performance scales and documentation of managerial salary increases provided the data which were collected at various intervals during the 18 months following the training program. The authors concluded that those employees who were rewarded for utilizing desired skills in the workplace through raises or promotions continued to exhibit positive changes 18 months after the training program. The researchers, however, were unable to

determine whether new behaviors were the direct result of the training or simply the direct result of the steel plant's salary increases and incentives.

Holton, Bates, Seyler, and Carvalho (1997) conducted research that was designed to aid the authors in the development of a transfer climate instrument. Their study was presented "as part of a larger evaluation of a computer-based plant operator training program, which was mandated by OSHA" (p. 100). Participants consisted of 189 technicians from four production units at a petrochemical manufacturing facility.

Transfer data were collected from each respondent though the researcher's newly developed 63-item transfer climate instrument. As a result of their research, the authors offer the following transfer climate constructs:

Supervisor support (the extent to which supervisors reinforce and support use of learning on the job), opportunity to use (the extent to which trainees are provided with or obtain resources and tasks that enable them to use their new skills on the job), peer support (the extent to which peers reinforce and support the use of learning on the job), supervisor sanctions (negative responses of the supervisor if training is not used on the job), positive personal outcomes (the degree to which application of training leads to positive outcomes or payoffs for the individual), negative personal outcomes (the degree to which application of training leads to negative outcomes for the individual), resistance (the extent to which prevailing group norms discourage use of new skills), content validity (the extent to which the trainees judge the content of the training to accurately reflect job requirements), and transfer design (the extent to which training gives trainees

the ability to transfer their learning to job applications and the extent to which training instructions match the job requirements). (pp. 110-111)

Research strongly indicates the importance of work environment variables in the transfer of training process. Trainees are directly impacted by the environment to which they return following any type of training. If the environment is conducive to transfer, there is a greater chance that trainees will attempt to utilize new skills and learning within the workplace. Conversely, however, if the work environment is not conducive to transfer of training, there is little hope than any transfer will take place.

Transfer Related to Adventure - Based Experiential Programs

Some literature exists which discusses the potential impact of various outdoor experiential programs. Many of the works within this particular body of literature arrive at the conclusion that outdoor adventure-based experiential programs can and do have a positive impact upon trainees and the organizations for which they work. Tarullo (1992), for example, maintains that "yes, rock climbing, and white water rafting really might teach important business lessons — you do your homework before you head into the woods" (p. 47). The author also maintains that these various learning activities can "become a metaphor for organizational behavior" (p. 48). Tarullo (1992), however, presents no studies to support his claims and does acknowledge that "there is a lack of hard evidence on the effectiveness of outdoor programs in general" (p. 52). This is a common theme throughout the outdoor training literature. There can be found, however, several studies within the literature attempting to provide the "hard evidence" that is needed in determining the effectiveness of this type of training program.

There are several studies which seem to indicate that outdoor adventure-based experiential programs do have a positive impact upon trainees and the organizations which they represent. One such study, conducted by McEvoy (1997), involved 140 military and civilian employees from an "information processing operation located on a military base in a western state" (p. 238). The outdoor training program, which consisted of low and high ropes course initiatives, was designed to build trust among participants, help participants understand the characteristics of effective teams, and enhance employee self esteem and self efficacy. Through an effort which involved both randomized group experimental design as well as qualitative research methods, the researcher collected data pertaining to trainee reactions, learning, attitudes and motivation, behavior, and organizational results. Analysis of these data revealed that the outdoor management education program "positively influenced participant knowledge, organizational commitment, organizational-based self esteem, and intentions to implement learning" (p. 235).

Another study conducted by Glaser (1994) attempted to assess the impact of a "teambuilding intervention among a group of department leaders who supervised a fire management unit working in the forests of the western United States" (p. 1). The team building intervention consisted of a three-day retreat, which covered such topics as communication skills, consensus building, and collaborative problem solving. There were follow-up sessions at various intervals during the course of the next three years. Researchers conducted interviews prior to the primary program and each of these follow-up sessions. Three years after the intervention, the author concluded the team building did have a positive impact upon the trainees involved. Such a positive impact was

identified as "an increase in the ability to raise issues and manage conflict, an increase in mutual praise, support, and cooperation, clarification of roles and responsibilities, and long-term commitment to teamwork and innovation" (p. 282).

Similar results have been reported in other related studies. One such study, conducted by Neely and Kling (1987), focused on a short-term cooperative wilderness leadership camp to "ascertain if behavioral changes in interpersonal communication and group interaction occurred for 4-H teen leaders" (p. 281). A three-day camping expedition where trainees were involved in erecting tents, cooking meals, and engaging in various outdoor activities was the focus of the training program. The experimental camp subjects represented two wilderness leadership training 4-H groups. Trainees within the treatment groups ranged in age from 13 to 18. Non-equivalent control groups were selected from similar camps within the same state. Researchers conducted followup video observations of the participants two months after the leadership development intervention. Neely and Kling (19987) found that trainees within the treatment groups, unlike those within the non-equivalent control groups, "reported use of strategies sensitive to allowing all members to have a voice, to enable ideas to flow within the groups and to facilitating group goals" (p. 285). The authors conclude "thus, the training appeared to have transferred into practice" (p. 285).

Other researchers have arrived at vastly different conclusions. Wagner and Roland (1992) studied organizations which have conducted outdoor-based experiential training programs. These studies looked at one- to five-day outdoor training programs that focused on teambuilding, leadership, and risk taking. The authors utilized such evaluation methodologies as pre- and post-training questionnaires, supervisory reports of

trainees both before and after training, and interviews with managers. Wagner and Roland ended up questioning the effectiveness of outdoor training:

Many people argue that the outdoor setting enhances the success of this type of training. Our research does not support that assumption. The amount of time spent outdoors in the training programs we looked at was unrelated to the success of the programs... Our research strongly suggests that the process, not the setting, facilitates the behavioral changes. (p. 65)

Another study, attempting to measure the effectiveness of a team building intervention, also questioned the impact of this type of programming. Rushmer (1997) conducted a study of a teambuilding event designed to enhance the relationship between two east Scotland government organizations which provide vocational training to the long-term unemployed. An attitude survey was administered following the team building intervention. Data from the survey lead Rushmer (1997) to argue that "It becomes difficult to see how effectiveness could ever be proved, if one is looking for irrefutable evidence" (p. 11). The author concludes "I think it is the nature of organizational development, their interventions and the complex and turbulent environment which constitutes the domain of their study to relegate them to the sphere of the 'unprovable'" (p. 11).

While there do appear to be some studies attempting to understand the impact of outdoor, adventure-based training programs, these studies cannot be found in large numbers. Within this fairly small group of studies, there does seem to be some indication of the fact that trainees do take certain skills and information from these programs and apply them within their workplace environments. Others, however, seem to indicate that

there is little added benefit from requiring trainees to take part in certain forms of outdoor training.

Barrier Variables

There is evidence to suggest that certain variables act as barriers to effective transfer of training. Broad and Newstrom (1992) site a survey conducted by Kotter (1988) of top-level executives during which four barriers to effective training transfer were identified. The first barrier "identified a lack of involvement by top-level managers in the behavioral change process initiated during training" (p. 18). The second greatest barrier was the fact that "new efforts to improve were too centralized in the top echelons of the organization, resulting in little acceptance by lower-level participants" (p. 18). Third, "new efforts to improve were believed by 21% of the executives to be too staff centered, with insufficient participation by the direct users" (p.18). Finally, 17% of those surveyed "believed that expectations from the programs were often unrealistic: too much was expected too soon" (p.18).

Newstrom (1986) conducted a survey involving 55 professionals within the field of training. Each trainer was "instructed to rank order the nine categories of barriers according to their perception of the relative influence against transfer" (Broad & Newstrom, 1986, p. 19). Through this inquiry, the author was able to compile a list of the "major impediments" to the successful transfer of training. He was able to identify nine of the most significant barriers. The most significant barrier was a lack of reinforcement within the practice setting. Even the most motivated trainees are destined to abandon new skills learned through training if these skills are not later reinforced within the practice setting. The second barrier to effective transfer of training was

identified as interference, such as work and time pressure, insufficient authority, ineffective work processes, and inadequate equipment or facilities, from the immediate work environment. A nonsupportive organizational culture was also found to be one of the primary reasons training fails to transfer back to the practice environment. Without the support for change, new skills were quickly abandoned. The author found through trainee perceptions that the training program was impractical, as well as trainee perceptions that the training content was irrelevant to both be powerful barrier variables to effective transfer of training. As previously mentioned, trainees must perceive the training as being relevant to their jobs if transfer is to occur (Axtell & Maitlis, 1997, Hicks, 1984; Howard, 1989, Keller, 1983; Vroom, 1964). Trainee discomfort with the behavioral changes associated with training was identified as an impactful barrier variable. The seventh barrier to transfer of training was identified as a separation from inspiration or support of the trainer. Trainee perceptions that the training was poorly designed and delivered was also found to greatly reduce any chances of meaningful transfer of training. The final barrier identified by the author was categorized as pressure from peers for the trainee to resist changes associated with training.

Despite the fact that trainers may take into account certain sets of transfer variables as trainee variables, program design variables, and workplace environmental variables, a training effort could still result in a lack of transference. This is due to the fact that there exists another set of variables that must be taken into consideration referred to as "barrier variables." Through taking into account the barrier variable, practitioners will be better able to identify those variables that will inevitably impede or block the transfer of training process.

Measures for Practitioners

There are authors writing within the transfer literature who have apparently taken the latest research and synthesized it into measures to be taken by practitioners in an effort to enhance the transfer of training process. These efforts are well summarized by Milheim's (1994) "before, during, and after" transfer of training model. According to Milheim, there are several steps that trainers could take before a training program, during a training program, and after a training program that would increase the likelihood that transfer of training will occur.

Milheim (1994) maintains that there are steps that can be taken by trainees, supervisors, and trainers before the training program which will ensure successful transfer of training. Some of these steps include conducting a needs assessment (Cervero & Wilson, 1994; Broad & Newstom, 1992; Kirkpatrick, 1960; Zigon, 1984), identifying the goals for the training program (Kemerer, 1991), specifying the content to be taught (Zemke & Gunkler, 1985; Kemerer, 1991; Tallman & Holt, 1987), enlisting the support of trainee supervisors and upper management (Facteau et. al, 1995; Ford et. al, 1992; Quinines et. al, 1995; Parry, 1990; Zigon, 1984), determining trainee characteristics (Tallman & Holt, 1987), assessing the work environment (Tallman & Holt, 1987; Parry, 1990; Rossett, 1997; Broad & Newstrom, 1992), and addressing trainee-scheduling concerns (Tallman & Holt, 1987),

Milheim (1994) also presents several other actions that can be taken during the course of the training program that will increase the likelihood of learning transfer.

Some of these include: identifying specific steps and/or actions for applying new skills on the job (Campbell & Cheek, 1989; Spitzer, 1982; Youker, 1985); breaking down

identified principles into simpler components or tasks (Kemerer, 1991); utilizing active learning methods such as role playing (Tallman & Holt, 1987) with a minimum of 60 percent active participation during the course of a program (Kemerer, 1991); using imaging skills and mental visualization to help trainees develop mental pictures of applying newly developed skills and behaviors (Kemerer, 1991; Redding, 1990; Zemke & Gunkler, 1985); providing instructional cues and situations that are similar to the trainee's work setting (Tallman & Holt, 1987); and providing practice in the application of new skills (Kemerer, 1991).

Finally, Milheim (1994) offers several "miscellaneous" literature-based strategies which can be used to facilitate the transfer process. Some of these strategies include using experienced colleagues as mentors to help trainees apply new skills (Broad, 1982; Stuart, 1992), involving trainees in work related situations to what was learned during training (Broad, 1982), requesting that newly trained employees share their experience with other employees (Broad, 1982), rewriting job descriptions to include skills learned through training (Tallman & Holt, 1987; Zigon, 1984), and assigning trainees to work on projects that require new skills (Clark, 1986).

Chapter Summary

In recent years, many professionals have joined the trend of including outdoor, adventure-based activities within their overall training program designs. As a result, many training programs more closely resemble recreation than adult learning. It is because of the fact that these programs do not, at least on the surface, look like adult learning programs that many have criticized this particular training format. Despite such criticism, however, there does seem to be some well-founded support for programs that

incorporate a more hands-on, active approach to adult learning. The experiential learning philosophy of outdoor, adventure-based programming is built upon an educational foundation that was originally constructed by Dewey (1910) and other pragmatists.

Further support is gained from Freire (1974) and others who take a philosophical stance against any training format that relies upon passive observation and rote memorization.

There is also research evidence which suggests that more learning takes place in environments where learners are able to interact and socially construct new knowledge (Vygotsky, 1978). In addition, other research suggests that educational models that incorporate a variety of teaching and learning techniques are more likely to address the needs of a wider range of learning styles (Kolb, 1984).

In addition to being based upon respected educational theory, philosophy, and research, there is evidence to suggest that actual meaningful learning can and does take place as a direct result of participation in outdoor, adventure-based training programs.

There is some research aimed at determining how trainees take this learning and apply it within their professional practice environments. This process of applying new learning is referred to "transfer of training."

Further research has identified at least four sets of variables which have been found to have a direct impact upon the transfer of training process. The first set of variables is what the individual trainee brings to the learning environment such as attitude, ability, and motivation. Other variables impacting the transfer of training process are directly attributed to the design of the training program itself. Research suggests that the work environment and social system to which a trainee returns following a training program may have a direct impact upon that trainee's willingness

and ability to transfer new skills and learning. Finally, research has identified a set of variables referred to as "barrier variables" which have been found to impede or block the transfer of training process.

The research related to transfer of training has been synthesized by many authors and practitioners in the field of training and development. This has resulted in a body of works aimed at providing measures for adult educators that will ensure a greater degree of training transfer. This body of work maintains that there are certain measures that trainers, trainees, and trainee supervisors can take before, during, and after a training program that will ensure a greater degree of transfer of learning to the professional practice environment. There is little research, however, which goes beyond exploring how isolated variables impact the transfer of training process within controlled experimental environments. In short, while there are practitioner articles on the subject, few actual studies have explored the process through which adult learners take what they have learned through outdoor, adventure-based training and transfer it to their workplace environments.

CHAPTER 3

METHODOLOGY

Virtually all types of training have witnessed dramatic increases in recent years.

One such type of programming is outdoor, adventure-based experiential training (OAB).

Despite the steady and continued increase in popularity of OAB programs, however, little is known about how adult learners take the learning from these programs and transfer this learning to their professional practice settings. Therefore, the purpose of this study is to describe the nature of the process through which adult learners transfer learning from this particular training format to their workplace environments.

This chapter begins with a general overview of qualitative research. In addition, this chapter will provide information pertaining to sample selection, data collection, data analysis, researcher bias, and study limitations.

Design of the Study

A qualitative research design has been determined to be best suited for investigating the process through which adult learners transfer learning from outdoor adventure-based programs to the practice setting. Numerous definitions of the term qualitative research exist throughout the research literature. Denzin and Lincoln (1994) maintain that qualitative research is "multimethod in focus, involving an interpretive, naturalistic approach to its subject matter" (p. 2). The authors continue: "This means that qualitative researchers study things in their natural settings, attempting to make sense

of or interpret phenomena in terms of the meanings people bring to them" (p. 2). Denzin and Lincoln (1994) conclude that "qualitative research involves the studied use and collection of a variety of empirical materials — case study, personal experience, introspective, life story, interview, observational, historical, interactional, and visual texts — that describe routine and problematic moments and meaning in individuals' lives (p. 2). Merriam (1998) defines qualitative research as "...an umbrella concept covering several forms of inquiry that help us to understand and explain the meaning of a social phenomena with as little disruption of the natural setting as possible" (p. 5).

In addition to specific characteristics, qualitative inquiry is identified by a set of assumptions aimed at addressing the process and purpose of conducting research (Bogdan & Biklen, 1992; Merriam, 1998). Merriam (1998) presents five such assumptions unique to qualitative research. The first of these is the fact that qualitative research assumes that reality is something that is constructed by each individual learner. This concept is a reoccurring theme within the constructivist and social constructivist literature (Vygotsky, 1978; Zahorik, 1995). Because each individual learner constructs knowledge, it is important to develop an understanding of how individual respondents make sense of a particular phenomenon if one is to gain certain insights into the nature of that phenomenon. What is important in this particular philosophy is to determine how the phenomenon is perceived from the respondents' perspective, not the perspective of the person conducting the research (Merriam, 1998). "This is sometimes referred to as the emic, or insider's perspective, versus the etic, or outsider's view" (Merriam, 1998, p. 7).

A second assumption behind qualitative research, according to Merriam (1998), is the fact that "the researcher is the primary instrument for data collection and analysis" (p. 7). This is advantageous because human beings have an ability to sense and react to many more dimensions of a research situation than can inanimate data collection tools (Merriam, 1998; Bogdan & Biklen, 1992). Qualitative research also assumes that the researcher will be conducting some form of fieldwork (Merriam, 1998; Bogdan & Biklen, 1992). This form of research assumes that the researcher will "go to the people" in an effort to observe them as they interact within their natural environment (Merriam, 1998, p. 7).

A fourth assumption behind qualitative research is that the researcher will rely upon an inductive approach to the research (Merraim, 1998; Bogdan & Biklen, 1992). Such an approach involves a process of building abstractions, concepts, hypothesis, and theories through "observations and intuitive understandings gained in the field" (Merriam, 1998, p. 7). It is also assumed that the end product of the research will not be straight data, but themes, categories, typologies, concepts, tentative hypotheses, and theory based on the researcher's interpretation of the data (Merriam, 1998).

Lastly, qualitative research assumes that the researcher will provide a richly descriptive end product (Merriam, 1998; Eisner, 1991). Because the focus of this form of research is upon process, meaning, and understanding, detailed writings and rich imagery, not data represented in the form of numbers, will be used by the researcher to share what he or she has gained through the research effort (Merriam, 1998). The descriptive end product is supported by the use of the participants' own words which can be found in documents, videotapes, and in other sources (Merriam, 1998).

According to Creswell (1998) there are seven reasons to undertake a qualitative study. When these seven reasons are compared to the proposed study, qualitative research appears to be the most appropriate research methodology.

A researcher should select a qualitative methodology if the research question driving the research begins with "a how or what" (Creswell, 1998, p. 17). A how or what question is used in an effort to describe a process or phenomenon, while a why question, the question most commonly associated with quantitative research, is used in an effort to compare groups or variables (Creswell, 1998). Through my study, I hope to address the question how, or in what ways, do adult learners transfer the learning from outdoor, adventure-based programs to the practice environment? I am not seeking to determine a correlation between one or more variables and learning transfer, as this has been done before. Because of this, qualitative methodology appears to be the most appropriate selection.

Qualitative research is appropriate for those situations in which a particular topic needs exploration (Creswell, 1998). The particular training methodology that I hope to explore — outdoor, adventure-based programming — is widely used in training circles today. In fact, experiential learning is a huge business, with millions of dollars being devoted to it. Despite this fact, however, little appears to be known regarding how adult learners make meaning of or transfer the learning from these experiences. In addition, little appears to be known about what affect these programs have upon groups of adult learners and the organizations for which they work. In short, this is an area that calls for further in-depth research efforts.

Such a holistic approach allows a researcher to present a detailed view of the topic being investigated (Creswell, 1998). This particular study intends to explore the complex and involved process through which adult learners transfer learning from a training environment back to their practice setting. I want to know how adult learners make meaning of outdoor adventure-based programs. In addition, I want to know what they do with the knowledge and skills that are acquired during such a program. I want to know how they feel about this type of programming.

This particular type of research provides the researcher the opportunity to observe people in their natural setting (Creswell, 1998). The proposed study will involve "real life" training programs. This will be done because I hope to gain insights into various processes as they occur within authentic outdoor adventure-based training sessions. I want to learn how real people react to, make meaning of, and transfer the learning from a real training program. Qualitative research will provide me the opportunity to do this.

Such a research design is particularly compatible with people who are interested in a literary writing style that brings the researcher into the study (Creswell, 1998). "The personal pronoun 'I' is used, or perhaps the writer engages a storytelling form of narration" (p. 18). I am interested in telling such a story. This is a topic that I feel passionate about, and I truly hope to become deeply involved in a learning experience through this study. I feel that I have the ability to develop a solid rapport with the learners, as well as the ability to descriptively share what I have found through my research.

Creswell (1998) believes that qualitative research truly benefits only those researchers who have the needed time and resources for extensive fieldwork and data

collection, as well as detailed analysis of text information. As a full-time student and half-time graduate assistant I feel that I will be able to devote the necessary time needed to conduct an appropriately thorough qualitative research project.

Finally, according to Creswell (1998), individuals who are willing to be active learners, who have the ability and are willing to tell a story from the participant's view, should select qualitative research methodologies. Because my dissertation addresses the topics of experiential and active learning, I will be more than willing to become actively involved in the research situation. I am looking forward to "rolling up my sleeves" and experiencing what the adult learners I am studying will be experiencing. I am a hands-on person and will enjoy interacting with a group of adult learners in training and interview situations.

Sample Selection

The focus of this particular study was to gain an in-depth understanding of the process through which trainees take the learning from outdoor adventure-based programs and apply it within their workplace environments. Because of this, sampling was purposeful. In short, a sample was selected that provided an understanding of the transfer of learning process, as it applies to outdoor adventure-based programs. "Purposeful sampling is based on the assumption that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned" (Merriam, 1998, p. 61).

