TEAM SKILLS LEARNED THROUGH ROPES COURSE TRAINING AND TRANSFERENCE TO THE WORKPLACE

By

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by

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TABLE OF CONTENTS

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ABSTRACT

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TEAM SKILLS LEARNED THROUGH ROPES COURSE TRAINING AND TRANSFERENCE TO THE WORKPLACE

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AMERICAN PSYCHOLOGICAL ASSOCIATION
(Name of Style Manual Used in this Study)

This paper explores the premise that ropes course training is beneficial to employees and the skills learned through this training are transferred back to the workplace. The researcher used a newly formed work team of ten people from a local technical college to complete the training. Evaluation was done using the *Team Effectiveness Critique*, designed by Mark Alexander, which was tallied using a Likert Scale. Positive results were found immediately following the ropes course training and were maintained one month later. More studies need to be performed and continued follow-up is needed on the team evaluated in this study. However, this paper, will serve as a foundation for future research in this area.

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LIST OF FIGURES

LIST OF TABLES

CHAPTER ONE

Introduction

We live in a changing society. Information is coming to us faster than ever before. Individual jobs, as well as large corporations, are continually undergoing major transformations. Because of this the need for ongoing training is now a top priority in the workplace. Historically employees were trained to perform specific tasks, had little additional training, and in many cases it was status quo throughout their working careers. Today employees need continuous training because jobs are no longer stagnant; they are evolving all the time. This means that employees have to change and grow with the company and employers need to provide this essential link. Training is one means for employees to grow with the changes. Training has become an integral part of a company's growth and changing nature.

One area of change that is becoming increasingly popular is the use of teams in the workplace. Companies and organizations are moving towards a team environment. For example, work teams, project teams, and consulting or quality teams are being formed and are being seen as useful in increasing productivity, producing better quality, and building morale. Because of this, employers see the need to expand training programs where employees will better learn to work as a team. Through team building training exercises, employees become able to communicate, problem solve, and trust each other. It is evident that teamwork has become an important function within an organization. It has become a part of the work environment.

Adventure education, also known as outdoor education, challenge education, experiential learning, etc., is one innovative means of training people to work as team

members. In recent years, corporations have increased the use of adventure education as part of their training in hopes of improving their "managerial business practices" (Gass, Goldman, & Priest, 1992). Through the activities and initiatives used in adventure education, people learn communication, problem solving, trust, risk taking, and self esteem (Steinfeld, 1997; Gass, Goldman, & Priest, 1992; McEvoy, Cragunm, & Appleby, 1997). Effective use of these skills results in a more effective team. Similar initiatives are also being used successfully in all levels of the workforce in many organizations.

Statement of the Problem

While training has become more prevalent, it is not always effective. A concern for employers is that once the training is complete and the employee is back in the workplace, the training is not always put into practice (Balwin & Ford, 1988). Transferability is the issue. The same concern holds true for those employees participating in adventure education. Before a company spends time and money on this type of training they want to be sure that one, the exercises/initiatives done during training are relevant to the employee's job and two, that those skills learned can be applied back on the job (Gass, Goldman, & Priest, 1992). They want assurance that the training is effective and transferable.

Purpose and Importance of the Study

This study will examine and determine if the skills learned on a ropes course, one area of adventure education, are effectively transferred back to the workplace. There has been some research done on the effectiveness of adventure education and ropes courses,

but little research has been done on the transferability of the skills learned from participating in such training.

The knowledge learned from this study will hopefully add to the minimal research done in this area and assist practitioners in utilizing ropes courses more effectively. This study will also help companies and organizations determine if and how challenge education could be beneficial for their work teams.

Limitations of the Study

The following are limitations of this study:

- The researcher cannot control the barriers the employees may face when back in their work environment.
- The lack of skill of the facilitator may hinder transferability.
- The potential of "post-training euphoria" may effect inventory results.
- The lack of willingness and open mindedness of the team participants may affect the outcome.
- Not all participants were involved with setting the training goals.

Assumptions of the Study

The following are assumptions of this study:

- Ropes courses are beneficial to team building.
- Participants will believe in the program and understand its value.

Definition of Terms

Adventure Education – A method of teaching interpersonal skills by placing individuals in "simulated initiative and problem-solving activities deliberately chosen and used as direct metaphors for specific challenges and problems faced by the participants on an everyday basis in the workplace" (Ibbetson & Newell, 1996, p. 165). There are four elements of adventure education: trust, communication, cooperation, and fun (Rohnke & Butler, 1995).