The design of this particular study called for three groups, each consisting of approximately five respondents. Each of the three groups were part of an intact working team from within one organization. Diversity within this study was sought on several

different levels including type of outdoor training program (e.g., ropes courses, white water rafting, sailing), providers of training programs, types of working teams, and hierarchy within working teams. In addition, this study sought diversity in terms of how each team documents its intentions to transfer learning to the practice setting.

It should be mentioned that there was some difficulty in gaining access to three groups of adult learners who had participated in these types of training events. This was found to be the case for three reasons. First, following the dramatic events of September 11th 2001, the outdoor training industry suffered a drastic decrease in bookings from virtually all types of businesses. As one vendor stated "it looks pretty bad if your company lays one group of employees off one week and then takes another group to play in the trees another week."

A second reason why there was some difficulty in obtaining groups for this study was the fact that certain vendors were somewhat concerned that the results from this study would not meet the outcomes identified in their promotional materials and on their websites. In fact, when questioned about some of the promises made on his website, one vendor went on to say that his particular outdoor adventure-based training program was "really just a lot of fun." Ethically, this program could not have been included in this study.

Finally, many vendors seemed to be somewhat territorial about their clients. In fact, many potential vendors in this study simply would not provide direct access to their clients. Speculation would lead one to believe that these vendors feared that the study would harm their reputations or that, somehow, this study would cause their clients to seek out alternative forms of training and development.

Despite these difficulties, three organizations were identified to be included in this study. Each organization sent approximately twenty-five employees to take part in an outdoor adventure-based program. Of the roughly seventy-five participants, thirty-six responded positively to taking part in this study. From these thirty-six volunteers, eighteen were eventually contacted and interviewed for this study. Due to the fact that there was some difficulty experienced in contacting participants from the health care system leadership team two months following the outdoor adventure-based program, only four individuals were interviewed from this group. Therefore, instead of the intended five, seven individuals were interviewed from both the advertising agency and the construction firm in an effort to maintain an appropriate sample size for this study.

The individuals within this particular study were identified using a set of criteria designed to facilitate the selection of a group of respondents capable of providing the desired information. Respondents were selected based on the following criteria:

First, respondents must have participated in some form of outdoor, adventure-based training program. In addition, at least two months time must have elapsed since training so that trainees will have had sufficient time to implement new learning.

Second, participants must have been sponsored by an organization that views the program as an investment that would produce tangible returns within the workplace environment. This study was dependent upon an expectation of learning as well as a belief in the potential for learning transfer. Therefore, individuals who participated in such an adventure-based program for "fun" or "retreating" were not considered.

Third, subjects must have reported that learning did take place as a direct result of participation in an outdoor adventure-based training program. This study hoped to gain

certain insights into the nature of adult learning within a particular context. Therefore, it was critical that respondents report more than mere "fun" and "bonding." Participants must have maintained that actual learning did take place as the direct result of their involvement with this specific type of training program.

Finally, participants in this study must have been able to provide evidence of learning transfer. Those who were selected must have been able to produce a memo, a corroborating statement from a colleague or supervisor, or some other tangible evidence suggesting that learning transfer actually did take place.

Immediately following several outdoor, adventure-based training programs, questionnaires to screen for participants were distributed to all trainees. The questionnaire asked whether or not participants found the program to be of value, whether or not trainees learned something of significance, and, finally, whether or not trainees actually intended to transfer learning from the program to their professional practice setting. A copy of this particular survey has been provided in Appendix A. Those trainees who reported a belief in the value of the program, a claim to have learned something of significance, and an intent to transfer new skills and knowledge were contacted two months following the program and asked to take part in an interview.

Data Collection

There are three primary methods of data collection in qualitative research (Merriam, 1998). Qualitative research relies upon more than one method because of the fact that no single approach to collecting data can provide a comprehensive picture of what is being studied (Patton, 1990). Most researchers conducting qualitative research rely upon interviews (Merriam, 1998). Interviews can involve both group as well as

person-to-person formats. However, most often an interview involves a purposeful conversation between two people, the researcher and the subject being questioned (Merriam, 1998). Interviews can also vary in terms of degrees of structure, from structured, to semi-structured, to unstructured. Through an interview, a researcher can obtain information that relates to such things as thoughts, feelings, intentions, and individual meaning making (Patton, 1990 cited in Merriam, 1998). In addition, the interview provides the researcher access to things that cannot be directly observed and past experiences that cannot be replicated (Merriam, 1998).

Another form of data collection found in qualitative research is observation (Merriam, 1998). A researcher can conduct observations as an outsider to what is being studied. In other words, playing the role of a passive observer on the periphery. However, observations can also be conducted through participant-observation, during which the researcher actually becomes a participant in what is being studied (Merriam, 1998). In fact, there exists a broad range of researcher roles during the observing process including complete participant, participant as observer, observer as participant, and complete observer (Merriam, 1998). Each role has potential benefits as well as drawbacks. It is up to the individual researcher to decide which role is best for a particular research situation.

The third primary method of data collection in qualitative research is obtaining data through documentation (Merriam, 1998). Documentation is a word that can represent a wide array of potential sources of data including pictures, audio and video tape, public records, personal papers, physical traces, email and other sources (Merriam, 1998). "Documents of all types can help the researcher uncover meaning, develop

understanding, and discover insights relevant to the research problem" (Merriam, 1998, p. 133).

The in-depth interview was the primary means of collecting data for this study. Such a methodology has been described as a purposeful conversation (Bogdan & Biklen, 1992). Semistructured interviews are particularly useful due to the fact that they yield specific demographic data and other details, while at the same time providing the researcher the freedom to explore various topics and issues as they present themselves. Merriam (1998) described the multipurpose nature of the semistructured interview:

Usually, specific information is desired from all the respondents, in which case there is a highly structured section to the interview. But the largest part of the interview is guided by a list of questions or issues to be explored, and neither exact wording nor the order of questions is determined ahead of time. This format allows the researcher to respond to the situation at hand, to the emerging worldview of the respondent, and to new ideas on the topic. (p. 75)

In this study, questions were asked regarding the nature of the learning that occurs within this type of program, the processes through which adult learners transfer this learning to the workplace, and learner, instructor, program design, and workplace factors that influence this transfer process. The interview schedule can be found in Appendix B.

Due to the fact that participants within this study were asked to provide some corroborating evidence or "proof" of training transfer, documents were selectively used as a secondary source of data. The term "documents," according to Merriam (1992), refers to a wide range of written, visual, and physical material relevant to the study at hand" (p. 112). For the purposes of this study, all documents were used, in addition as a

straight source of data, as a focal point around which a discussion of reported transfer of training took place.

Data Analysis

The data analysis methodology referred to as the constant comparative method has been used in this study (Glaser & Strauss, 1967). The primary function of the method is to compare data in an effort to discover emerging similarities and differences within the data (Strauss & Corbin, 1990). In short, the method requires that the researcher "do just what the name implies — constantly compare" (Merriam, 1998, p. 159).

The constant comparative method, as described by Creswell (1998), is a research process involving several steps. The process begins with the researcher heading out into the field in an effort to collect interview data. Unlike other forms of data analysis, where the analysis is conducted upon the completion of data collection (when all interviews have been conducted), the constant comparative method calls upon the researcher to analyze the data set from each interview immediately after it has been conducted. This process quickly begins to resemble a "zigzag" in which researchers "go out in the field to gather information, analyze the data, go back to the field to gather more information, analyze the data, and so forth" (p. 57). "How many passes one makes to the field depends on whether the categories of information become saturated and whether the [topic being investigated] is elaborated in all of its complexity" (p. 57). It is this process which demands that the researcher collect and analyze data simultaneously, that is central to the constant comparative method (Merriam, 1998). The objective of this process is to collect interview data to saturate, "or find information that continues until no more can be

found" (p. 56). When no new information is forthcoming, all data are assigned to categories, each representing "a unit of information composed of events, happenings, and instances" (p. 56).

Validity and Reliability

Like all credible research endeavors, this study intended to address various issues of validity and reliability. Internal validity, according to Merriam (1998), deals with the questions of how research findings match reality, maintaining congruence between findings and reality, and exploring that phenomenon which the researcher intends to explore. There are several strategies that were employed within this study in an effort to maintain research validity. Triangulation, member checks, and researcher biases have been used during this study in an effort to enhance internal validity.

Triangulation involves "using multiple investigators, multiple sources of data, or multiple methods to confirm the emerging findings" (Merriam, 1998, p. 204). Mathison (1988) maintains that "good research practice obligates the researcher to triangulate... to enhance the validity of research findings" (p. 13). Triangulation will be achieved on several levels within this study. On the first level, this study will seek respondents who have participated in a variety of forms of outdoor, adventure-based training programs. This will ensure that the emerging findings are related to adventure-based training in general and not, for example, only ropes course programs. On a second level, this study will compare respondents who have been through training programs presented by a variety of adventure-based training companies. This will ensure that emerging findings are not related to a specific programming vendor, but rather to a general approach to adult education. On a final level, multiple methods of data collection will be employed

throughout this study. This research will utilize both interviews and documents as sources of data. The result of such methodological triangulation will be convergence on the transfer of training process within the context of outdoor, adventure-based programs (Mathison, 1988).

Member checks were utilized in an effort to enhance the internal validity of this particular study. These checks involve "taking data and tentative interpretations back to the people from whom they were derived and asking them if the results are plausible" (Merriam, 1998, p. 204). This will be done periodically throughout this study.

One final measure used in an effort to enhance the internal validity of this particular study was the disclosure of researcher's biases. This, according to Merriam (1998), involves "clarifying the researcher's assumptions, worldview, and theoretical orientation at the outset of the study" (p. 205).

Additional steps have been taken in an effort to increase the internal validity of this study. In an effort to check the questions that are to be used in this study, a pilot study was recently conducted. The purpose of the study was to determine various factors that influence the transfer of training process from an outdoor, adventure-based program to the workplace environment. This study began with a purposeful sampling selection, which followed the sample selection criteria identified for this study. Two trainees, who had taken part in adventure-based training, were identified and later interviewed.

Interviews were taped and transcribed. Results of the study revealed the fact that learning readiness, peer support, and supervisory support had an influence upon the transfer process. Through this pilot study, it was learned that it is vital to focus the trainee's attention upon the nature of the learning that takes place during these programs,

not simply reactions and emotions related to the program. It was also learned that it is important for the interviewer to help guide the discussion in such a way that it focuses upon "how" the transfer of training occurred. Without such a focus, the interview will likely only reveal "what" happened following the program.

Within research, reliability refers to "the extent to which research findings can be replicated" (Merriam, 1998, p. 205). Reliability, at least within social science research, is rather difficult to achieve due to the fact that human behavior is constantly changing (Merriam, 1998). Despite this fact, however, reliability has been addressed within this particular study through the use of an audit trail. Such an audit trail requires that the researcher "describe in detail how data were collected, how categories were derived, and how decisions were made throughout the inquiry" (Merriam, 1998, p. 207). An attempt has been made within this study to describe how data were collected, how categories were derived, and how and why certain decisions were made.

External validity, according to Merriam (1998), "is concerned with the extent to which the findings of one study can be applied to other situations" (p. 207). Within this study certain strategies have been used to increase the overall generalizability of this study. One such strategy was to provide rich, thick descriptions. Such detail allows other researchers to determine whether or not the situations being investigated in this study match those situations being studied within their own studies, "and, hence, whether findings can be transferred" (Merriam, 1998, p. 211).

Researcher Biases and Assumptions

I have been a facilitator within the field of outdoor adventure-based training for approximately seven years. During this time, I have led groups through ropes course

experiences, whitewater-rafting excursions, and rock climbing expeditions. Through my experiences in the field, I have come to view this particular training format as powerful and potentially beneficial. I do believe that when it is conducted and facilitated properly, such programming can and will have a significant impact upon groups of employees and the organizations for which they work. As a professional in the field, I would like to be able to "prove" that this type of programming is worthwhile; however, I also realize that I, as a researcher, have an obligation to be open and receptive to whatever the data from this study reveals. Therefore, I view it as my responsibility to acknowledge the fact that I hold several researcher biases and assumptions. First, I believe that actual and potentially meaningful learning can take place as the direct result of outdoor, adventure-based training and that this learning can deeply affect individual trainees. Also, I maintain that this learning does transfer from the training session/s to the practice environment. Finally, I hold to the belief that outdoor adventure-based training can and does result in personal enrichment, and possibly development of higher-functioning teams.

CHAPTER 4

FINDINGS

The purpose of this study was to understand how adult learners transfer adventure-based experiential learning to their workplace environments. Adventure-based experiential training has captured an increased share of the overall training and development market in recent years. With such an increase in demand and popularity arises the need to examine how this particular training format affects some of the thousands of adult learners who are exposed to it annually in the United States.

Utilizing a qualitative design relying on semi-structured interviews, data was collected from several groups of participants who met a previously determined set of criteria. Each of these semi-structured interviews was audio-taped and later transcribed. All transcripts were then re-read and analyzed using the constant comparative method for data analysis. From that analysis emerged categories which provide certain insights into how adult learners transfer adventure-based experiential learning to their workplace environments.

This chapter is divided into two sections. First, each group of adult learners is introduced through organizational profiles that are intended to aid the reader in developing a deeper understanding of the context in which the training sessions were conducted. Next, various conceptual categories that emerged through data analysis are

presented and discussed. This discussion is supported by the presentation of data taken directly from the transcripts that serve to highlight emergent categories.

The Groups

A total of 18 adult learners were interviewed during the course of this particular study. Three different organizations, including one marketing firm, one construction firm, and one hospital system, were represented by this group of individuals. Each organization recently sent a team of employees to take part in a one-day adventure-based experiential training program designed to improve overall group performance. The marketing firm based within the southeastern region of the United States sent all of its employees to take part in a one-day low ropes course training program. The construction firm, which is also based within the Southeastern region of the United States, sent the members of its *accounts payable* team to experience a full-day ropes course training program which began with low ropes challenges and later progressed on to more advanced high ropes elements. Finally, the hospital system sent several members of its senior management team to take part in a one-day experiential field day training program that presented the team with various portable group problem-solving initiatives.

The Marketing Firm

The first group to take part in this particular study represented a marketing agency located in the southeastern region of the United States. The firm is a fairly small organization in relation to other marketing firms of its type, consisting of seventeen full-time employees. The firm provides four primary services to its clients. The first of these services is referred to as "strategic branding." Strategic branding, according to the

organization's website, entails "planning, defining your sales message, customer dialogue, corporate identity packaging, and value propositions." This particular service represents the "launching pad and control center to point your integrated marketing communications vehicle in the right direction." The agency also offers the development of what is called "sales collateral." Sales collateral includes "brochures, direct marketing pieces, CD ROM, streaming media presentations, and promotional items." This collateral "works for your sales force and supports the unique tactics of personal selling." In addition, the agency offers its clients website design and support. The agency maintains the belief that websites need to be more than mere "brochureware." In short, the agency aids its clients in the development and maintenance of websites that "actually do something." Finally, the firm offers its clients print and broadcast advertising. This advertising "embodies your brand identity while appealing to your customers' motivations."

The agency emphasizes the fact that they are a smaller-than-usual organization. They believe that their size is beneficial for two primary reasons. First, a smaller size means that their clients will enjoy the benefit of developing relationships with each of their employees, unlike working with some of the larger, more impersonal, firms. Second, they maintain that a smaller organization can create a better work environment for the employees of the advertising agency. This is a theme that is heavily emphasized in all of the organization's literature. Through reading the company's materials, one never finds phrases such as "work force" or "employees." Instead, the firm chooses to use such words as "community" and "team." The following is a passage taken from the organization's website that articulates such a team/community-based approach to work:

We thrive on lots of things – like great work that gets results for our clients, creativity, strategic thinking, and, of course, fun. Each of our team members brings a combination of these things to the table. And we place a huge value on the people who work for [us]. The real "skinny" on us? We're all genuine people who like to do what we do, and we compliment each other, resulting in a collaborative groove.

Despite this emphasis upon an enjoyable working environment, the organization is driven by a fairly traditional and bottom-line business philosophy. The essence of this philosophy focuses upon "helping you connect your brand with your customers by building interactive brands." According to the agency, "that's a fancy way of saying you'll strengthen your ability to attract, retain, and grow your customer base." The agency's philosophical statement concludes with the phrase "the bottom line is more profit."

The firm was incorporated only one year ago by a group of four partners who had previously worked together within the industry. The four, who were all in their mid- to early-30s had become "disenfranchised" with the traditional business world as they had all experienced it. They wanted to create a new kind of marketing agency, one that provided opportunities for success as well as an enjoyable environment in which to work. The hope was that this new agency would not only provide a great career opportunity for the founders, but for all other employees of the new agency as well.

Initially the agency experienced modest success and the founding partners were able to develop the firm into one that employed a sizeable group of full-time employees.

The marketing agency continued to experience success and as a result, the partners and

their employees were forced to work increasing hours under increasingly stressful working conditions. The partners found themselves in a situation in which they were struggling to manage the stress of running a growing advertising firm while their employees were now working within an environment that was not unlike any of the other firms for which they had worked in the past. As one of the partners noted "we were becoming exactly the opposite of what we wanted to be."

In an effort to address some of these concerns, the partners of the agency called a meeting at which it was decided it would be beneficial for the organization to attend a training program that could possibly improve the working situation for all involved. It was decided that a training program was needed which would provide skills in the areas of conflict resolution, effective communication, collaboration, and overall teambuilding. Following the strong opinion of one of the four partners, it was decided that a "low ropes course type of program" would be best. Soon after this meeting, a local consulting firm was contacted and a "low ropes" training day was scheduled.

According to the consulting firm's promotional materials, a day of training focused on low ropes initiatives presents a group of adult learners with "various physical and mental challenges such as the low climbing wall, wild woozy, trust fall, etc. that require the whole team to interact and find ways to problem solve." The consultant maintains that the low ropes course is "an essential ingredient when planning a corporate program." These are such an essential component of a training program because low initiatives "create opportunities for teams to enhance communication, set goals, make decisions and to develop leadership during problem solving challenges."

According to the provider of the outdoor training program, there is a clear rationale behind investing in a low ropes training day. "When a team is engaged in a team building program on the ropes course, it's ok for the team to make mistakes. The provider's website goes on to state that "the team learns from these mistakes by having a facilitator process the experience." The consulting firm maintains that with the help of their skilled facilitators, the group "talks about what happened, what they learned, and how the learning is going to reflect back in the workplace." The consultant explains that this process of experience, reflection, and application to the workplace setting is influenced by Kolb's (1980) experiential learning cycle. Such a process is valuable, according to the consultant, because "it enables a team to utilize the ropes course as a practice environment of growth and challenge but it also allows the team to understand how everything applies back into the work environment."

On the day that this low ropes course training was to take place the marketing firm literally locked its office doors and required that all employees report to the consultant's outdoor training facility located within the same city. Upon arriving at the facility, the group was greeted by the facilitators and asked to spend a few minutes filling out liability forms. When these forms had been completed, the session began with the facilitators asking the group to create what they referred to as a "full value contract." The contract was a document that outlined how the group was to perform as a team throughout the day. This was, in essence, an agreement which held that each member of the team was to be fully valued throughout the course of the training day. The contract also addressed some of the specific ways the group was going to demonstrate the fact that they were attempting to become a "high functioning team." Some of these specifics

included such statements as "not talking when someone else was talking" and "supporting each other as we try to do our best." With this document completed, the group and their facilitators walked into the woods to experience some of the "group challenges."

The outdoor facility consists of a trail system that meanders through a tract of heavily wooded land. Along this trail system are discretely cut out small clearings.

Within each of these clearings was some type of team building apparatus referred to as a "challenge course initiative." At each "station" the facilitator would begin by presenting some type of fictitious scenario (i.e., "aboard a sinking ship" or "tangled within a huge spider's web"). The group was then given about one hour to develop a solution that would allow them to physically climb over, under, through, or upon the apparatus without violating the guidelines set forth by the facilitator.

The group was able to complete three initiatives before breaking for lunch. Lunch was casually served in an outdoor pavilion just outside the wooded area. Following the break, the group was able to complete three more group problem-solving activities in the woods. The pattern that was maintained consisted of activity, reflection upon what happened during the activity, followed by applying learning from the activity to the workplace setting. In short, the group would engage in a group problem solving initiative, talk about how the team functioned during the activity, and then discuss how the dynamics displayed during the activity manifest themselves within the workplace. The day concluded with a discussion of what the group learned during the training day, and what changes they intended to take back to the practice setting as a direct result of these insights.

Two months following the training program, I had the opportunity to journey to the advertising firm's office to conduct interviews. I was able to interview seven of the participants in the training program during the course of three separate trips to the office setting. Upon entering the office on my initial visit, I was immediately struck by the fact that this was a new firm that was run by young professionals. This was definitely not a traditional or "stuffy" office environment. The walls were painted electric orange and were covered with images from vintage advertising campaigns. These images were not unlike Andy Warhol's famous series of images featuring Campbell's Soup cans. In addition, the office was furnished in a "retro" motif utilizing furniture that saw its height of popularity during the 1960s. Unlike many business environments, no one within the office was clad in traditional business attire. Instead, most people were wearing khaki pants or jeans with plain button down shirts. There was not one tie or suit anywhere to be seen throughout the entire office. I was greeted warmly each time I visited and led to a meeting room filled by one long rectangular glass table surrounded by twelve or so chairs. It was here that I conducted each of my seven interviews.

As was previously mentioned, I interviewed seven professionals from this particular advertising agency. The following is some brief biographical information about each of these seven individuals.

Mary – Mary is a 52-year-old white female. Her official title within the agency is "art director." She serves the organization as a graphic designer and is responsible for the art direction of all print pieces the firm produces. She has 22 years of experience "as a freelance art director, graphic designer and illustrator." Mary holds "no degrees past high

school." However, she did attend art school in New York for five years with a concentration in design and art. She has also received training in computer graphics.

Robbie – Robbie is a 38-year-old white male. His title is "president" of the advertising firm. His primary responsibilities include "overall management and setting the direction for the agency." He has seven years of "operations and marketing training in the drug store industry" and "four years of category management and merchandising in the grocery industry." In addition he has "three years of management in advertising as VP the Sr. VP of account service." He holds a BA degree in communications as well as an MBA in marketing.

Janice – Janice is a 26-year-old white female. Her title within the agency is "account executive." In most other office environments, Janice would most likely be referred to as a secretary. Her primary responsibilities entail "organizing accounts internally and externally." She also serves as "liaison between the agency and its clients." She has been with this particular firm for one year. Prior to this position she worked with an advertising firm in New York for three years. She holds a BA in advertising and is working towards the completion of an MBA degree.

Jordan – Jordan is a 33-year-old white female. Her title within the agency is "creative director." She is responsible for "the creative products produced by the agency." She manages four artists and "also has some human resources responsibilities such as insurance, healthcare, time sheets, etc..." She has ten years of advertising, marketing, and

graphic design experience. Jordan holds a BFA degree in graphic design with a minor in psychology.

Paul – Paul is a 39-year-old white male. He claims that his title within the agency is simply "executive." He maintains that his primary responsibilities include making "management decisions." He has 16 years of experience within the advertising agency. Paul holds a bachelor degree "plus more."

Julie – Julie is a 30-year-old white female. Her title within the agency is "vice president." Her responsibilities include "client service, new business, management, and serving as partner." She has four years of advertising experience along with five years of sales experience. She holds a BA degree in business administration.

Kathy – Kathy is a 31-year-old white female. Her title within the agency is "production manager." Her primary responsibilities include "purchasing, maintaining vendor contacts, meeting critical deadlines, quality control, and developing cost analysis projects." She has three years experience in the printing industry and four years experience in advertising and marketing. She holds a BS degree in business management.

The Construction Agency

The second group of adult learners in this study represents one of the largest construction firms in the southeastern region of the United States. The company employs

over 850 full-time "experienced craftsmen" as well as numerous other support staff and office personnel. The business is apparently extremely productive and experiences "over 125 million dollars in annual revenues." In addition, the organization claims "over 150 million dollars in bonding capacity."

The company operates under three distinct divisions. According to the organization's website, these divisions can operate separately or "can be combined based upon the needs of your particular project." The first division is titled "State and Highway." This division focuses primarily upon clearing, grading, piping (storm, sewer, water), base, asphalt paving, concrete, bridges, and miscellaneous structures. The second division is titled simply "Industrial." This division's primary focus is upon building "heavy process projects for chemical, pulp and paper, power, pharmaceutical, fiber, and metal sectors." The final division within the agency is referred to as "Civil and Environmental." This particular division "specializes in bringing the right environmental solution to industrial and municipal water and wastewater programs." The company's market area "covers most of the southeast including North Carolina, South Carolina, Virginia, West Virginia, Kentucky, Tennessee, Florida, Georgia, Mississippi, and Alabama."

The construction firm places a heavy emphasis upon its long-standing history and well-established reputation. Founded in 1947, the company's original mission was to "build high-quality projects through integrity and commitment to their customer's satisfaction." Today, the company is run according to an updated philosophical statement. The statement reads "as a privately held employee-owned company, we will

provide value to our clients, employees, vendors, shareholders, and communities above and beyond our competitors."

Recently, the firm completed construction of its new corporate headquarter office building. The idea behind the new building was to bring together various departments within the agency that had previously been "spread around" in various offices and buildings throughout the southeastern region of the United States. One such department that was coming together for the first time to work in the same office space was the "accounts payable" department. Though the individuals within this department were technically part of the same "team," many of them had never actually worked together within the same office space. For the most part, these people collaborated occasionally via phone conversations and email.

When the accounts payable department actually moved into its new office space, the transition proved to be more challenging than had previously been anticipated. As one employee within the department put it, "we just didn't seem to know each other all that well. In addition, there were some territorial feelings around here." The accounts payable department's "controller" or manager decided that because of some of the difficulties the group was having, money needed to be invested in some type of program that would "develop a sense of team, increase communication, develop conflict resolution skills, and just bring the group together as a team." After some research, the office manager decided that a ropes course training day that featured various "high ropes" elements would be what this particular group needed.

The construction firm eventually contracted with the same consulting group that was utilized by the advertising agency. According to the consultant's website, training

programs that offer "high ropes" elements are particularly challenging and beneficial.

The term "high ropes" is applied to any challenge that "involves being above 15 feet."

During high ropes activities, "each participant is tied into a belay system which allows the participant to engage in healthy risk taking, thereby providing opportunities for the team members to become more comfortable with change in the global market today."

The consultant concludes that this particular training format "is a great way for teams to learn to depend on each other as well as to develop a deeper trust among team members."

Because the high ropes course training day was conducted by the same firm that worked with the advertising agency, it had a strong resemblance to the previous program, at least at the beginning of the day. The day began with the group assembling at the consultant's outdoor training facility. They were asked to fill out and sign liability forms that highlighted the inherent dangers involved with various climbing activities. The group also created a full value contract, which clearly outlined how the group could operate as a "high functioning team" throughout this particular training experience. Next, the facilitator led the group in a discussion highlighting the group's goals for the day. In short, they discussed what they hoped to gain from this experience both as individuals as well as a team. The consultants led the group through a series of "low" activities that were not unlike those experienced by the advertising agency. After the morning break, however, the program began to distinguish itself from the others within this study.

After the morning break, the group was told that they were going to be experiencing what the consultant referred to as "ground school." During ground school, the group was taught to put on safety harnesses and helmets properly, tie various knots, belay other participants, and climb safely upon high ropes course elements. When the

group had successfully completed this initial training, they moved on to the actual high ropes course challenge initiatives.

The rest of the training day was devoted to experiencing a series of elements that required each participant to climb roughly 40 feet into a tree, walk across a wire, a small wooden plank, or rope bridge to another tree, and climb down safely. While each individual was climbing, the rest of the team was holding ladders, coiling rope, offering encouragement and support, and even tending to the rope that was the climber's lifeline. Following each initiative, the group would "circle up" and process the experience.

During each of these discussions, the focus was upon what the group experienced, what they gained from the experience (i.e., better communication skills, increased sensitivity to the needs of others...), and how these new insights could be applied back within the group's work environment.

The training day ended with a facilitator-led discussion focused upon what each individual gained from the experience. To this, there were many responses including "this group can actually work together as a team," "we can actually support each other without too much effort," and "we learned how to create a positive work environment." The facilitator concluded by asking the participants to think about what they could do differently "back at the office in light of today's training experience."

Two months following this particular training experience, I contacted the accounts payable department in an effort to schedule interviews with several of the participants. I was able to schedule interviews with seven individuals who attended the training session over two days at the construction agency's newly built office space.

Upon entering the accounts payable department, I was struck by its extreme formality.

The accounts payable office space was one large room with scores of cubicle stations in rows from one wall to the other. Each cubicle had an open doorway and walls that extended only about five feet up from the floor. In short, the employees within the department had absolutely no privacy while they worked at their desks. Each of the seven interviews was conducted in a small meeting room, just off the main accounts payable office space. The door to this space had a large window in its center, through which others in the office would stare during each interview. There was an incredible sense of pressure during each interview. I had the feeling during each of the interviews that the person with whom I was talking was concerned about being away from his or her desk for too long. This sense of pressure was heightened by the other workers staring at the individual through the glass while they talked with me. Clearly, each individual had been told not to spend too much time with me in an effort to get back to work as soon as possible. Throughout this experience, I too had the sense that "Big Brother" was watching.

Despite the rather uncomfortable surroundings, I was able to conduct interviews with seven of the sixteen individuals who had taken part in the high ropes training day two months earlier. The following is some brief biographical information on each of these seven individuals:

Tonya – Tonya is a 25-year-old African-American female. Her title within the agency is "accounts payable coordinator, satellite office division." Her primary responsibility entails managing one of the firms' satellite office's accounts payable division. She has

three years' experience working in accounting. Tony holds a BA degree in insurance/risk management and accounting.

Wilma – Wilma is a 28-year-old white female. Her formal title within the agency is "accounts payable coordinator." Her primary responsibilities include "coding invoices and taking care of vendors." She has five years' work experience in "accounts payable, typing, filing, and data entry." Wilma is a high school graduate and is currently working on an undergraduate degree part-time.

Amy – Amy is a 30-year-old African-American female. Her title within the agency is "assistant coordinator." Her primary responsibilities include "paying bills and working with vendors." She has seven years' experience within the construction industry. Amy is a high school graduate who is working toward the completion of a BA degree.

Tara – Tara is a 20-year-old African-American female. Her title within the agency is "accounts payable assistant." Her primary responsibility within the agency is to "process invoices." She has been with the company for one year. Currently, Tara is working on completing her BA degree.

Monica– Monica is a 37-year-old African-American female. Her title within the agency is "accounts payable lead coordinator." Her primary responsibilities include processing all payable accounts for one of the agency's satellite offices and serving as the assistant

to the accounts payable supervisor. She has twelve years' of accounts payable experience. Monica holds an Associate degree in business administration.

Joy – Joy is a 45-year-old African-American woman. Her title within the agency is "assistant accounts payable coordinator." Her primary work-related responsibilities include coding invoices, matching account documents, and data entry. She has "many years" of experience within the field of accounts payable. Joy is a high school graduate.

Bart – Bart is a 27-year-old African-American male. His title within the agency is "assistant accounts payable coordinator." His primary responsibility involves "coding invoices for different vendors." Bart has five years' of accounting experience. He holds an associate degree in accounting.

The Regional Healthcare Center

The final group to take part in this study represents a large health care center based within the mid-western region of the United States. In 1882, a religious order of Catholic nuns established what has now developed into the regional medical center. It was this particular area's first hospital. Today, this center "offers state-of-the-art technology and the most advanced medical procedures available anywhere."

The organization has strong philosophical and mission statements throughout its promotional literature. One such philosophy emphasizes the center's "uncompromising concern for the well-being of our patients and their families." The center also highlights a "belief in the inherent, God-given dignity of all people." The organization pledges its

"time and talents to the needs of others." Finally, the organization is committed to working "tirelessly for the common good in every community we serve."

In addition to emphasizing a religious-based commitment to service, the health care system also is committed to "advanced care close to home." "Our experienced and dedicated physicians provide comprehensive care using the most advanced technology and procedures available."

The organization enjoys a strong reputation for providing respected service in several healthcare areas. The center offers "a complete labor and delivery, postpartum and nursery service offered in a friendly, home-like setting." This particular center is also known for having "one of the best heart attack survival rates in the country." The organization is known for its "nationally recognized cancer treatments through our Cancer Institute." In addition, the hospital offers several "accredited pain and rehabilitation programs that have helped hundreds get back on their feet." Finally, the center claims to be the only "hospital in the area to offer an innovative mind-body approach to medical treatment through our Mind/Body Medical Institute."

Within recent years, the healthcare organization which runs this regional medical center bought out one of its regional competitors. Following this purchase, the organization set about the tremendously difficult task of reorganizing in an effort to efficiently absorb the other organization. The goal was to have one new organization with several "campuses." One of the first steps of this reorganization process was to establish a new "senior leadership team" of doctors and various administrators. The members of this team were leaders of each of the units within the new and expanded healthcare center.

In an effort to facilitate the process of becoming a team, the group had worked with a consulting firm out of Atlanta, Georgia. This firm had provided several programs that were designed to aid the center in its efforts to come together efficiently. One of these programs was a day of portable outdoor team challenges planned to improve the group's communication skills, problem-solving abilities, teamwork, and collaborative skills. In addition, the day was to be used as a means of allowing the members of the team to "get to know one another better."

Portable initiatives, also known as action learning devices, are designed so that they can be carried by a consultant to a client's facilities or outdoor park-like environment. Once assembled, these initiatives provide an experience that is not unlike those found within a "low ropes" challenge course facility. According to a well-respected provider of these portable initiatives, these elements can be very effective teaching and learning tools:

Action Learning Devices provide an environment for accelerated learning, a stage for viewing individual, group and organizational behaviors, and a versatile tool for enhancing employee and organizational development programs. Each device can produce a variety of learning environments reflecting group dynamics ranging from simple to complex. Each tool also provides an arena for action-based assessment of participants' styles and capabilities and a practice field for developing new competencies. Clients use Action Learning Devices for developing leadership, coaching, and systems thinking skills, for creating high performance teams and learning organizations, and many other applications.

On the day of the outdoor training, the hospital's senior leadership team was asked to report to a local state park where they were greeted by the consultant who was to conduct the day's events. During the outdoor program, the group experienced two portable initiatives. The first of these activities was referred to as group skis. This is an activity that involves a pair of skis that are long enough to accommodate all fifteen members of the team. Once on the skis, which are simply two long boards with rope handles, the team is required to develop a system by which they can all walk in unison from one designated point to another. The teams can often be seen chanting something to the effect "one, two, three, left leg step!...One, two, three, right leg step!" The second initiative presented involved the group traversing a designated grassy space "without touching the ground." The team was provided with several boards and cinder block that could be used to construct a bridge that would provide safe passage. Following each of these initiatives, the team processed the activity within the context of team dynamics, communication and listening skills, personality styles, and application to the team's "real world" work environment.

Following these two outdoor initiatives, a real threat of tornadoes forced the group to seek shelter in a nearby building. Because of this threat, the facilitators continued the training session indoors. Once inside, the group was then provided with batteries, wires, light bulbs and various other "electronic gizmos" and asked to assemble lights that could be used to illuminate the room. The group constructed the lights and then discussed the process in the context of team dynamics, communication and listening skills, personality styles, and applications to the work environment.

Two months following the training program, I was able to conduct phone interviews with four out of 22 members of the center's Senior Leadership Team who had attended the session. The following is a brief biographical sketch of each of these individuals:

Hopper – Hopper is a 55-year-old white male. His title within the center is "Vice President, Information Services." His primary responsibilities involve "developing and executing information technology initiatives" and "supporting the organization's telecommunication infrastructure." He has over 30 years' experience in the field of information technology. Hopper holds a BA in Communication Arts and has partially completed an MBA degree.

Abbey – Abbey is a 42-year-old white female. Her title within the organization is "Chief Executive Officer." Her responsibilities are numerous and include operations and administration of the two joined organizations, as well as one managed care department. She has eight years' experience in managed care, three years' experience in healthcare marketing, and five years' fundraising experience. She holds a BS degree in Home and Family Life, a Master of Health Administration, and an MBA degree.

Robert – Robert is a 55-year-old white male. His title within the center is "Vice President for Medical Affairs." His primary responsibilities include "medical staff services, performance improvement, utilization management, health information, medical records, development of physician leadership, and coordination of risk management."

Robert has 26 years' experience as a primary care internist, six years' experience as a

medical staff officer, and 15 years' experience as a managed care medical director. He holds a MD, a certificate in medical management, and is currently working on a master's degree in medical management.

Winston – Winston is a 43-year-old African-American male. His title within the center is "Organizational Diversity Officer." He "provides system-wide leadership to foster workplace diversity and improved relations with the external broader community of people of color by facilitating differences and encourages heterogeneous groups of persons to work together toward a common end." Winston has 15 years of healthcare management experience. He holds a Masters of Public Affairs in Health Systems Administration and a BS in Business and Human Resources.

Table 1

<u>Participant Information</u>

Pseudonym	Age/Sex	Ethnicity	Job Title	Education			
Marketing Firm							
Mary	52 / Female	Caucasian	Graphic Design	High School			
Robbie	38 / Male	Caucasian	President	BA, MBA			
Janice	26 / Female	Caucasian	Account Executive	BA			
Jordan	33 / Female	Caucasian	Creative Director	BFA			
Paul	39 / Male	Caucasian	Executive	BA			
Julie	30 / Female	Caucasian	Vice President	BA			
Kathy	31 / Female	Caucasian	Production Manager	BS			

	C	onstruction Age	ncy	
Tonya	25 / Female	African- American	Accounts Payable Coordinator	BA
Wilma	28 / Female	Caucasian	Accounts Payable Coordinator	High School
Amy	30 / Female	African- American	Assistant Coordinator	BA
Tara	20 / Female	African- American	Accounts Payable Assistant	BA
Monica	37 / Female	African- American	Accounts Payable Lead Coordinator	Associate Degree
Joy	45 / Female	African- American	Accounts Payable Assistant	High School
Bart	27 / Male	African- American	Accounts Payable Assistant	Associate Degree
	Regio	onal Healthcare	Center	
Hopper	55 / Male	Caucasian	Vive President Information Services	BA, MBA
Abbey	42 / Female	Caucasian	CEO	BS, MBA
Robert	55 / Male	Caucasian	Vice President Medical Affairs	BS, MD
Winston	43 / Male	African- American	Organizational Diversity Officer	BS, MPA

Results

This study produced data that contributes to the understanding of learning transfer from outdoor adventure-based programs to the practice setting. Insights were gained into what and how adults learn during this particular type of training format, how this learning

is transferred back to the practice setting, and what factors influence the transfer process within this particular context.

Findings from a comparison of interview data from the 18 participants reveal that adult learners experience meaningful learning during these training programs. Learning in this context appears to be the direct result of a purposeful and planned instructional process. Second, a specific process was identified by which this learning is transferred to the practice setting. Finally, there exist various workplace setting, supervisor, and group factors that influence the transfer of learning process. The main findings of this study are presented in Table 2.

As can be seen in Table 2, there is a learning process that takes place during outdoor adventure-based training programs. This process begins with the adult learners being actively engaged through various active learning and collaborative learning techniques. The group of adult learners is then asked to question what occurred during the learning activity and reflect upon what they have learned during the activity. Finally, participants speculate as to how this learning might be applied to the group's practice setting.

There seems to be significant and meaningful learning that occurs during this particular type of program. During outdoor adventure-based training programs participants appear to develop keen insights into their own personal behaviors within the group. In addition, adult learners also develop a deeper understanding of the personalities, behaviors, and attitudes of their colleagues. Finally, participants in outdoor adventure-based programs obtain a more complete understanding of how the group operates in terms of group dynamics and behaviors.

This study has revealed a process through which adult learners transfer learning from the outdoor adventure-based program to the practice setting. The transfer process begins with the adult learners taking time to reflect back upon the activities and insights experienced during the training program. Here, individuals as well as the group strategize in an effort to determine how to best apply learning gained through training to the workplace setting. The next phase of the process involves individual and organizational implementation of new knowledge and insights within the practice environment. Finally, the process ends with a critical evaluation aimed at determining the overall effectiveness of this implementation, bringing the individual adult learner and the group back to a process of reflection.

Several factors emerged that influence the transfer of learning process within this particular training context. The first of these factors is adult learner perceptions of the program. There does seem to be some connection between having positive perceptions and efforts to transfer learning to the practice setting. Also, supervisory as well as colleague leadership styles influence individual and organizational efforts to transfer learning. Finally, several group dynamic factors also influence the transfer process.

Table 2

Principle Findings

- I) The Learning Process
 - 1.) Active engagement
 - 2.) Questioning
 - 3.) Group Reflection
 - 4.) Application

- II) Content of Learning
 - 1.) Insights into Self
 - 2.) Insights into Colleagues
 - 3.) Insights into Group Functioning
- III) The Transfer Process
 - 1.) Reflection
 - 2.) Strategizing
 - 3.) Implementation
 - 4.) Evaluation
- IV) Factors Influencing the Process
 - 1.) Perceptions of the Program
 - 2.) Leadership Styles
 - 3.) Group Dynamics

The Learning Process

Outdoor adventure-based programs strive to incorporate within their design a deliberate learning process. The process uncovered in this study begins with some type of learning activity that requires each participant to become actively involved.

Next, the facilitator leads the group of adult learners through a series of questions designed to bring focus upon what occurred and what was observed during the initiative. Finally, the group is required to reflect upon the significance of the insights and discuss how certain observations can be applied to the practice setting.

Active Engagement

Unlike many corporate training programs, where the adult learner is a passive observer of instruction, outdoor adventure-based programs place a heavy emphasis upon active learning and collaborative learning techniques. In fact, it is these activities which are the hallmark of this particular training format. For the participants in this study, these learning activities were the highlight of the program. In addition, most participants felt that these activities were an effective vehicle for analyzing individual and group behaviors and applying this analysis to the group's practice environment. Wilma describes one of these learning activities, which could otherwise be identified as a "high ropes" initiative that was experienced during her construction firm's experiential training day:

The thing that I liked most was the walking across the, climbing the ladder and walking across the log. You had to strap a harness on and the people down at the bottom held the rope and kind of lowered you, and made you feel safe, and then you had to climb up a ladder. The log was a couple of, I don't know how many feet off the ground, but anyway, you had to climb a ladder and walk across a log hands-free. I found that enjoyable.