Ropes Courses - A series of obstacle type events made from rope, steel cable and logs to offer challenges and perceived risk-taking adventures. Ropes courses "provide an environment in which leadership skills, communication, team building and group dynamics can be developed…they are set up for groups to solve problems and work together to complete tasks" (Goldenberg, et al, 1998, p. 43). These events usually take place on the ground (Low Ropes) or in the air (High Ropes).

Low Ropes - A series of activities or initiatives that focus on group problem solving, communication, and teamwork. "Emphasis is on group trust and in assuming responsibility for someone else" (Moote & Wodarski, 1997, p.151).

High Ropes - A series of risk taking and problem solving exercises that take place around 30 feet in the air. These are belayed activities (a safety mechanism to prevent participants from falling) in which there is a high level of perceived risk. The primary focus is accomplishing individual goal and confronting fears (Rohnke, 1989). Team

members play a role by offering support, which in turns builds cohesiveness within the group. (Steinfeld, 1997).

Initiatives - A series of "group problem-solving activities that require participation of all members to complete an assigned task" (Moote & Wodarski, 1997, p. 151).

Facilitator – A person who presents "activities in a way that allows the group to develop its own abilities, with guidance from the [facilitator] when appropriate" (Rohnke & Butler, 1995, p. 5).

Debriefing - The process at the end of an activity where the facilitator leads the group in a discussion of the group's progress. During this time, participants are encouraged to "verbalize their behaviors, reactions and feelings" (Smith, et al., 1992, p.156). Discussions can focus on the groups evaluation of their successes and mistakes, leadership styles, group involvement and problem solving styles. By doing this, participants learn from their experience (Priest & Naismith, 1993).

Transfer of Training – The application of knowledge and skills learned during training to the workplace (Broad & Newstrom, 1992).

Team Work – "Cooperative or coordinated effort by a group of persons acting together as a team or for a common cause" (Stein, J., et al., 1988, p. 1348).

Summary

This study will provide an in-depth look at Adventure Education, and more specifically ropes course training. The study will include background information, benefits of such training, questions that have been raised about the advantages and disadvantages of the training, especially in the area of transferability. A critique will be used to evaluate the newly formed work team before the rope course, immediately following the ropes course, and approximately one month following the rope course participation. The objective of this study is to help determine if outdoor education is an effective tool to be used to improve workplace relationships, trust, and productivity through transferability from course training to the office setting.

CHAPTER TWO

Review of Literature

This chapter will review the most recent literature relevant to the research paper. It will describe experiential and ropes course training (also known as Adventure Training), and will state the objectives of such. The literature will show not only the importance of transferability to the workplace, but will address who should be involved, how to transfer from the course activity to the workplace, and the difficulties one may encounter. There is limited objective information and valid research done on the benefits of adventure education, and most of the information found is subjective. However, the literature will support the importance and benefits of such training.

Background and Benefits of Adventure Education

Adventure education is the use of activities and initiatives to bring about team development. It is generally done away from the workplace in an outdoor environment. According to Ibbetson and Newell (1996) "adventure-based development training programs use simulated initiative and problem-solving activities deliberately chosen and used as direct metaphors for the specific challenges and problems faced by the participants on an everyday basis in the workplace" (p. 165). Participants must solve various tasks and in doing so discover that they must work together to find creative solutions to the problems (Cacioppe & Adamson, 1988).

One reason why adventure education is so effective is because the participants learn by doing. When people sit passively in a classroom learning tends to be limited, but when participants are actively engaged they have a better understanding of the

information and are more likely to retain the knowledge. In adventure education participants have the chance to create their own learning through being challenged to find solutions; there are no right or wrong answers. Participants are put in an unfamiliar environment and given problems to solve as a team, which enhances the learning process. (Cacioppe & Adamson, 1988; Wagner & Weigland, 1993). Since adventure education "consists of unique and novel situations, people are forced to break out of their old patterns of thinking and to experiment with some unique methods of problem solving" (Clements, Wagner & Roland, 1995, p. 53).

It is a well-known fact that learning takes place when it's both fun and meaningful, and this is an important aspect of adventure education. The training uses games, initiatives, and exercises. However, the activities done during training need to focus on management skills not the activity itself. That is to say that the major focus of the training is on communication and decision-making, not developing the skill of the activity (Outdoor Management Development—Reality or Illusion, 1995).