Not all of the activities identified as being significant learning opportunities were as dramatic as the high ropes initiative described by Wilma. In fact, other participants enthusiastically discussed other initiatives, which did not require the use of ladders, ropes, and harnesses. Joy, a member of the construction firm's accounts payable team, identifies a low ropes course initiative referred to as "all aboard:"

When you stand on that little, there was a square and everybody had to huddle together and I think it was a ship something. The ship thing or something was called and everybody had to stand on there and make sure everyone was on secure and couldn't get down and step in the water and I guess they fight to make sure they hold on to everyone so that they won't fall off. So I think that was the most important one.

While traditional high and low challenge course initiatives were the source of vivid memories, other types of portable challenge initiatives were viewed by participants as exciting and challenging activities. Abbey describes a portable experiential activity referred to as "group skis" as experienced by her and her hospital leadership team:

There was one where there were three teams of people and we were all on our own separate little, I don't know if I can describe it, but little logs that were connected together in front of us. But not, you know, like our right foot was connected to the right foot in front of us, the right foot in front of that. Not necessarily connected to the left foot. So, we all had to move at one time in a single direction, and move up, and then turn around and come back.

In keeping with the theme of enthusiastically remembering the active engagement aspect of these types of training programs, Janice reflects upon a training exercise that she found to be valuable for her advertising agency's team. The exercise she remembers most vividly is referred to as "board room:"

We did one activity where there was four boards and everybody has to move around – you start there's three people on each of the four boards. Everybody has to move around in a different position, different board at the end. So just trying to

decide how we were going to do that, everyone was getting really frustrated...

After thirty minutes, we were still trying to figure it out because too many people were jumping in trying to do it their own way. So, we finally, just like, ok, how should we do this? One person took over, figured it out, explained it to everybody, everybody got it and then we were able to get it done on time.

While these experiential exercises were identified as being "the most important one," the "highlight of the day," or "one that sticks out," it is important to mention that the participants in this study discussed various activities as being more than mere "fun" and "exciting" group activities. In fact, much was made about the fact that these initiatives presented an opportunity for significant learning and reflection.

Questioning

While the participants in this study spent a great deal of time discussing certain activities, there was also an emphasis placed upon the purpose behind these activities.

These activities were always followed by a series of questions aimed at causing the group to focus upon "what happened?" during the learning activity. It was this type of questioning that made the experiences significant and meaningful. Paul, one of the advertising executives, said that it was this process of asking post-activity questions that made the experiential initiatives feel more educational:

As far as, again, it was the sit down, ok, you guys had fun, what did you learn?

Which is always one of those awkward moments that when you sit down with a teacher and say, oh, ok, you saw the filmstrip, what did you learn from it?

Paul also went on to say that this process forced the group to address a series of questions that went to how the group operated as a team. Some of these questions,

according to him, focussed upon group strategizing, collaboration, as well as communication.

A group of people come together as a huddle and sitting there, ok, what is the opposition going to do? What do you wanna do? Matching back and forth led to a real and play atmosphere. Role taking. What would my boss be doing? What does he think I want to do?

According to Amy, one of the accounts payable team for the construction firm, this process also proved to be a valuable aspect of this particular training format for her group. Amy maintains that this process of questioning helped her team gain valuable insights into how her group was working together.

We talked before and after. How we were going to get there. What tools we were going to use at that point. Who was, like, when we had to walk across the hoolahoops, who was the strongest and, you know, who could we put there to get to the lightest. And we needed a strong person at the end to carry us through. So, we just talked over things like that.

For Mary, a member of the advertising firm's team, questioning played a crucial role in the training day. From her perspective, it was a process of questioning that actually improved the team's ability to work together on the ropes course:

And we had to do that process on how quickly we could do it. And that was one of those things that I remember not thinking that we could do it quicker than 30 seconds or whatever it came to. We finally got it down to four seconds because we were trying to learn how to think outside the box. Do we actually physically have to toss it? Can't we just touch it? So, we all just touched it in succession.

Mary also added that the various exercises presented during this particular training format generated questions that forced the group to look closely at their behaviors as a team. Certain questions, according to her, were indicative of "ah ha" moments that uncovered certain dynamics that had not been discussed previously. "From the moment we got there every little thing was a big surprise. It. It's interesting. We're doing this? We're doing that?"

The learning environment offered by outdoor adventure-based programs allows individuals to ask certain questions of their colleagues that, in other contexts such as the workplace environment, might never have been asked. Jordan mentioned the fact that it was this particular environment that allowed her to challenge certain colleagues from her advertising agency like she had never been able to do in the past:

When you're out there on the ropes course and you kind of kid each other about, you know, why have you been so uptight? Or, now what's your problem? It's a game and you can kind of kid each other about it. So it actually opens up an opportunity to talk about things in the office that you might not be able to talk about because it's just too intense.

Before, during, and after each activity found within outdoor adventure-based programs, questions are used to get at what has been learned from active engagement. In fact, questions play a vital role in the learning process as it forces members of the team to reflect upon how that particular team is working together.

Reflection

In each of the three programs included in this study, reflection played a major role in the learning process. It was through reflection that the groups were able to discover

the significance of what was being observed throughout the training day. Reflection was also used a means to create certain awareness in terms of understanding certain behaviors as well as identifying personal beliefs. All of the programs included some type of session during which the team reflected upon those areas in which the group needed to improve. As Tara, a member of the construction firm's group, simply stated "we just sat around for a while and just talked what our problems were and stuff like that." Robbie describes this process as a facilitator-led reflective period during which "we started to talk about core values and what was important to us."

From Tara's description, one might develop the impression that the reflective portion of outdoor adventure-based programs is spontaneous or loosely planned, if planned at all. This does not appear to be the case. In fact, the participants describe this process as being the direct result of a skilled facilitator's direction. Mary reflected back to how the facilitator helped her advertising group bring focus to the training day through reflection:

I know we had to come up with four things. Four main things that were, that would describe the most important elements of a good team. A working team for our business. So, I know that took us some time. [The facilitator] walked away and let us alone for several maybe 15 minutes while we sort of chewed on that and came up with a long list of things.

The facilitators of these types of training events do put a considerable amount of time into creating ways that are conducive for group reflection. One measure that can be taken is arranging the group physically in a way that allows them to reflect and share ideas together. Abbey talked about what the facilitator did for her hospital leadership

team that allowed them to reflect more fully on the training day's activities. She describes it as "just sitting around in the group where we're in a U-shape and the group with the facilitator up front so we could talk more about...how to improve some of the areas where we saw we needed improvement."

Paul discussed what he saw as the purpose for this reflection: "We're here to reflect on any problems that we perceive, offer our perceptions on how you might solve it." Paul later talked about the fact that reflection allowed the group to develop new insights into possible "problems" with the organization:

This was definitely, you had thrown a stone into the pond and you got some ripples. And so, everybody was able to sit back and go oh, this does have relevance. This has significance. What is the meaning for it? And once the person has said it, you can't take it back and you are in a setting enough that you aren't going to be challenged. You know, this is not a challenging moment and management has to sit there and kind of go wow, this was a topic that I wasn't aware there was a problem.

Reflection is an integral component of the learning process that takes place during outdoor adventure-based training programs. This phase of the process causes the learners to think deeply about the significance of what was learned through various outdoor training initiatives. Once the significance has been identified, the group is then ready to apply the learning, at least in theory, to the workplace environment.

Application

The final phase of the learning process that occurs during outdoor adventurebased training programs is application of new knowledge. This application is theoretical and involves making connections between the training program and the practice environment. On one level, these connections relate to the learning activities and how these activities closely resemble the challenges faced by the members of the group on a daily basis within their work environment. On another level, these connections have more to do with a particular individual's behavior during the training session and how that behavior is manifested by that individual or individuals back at work. On a final level, there are connections that pertain to the group's overall performance throughout the training and how performance during training resembles the group's daily performance completing work-related activities. Hopper talked about the fact that the outdoor training experience was applicable to the daily activities of his hospital leadership team:

We spent a little bit of time trying to interpret the rules. That's very similar to what we do here. This is a fairly unstructured work environment for us, and you can't go into any situation assuming that everybody is always on the same page about, you know, what the limits of authority are, what you can do, what you can't do, and how things work, whether the rules are actually hard and fast or whether they're guidelines. So, I think that was very much like what we have in the real world and that is some ambiguity about what the actual rules are and then various attempts to understand both the letter of the rules and see where there might be some opportunities for exceptions. So that, I mean that, I thought that was very real world and it was interesting how we went along and people, we had some free spirited discussions about what we could do.

Outdoor adventure-based training programs were viewed as potentially beneficial due to the fact that such training sessions provided opportunities for the group to discuss

issues directly related to the workplace environment. This particular training format was valuable because, as Janice stated, "it worked a lot like it does in the office." In short, participants were able to apply the lessons learned throughout the training day directly to the workplace environment. Tonya discussed how sticking together as a team during the training session was an important experience for her construction firm's accounts payable department:

They all had to figure a way to get that one little center block and they did that. It was amazing for me too, because, like I said, everyone is different sizes. They figured out a way. It was a group effort for everything and all like that. Because that's what we deal with here in the office is teamwork, and when one person breaks down, or one person does not want to participate, or if you have someone who's sick, or like me had a broken foot, we still figured out a way to make it through.

This training format also forces groups of individuals to trust and support one another. The group quickly learns that the team's success is dependent, not upon the achievement of individuals, but upon the achievement of the group as a whole. Participants in outdoor adventure-based training programs identify this particular dynamic as directly applicable to a work group's practice environment. Bart spent some time discussing how the supportive nature of the training program directly relates back to his accounts payable team's office environment:

In my division, we have a coordinator, assistant coordinator, and an assistant. If my coordinator doesn't do her job, and if I don't do my job, that means my assistant can't do her job, and then, therefore, the vendor's not going to get paid.

So it's like, you know, we had to put that trust, so one event we did [during the training] was based on trust, that you're dependant upon that one person, and we stood behind that one person and they fell back. So, it was our responsibility to hold them, you know, to keep them from falling. That's something that they really trusted you not to let them fall. It was just a thing that we did... ... We had to think of a way how to get through that and as a team we achieved. That's what our team is all about. Together, everyone achieves more.

The learning activities presented during outdoor adventure-based programs are also opportunities for a group to identify problem areas, such as poor conflict resolution skills. More importantly, however, the groups apply difficulties encountered during the adventure-based training to the practice environment. Jordan remembered the fact that two of her colleagues exhibited "bad behavior" during one particular initiative. She found it interesting that these particular colleagues exhibit the same behaviors within the advertising firm's office environment. Because of this, she found the outdoor activities to be directly applicable to specific work situations such as group meetings and brainstorming sessions:

Well, Jim and Tom who are, I mean they're strong personalities. They're very outspoken. They're naturally loud people. They talk very loud. I mean they're outspoken people. They're like trying to figure out how to do this exercise successfully. I mean, they're doing what the do in here [the office]. They're having open heated, loud arguments about it. Anyone who gives an idea they're like challenging them, and shooting them down. *No, that's a stupid idea! It's never going to work!*

In summary, the learning process found within this training context closely mirrors that process outlined within Kolb's (1984) experiential learning cycle. The process is initiated when the group is actively engaged in various types of physical learning activities. The group then is challenged to question what happened during the experiential initiative. This time is devoted to capturing the subtleties and specific details of the activity. These questions cause the group to reflect upon the significance of the learning experience. Once the significance is well established, the group then attempts to apply the various lessons from a particular activity to the workplace environment.

The Content of the Learning

Outdoor adventure-based programming has grown in popularity in recent years. With this growth has developed a certain degree of controversy. Such controversy stems from the fact that some argue that, though they may be "fun" and "exciting," no actual learning takes place. This study, however, has revealed the fact that adult learners do come away from these programs with significant and meaningful learning. This learning can be broken down into three primary categories. First, participants seem to develop certain insights into self. In other words, through participating in these programs, individuals develop a better understanding of their own personal behaviors and interactions while functioning as part of a team. Next, individuals gain certain insights into their colleagues' strengths, weaknesses, preferences, and behaviors. Finally, outdoor, adventure-based programs offer adult learners an opportunity to develop certain insights into the way in which the group functions together as a whole unit.

Insights into Self

One of the primary outcomes of an outdoor adventure-based program is the fact that learners develop a deeper understanding of themselves as individuals. People do seem to come away from these events with insights into their personal strengths, weaknesses, abilities, and shortcomings. Repeatedly throughout this study, respondents talked about the fact that they learned something about themselves through processing the day's activities. Some of these insights pertained to positive things that the individual hoped to continue doing as a member of the team. There were other discoveries, however, with which individuals were less than pleased. Mary talked about the fact that she learned certain things about herself during the training program:

What I learned, I think the biggest thing I learned, which is a negative, was that, I mean it's not a negative in the sense that I learned from it, but the fact is that I tend to approach things from a negative point of view. I will look at it and say "oh, impossible. I can't do it. I can't do this." So, I'm, you know, looking at the glass half empty a lot. So it was an eye opening experience for me to realize that I can do a lot more of the things that are asked of me.

Robbie, the CEO of the advertising agency, also talked about discovering certain things about his own personality that he would like to change as a result of the program:

I feel that I learned that I do tend to dominate things. We tend to have, the partners and probably Greg and I in particular even more so, have a personality that's kind of like I'll wait five seconds and if it isn't done, I'm just going to figure it out and do it myself. That, in some ways, makes people more infantile in the long run. That's probably the biggest thing that I learned.

Jordan, like Robby, learned that she tended to "dominate" her colleagues within the advertising agency. Jordan talked about the fact that during the outdoor ropes course program, she learned that she has a tendency to confront her colleagues in negative ways:

We talked about it. I mean, we joked around about it because Bill knew that I knew his plan wasn't going to work. I guess part of me does what I do in here. I was secretly laughing like, you sat there and you dominated and you argued with Bill.

Not all of the personal insights gained through participating in outdoor adventure-based programs pertained to negative personality traits. In fact, many participants talked about discovering previously untapped potential. While taking part in a particularly challenging high ropes course initiative with the rest of her accounts payable colleagues, Amy learned that she could do things that before she "never dreamed I could do:"

Walking up the ladder, I was really nervous because it was kind of swaying. But my team players were down there and they were holding the ladder, so I had to have trust in them because you have to have trust in you [teammates] because you all work together... ...So, I got up to the top and kind of had to balance myself. Of course, I was nervous. But, I don't know, I just, my coworkers were down there, you know. 'You can do it! You can do it!" And just helping me out and getting me through it. Then, I walked across and then, it was like, when I came back, when I was walking back across to the ladder I was alright because they were down there cheering me on saying I can do it. That made me feel good learning that I could do it, because I wasn't going to do it at all.

Participants in outdoor adventure-based programs also gain certain insights into what they as individuals bring to their team. For many, the experiential initiatives involved in this type of training represented an opportunity to realize that they do, in fact, make meaningful contributions to their groups. Janice maintained that she learned during the training program that she is someone who has something significant to contribute to her group at the advertising agency:

I found myself interjecting a lot, and much to my surprise, [the facilitator] pointed out that she thought that I had a lot of good stuff to say... ... That I did have something to contribute. So, that was interesting, something that I wasn't aware of. So, that was the learning experience for me.

In short, through participating in these types of training events, adults can learn a great deal about themselves as individuals. Some of the things that can be learned include how one deals with problems, arrives at solutions, and works with other people.

Jordan talked about the wide spectrum of things that she believes that can be learned through participating in outdoor adventure-based programs:

When we did the [outdoor adventure-based training program] I realized that this is part of my personality. This is who I am and this is how I deal with the problem, deal with the solution, deal with other people. I just do it different than others, better or worse, I just need to make sure that I'm always handling it positively.

While there has been some doubt in the past as to whether or not adults actually learn during outdoor adventure-based programs, this study generated data that leads one to believe that there is actual learning that does take place. Specifically, adults seem to gain numerous personal insights during these training events. Some of these insights are

negative traits that the respondents hope to change. There are other discoveries, however, that are more positive in nature, revealing personal potential that had been previously undiscovered. In either case, participants walk away from these programs with a deeper personal understanding of themselves and how they function as a member of their teams.

Insights into Colleagues

In addition to gaining meaningful personal insights, participants in this study also reported that they were able to gain a deeper understanding of their colleagues. Through various experiential learning activities as well as in-depth discussions about those activities, individuals were able to recognize their teammate's tendencies, preferences, strengths, and limitations. Also, this training format allowed people to more fully understand their colleague's personality types and temperaments. As Monica stated, participating in various high ropes course initiatives provided her with an opportunity to understand her colleagues from within the accounts payable department "on a different level:"

But you just learned them on a different level. A personal-type level. Like I said, the girl who we thought was so macho couldn't walk that pole. We could see the fear in her face and all that. Ok, well she fears things also, you know. You just learn people from a different aspect other than just their work.

Like Monica, Amy was surprised by the fact that this one particular "macho" individual did have certain limitations. She mentioned that, before the program, she never would have dreamed that there was a point at which this very strong individual simply "couldn't go on." During the program, however, she quickly learned that this particular individual could, in fact, be very frightened in certain situations:

There was this one person who in particular who couldn't do it. I mean, she couldn't even make it up the ladder and, you know, we were all like "get her down, don't let her go on!" Because she kind of felt like she had to because the rest of us did. And we were like "get her down, make her get down!" Because she's going to get up there and panic and, you know, freak out once she gets up there. So, we were like "get her down!" Make her feel like we were going to be proud of her regardless of whether she does it or not.

Amy also felt that she gained many meaningful insights into the behaviors and temperaments of her colleagues from within the construction agency. She was surprised to discover that some of her colleagues were more like "perfectionists" than she had realized before:

You know, I mean because some people get aggravated because we couldn't do some of the activities that we had to do. We had to stay on the board. That little board, and we all had to fit on that board. And, you know, some people got aggravated, but then we got to doing it working together and then we figured it out. You've just got to learn people's moods.

Paul found that the outdoor adventure-based training format was an ideal way through which to learn about each of his colleagues with whom he worked back at the advertising agency. In fact, he maintains that he learned so much about the individuals on his team that he intended to modify the way in which he interacted with each of them from that day forward:

I can say for a fact that again the communication, the honesty and the perception such as, "Oh Bob over there is a person who deals with short words." He deals

with facts, figures. He is not an abstract thinker. He is a plotter. He is a person who sees a wall and would rather go through it than find the door and go around it. I am now aware of that because I saw him on the course and I must deal accordingly. There's Teresa in the corner. Teresa is very giving, flighty woman who cares so much about the world that it just makes you weep at the end of the day. She can drive you to distraction in one of these sessions in Adventures in Team Building because she can't stay focused. So, if I wish to manage her I have to do this in order to manage her. I have to set these rules and these guidelines and I have to be aware of the fact that I'm not repressing her, but instead I'm setting up a certain series of rules that she can follow that makes her actually feel comfortable. So, I think that everyone who was there picked up certain character traits, certain reflections on how people like to be treated, how they like to react to it, and then is transferred, laid over to the work environment. For some people go ahead saying "Well, Tad over here is not a touchy-feely person." So, I must learn that with Tad that I can't gush about feelings. I need to be more matter-of-fact, more pragmatic. And, you know, Angie over here, Angie over here is one of these people who if you barely prick her skin she will bleed liberal causes and start screaming about the environment and all this business. So you need to be aware of that too. So awareness was fostered.

The unusual collaborative context that is found within this type of training allows individuals to see their colleagues operate in situations that are quite different than those found within the traditional practice setting. Participants gain certain insights into their co-worker's personalities, temperaments, and collaborative styles that might otherwise

have been missed simply working together five days a week in an office environment.

Participants report this to be an extremely important aspect of this particular type of training.

Insights into Group Functioning

While participants in this study found learning about themselves and other individuals on their team to be very beneficial, these were not the only areas of significant learning. Another dimension of these programs is the fact that they allow groups of individuals to develop a deeper understanding of how their teams functioned as a whole unit. Through interacting on the ropes course for example, participants were able to learn more about their particular team's tendencies. For most, the tendencies exhibited during the outdoor adventure-based program directly related to tendencies within the practice setting. Hopper found that the team initiatives presented during the program did provide opportunities for his hospital leadership team to learn various skills that would be directly applicable to their workplace:

The key lesson was the differences in the way that the team works based on the size of the team, the size of the team and the kind of activity that needs to be done. It was real interesting in the, you know, we had, when we had more people on the skis how different the communication had to be. And then, in the electronic exercise how we, I think we probably over teamed some of the things and it tended to slow us down. So, you know, the, I guess the case-by-case nature of what dynamics are required in different types of teams and different types of activities I thought was my biggest take-a-way from the whole thing.

From Abbey's perspective, the outdoor training day was valuable because it allowed her hospital leadership team to analyze its own behavior as it attempted to complete various outdoor experiential learning initiatives. One aspect of the training that she found to be particularly interesting was the fact that certain tasks required that the team "sub-group." According to Abbey, the sub-grouping component of the training presented certain dynamics experienced by the team within their workplace environment:

I think that it was interesting for we got reasonably intelligent people on these teams that are doing this. And the fact that one group was able to figure out how to get the working together down so that you were all moving together in a single direction and able to maneuver the thing, and the other two were not, was a pretty interesting dynamic. And then when we changed the second part of the exercise and regrouped the teams, that the team that had been successful the first time was not as successful the second time and a different team was because you were added to each of the teams. So it became a bigger machine and harder to move the larger group than it had been with the smaller group plus with the added people.

Abbey concluded that some of these activities provided meaningful insights into her team. These insights were valuable to a team representing a growing hospital because it allowed them to see "very much how communication is more difficult in a larger body of the organization."

Participants from the construction agency's accounts payable department also reported gaining valuable insights into their team during the outdoor adventure-based training day that they experienced. As Wilma stated, they "just learned how to work

together as a team instead of individuals." Tara maintained that, in her opinion, the group learned how to better come together in an effort to solve various types of problems. "We had certain stations where we had to get across, and we had to help each other get across each way. And just different ways of getting across without touching different boundaries and it was neat." Monica claims to have learned about some of the interpersonal dynamics at play within her accounts payable team:

I think it was because we had so many different personalities in the group and there was a, we were faced with a lot of issues of the different personalities. And just learning that, you know, that you can be who you are and say, you know, what your gonna say and its just always a right and a wrong way to put things. And it just, we just had a lot of issues that we need, with the different personalities, and we just need to come together and, you know, be a team.

Participants representing the advertising agency also felt that this particular training format provided various insights into the way in which their team operated and functioned together. They, too, seemed to think that this learning was significant and directly related back to their collaborative efforts within the practice environment. As CEO of the company, Robbie saw for the first time that he and his fellow partners tended to "butt in" and to dominate the associates on the team every time a decision had to be made:

I think to me the one that stands out is the allowing the group to come to decisions without interference of the partners butting in as much. That was the most specific. How we come to decisions. That was the most specific behavior I can think of.

For Janice, the program represented one of the first times she reflected upon how her team worked together. Through paying close attention to how the team collaborated, she discovered that there were certain team dynamics with which she was not entirely satisfied:

Somebody would start to solve a problem and then someone else would jump in.

And it wasn't a solution, it was just, it was a whole different way to tackle the problem. So instead of coming to one solution, there were just a bunch of different ideas that weren't working together.

As a particularly strong woman, Jordan found herself becoming frustrated with the members of her team who struggled with the physical nature of the low ropes course training day. She was surprised to discover the fact that a large percentage of the group shard her feelings. Jordan learned that so much frustration, with little patience, created an atmosphere that could not be accurately described as nurturing and supportive. She also claims to have learned that, as one of the senior partners, she plays a major role in setting the overall tone for the entire team:

We have some employees here who are not as athletic as others. Some are just naturally athletic and some just aren't and I found myself getting frustrated on the ropes course because I'm a relatively athletic person and I'm like, "How hard is it? Just grab the rope and walk across! C'mon!" I guess the patience issue with people with their strengths and weakness... ...It's not that they're not trying so very, very hard... ...I think patience that I shouldn't get frustrated because people don't have the level of something that I have or my expectations and I need to be more flexible. I need to listen better and I need to either help them

with their weaknesses to the ability that they can get better with their weaknesses to the ability that they can be and play off their strengths.

Outdoor adventure-based training programs require that groups take part in physical activities that have little to do with their practice environments. Despite this fact, however, these programs do serve as an effective tool through which groups gain valuable insights into the way in which they operate. Participants report gaining new insights into various dimensions of their group's problem solving, communication, and collaboration abilities. In short, participants in this study report gaining valuable insights into, as Robbie stated, "group dynamics and how the group functioned together."

The Transfer Process

One of the primary criticisms of outdoor adventure-based experiential programming is the fact that, while it is fairly expensive, there is little known about whether or not learners take meaningful learning back to the workplace. This study, however, has revealed that there is a process through which adult learners take learning gained through this type of programming and apply that learning within their practice environments. This process begins with a period of reflection. During this time, adult learners think back to the training program in an effort to remember insights gained and lessons learned about individual and group behaviors. Second, learners strategize, individually and collectively, in an effort to identify needed changes in light of the outdoor experiential program. Next, strategies are implemented on an individual and group level within the workplace setting. Finally, those within the office who are affected by the resulting changes evaluate this implementation. Such an evaluative

process requires additional reflection, bringing the adult learner back to the beginning of the process.

Reflection

During the immediate days and weeks following an outdoor adventure-based training program, participants take time to reflect upon the learning experience. This reflection is done both individually and collectively and touches upon what was learned, how this learning was significant, and possible applications for this learning within the workplace. Within the advertising agency, there was a formal effort to reflect upon the learning experience. Robbie, the organization's CEO, put out a formal request for all of his employees to get together and think about the low ropes course training day:

I wanted them to talk about what they had learned. How that could be specifically implemented here, things that they thought how we measured up on the full value contract, where we succeeded, where we failed. For them to actually rate us on each of those. What they could do themselves moving forward to improve the situation.

Janice mentioned the fact that her boss's formal request came in the form of an email consisting of several questions aimed at causing some period of reflection following the program. Mary remembers that "Bob sent us an email that he's going to give us a week or two weeks, I think, to think about what we've learned and how we want things to change here." According to Janice the recap was focused on the "four goals, I guess, of the session." She continued:

Trust, respect, unity, and I can't remember the last one. But we [the entire office] commented on all those and there were a couple of other questions like, how do

you think management has fulfilled these four? Or, how do you think you can be better at them? And stuff like that. So, we each answered those questions, we were very truthful and got the information out to management.

Following the hospital leadership team's outdoor training program, they too, made a formal and conscious effort to reflect back upon their learning experience.

Robert remembers that the training program was an "agenda item" during one of the group's meetings following the program:

We talked about them [experiential exercises] at the meeting, yes. I would say that we've had a formal meeting get-together back at the ranch where we just about, one of our say bi-weekly meetings to something that we talked about, where we had that as an agenda item and spent an hour or so talking about it.

Not all reflections were the result of a formalized effort to remember various aspects of the training day. Some of these group reflections were the result of something as informal as a casual conversation. Hopper mentioned the fact that he remembered a great deal about his group's training session through talking about it with his colleagues back at the hospital who did not take part in the program. "I've kind of brought back anecdotal descriptions of some of these things to give folks an idea of the kinds of things we're doing and how they might apply to other team-type situations." Amy also talked about casually reflecting on the training experience within her construction firm's office. "We talked about our experiences with the other people in the office, you know, about, [the low ropes day] and what we did and everybody said that they could really see a difference... ... We shared it with other people that didn't go." Tanya, too, remembered that casual interactions were a way through which she and her colleagues from within the

construction agency could reflect back to the low ropes training day. "We talked about it with everyone. We shared. We laughed."

For some of the participants in this study, pictures were used to reflect upon the training day's events. Tara discussed the fact that looking at pictures helped her team from the accounts payable department to reflect back upon their high ropes training experience:

When we went through the pictures, we took lots of pictures and stuff like that and just reflect on how much fun we had. We got together just to look at the pictures... Our employee service leader went with us to take the pictures and then she sent them to our supervisor. And our supervisor had, she had sent them to us individually, but as she was getting them, she had us come and look at them. It was just informal, but it was nice.

In addition to photographs, participants used other items to remind them about what they learned during a particular outdoor training program. Amy recalls using the helmet that she wore while participating in the high ropes experiential program:

After an outdoor adventure-based program, participants do take time to reflect upon the training experience. The process can be formal, driven by the participants' institution, or informal, driven by the individual employee's desire to make meaning of the learning experience. In addition, this reflection appears to be done in social settings as well as in private moments. Either way, employees attempt to assess what was learned through a particular program, understand the significance of this learning, and apply these lessons, in a meaningful way, within their office environments. This reflection leads the employee to a phase during which he or she develops strategies in an effort to determine how to best apply new learning within a given practice environment.

Strategizing

After a period of reflection, during which time learners think back to what they learned, why it was significant, and how this learning relates to their work environment, participants begin to think seriously about specific ways to apply new learning. This brings adult learners to a period of strategizing. During the strategizing phase of the process, adults consider specific ways they as individuals can implement new learning. In addition, they consider how their particular work group can make specific changes as well. Strategizing is done by individuals in the privacy of their own office space, colleague-to-colleague at the water fountain, and at formal organizational meetings in the boardroom. Hopper talked about the fact that he took some time to strategize by himself before going to his supervisor in an effort to discuss changes within the hospital:

I would like to be able to run exercises like these with members of my own staff.

And I've had a chat with [my supervisor] about setting up some kind of an

opportunity to do some of those, to do things like this with members of my own staff. So, my own senior leadership team would be good.

Abbey also talked about the fact that the leadership team from the hospital had been strategizing in an effort to implement specific changes. She discussed the philosophy behind such strategizing. "Strategically, you have to remember where you were and look at the steps. Be cognizant of the steps along the way to see, to see that you're actually attaining your strategic goal." Abbey went on to talk about some of these specific steps she and her colleagues have been thinking about:

I know that there have been a couple of things as we're talking about improving our internal communications here in my specific work site. Taking some of that, I didn't take the specific exercises that we had done elsewhere, but taking some of those concepts of the things that we had done elsewhere. Applying new exercises to them and doing them within this group.

Strategizing is dependent upon a group's ability to discuss possible changes.

Abbey went on to talk about some of the discussions that she has been having with her coworkers on the hospital leadership team since the outdoor adventure-based training program:

We've actually had that very discussion. If we're going to call ourselves a team, what does team mean to us? And the idea that these are the senior leaders of the whole organization so that we need to be assured that we are operating a, in a like-minded mode. That's really the team that we are more a part of. A more strategic type team verses functional type team.

Following a low ropes course training day, the advertising agency began an organizational-wide strategic planning period in an effort to identify specific changes that needed to be made in light of the training program. This process was sparked by the CEO's desire to make the program a worthwhile investment for the organization. "I told the other partners that if we spent this time to do this and we were going to do this, it had better be more than just this fun activity and then now go back to being ourselves."

Because of this Robbie put out a formal request of all employees who took part in the training session to think about possible changes that they as individuals and the organization as a whole needed to make:

And we gave them two weeks to kind of get together. I told them that they could respond any way they wanted. They could call a meeting with all of us and verbally tell us. They could write something up as a group. That they could do it any way they wanted. I wanted purposely, I wanted to force a level of thought.

Following the request issued by the CEO and the partners, the rest of the employees from within the agency convened in an effort to strategize together how best to respond. Janice remembered that "we did the recap and kind of got together to talk through that and try to figure out a way to make some improvements, which was taken well by everyone."

The process resulted in a large number of potential changes. In fact, there were too many from the partner's perspective to respond to at one time. Jordan recalled how the partners chose to handle the situation:

We couldn't tackle every single issue that they had told us and addressed in these questionnaires. And we decided, you know, let's tackle like five or six of these

things. Because it's much like a client, you need to show progress quickly on a handful of things and then you can tackle some of the bigger, broader things.

Not all of the strategizing done within the advertising agency following the program was done in large groups. In fact, there were meaningful strategies developed between pairs of individuals as well. Mary talked about the fact that she was approached by her boss, Robbie, to talk about possible strategies:

But he said "I just have to tell ya, I am totally blown away as to how unhappy everybody seems here. I just can't believe it and I don't know what to do." And I said, "what do you want me to say?" So, he kind of just, we talked for a good half hour, but basically he says "well, what do you think I can do?" I was pretty shocked that he came to me and here I've only been here less than a month when this was happening.

The strategic process within the advertising agency concluded with one more group meeting. The employees from within the agency, all of whom attended the outdoor adventure-based training program, came together in an effort to decide upon which strategies would be implemented first. Kathy recalled this meeting:

Since all of our questions had been read and then he [the CEO] read them all to the rest of the, all the managers, there are four partners here. So, all of them had to read what we had to say. We all had a group meeting a week or two after that in which we all, he made, he [the CEO] outlined a whole process dealing with our criticisms and how they were going to improve on those. And then, we're supposed to now see how this goes and see what improvements are made and I

guess there's going to be a trial period of a couple of months and we're going to get back and see how everyone feels about it.

Following an outdoor adventure-based training program, there is a specific period during which individuals and groups develop strategies for making changes within their organization. These strategies are the result of casual reflections and conversations, as well as formal organizational efforts to make changes. This strategic process does yield specific measures that are then implemented by both individuals and groups.

Implementation

Once several strategies have been identified for making improvements within the workplace, the organization moves on to the implementation phase of the transfer process. During this phase, plans for workplace changes are put into action. In short, it is during this phase of the process when participants do something in light of what they learned during an outdoor adventure-based program. Implementation is done on several levels within the workplace. First, individuals implement specific changes that they intended to make in light of various insights gained through the training experience.

Next, small groups within an organization implement various strategies for change.

Finally, entire organizations implement strategies that have an impact upon all employees working within that company.

At the individual level, there were attempts to implement changes within the workplace following the outdoor training program. Some of theses changes were behavioral while others were more attitudinal in nature. The result of these implementations were different thought processes and interactions within the workplace environment. Mary made reference to the fact that before the outdoor adventure-based

program, she was more pessimistic than she had previously realized. Discovering this pessimism, Mary decided that she would try to be more positive and optimistic when working on projects with her colleagues back at the advertising agency. Mary discussed implementing a "new attitude" and subsequent new behaviors back at the advertising agency's office:

I believe now, I'm still very outspoken. If I do have some apprehension I will voice it, but, at the same time, I stop myself a lot and say "you know, it's not totally impossible." So, and it's just, I think that they [the facilitators] helped me with my interactions with everyone here, and knowing how to deal with them.

During her time on the low ropes course, Jordan claims to have developed a better understanding of the fact that she is extremely "hard" on her fellow partners at the advertising agency. In light of this, she developed certain strategies that would enable her to develop into a more supportive colleague:

I've made a real conscious effort to be aware of that.....I became aware of it and that I really needed to become more of a support person like I am with my employees to my partners. With all people, I should be trying to help them with a weakness as opposed to getting all mad and going to one of the other partners and, "They can't do this. I've asked them ten times. How hard is it? Just do what I need." ...I have tried. I still find myself occasionally getting frustrated and doing it and I have to make a conscious effort to remind myself, no you promised yourself you were going to stop this, and if you have a problem you need to get a partner and talk with them.

Not all implementations were done on a personal level. Within the construction firm's accounts payable department, there were specific changes that were implemented in light of what was learned through the outdoor adventure-based program. Joy noted that she and her colleagues decided that if they were to be more of a team after the training program, they needed to act like more of a team. Because of this, the department implemented an unwritten policy requiring employees within the accounts payable department to acknowledge or greet each other as they interacted throughout the day. Joy talked about why this new policy was needed:

Different attitudes. Changes. People coming in more cheerful. Because we talked about it at the place [high ropes course]. They would speak, because some would come in and not even say good morning. People pass you by. They don't even speak.

In keeping with this theme of becoming more of a team, the supervisors of the construction firm's accounts payable department implemented a policy of becoming more accessible to their employees. These changes were deemed necessary because, as it was learned during the high ropes training, employees from within the department felt isolated from their supervisors. Bart talked about the changes his supervisors have made within his office environment:

Jackie and Joan, you know, they had, they never really stepped, they never really, Ralph was the president we really report to. Jackie and Joan, we really don't associate with them that much because they're up there and they like, they're really not in the office that much. But lately, they'll come through and they'll like sit and talk with us and ask us how things are going. And lately they come

thorough every morning and say 'good morning' and it's something that, that's something that really I like because from the companies and stuff that I was with where the company was so big that you really didn't get to see your boss's boss or whatever and they don't talk to the staff and they keep their offices closed.

The healthcare leadership team has also implemented certain changes in light of their outdoor training experience. One of the major outcomes of the program was the recognition that the group did not handle conflict well. In short, there were a lot of problems with individuals talking about other individuals "behind their backs." In light of this, the group implemented a policy of keeping all conflicts "eyeball to eyeball." Amy reflects upon her group's new policy:

If you had a problem with somebody, you'd fetch one other person and say "well, she's just driving me crazy" or "she's getting on my nerves" or something like that. But now we've just learned that if you just go to the source and just work it out, then you don't have to go behind somebody's back and say this or that. I mean it didn't happen all the time, but so much builds up and then, but if you just go to that person and talk to them. I mean, I think that that's a major respect in communication thing that we have going on. And now we've learned from there [outdoor program] that you can talk to somebody regardless, you might hurt somebody's feelings, but at least you're honest.

Finally, the advertising agency implemented certain changes that had an effect upon all employees following their low ropes training program. During the program, it was learned that many of the agency's employees felt as if they were taken for granted and not supported by upper management. In light of this revelation, Robbie, the CEO of

the agency, instituted a new company-wide policy in an effort to show a sign of upper management support:

We have implemented certain new procedures, like we decided we were going to spend \$1,000.00 on training every year for each employee. That they were going to have a budget that they could utilize in any way that they wanted as long as it was, in some way, going to help the business.

During the advertising agency's low ropes training day, it was also learned that employees were very unhappy about the fact that, despite specific promises made by upper management, there was no retirement plan in place for the agency's workers.

Hearing this complaint, Robbie implemented another plan:

So we took a lot of steps like that. We went through the things where they felt that we had committed to when we opened the business we hadn't lived up to.

The 401k, for instance. And we really hadn't had the money to start a 401k. That was the bottom line. It was a money issue. But we gave them a date when we would and here's the plan, and very specifically.

Following outdoor adventure-based programs, participants do attempt to implement changes back within their workplace environments. Individuals, groups, and entire organizations initiate workplace changes. They can be minor changes, dealing with the behaviors of only one person, or they can be fairly sweeping changes, impacting all who work within the confines of a particular office space. These changes are left in place for a period of time to have an impact upon the workplace environment. After a short period of time, however, participants move on to the final phase of the transfer process, evaluation.

Evaluation

Participants evaluate the impact of various individual, group, and organizational workplace changes that were the result of the training program. Janice found that the program her advertising agency went to had a continued impact two months following the training day:

It also helped us to come back to the office and have some open discussions about the environment of the office itself. I think it encouraged the employees to speak more freely in those meetings. We asked for written feedback, anonymous written feedback from the employees and I think having the [low ropes] experience made them feel like we were truly interested. We were going the extra effort and they were very open and very honest with their responsiveness, both good and bad.

While the training program did have a positive impact upon the office environment from Jordan's perspective, she did see some areas where the program created certain "problems." Jordan discussed the fact that the program opened her employees up, possibly too much. She continued on about the fact that, in her opinion, enhanced relationships within the workplace has decreased the agency's overall productivity. "And I am sort of torn because as being part of the creative department I'm so excited because my team is coming together and they're over there working on the computers, but they're joking around."

Participants from the hospital leadership team talked about the fact that implementing group guidelines developed during their particular outdoor training session has had somewhat of a lasting impact upon the group within its practice environment.

Some reported that the group has functioned better since the outdoor program. Robert believed that the program improved his group's communication, listening, and conflict resolution skills:

I think for one, that there is a lot less personal attacking. I think that people try to listen better. I think they try to identify issues better than they have in the past. I think there're a little more likely to yield on their own positions and try to come to some understanding of what issues are out there. See if we can formulate some creative alternative to what's been proposed. So I think that the mindset is creeping in and the people are better accepting and understanding of that in attempting to do that.

Others on the hospital leadership team felt that the program was a positive thing for the group to have experienced together. Some felt that the dimension of trust development was particularly important for a team comprised of former competitors. Hopper talked about this particular aspect of the outdoor program and why it has continued to be so important to the hospital leadership team two months following the training session:

I think that after the training there is a significant higher degree of trust among the members of the team. Particularly from those of us who came from different organizations that were pulled together to create this team, so, yeah, this team was created when two organizations merged. About two-thirds of the members of the team came from one organization and the other third came from the other organization... So there was a lot of trust that needed to be built and we each felt that we each had ownership of the right way to do things. I think that one of the

things that we've learned as the result of probably these training sessions, and of being together as a team for some time is that the larger organization doesn't always have all the best ideas. And breaking down those arrogance barriers, I think its been a very important either product or byproduct of this exercise.

Abbey, from the hospital leadership team, also talked about the fact that her team has improved since the training session. From her perspective, one of the greatest areas of application and improvement has been with the team's ability to communicate effectively with one another. She believes that her team has been able to effectively apply various experiential learning activities to its daily operations. "We have been able to apply them, and I have seen improvement in our communication among the senior leadership team itself."

Participants from the construction firm's accounts payable department, too, were evaluating various changes within their office environment two months following their high ropes program. One of the team's major goals for the program was to come together as team to create a more pleasant and supportive work environment. According to Tara, this is exactly what occurred after the training session:

Well you would see individuals before. You'd see what this person is doing.

What that person was doing. But now, you would see us working as a group. We have different divisions, but we all help out with the different divisions now.

We're all more eager to ask questions and more willing to help out the next person if they need it.

As was mentioned previously, the construction firm instituted an unwritten policy whereby employees were asked to make an extra effort to greet fellow team members in

the morning and as they encountered them throughout the day. Monica spent some time evaluating this particular workplace change initiative. According to her, this particular change has been hugely successful:

It has really been great. We enjoy coming to work and it really has, everybody has put all they have to have that closeness. We're talking about a group of ten people who didn't even say good morning. You know, to you just say good morning to your favorites. To a group who is now, everybody's 'good morning!' You know? I mean that's a good thing at the start of the day. [The facilitator] really did good. She really did well with us.

During their high ropes training program, the supervisors from within the construction firm's accounts payable department discovered that their employees felt isolated from them. In addition, these same employees felt that the supervisors did not offer as much support as was necessary. Because of this, the supervisors implemented changes within the office that forced the supervisors to go out of their way to interact with their employees in a more positive and supportive manner. Participants reported that this had had a profoundly positive impact upon the workplace environment. Bart made reference to a specific example of this new policy's effect on the office environment:

She really needed [the high ropes training session]. She really needed to, she really needed [the high ropes training session] because as a supervisor she wasn't on that supervisor level and she really didn't know anything about her employees. She used to take in a lot of grief and she'd say stuff and I felt as though she really needed [this training]. Since [then], she made a miraculous change and I really,

she really needed it. She became much closer to her coworkers, to her people.

That's my change that I've seen and she's getting better as the days go by.

The final phase of the transfer process, evaluation, shows that participants do not simply make changes within the workplace environment following an outdoor adventure-based training program and then forget about these changes. In fact, it is quite the opposite. Participants make changes and then allow a certain period of time to pass. While this time is elapsing, participants periodically think about these workplace changes in terms of what has gone well, where has the team fallen short of their goals, and in terms of additional changes that need to be implemented. It is this thinking about implemented changes within the practice setting that leads the learner back to the beginning of the transfer process for further reflection.

Factors Influencing the Transfer Process

This study was focused upon understanding a process through which adult learners take learning from outdoor adventure-based experiential programs and transfer that learning to the practice setting. During this study it was learned that there are several factors that have an influence upon adult learners' ability and willingness to transfer learning within this context. First, there is an apparent connection between learner perceptions of the program and an ability and willingness to transfer learning. Next, supervisory support of the group experiencing the program appears to influence this process as well. Finally, there are various group dynamic factors influencing the process through which adults take learning from outdoor programs and transfer this learning to the workplace.

Perceived Quality of the Program

Many of the participants in this study made reference to their perceptions of the outdoor adventure-based program while talking about their efforts to transfer learning from these programs to their office environments. Because of this, trainee perceptions have been identified as at least one of the factors influencing the transfer of learning process in this particular context. Adult learners are heavily influenced by such program-related factors as the learning environment or facilities, program materials, as well as group facilitators.

Before the program date, learners already had various preconceived notions about what it meant to attend an outdoor adventure-based training program. In fact, almost all of the participants in this study were, as Janice pointed out, "excited about it." She continued: "I thought it was great. Before it even happened, I was excited about the opportunity. I thought some good things could come out of it, and they did." Others saw this type of programming as more than exciting. For others, outdoor adventure-based training was a good investment. Robbie talked about the fact that he and the other senior partners from the advertising agency thought a low ropes training day would be "worth doing." He recalled that "Anne was the instigator of that…. I think that all of the partners collectively agreed that this was worth doing, but she was the catalyst."

Once at the program, many participants had very positive perceptions of this particular leaning experience. Like the other members of her accounts payable team, Amy admits to being scared before taking part in a training and development program

that utilized high ropes training initiatives. Once the program was underway, however, her perceptions eventually changed:

It was really good. It was scary. At first, I didn't want to go because I didn't know, you know. If you don't know what's going on, you get nervous and because I saw all these things that we'd be climbing and I thought "oh, my gosh!" I was scared. But it was great. I was nervous about going. Didn't really want to go. But then once I got there, I started participating with everybody and got into the mood to do things.

Janice talked about the fact that, for her, the experiential initiative-based training day was more than fun and excitement. Rather, it was a legitimate learning opportunity. She believed that this learning was significant and had relevance for her and the rest of the advertising agency: "So I think it was pretty, you could relate the activities to the work environment, which was good. So then we learned how to work through those. So, I think that was very helpful."

The group facilitators involved in each of the three programs in this study had a profound impact upon learner perceptions' of the outdoor adventure-based training programs. Due to various physical limitations, Paul was worried that he would not be able to keep up with the rest of his team from the advertising agency while on the ropes course. He was extremely impressed, however, with the facilitators' ability to address his concerns. "So, they allayed any of the fears I would have of the physical materials that I would have to do and they also made me feel very much as if I were a valued member of the entire crew."

Most participants in this study stated, either directly or indirectly, that they perceived the program as being valuable specifically because of the facilitation. It was the facilitator's professionalism and ability to tie the program to the workplace that caused many to believe that the program was a worthwhile experience. In fact, Hopper stated that he found the facilitator who worked with his team from the hospital to be the most important part of the experiential learning "formula:"

I think that he brings a very down-to-earth perspective to these sort of things. He obviously has enormous knowledge about these types of things, but he never comes across as preachy or whatever. He just kind of gets down there with us and brings us along. So I think that the way that he relates with the group and is able to take stories that we tell him and exercises that we do and relate that to thinking in the area of teambuilding and that sort of thing is a very, very useful formula. It came across as very helpful and not at all academic.

Robert also felt that the facilitators who worked with his hospital leadership team were one of the primary reasons for the success of the outdoor experiential initiative-based program. According to him, the facilitators from this program were "very helpful:"

Well I thought that they were very organized. That they knew their material well. That they had some basic concepts that they wanted to get across. They were creative in how they did that... In terms of opening some eyes and making people think a little bit differently. I think they've also, I think they also challenge people to deal with some unpleasant situations and discussions. Take people where maybe they didn't want to go that day. I think in that respect they're very helpful.

Finally, Abbey believes that the value of the program that she and her colleagues from the hospital team took part in came from the abilities of the lead facilitator. When asked what was most valuable about the experiential program, Abbey stated that it was the "quality of the entire program." She then went on to discuss how this perception of quality was mostly attributed to the group facilitator:

I would say that it is the quality of the entire program, and I know that sounds pretty, like a cop-out, but it really is. And to be more specific, of course the quality of the facilitator. He has the ability to be very a direct and honest facilitator without being an in-your-face type of person.

In almost all of the instances during this study during which adult learners talked about their efforts to transfer learning, they also talked about the fact that they were attempting to transfer learning from a "quality program." Perceiving the program to be of high value, then, is an important and influential factor in the transfer of learning process. Without this perception of program quality, adult learners would most likely make little or no attempt to transfer learning to their workplace environments.

Supervisory Support

Participants for this study were interviewed after at least two full months following an outdoor adventure-based training program. During this time, participants reported attempts to transfer what was learned back to their office environments. These efforts were impacted by the leadership styles of the supervisors of the groups in this study. Positive leadership styles, especially a receptivity to change, facilitated efforts to transfer learning. Bart spent some time discussing the fact that, at least in his opinion, his

accounts payable supervisors were more than willing to aid him and his colleagues with any change initiatives:

But you know, I can actually say that Jackie and Joan are two women that can really stand their ground and they're good people when it comes to conversation. And if you can't understand something or if you need support, moral support or need somebody to talk to, they're there. And you know since then [the program] and since we're moving out of the building and everything, they really can't, they've really interacted with accounts payable. So, they definitely brought all of us together.

Tanya also believes that the supervisors within the accounts payable department provide a lot of the support that has allowed the group to make positive changes since the training program. Tanya emphasized her supervisors' work ethic and willingness to meet and discuss changes and issues as they arise:

I have wonderful supervisors. Like I said, everyone has their faults, but I wouldn't trade. I have the best supervisors I ever had. When something needs to get done it's "Hey, you, drop what you're doing. We need to have a meeting."

Supervisors do more than provide good will and feelings of support within the workplace following a particular program. In fact, there are times when supervisors take the lead in making sure that learning is transferred to the office and that resulting changes are maintained. Tara made reference to a specific example during which her supervisor made a sincere effort to implement the "full value contract" that was developed on the ropes course in her office environment:

Well like one, we had somebody new come in about six months ago and she went with us to the group meeting and stuff like that. And then when we came back there were some questions about out time cards and stuff like that and she was wanting us to take more breaks because we weren't taking our breaks. And she was doing it in a good way because she wanted us to get out of the office and stuff like that. Well, as soon as we got the email, you just heard stuff going around "I can't believe she's making us do this! I can't believe she's making..." Instead of going to her and asking her about it. And then she sent us an email saying "this is just for you guys. I wasn't trying to..." you know, it was easy for her to talk. And then she mentioned at the bottom "remember, let's not slip back to our old ways." She referred back to the [high ropes program] and it was nice. It kind of made us all wake up and say, OK and we all calmed down about it. We do refer back to it every once in a while.

As the CEO of the advertising agency, Robbie sensed that his leadership support would be instrumental if the organization was going to successfully transfer learning from the low ropes course to their office environment. According to him, the program opened up a line of communication between the office personnel and the upper management. It was his intention to make sure that this line of communication would remain open back within the workplace:

First of all, you've shown that you care enough to try to improve the situation, and that in and of itself is extremely important. I think the fact that they can kind of stick their toe in the water and say something negative and not immediately be

fired, you know. There is a level of, a trust hurdle that kind of gets broken through.

Following an outdoor adventure-based training program, participants did make an effort to transfer learning back to their office environments. In almost every instance of successful transfer was some mention of supervisory support within the workplace.

Without this positive influence, the transfer process might have broken down or not have ever begun at all.

Group Dynamics

As was previously mentioned, adult learners attempt to transfer learning from various outdoor programs to the workplace environment in the days and weeks following the training day. These efforts are impacted by the group dynamics at play within the group's workplace setting. Positive group dynamics, emphasizing colleague support, create an atmosphere that is conducive to learning transfer. Negative group dynamics, however, are likely to impede any efforts to transfer to the work environment that which was learned through outdoor adventure-based training.

Within the construction agency's office, there have been many successful attempts to transfer learning from the high ropes training experience. When asked what it was about this particular workplace environment following the program that made learning transfer possible, participants talked at length about the group dynamics of their particular team. Tara talked about the fact that her team provides the support needed for successful transfer:

There's more willingness to come over to your desk, talk to you and see if you need help... So, you see that more instead of just working and getting your work

done and leaving for the rest of the day. It's more personal... Like I said, a positive atmosphere. That makes a big difference in the workplace.

Monica also talked about the fact that she was now working within an atmosphere that was conducive to change. In fact, it is this atmosphere which has allowed individuals to challenge the group's behaviors:

The most valuable part was learning that this is my family. I can depend on them for anything. I can say anything. I can give them constructive criticism and not feel like, well, I'm picking, you know, I can do that. It's OK to say what I want to say.

Bart talked about the connection between bringing learning back to the workplace and positive group dynamics within the office environment. He said that the transfer process works within this particular workplace setting because "we try to do things as a group to make the work flow go easily." Bart also mentioned that his group's ability to make changes is the result of the "support" offered by positive group dynamics:

So you know, since [the high ropes training program] we all became one we all became one happy family. But, everyday's not a good one for everybody, so we try to do a little prayer or something, or if there's a death in the family or a birthday we'll send out a card, everybody signs it. Before the end of the day we'll give it to you. You know, I love it being here.

Just as positive group dynamics encourage transfer of learning, negative group dynamics within the workplace can severely limit opportunities for learning transfer. Following their low ropes course program, there were several participants from the advertising agency who felt that there had been a breakdown in the transfer of learning

process. This problem apparently stems from the fact that there are some group dynamics issues that are negatively impacting the practice environment. As a partner in the firm, Jordan feels that some of her employee's negativism affects the larger group, preventing the group from making changes following the program:

That a couple of employees that I just don't think, I think that they just want to have something negative. They just want to complain about something. Just their personality. Because you could kind of see it on the ropes course too. Even in a light situation, they were still kind of grim, I guess. So they're just, you're just going to take them to a level of happiness and you're just, personality is not going to let them go any further than that. So, for them, I don't know if too much has changed.

As one of the associates in the advertising agency, Janice recognizes that there are certain dynamics at play between people at her level and the senior partners that are limiting the transfer of learning process. According to her, she becomes so "frustrated" with certain individuals that she no longer is willing to make positive changes within her office environment:

I think we fail to recognize their efforts when they make them because some of us are so sour I guess towards everything. So that we need to show them some more, "Hey, thanks for trying, that was great," and give them more support also. And from a respect issue, I guess I know I personally could work on respecting mine [senior partners]. Just because I'm so frustrated I get pissed and then I could just sit back a second and be more open to their ideas and eventually come to the answer.

When talking about certain dynamics within the advertising agency, Mary expressed some of the same concerns that Janice mentioned. In fact, she feels that the negative dynamics between senior management and lower management are severely limiting her willingness to put forth the effort needed to implement changes within the workplace:

But I don't feel like it really is an open environment. Because there are two separate groups, and this sound so immature, but you feel like the other group is like talking about you behind your back and making fun of lower management all the time. So, if it's worth saying anything, then you feel like it's going to be a bigger deal later and it's going to come back on you every job that you do after that. For me, it's not worth it to say anything. Just to let it go and keep going, which is frustrating.

Transfer is also limited by the fact that, among the team within the advertising agency, there are "strong" personalities and more mild personalities that have to interact on a daily basis. According to Jordan "You know, the people in the office tend not to speak up much and kind of get overrun by the more stronger personalities..." The dynamic between strong and mild personalities has rendered some within the agency "afraid to speak up." Janice discussed why she does not like to offer too many opinions about what the group learned through the low ropes program. "Because I think at the program, I know I was afraid to say anything because I was afraid how it would affect how I was treated at work, and I wasn't sure everybody else would support me."

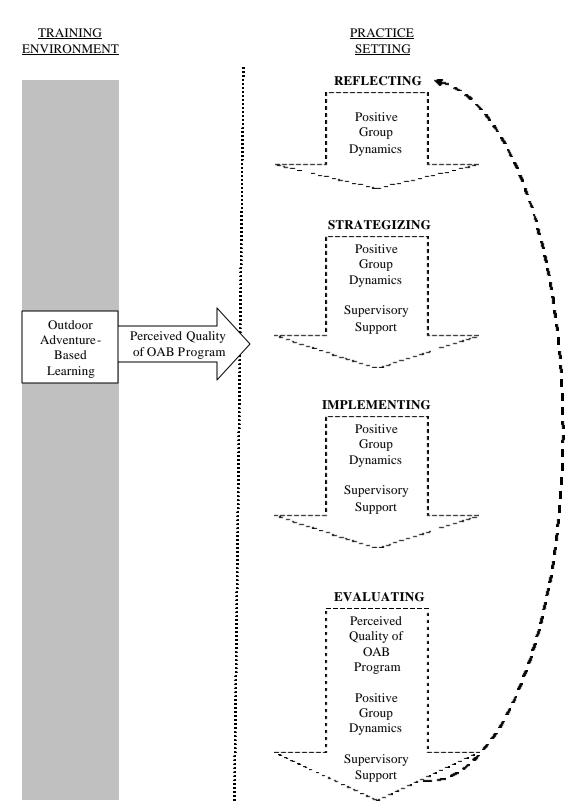
Following an outdoor adventure-based training program, individual as well as group efforts to transfer learning to the workplace are greatly affected by the group

dynamics within the office. Positive group dynamics seem to foster a willingness and ability to transfer learning. Negative group dynamics and the resulting negative feelings, however, seem to have an equally detrimental impact upon the transfer of learning process. Both positive and negative group dynamics, therefore, are found to be factors in the transfer of learning process.

The factors identified through this study influence each phase of the process employed by participants to transfer outdoor adventure-based learning to the practice environment. Figure A, Model of the Transfer Process, depicts the interaction between certain factors and the process through which adult learners transfer outdoor adventurebased learning to the practice environment. First, participants must perceive the program to be of high quality if learning is to be transported from the training environment to the workplace. Once in the practice environment, the process begins with reflection. While individuals could reflect on the experience alone in their offices, collective reflections were dependant upon positive group dynamics within the office environment. Effective strategies were only developed within office environments in which there were positive group dynamics and supervisory support. The implementation of various strategies within the workplace was certainly dependent upon positive group dynamics as well as supervisory support of workplace change. Finally, the evaluation of workplace changes, which brought the participants back to a period of reflection, was also found to be dependant upon positive group dynamics and supervisory support.

Figure A

Model of Transfer Process



Chapter Summary

Through participating in outdoor adventure-based programs, individual adult learners and groups of adult learners do experience a learning process. This process is initiated with the learner actively engaged in an experiential learning initiative. During and after this period of engagement, questions are asked to focus the learner upon what is occurring or has occurred during the activity. Following the group activity, adult learners are asked to reflect upon the significance of the learning activity. Finally, there is an effort to apply, at least in theory, this learning to the group's workplace environment.

There does appear to be meaningful yet unintended content that is learned through participating in outdoor adventure-based programs. Participants report learning in three primary areas. First, individual participants, through interacting in various experiential activities, gain insights into themselves. These insights touch upon such areas as leadership style, communication style, and ability to manage conflict. Second, participants report gaining deeper insights into the personalities and temperaments of the people with whom they work on a daily basis in the practice setting. Finally, these types of programs offer participants an opportunity to learn more about how their team interacts in various collaborative situations.

Following the outdoor program, there is a process implemented through which adult learners attempt to transfer learning from the program to the practice setting. This process begins with the learners reflecting upon the learning experience and insights and information that was gained from that experience. Next, learners strategize in an effort to determine how best to apply this learning within the workplace. The process progresses when individuals, small groups, and entire organizations implement some of the

strategies within the office. Finally, these workplace changes are evaluated in an effort to determine their impact, a process which leads back to individual and group reflection.

There do appear to be several factors that influence the transfer of learning process following an outdoor adventure-based program. One factor is adult learners' perceptions of the program. Perceiving that the program was worthwhile and offered something of value to the group results in an increased effort to transfer learning from that program. Supervisory Support also appears to be a factor that has an impact upon the transfer process. Group leadership that is open and supportive tends to create a workplace environment more conducive to transfer. Finally, interoffice group dynamics is a factor which influences the transfer of learning. Positive and upbeat group dynamics promote efforts to apply learning from outdoor programs within the office environment. Conversely, negative interoffice dynamics severely limited individual and group willingness to attempt to transfer learning.

CHAPTER 5

CONCLUSIONS AND DISCUSSIONS

The purpose of this study was to understand how adult learners transfer adventure-based experiential learning to their workplace environments. This particular training format has experienced tremendous growth due to the increasing popularity of such teambuilding activities as low ropes course initiatives, high ropes course elements, and portable experiential group exercises. Despite this increased popularity, however, little remains known about what adults learn through these various activities and how this learning is later transferred to the practice environment.

This study employed a qualitative methodology relying upon in-depth interviews. Data were collected from 18 adult learners from three different organizations. Each of the three groups attended separate outdoor adventure-based experiential programs. Data were analyzed using the constant comparative method. This approach to the data resulted in a descriptive set of categories that provided insights into the transfer of learning process from outdoor adventure-based programs to the workplace.

Conclusions

This chapter presents three conclusions based on the findings from this study, and discusses how this research relates to the current literature on transfer of learning, experiential learning, and outdoor adventure-based learning. The three conclusions are:

(1) There is unintended yet meaningful learning that takes place during outdoor

adventure-based programs; (2) Adult learners employ a specific process to transfer this learning to the workplace; and (3) There are several factors that have an impact upon this transfer of learning process. Finally, this chapter discusses the implications of this study for practice and for future research.

Conclusion 1: There is unintended yet meaningful learning that takes place during outdoor adventure-based programs.

Within the literature, there can be found two strong positions with regard to outdoor adventure-based programs. The first position maintains that while these one-day outdoor training programs can be fun and exciting, participants simply do not learn how to be better leaders and team members through developing communication, conflict resolution, and problem-solving skills. A second position maintains that outdoor adventure-based programs provide opportunities for significant learning and that this learning can have a profound impact upon an organization after the training session.

Through this study, it has been learned that both of these positions are, indeed, correct. Participants made little or no mention of learning new managerial skills during their one-day outdoor adventure-based training program. Despite this fact, participants did repeatedly discuss the fact that they came away from these programs with valuable new insights, insights that would forever change they way they perceive themselves, their colleagues, and their entire organizations. Such insights could likely be used following an outdoor program to spark significant workplace change.

Thus the findings of this study suggest that adult learners do experience meaningful though unintended learning during outdoor adventure-based experiential programs. Participants in this study identified three areas of significant learning. The

first of these areas dealt primarily with insights into personal attitudes and behaviors.

Next, participants reported gaining significant insights into the behaviors, temperaments, and attitudes of their colleagues. Finally, this type of program allowed participants to gain insights into the way in which their groups functioned together as a team. Such findings were not unexpected due to the fact that specific learning outcomes are linked within the literature to educational endeavors that involve action, reflection, collaboration, and application.

The outdoor experiential learning process presents several teaching and learning methods that have been linked to learning within the adult education and general education literature. The first and most obvious characteristic of outdoor adventure-based programs is the fact that they require active engagement throughout the learning process. On a philosophical level, such an approach ensures that learners are not treated as mere passive observers of instruction or a "deposit" box in which information is stored (Friere, 1974). Active engagement has been shown to effectively promote learning for a diverse audience of learners (Detterman, 1996, Penner, 1984, Stuart & Rutherford, 1978; Verner & Dickinson, 1967; Bligh, 1972; Costin, 1972, Bonwell & Eison, 1991; Apps, 1991).

Another key component of outdoor adventure-based programs is the fact that they promote group collaboration in the learning process. Throughout these events, learners are encouraged to work with others in an effort to gain new insights as well as to gain new knowledge. Many of the respondents in this study discussed the fact that they learned a great deal about themselves, their colleagues, and their entire team in an effort to solve various group initiatives. Collaboration is discussed throughout the educational

literature as an effective means through which to promote learning (Vygotsky, 1978; Zohorik; 1978, Davis & Davis, 1998).

Outdoor adventure-based programs also promote reflection as a tool to facilitate the learning process. In fact, throughout this study participants continuously made connections between individual and group reflection and meaningful learning both during and after the program. The connection between reflection and learning that is made within the field of outdoor education can also be found within the adult and general education literature (Schon, 1983, 1986; Zahorik, 1995; Brookfield, 1986).

During the course of this study, it became clear that outdoor adventure-based training programs were not simply a series of isolated group activities. What has emerged through this study is the fact that these activities are part of a deliberate learning process. This process begins with a collaborative learning activity. The second phase requires that participants reflect upon this activity. Learning from this activity is then theoretically applied to contexts other than that found in outdoor adventure-based training programs, namely the workplace environment. Similar processes of action, reflection, and application have been promoted throughout the educational literature as an effective means to facilitate substantive learning.

The learning process that is found in outdoor adventure-based training programs closely resembles the first three phases of Kolb's (1984) experiential learning cycle and Lewin's (1951) experiential learning model. According to these models, the human learning process occurs in four distinct phases: concrete experience, reflective observation, abstract conceptualization, and active experimentation. The active experimentation phase of the Kolb and Lewin learning process entails the learner

applying new learning within a context other than the one in which the learning took place. Because the outdoor experiential learning model identified in this study is utilized during a one-day program, there is not an opportunity for learners to actively experiment with new learning in another context until after the training event. Therefore, during outdoor adventure-based training programs, all learning is applied, on a theoretical level, within the learning context. Because of this, the collaborative learning phase of the outdoor learning process could be considered a combination of the concrete experience and active experimentation phases found within the Kolb and Lewin experiential learning models.

The process of outdoor learning that is revealed through this study appears to incorporate a number of learning models found throughout the adult education and general education literature. Within the adult education literature, Knowles (1980) introduces experiential learning as one of his four assumptions of andragogy. Knowles' second assumption maintains that "adult's experiences are a rich resource for learning" (p. 43). Also, Knowles' second assumption holds that "adults learn more effectively through experiential techniques such as discussion or problem solving" (p. 43). Knowles' second assumption of andragogy represents the primary thrust of the outdoor adventure-based learning model identified through this study.

The emphasis of outdoor learning activities as a means of teaching and learning can be traced back to a model of "active learning" (Bonwell & Eison, 1991). This model presents a series of classroom-based activities that can be incorporated by instructors in an effort to meet the needs of a diverse audience of learners. The field of outdoor education has applied various classroom-based aspects of this model such as discussion,

activity, and questioning to adventure-based training programs. Outdoor training focuses upon active learning in an outdoor learning environment, while Bonwell and Eison's original application of the term was in the higher education classroom.

The outdoor adventure-based programs in this study placed a heavy influence upon action and reflection. Throughout each of the three programs, participants were constantly engaged in learning activities. Following each activity, there was an effort to discuss what was learned. This discussion was always in the context of the group's workplace environment. Such an effort to contextualize learning is the cornerstone of Freire's model of learning is referred to as Praxis (1970a, 1970b, 1973, 1985, sited in Brookfield, 1986). According to Brookfield (1986) the term Praxis means "that explorations of new ideas, skills, or bodies of knowledge do not take place in a vacuum but are set within the context of learner's past, current, and future experiences" (p. 15). While Freire used his model to teach illiterates various reading skills, outdoor educators use a similar approach in applying the lessons from various adventure-based activities to the group's workplace environments.

The ultimate goal of the outdoor adventure-based programs in this study was to provide participants with opportunities to apply learning to the practice environment. In fact, application represents the final and most important phase of the outdoor adventure-based learning process. Schon (1983, 1986) presents a similar model, outlining how adult learners apply learning gained through training to the workplace. Schon's model is referred to as reflection-in-action. According to the model, learners do not need to memorize standardized information that is to be applied, universally, to their professional environments. Instead, participants need to be equipped with the reflection skills needed

to appropriately apply learning from training to their particular workplace environments. While Schon's model focuses upon the application of learning gained through academic professional development programs and the application of learning gained through reflection-in-action within the professional field, outdoor educators are focused upon transfer from a one-day adventure-based learning activity to the practice setting.

The outdoor adventure-based learning process resulted in meaningful learning for the participants in this study. Through taking part in various types of outdoor adventure-based activities, participants gained new and meaningful insights into themselves as individuals, into the behaviors, temperaments, and attitudes of their colleagues, and into the functioning of their collective work group as a team. Gaining various insights through outdoor adventure-based programs has been discussed in the outdoor education literature. Gall (1987) maintains that one of "the points" of outdoor adventure-based learning activities is for individuals to develop a deeper understanding of previously hidden personal strengths and abilities. According to the author, forming such a deeper personal understanding during the outdoor program could result in a more positive and possibly more effective employee back in the workplace setting:

If you can get people to risk trying something that they are sure they can't do and they discover that they can do it, that realization translates into their whole attitude about how they approach life, how they approach work, how they approach managing. (p. 54)

This study revealed that participants come away from outdoor adventure-based programs with meaningful insights into their co-workers' feelings, temperaments, attitudes, and subsequent behaviors. A deeper understanding of co-workers has been a

topic of discussion in the outdoor education literature. Szwergold (1993) maintains that outdoor training programs provide opportunities for participants to gain valuable insights into their colleagues:

The goal is to help managers better understand the way their subordinates feel when they are "blind" from lack of information or communication. These [outdoor activities] are used so that leaders and followers can better appreciate the unique role each plays within the organization. (p. 6)

Finally, this study identified insights into team functioning as one of the primary outcomes of outdoor adventure-based training programs. Participants discussed that, through taking part in various collaborative outdoor activities, much was learned about their teams' tendencies, strengths, and weaknesses. Insights into how workgroups function together as teams is also a topic that is discussed in the outdoor education literature. Long (1987) presents outdoor adventure-based programs as an opportunity for groups to explore and experiment with how they work together:

[Outdoor] group problem-solving events provide team members and leaders an opportunity to explore and experiment with strategies for powerful teamwork. Reflection following each challenge focuses upon two key perspectives: task effectiveness and the commitment and energy level of team members essential to ongoing task effectiveness. (p. 33)

Results from this study provide little evidence of the fact that participants learn new managerial skills such as improved planning and problem solving, better communication, and enhanced conflict resolution skills, while participating in outdoor adventure-based programs. This was particularly surprising due to the fact that

managerial skills development during these training events is a topic that is discussed throughout the outdoor education literature. However, while this study produced no clear evidence of the fact that these skills in particular were learned at the time of the outdoor adventure-based programs, it can be assumed that the learning that did occur likely impacted the groups' communication, teamwork, and problem solving skills back within the workplace environment following the programs.

The findings from this study represent the "best case scenario" for outdoor adventure-based training programs. This has been found to be the case because of the fact that each instance of learning transfer in this study was supported by five key factors. First, as a result of the sample selection process employed in this study, all participants were very likely to be self-motivated to learn and to transfer learning to the workplace. Second, by chance, this study happened upon outdoor programming vendors who were perceived by participants to be of superior quality and ability. Next, many of the participants in this study discussed the fact that, after the outdoor adventure-based program, they returned to a practice environment in which there was a high degree of positive group dynamics. Finally, most of the participants in this study identified their workplace supervisors as individuals who encouraged and supported transfer of learning efforts. Because of this, it can be concluded that 1) when the participants are intrinsically motivated, 2) the OAB program vendor is of superior quality, 3) the participants return to an office environment in which there are group dynamics conducive to transfer, and 4) the participants feel that they have a high degree of supervisory support, then outdoor adventure-based programs can result in meaningful learning that is later transferred back to the practice environment.

Conclusion 2: Adult learners employ a specific process to transfer this learning to the workplace.

Through this study, it has been learned that adult learners employ a specific process in an effort to transfer outdoor adventure-based learning to the workplace. This process begins with a period of reflection soon after the completion of the outdoor adventure-based program. Reflection is done by individuals sitting at their own workstation and groups in public areas within the office environment. These reflections are often triggered by items from the training session, photographs of the event, and conversations about the program. Such a reflective process appears to lead the participant to a better understanding of what was learned during the outdoor program. Following this understanding, participants then develop strategies, individually and collectively, in an effort to determine how best to incorporate this new knowledge within the workplace. These strategies often lead to changes within the workplace at the individual, work group, and organizational level. All changes are evaluated soon after they are implemented, a process which leads the participants back to a period of reflection.

There are other models that can be found throughout the training and educational literature designed to promote learning transfer. These models generally break the transfer process down into three phases. First, transfer models maintain that there are specific measures to be taken before the training program that will facilitate transfer of learning (Cervero & Wilson, 1994; Broad & Newstrom, 1992; Kirkpatrick, 1960; Zigon, 1984; Kemerer, 1991; Talman & Holt, 1987; Parry, 1990; Rossett, 1997; Milheim, 1994). Next, transfer models within the literature emphasize that there are certain steps which

can be taken during the training program that will increase the likelihood of transfer (Campbell & Cheek, 1989; Spitzer, 1982; Youker, 1985; Tallman & Holt, 1987; Kemerer, 1991; Redding, 1990; Zemke & Gunkler, 1985). Finally, transfer models argue that there are specific procedures that, when implemented properly, will promote transfer of learning after the training event (Cervero & Wilson, Broad & Newstrom, 1992, Milheim, 1994; Talman & Holt, 1987; Broad, 1982; Stuart, 1992; Zigon, 1986; Clark, 1986).

The model for learning transfer developed during this study differs from others found within the literature because it provides data that shed light on what adult learners themselves actually do following an outdoor adventure-based program in an effort to transfer leaning. Most of the measures discovered through this study were not part of a formalized transfer plan. Rather, they were the result of individual and group desires to make certain changes in light of specific learning outcomes. In short, this model reveals a process that is formally and informally implemented by the participants themselves following an outdoor training program. Most other models, however, identify those measures which can be taken by trainers, instructors, and employers "before, during, and after" a training program to promote learning transfer. In short, the model developed during this study provides data revealing what is done by learners following a particular type of training program, while most other models provide information about what can be done to learners in an effort to promote successful learning transfer.

Conclusion 3: There are several factors that have an impact upon this transfer of learning process.

During the course of this study, it was discovered that the process through which adult learners transfer outdoor adventure-based learning to the workplace is influenced by several factors. First, participant perceptions of the overall quality and relevance of the training program impacted the transfer process. Next, supervisory support following the training program was found to play a major role in learning transfer. Finally, group dynamics were also found to be an important factor impacting the transfer of learning from outdoor adventure-based programs to the workplace.

Throughout this study, there was a continuous connection between perceptions of the outdoor training program and an ability or willingness to transfer learning from that program to the practice environment. In short, many of those who reported having learned something of value through the program and had transferred this leaning to the workplace were documented as having said that they perceived the program to have been of value. Trainee perceptions, then, have been identified as a factor that does play a role in the transfer of learning process from outdoor adventure-based programs to the workplace. Similar connections between learning transfer and positive perceptions of a training program have been found elsewhere in the literature (Axtell & Maitlis, 1997; Hicks, 1984; Howard, 1989; Keller, 1983; Vroom, 1964; Baumgartel, Renolds, & Pathan, 1984).

A second variable identified during this study as having an influence upon the transfer process of outdoor adventure-based learning to the workplace was supervisory support. Supervisory support was viewed from two perspectives during this study. On

one hand, subordinates talked about the fact that they were willing to make certain changes within the workplace due to the fact that they believed they had the full support and encouragement of their supervisors. On the other hand, the supervisors involved in this study discussed the fact that they were responsible for the development and nurturing of a workplace environment that was conducive to learning transfer. When supervisors did not live up to this responsibility, the transfer of outdoor adventure-based learning did not occur.

From the subordinate perspective, there was much discussion about new learning and new insights into how the workgroup functioned as a team. Some of these insights dealt with certain negative group dynamics at play within the organization. On numerous occasions throughout this study, subordinates talked about the fact that they did not share new insights or try to make changes within the workplace due to the fact that they believed they did not have the full support of their supervisors within the organization. In fact, those participants in this study who transferred learning on only a limited level said that a lack of supervisory openness to new ideas, suggestions, and workplace changes represented a significant barrier to the transfer of learning process.

From the supervisory perspective, there was an acknowledgment of the fact that successful transfer of learning was directly influenced by the workplace tone set by the organization's leaders. On several occasions throughout this study, supervisors discussed that they saw their employees taking risks by speaking up about various workplace changes that needed to be made in light of learning gained through the outdoor adventure-based training program. One supervisor summed up his role in the transfer

process by stating that he wanted his employees to feel as if they could take risks by speaking out and suggesting changes without fear of getting fired for insubordination. This study is linked to the business and management literature in that supervisory support has been discussed as an important component in the transfer of learning process (Huczynski & Lewis, 1980; Facteau, et al, 1995; Ford, et al, 1992, Quinones, et al, 1995; Holton, bates, Seyler, & Carvalho, 1997).

The final factor found to influence the transfer of outdoor adventure-based learning to the practice environment is workplace group dynamics. Positive group dynamics allowed each of the three groups in this study to successfully move through a transfer of learning process. The first part of the process was reflection. Some of this reflection was done by individuals within the office. In addition, a great deal of meaningful reflection was conducted by small groups that periodically congregated at colleagues' desks or common areas following the outdoor adventure-based program. At these gatherings, participants reminisced about the training experience, reviewed photographs, and talked about learning that took place as a direct result of the outdoor adventure-based program. In the second phase of the transfer process, developing strategies, positive group dynamics within the workplace environment was also found to be an important factor. These strategies were developed during formal and informal group gatherings within the workplace. In addition, there were numerous one-on-one conversations between colleagues during which strategies were developed and discussed.

In much the same spirit, workplace changes were implemented and evaluated by groups of individuals who were willing to share and collaborate with one another in an open and candid manner. During this study, it was revealed that the transfer process did

break down, particularly in one of the organizations. The transfer breakdown stemmed, in large part, because some individuals were not open and honest with their colleagues due to the fact that they were concerned about how they would be received by certain members of their team. In short, where there were any signs of a lack of colleague support, there was also a lack of an effort to transfer learning.

This study revealed group dynamics as a powerful variable impacting the transfer process of outdoor adventure-based learning. Such dynamics were found to be a variable which could both promote learning transfer, while at the same time this variable could also block any meaningful transfer from occurring. Group dynamics have also been found elsewhere throughout the literature to be a powerful factor which influences the transfer process (Rouiller & Goldstein, 1993; Tesluk, Farr, Mathieu & Vance, 1995; Tannenbaum & Kavanagh, 1995; Tziner, et al, 1991, Xiao, 1996).

Several models can be found in the literature that identify a transfer of learning / training process (Cervero, 1985, 1988; Baldwin & Ford, 1988; Ford & Weissbein, 1997). These models highlight certain variables that influence the transfer process. According to these widely accepted models, there are several categories of variables, including variables brought to a program by an individual participant, variables within the program design, and work environment / transfer climate variables that play an important role in the transfer process. Although this study focused on outdoor adventure-based learning, rather than standard classroom-based learning, it uncovered similar variables that support or hinder the transfer process. This finding underscores the fact that there is a similar process of transfer whether the learning takes place during an outdoor adventure-based program, or during a traditional classroom-based training session.

Implications for Practice

This study explored what adults learn during one-day outdoor adventure-based experiential programs. Also investigated was how outdoor adventure-based learning transferred to the workplace. It was learned that adults do come away from these programs having gained meaningful insights into themselves as individuals, their colleagues within the work group, and into the style and tendencies of their entire team. In addition, this study revealed that, following an outdoor program, adults employ a specific process in an effort to transfer this learning back to their office environments. Finally, through this study it was discovered that there are specific trainee-related variables and workplace environmental variables that have an impact upon the transfer of outdoor adventure-based learning. These discoveries have certain implications for practice.

For the participants in this study, participation in a one-day outdoor adventure-based program represented an opportunity for significant learning. Through the low ropes course initiatives, high ropes course elements, and portable group problem solving activities, participants gained valuable personal insights, insights into their colleagues, and insights into their work teams as a whole. With this information, practitioners could better prepare participants before an outdoor adventure-based learning opportunity by deemphasizing managerial skills development and focusing participant attention on the opportunity for meaningful insights. To do this, practitioners could spend some time before the program discussing the fact that various outdoor activities can provide opportunities for beneficial insights. This conversation could be enhanced through the use of a pre-program questionnaire during which participants assess themselves, their

colleagues, and their team as a whole. Results from these questionnaires could be referred to throughout the day of outdoor adventure-based learning activities. Similar post-training questionnaires could be used to facilitate discussions about program-related learning that took place.

This study also revealed the fact that, following a one-day outdoor adventurebased program, adult learners experience a process through which they attempt to transfer learning to the workplace environment. This appears to be a naturally occurring process, implemented by participants who are not required to do so. This process entails reflection, strategizing, implementation, and evaluation. With this information, employers could take certain steps to encourage this process following the program in an effort to facilitate meaningful learning transfer. First, reflection could be enhanced through questionnaires or organizational debriefing sessions encouraging participants to reflect upon the outdoor program and upon what was learned through the experience. Second, during post-program workplace-sponsored debriefing sessions, the group could be asked to develop strategies for change within the workplace based upon what was learned through the program. Such strategies could be developed during organizational meetings, or via organizational sponsored list-serv discussions. Third, various strategies could be agreed upon and implemented by the entire work team. Finally, through organizational sponsored meetings or email discussions, implementation of the various strategies could be assessed by the organization as a whole.

This study revealed that the transfer of outdoor adventure-based learning is impacted by several variables. These variables include trainee perceptions of the program, supervisory support, and workplace group dynamics. Practitioners and

employers could use this information in an effort to increase the likelihood that transfer of learning will occur from outdoor programs to the workplace.

During this study, participant perceptions of the training program were found to be an important variable in the transfer of learning process. In other words, those participants who identified an outdoor adventure-based program as being valuable and relevant also reported attempts to transfer learning from the program to the workplace. Because of this, employers should make every effort possible to convey the message to all employees that attending an outdoor adventure-based training program is viewed by the organization as more than an opportunity for group recreation. In addition, employers should emphasize that investments made in outdoor programming are intended to result in meaningful learning. Practitioners, too, should make every effort possible to convey the message that their programs are designed to be serious learning opportunities that will result in meaningful learning outcomes and possible significant workplace change initiatives. During the program, practitioners should also draw connections between the program and the participants' practice environment. Finally, supervisors should sponsor a debriefing session shortly after the program during which learning is discussed and the importance of the program is emphasized.

In addition to perceptions of the training program itself, this study identified perceptions of the program facilitators as being an important variable in the transfer process. In fact, many of the initial statements about the overall quality of a particular training session led the participants to talk about the quality of the program's instructors. In light of this, providers of outdoor experiential programs should strive for a reputation of excellence. Such an effort could entail providing referrals and testimonials from

clients with whom the instructor(s) have worked in the past. Such measures could be taken so that new participants form favorable attitudes toward the vendor itself, not just specific experiential learning activities. In short, the people offering the outdoor learning opportunities need to be perceived as "top notch" by participants if the likelihood of learning transfer is to be increased.

Finally, it was also discovered that workplace supervisory support as well as group dynamics were variables in the transfer of learning process. Participants who reported successful learning transfer also reported a high degree of supervisory support and positive interoffice group dynamics. Practitioners should take these variables into account during the program-planning phase of an outdoor adventure-based training session. Such an effort to take these variables into account could entail pen and paper assessments, phone conversations with supervisors and subordinates, and possibly a group session with all of the program's stakeholders in attendance to discuss various supervisory and group dynamic related issues. Identifying the levels of supervisory and colleague support within the workplace would provide practitioners and employers with the information needed to ensure the removal of possible transfer barriers before the outdoor adventure-based training program took place.

Recommendations for Future Research

As the field of training and development continues to grow, there is little doubt that the field of outdoor adventure-based training will continue to grow as well. As this particular process of teaching and learning expands, reaching into an increasing number of office environments, practitioners will benefit from additional research. This section

offers several recommendations for future research in the area of transfer of outdoor adventure-based learning:

- A study involving the three groups from this investigation would be helpful in determining the long-term or lack of long-term effects of a one-day outdoor adventure-based program design.
- 2. This study focused primarily on the "traditional" outdoor training activities of low ropes courses, high ropes courses, and portable initiatives. A study involving more dramatic outdoor activities such as rock climbing or whitewater rafting would be helpful in determining the extent to which the nature of the type of activity (i.e., traditional vs. dramatic) affects learning and transfer.
- 3. This study investigated only outdoor programs that were "one-shot" or one-day events. The field of outdoor adventure-based programming would benefit from a study that investigated the learning and transfer process from an outdoor program that was distributed over a prolonged period of time. Programs that are distributed over a prolonged period of time have been shown to produce more dramatic results for participants. More information about the effectiveness of outdoor adventure-based programs would help professionals in the field better respond to those who argue that these types of programs are simply "fun" and "exciting" days away from the office.

Chapter Summary

This chapter discussed three conclusions derived from the findings. First, adult learners experience meaningful yet unintended learning during outdoor adventure-based programs. Second, participants employ a specific process in an effort to transfer this learning to their practice environments. Finally, there are certain factors or variables that

influence the transfer process of outdoor adventure-based learning. The chapter concluded with a discussion of implications for practice and recommendations for future research.

REFERENCES

Allard, P.B. (1991). Why they didn't learn what we wanted them to learn. New Directions for Adult and Continuing Education, 49, 55-66.

Apps, J.W. (1991). Mastering the teaching of adults. Malabar, FL: Krieger.

Axtell, C.M., & Maitlis, S. (1997). Predicting immediate and longer-term transfer of training. Personnel Review, 26(3), 201-214.

Baldwin, T.T. (1992). Effects of alternative modeling strategies on outcomes of interpersonal-skills training. <u>Journal of Applied Psychology</u>, 77, 147-154.

Baldwin, T.T., & Ford, J.K. (1988). Transfer of training: A review and directions for future research. Personnel Psychology, 41, 63-105.

Barker, J. The great outdoors: How to put adventure into your meetings and make it pay off. Successful Meetings. October, 91-94.

Barrick, M. R., & Mount, M. K. (1991). The five big personality dimensions and job performance: A meta-analysis. Personnel Psychology, 44,1-26.

Baumgartel, H., Reynolds, M., & Pathan, R. (1984). How personality and organizational-climate variables moderate the effectiveness of management development programmes: A review and some recent research findings. Management and Labour Studies, 9, 1-16.

Bell, J.D., & Kerr, D.L. (1987). Measuring training results: Key to managerial commitment. <u>Training and Development Journal</u>, 41(1), 70-73.

Bennett, J.B., Lehman, W. E.K., & Forst, J.K. (1999). Change, transfer climate, and customer orientation. <u>Group & Organization Management</u>, 24(2), 188-216.

Bligh, D.A. (1972). What's the use of lectures? Baltimore: Penguin Books.

Bogdan, R.C., & Biklen, S.K. (1992). <u>Qualitative research for education: An introduction to theory and methods.</u> (2nd ed.) Needham Heights, MA: Allyn & Bacon.

Bonwell, C.C., & Eison, J.A. (1991). <u>Active learning: Creating excitement in the classroom.</u> ASHE-ERIC Higher Education Report No. 1. Washington, D.C.: The George Washington University, School of Education and Human Development.

Bramley, P. (1989). Effective training. <u>Journal of European Industrial Training</u>, 13(7), 1-33.

Briggs, G.E., & Naylor, J.C. (1962). The relative efficiency of several training methods as a function of transfer task complexity. <u>Journal of Experimental Psychology</u>, 64, 505-512.

Brinkerhoff, R. O., & Montesino, M.U. (1995). Partnership for training transfer: Lessons from a corporate study. <u>Human Resource Development Quarterly</u>, 6, 263-274.

Broad, M.L., & Newstrom, J.W. (1992). <u>Transfer of training: Action-packed strategies to ensure high payoff from training investments</u>. Reading, MA: Addison-Wesley.

Brookfield, S.D. (1986). <u>Understanding and facilitating adult learning.</u> San Francisco: Jossey-Bass.

Brown, A.L., & Kane, L. R. (1988). Preschool children can learn to transfer: Learning to learn and learning from example. <u>Cognitive Psychology</u>, 20, 493-523.

Buller, P.F., & Cragun, J.R., & McEvoy (1991). Networking: The overlooked benefit of training. <u>Training and Development</u>, 45(7), 41-44.

Caffarella, R.S. (1994). <u>Planning program for adult learners: A practical guide</u> for educators, trainers, and staff developers. San Francisco: Jossey-Bass.

Campbell, C.P., & Cheek, G.D. (1989). Putting training to work. <u>Journal of</u> European Industrial Training, 13(4), 32-36.

Cervero, R.M. (1985). Continuing professional education and behavioral change:

A model for research and evaluation. The Journal of Continuing Education in Nursing,

16, 85-88.

Cervero, R.M. (1988). <u>Effective continuing education for professionals.</u> San Francisco: Jossey-Bass.

Cervero, R.M., & Rottet, S. (1984). Analyzing the effectiveness of continuing professional education: An exploratory study. <u>Adult Education Quarterly</u>, 34(3), 135-146.

Cervero, R.M., & Wilson, A.L. (1994). <u>Planning responsibly for adult education:</u>

A guide to negotiating power and interests. San Francisco: Jossey-Bass.

Costin, F. (1972). Lecturing versus other methods of teaching: A review of research. British Journal of Educational Technology, 3, 4-30.

Crafts, L.W. (1935). Transfer as related to number of common elements.

<u>Journal of General Psychology</u>, 13, 147-158.

Crannell, C.W. (1956). Transfer in problem solution as related to the type of training. Journal of General Psychology, 54, 3-14.

Creswell, J.W. (1998). Qualitative inquiry and research design: Choosing among five traditions. Thousand Oaks, CA: Sage.

Cross, P.K. (1987). Teaching for learning. AAHE Bulletin, 39, 3-7.

Davis, J.R., & Davis, A.B. (1998). <u>Effective training strategies: A comprehensive guide to maximizing learning in organizations.</u> San Francisco: Berrett-Koehler Publishers, Inc.

Detterman, D.K. (1996). The case for prosecution: Transfer as an epiphenomenon. In D.K. Detterman & R.J. Sternberg (Eds.), <u>Transfer on trial:</u> Intelligence, cognition, and instruction (pp.1-23) Norwood, NJ: Ablex.

Dewey, J. (1910). How we think. Chicago: University of Chicago.

Dewey, J. (1938). Logic: The theory of inquiry. New York: Henry & Holt Co.

Duncan, C.P. (1958). Transfer after training with single versus multiple tasks. Journal of Experimental Psychology, 55, 63-72.

Duncan, C.P., & Underwood, B.J. (1953). Transfer in motor learning as a function of degree of first task learning and inter-task similarity. <u>Journal of Experimental</u>
Psychology, 46, 445-452.

Eden, D., & Ravid, G. (1982). Pygmalion versus self-expectancy: Effects of instructor and self-expectancy on trainee performance. <u>Organizational Behavior and</u> Human Performance, 30, 351-364.

Eden, D., & Shani, A.B. (1982). Pygmalion goes to boot camp: Expectancy leadership and trainee performance. Journal of Applied Psychology, 67, 194-199.

Eisner, E.W. (1991). <u>The enlightened eye: Qualitative inquiry and the enhancement of educational practice.</u> Old Tappan, NJ: Macmillan.

Elias, J.L., & Merriam, S. B. (1995). <u>Philosophical foundations of adult education</u> (2nd ed.). Malabar, FL: Krieger.

Ellis, H.C. (1965). The transfer of learning. New York: Macmillan.

Facteau, J.D., Dobbins, G. H., Russell, J. E. A., Ladd, R.T., & Kudisch, J. D. (1995). The influence of general perceptions of the training environment on pretraining motivation and perceived training transfer. Journal of Management, 21(1), 1-25.

Fenwick, T.J. (2000). Expanding the concepts of experiential learning: A review of the five contemporary perspectives on cognition. <u>Adult Education Quarterly</u>, 50 (4), 243-272.

Ford, J.K. (1994). Defining transfer of training: The meaning is in the answers. Adult Learning, 5(4), 22-23,30.

Ford, J.K. (1997). Transfer of training: The criterion problem. <u>Applied</u> Psychology: An International Review, 46(4), 349-354.

Ford, J.K., Quinones, M. A., Sego, D.J., & Sorra, J. S. (1992). Factors affecting the opportunity to perform trained tasks on the job. <u>Personnel Psychology</u>, 45, 511-527.

Ford, J. K., & Weissbein, D.A. (1997). Transfer of training: An updated review and analysis. <u>Performance Improvement Quarterly</u>, 10(2), 22-41.

Fox, R.D. (1994). The transfer of learning process: Before, during, and after educational programs. <u>Adult Learning</u>, 5(4), 24-30.

Frazis, H., Gittleman, M., & Joyce, M. (2000). Correlates of training: An analysis using both employer and empolyee characteristics. <u>Industrial & Labor Relations</u>

<u>Review, 53(3), 443-463.</u>

Freire, P. (1970a). <u>Cultural action for freedom.</u> Cambridge: Harvard Educational Review and Center for the Study of Development and Social Change.

Freire, P. (1970b). <u>Pedagogy of the oppressed.</u> New York: Herder and Herder. Freire, P. (1973). <u>Education for critical consciousness.</u> New York: Seabury Press.

Freire, P. (1985). <u>The politics of education.</u> South Hadley, MA: Bergin and Garvey.

Gagne, R.M., Baker, K., & Foster, H. (1950). On the relationship between similarity and transfer of training in the learning of discriminative motor tasks.

Psychological Review, 57, 67-79.

Gall, A. L. (1987). You can take th3e manager out of the woods but... <u>Training</u> and Development Journal. March, 54-58.

Georgenson, D.L. (1982). The problem of transfer calls for partnership. Training and Development Journal, 36(10), 75-78.

Gick, M.L., & Holyoak, K.J. (1980). Analogical problem solving. <u>Cognitive</u>

<u>Psychology</u>, 12, 306-355.

Gist, M., Bavetta, A.G., & Stevens, C.K. (1990). Transfer training method: Its influence on skill generalization, skill repetition, and performance level. <u>Personnel</u> Psychology, 43, 501-523.

Gist, M. E., Stevens, C.K., & Bavetta, A.G. (1991). Effects of self-efficacy and post-training intervention on the acquisition and maintenance of complex interpersonal skills. Personnel Psychology, 44, 837-861.

Glasser, B.G., & Strauss, A.L. (1967). <u>The discovery of grounded theory.</u> Chicago: Adline.

Hand, H.H., Richards, M.D., & Slocum, J.M. (1973). Organization climate and the effectiveness of a human relations program. <u>Academy of Management Journal</u>, 16, 185-195.

Hendrickson, G., & Schroder, W. (1941). Transfer of training in learning to hit a submerged target. Journal of Educational Psychology, 32, 206-213.

Hicks, W.D. (1984). The process of entering training programs and its effects on training outcomes. <u>Dissertation Abstracts International</u>, 44, 3564B. (University Microfilms No. DA 8403528).

Hicks, W.D., & Klimoski, R.J. (1987). Entry into training programs and its effects on training outcomes: A field experiement. <u>Academy of Management Journal</u>, 30, 542-552.

Holten, E.F. III (1996). The flawed four-level evaluation model. <u>Human</u> Resource Development Quarterly, 7(1), 5-21.

Holten, E.F. III, Bates, R.A., Seyler, D.L., & Carvalho, M. B. (1997). Toward construct validation of a transfer climate instrument. <u>Human Resource Development</u>

<u>Quarterly, 8(2), 95-113.</u>

Howard, K. W. (1989). A comprehensive expectancy motivation model: Implications for adult education and training. <u>Adult Education Quarterly</u>, 39(4), 199-210.

Huczynski, A.A., & Lewis, J.W. (1980). An empirical study into the learning transfer process in management training. <u>Journal of Management Studies</u>, 17, 227-240.

Jones, E.V., & Lowe, J. (1990). Changing teacher behavior: Effective staff development. Adult Learning, 1(7), 8-10.

Judd, C.H. (1908). The relation of special training and general intelligence. Educational Review, 36, 42-48.

Keller, J.M. (1983). Motivation design of instruction. In C.M. Reigeluth (Ed.), Instructional design theories and models: An overview of their current status, (pp. 383-429). Hillsdale, NJ: Erlbaum.

Kemerer, R.W. (1991). Understanding the application of learning. <u>New</u> Directions for Adult and Continuing Educations, 49, 67-80.

Kirkpatrick, D.L. (1960). Techniques for evaluating training programs: Part 3-behavior. Journal of the ASTD, 14(1),13-18.

Kolb, D. A. (1984). <u>Experiential learning: Experience as the source of learning</u> and development. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Kotter, J.P. (1988). The leadership factor. New York: Free Press.

Kraiger, K., Salas, E., Cannon-Bowers, J.A. (1995). Measuring knowledge organization as a method for assessing learning during training. <u>Human Factors</u>, 37, 804-816.

Lewin, K. (1951). <u>Field theory in social science.</u> New York: Harper and Row. Lincoln, Y.S. (1995). Emerging Criteria for Quality in Qualitative and Interperetive Research. Qualitative Inquiry, 1(1), 275-289.

Lintern, G., Roscoe, S.N., Koonce, J.M., & Segal, L.D. (1990). Transfer of landing skills in beginning flight training. Human Factors, 23, 319-327.

Long, J. W. (1987). The wilderness lab comes of age. <u>Training and Development Journal.</u> March, 30-39.

Mathieu, J., Tannenbaum, S., & Salas, E. (1992). Influences of individual and situational characteristics on measures of training effectiveness. <u>Academy of</u>
Management Journal, 35, 828-847.

Mathison, S. (1988). Why Triangulation? <u>Educational Researcher</u>, 17, 13-17 McEvoy, G. M. (1997). Organizational change and outdoor management education. Human Resource Management, 36, 235-250.

McGehee, W., & Thayer, P.W. (1961). <u>Training in business and industry.</u> New York: Wiley.

Merriam, S.B. (1998). Qualitative research and case study applications in education. San Francisco: Jossey-Bass.

Michalak, D.F. (1981). The neglected half of training. <u>Training and Development Journal</u>, 35(5), 22-28.

Milheim, W.D. (1994). A comprehensive model for the transfer of training.

Performance Improvement Quarterly, 7(2), 95-104.

Miller, N. (2000). Learning from experience in adult education. In A. R. Wilson and E.R. Hayes (Eds.), <u>Handbook of adult and continuing education</u> (pp. 71-86). San Fransisco: Jossey-Bass Inc.

Naylor, J.C., & Briggs, G.E. (1963). The effect of task complexity and task organization on the relative efficiency of part and whole training methods. <u>Journal of Experimental Psychology</u>, 65, 217-224.

Noe, R. (1986). Trainees' attributes and attitudes: Neglected influences on training effectiveness. <u>Academy of Management Review</u>, 27, 736-749.

Noe, R. (1999). <u>Employee training and development.</u> Boston, MA: Irwin/McGraw-Hill.

Noe, R. (2000). <u>Human resource management: Gaining a competitive advantage.</u>
Boston, MA: Irwin/McGraw-Hill.

Novick, L.R. (1990). Representational transfer in problem solving.

<u>Psychological Science</u>, 1, 128-132.

Olivero, G., Bane, K.D., & Kopelman, R.E. (1997). Executive coaching as a transfer of training tool: Effects on productivity in a public agency. Public Personnel Management, 26(4), 461-469.

Ottoson, J.M. (1997). Beyond transfer of training using multiple lenses to assess community education programs. New Directions for Adult and Continuing Education, 75, 87-96.

Ottoson, J.M. (1995). Reclaiming the concept of application: From social to technological process and back again. <u>Adult Education Quarterly,46</u>(1), 17-30.

Parry, S. (1990). But will they use it? <u>Training & Development Journal</u>, 44(12), 15-17.

Parry, S. (1990). Ideas for improving transfer of training. <u>Adult Learning</u>, <u>1</u>(7), 19-23.

Patton, M. Q. (1990). <u>Qualitative evaluation methods</u>. (2nd ed.). Thousand Oaks, CA: Sage.

Penner, J.G. (1984). Why many college teachers cannot lecture. Springfield, IL: Charles C. Thomas.

Quinones, M.A., Ford, J.K., Sego, D. J., & Smith, E. M. (1995). The effects of individual and transfer environment characteristics on the opportunity to perform trained tasks. Training Research Journal, 1, 29-48.

Reed, S.K., Dempster, A., & Ettinger, M. (1985). Usefulness of analogous solutions for solving algebra word problems. <u>Journal of Experiential Psychology:</u>
Learning, Memory, & Cognition, 11, 106-125.

Robertson, I., & Downs, S. (1979). Learning and the prediction of performance:

Development of trainability testing in the United Kingdom. <u>Journal of Applied</u>

Psychology, 64, 42-55.

Rossett, A. (1997). That was a great class, but. . . <u>Training and Development</u> Quarterly, 51(7), 18-24.

Rouiller, J.Z., & Goldstein, I.L. (1993). The relationship between organizational transfer climate and positive transfer of training. <u>Human Resource Development</u>
Quarterly, 4, 377-390.

Schoel, J., Prouty, D., & Radcliffe, P. (1988). <u>Islands of healing: A guide to adventure based counseling.</u> Hamilton, MA: Project Adventure, Inc.

Schon, D.A. (1983). <u>The reflective practitioner: How professionals think in action.</u> USA: Basic Books.

Schon, D.A. (1987). <u>Educating the reflective practitioner.</u> San Francisco: Jossey-Bass.

Shore, E., & Sechrest, L. (1961). Concept attainment as a function of positive instances presented. Journal of Educational Psychology, 52, 303-307.

Sork, T.J. (1991). Learning about planning from success and failure. <u>New Directions for Adults and Continuing Education</u>, 49, 5-13.

Steinfeld, C. (1997). Challenge courses can build strong teams. <u>Training & Development.</u> April, 12-13.

Strauss, A.L., & Corbin, J. (1990). <u>Basics of qualitative research: Grounded</u> theory procedures and techniques. Thousand Oaks, CA: Sage.

Stuart, J., & Rutherford, R. J. (1978). Medical student concentration during lectures. <u>Lancet</u>, 2, 514-516.

Tallman, D.E., & Holt, M. E. (1987). Moving learning from workshops to work.

Continuing Higher Education Review, 51(1), 15-31.

Tannenbaum, S., Mathieu, J., Salas, E., & Cannon-Bowers, J. (1991). Meeting trainees' expectations: The influence of training fulfillment on the development of commitment, self efficacy and motivation. Journal of Applied Psychology, 76, 759-769.

Tesluk, P.E., Farr, J.L., Mathieu, J.E., & Vance, R.J. (1995). Generalization of employee involvement training to the job setting: Individual and situational effects.

Personnel Psychology, 48, 607-632.

Thorndike, E.L., & Woodworth, R.S. (1901). The influence of improvement in one mental function upon the efficiency of other functions. <u>Psychological Review</u>, 8, 247-261.

Tracey, J.B., Tannenbaum, S.I., & Kavanagh, M. J. (1995). Applying trained skills on the job: The importance of the work environment. <u>Journal of Applied</u>

<u>Psychology</u>, 80(2), 239-252.

Tziner, A., Haccoun, R. R., & Kadish, A. (1991). Personal and situational characteristics influencing the effectiveness of transfer of training improvement strategies. Journal of Occupational & Organizational Psychology, 64(2), 167-177.

Underwood, B.J. (1951). Associative transfer in verbal learning as a function of response similarity and degree of first-line learning. <u>Journal of Experimental</u>

<u>Psychology</u>, 42, 44-53.

Vernon, Coolie, Dickerson, G. (1967). The lecture: An analysis and review of research. Adult Education, 17, 85-100.

Vroom, V. (1964). Some psychological aspects of organizational control. In W.W. Cooper (Ed.), New perspectives in organizational research (pp. 72-86). New York: John Wiley.

Vroom, V. (1964). Work and motivation. New York: John Wiley.

Vygotsky, S. (1978). <u>Mind in society.</u> Cambridge, MA: Harvard University Press.

Wagner, R. J., Baldwin, T.T., & Roland, C.C. (1991). Outdoor training: revolution or fad? Training and Development Journal. March, 51-57.

Warr, P., & Bunce, D. (1995). Trainee characteristics and the outcomes of open learning. Personnel Psychology, 48, 347-375.

Wexley, K.N., & Thornton, C.L. (1972). Effect of verbal feedback of test results upon learning. <u>Journal of Educational Research</u>, 66, 119-121.

Xiao, J. (1996). The relationship between organizational factors and the transfer of training in the electronics industry in Shenzhen, China. <u>Human Resource</u>

<u>Development Quarterly</u>, 7, 55-73.

Zahorki, J.A. (1995). <u>Constructivist teaching.</u> Bloomington, IN: Phi Delta Kappa Educational Foundation.

Zemke, R., & Gunkler, J. (1985). 28 techniques for transforming training into performance. <u>Training</u>, 22(4), 48-63.

Zigon, J. (1984). Increasing the bottom line results of training. <u>Performance and Instruction</u>, 23,(2),18-20.

APPENDICES

APPENDIX A	
Questionnaire	
Have you learned something of value through this training session? Yes / No If yes , briefly describe what you have learned today.	
Do you intend, as a result of today's program, to make any changes at work? Yes If yes , briefly outline what you think some of these changes might be.	/ No
Would you be willing to be interviewed about this particular training experience? No If yes, please provide the following information.	
Name	
Title	
Address	
Phone Number	
PHONE INUMBER	

Work_____

Home_____

APPENDIX B

Interview Schedule

What do participants learn during this type of program?

- 1. What do you feel you learned from this particular program?
- 2. Could you please provide a specific example of a learning activity or incident from which you learned something?
- 3. What skills, if any, did this program help you to develop?
- 4. Could you please provide a specific example of a learning activity or incident during which you developed this skill?
- 5. What impact did this program have upon your views of working with others?
- 6. What did your work team, as a whole, learn from this experience?

Through what processes do adult learners, individually and collectively, transfer this learning to the work place?

- 7. How did you find out about the program?
- 8. How did you respond to the proposed training?
- 9. How did your colleagues respond to the proposed training?
- 10. How did your immediate supervisor respond to the proposed training?
- 11. Who made the decision to attend this training?
- 12. What need precipitated this person making the decision to attend a training program?
- 13. What was your reaction to the actual program?
- 14. How did your work group react to the program?
- 15. How did you and your team change during the course of the training?

- 16. How would you say you have changed at work since the training?
- 17. How did you make these changes?
- 18. How has your team changed?
- 19. What, specifically, has your team done differently since the training program?
- 20. How did the team go about making these changes?

What learner, instructor, program design, and workplace factors influence this process?

- 21. What factors from within your practice setting allowed you and your team to make changes since the training event?
- 22. In what ways have you fallen short of making the changes you outlined immediaitely following the program?
- 23. How has your team fallen short?
- 24. What factors (personal, work environment...) hindered group and individual efforts to change?
- 25. Could you describe your as well as your teammates' reaction to the:

Instructor

Facilities

Program content and materials