Research has found that there are many benefits to adventure education. These include but are not limited to better communication, more creative problem solving, more effective team work, taking risks, assessing and using resources, giving and receiving feedback, managing conflict, and improved leadership and trust among work groups (Ibbetson & Newell, 1996; Gass, Goldman & Priest, 1992; McEvory, Cragunm & Appleby, 1997). In a study done by Wagner and Roland (1992), they consistently found that there was a significant improvement in group behavior – such as problem solving, group cohesiveness, group clarity, group homogeneity and group effectiveness after participating in an outdoor-based program, but no significant changes were found in

individual behavior. Therefore adventure education is most beneficial to develop work teams.

Risk taking is also an important facet of adventure education. Participants learn to take risks and try new approaches while working with team members. A main benefit of the training is that it is done in a safe environment with little or no consequences -- either monetarily or job threatening. Team members are there to encourage and support each other when new techniques are tried. Researchers believe that feeling at ease with risk taking is a major benefit of the training. "Professionals willing to take risks and deal with fear of failure are an asset to the growth of themselves and to that of their team" (MacRae, Moore, Savage, Soehner & Priest, n.d., p. 10). While many of the activities done during training may seem fear provoking, perceived physical risk, not true physical risk is the objective to adventure education.

Transfer of Training

According to Broad and Newstrom (1992), "transfer of training is the effective and continuing application, by trainees to their jobs, of the knowledge and skills gained in training" (p. 6). This implies that employees are expected to utilize their new skills when back at work. Unfortunately the transfer of skills is not automatic and in many cases does not happen.

Studies conducted in the area of transferability have found that the training is expensive for employers and does not always achieve long term results. Baldwin and Ford (1988) found that while billions of dollars are spent on training each year by

companies, only a small percentage of the training done is successfully transferred back to the job.

Research done by Kozlowski and Salas (1997), determined that the obtainment of knowledge, skills, behaviors, and attitudes in training is of little value if no parallels are drawn between the training and the workplace. They also found that these skills need to be maintained over time. While most of the training may seem like a common sense practice; the skills needed to build trust, better communication, and problem solving need to be taught, learned, and then transferred to the job if teams are to be effective.

One of the problems employees encounter is not being able to practice some of the less clearly defined skills—for example, interpersonal communication and decision making—immediately when back at work because the opportunity to utilize these skills is not readily available. The environment may not provide direct support for transfer of these skills (Broad & Newstrom, 1992). In addition, it is more difficult for employers to measure if these obscure skills are being used or not.

Barriers to Transfer

Barriers to transfer are inevitable with any training. In a study done by Newstrom (1986), the top three barriers to training transfer are (1) lack of reinforcement on the job, (2) interference from the immediate work environment, and (3) a non-supportive culture for the change. From this study, Newstrom also determined that managers play the most significant role in resolving the problems of transfer of training. Kotter (1988) found that the most powerful force of inhibiting transfer was the lack of involvement by top management. Managers hold the primary responsibility for the number one barrier to

transfer**,** which is lack of reinforcement on the job. Without management reinforcing and supporting what was learned during training, employees will easily fall back into their old routines. Additionally, the trainee's perception of the transfer climate is important. Questions may arise like: 'Does my manager see the value in this training?' or 'Will I be able to use it?' Pre-training conditions have obvious potential to influence such perceptions. Much of the transfer climate should be communicated prior to any instruction. For example, if employees do not feel they need training or have heard negative things about the training from co-workers, successful transfer may not take place. Confronting these issues beforehand may alleviate doubts. Furthermore, supervisors/managers may need training themselves to learn how to support the transfer of skills for their subordinates (Broad & Newstrom, 1992).

Transfer Partnership

Broad and Newstrom (1992) broke down the barriers to training into two main areas. They are 1) timing when the barrier arises, such as before, during and after training, and 2) who is responsible for the transfer. They recommend a "transfer partnership" (p. 14) when designing, implementing, and following up on training. The transfer partnership consists of the trainee (or employee), the trainer (could be internal or external), and the manager (or team leader). The partnership or joint efforts of these three groups should be utilized during the entire training process. Broad and Newstrom discussed what each of these entities can do to ensure effective transfer of skills before, during and after training. They state, "an organization cannot wait until after a training program is over to address the transfer-of-training problems" (p.21). Management,

employees, and trainers all play a key role in the transfer of training. Cooperation between all three is essential for successful training and transfer. What follows is a listing of possible strategies that Broad and Newstrom put together which can be used to help ensure effective transfer of skills during the training process. These are not cookie cutter strategies, and it is important to remember that not all strategies are appropriate and beneficial in all areas of training. It is essential to determine which strategies are suitable for the type of training being done.

Pre-Training Transfer Strategies

Pre-training assessment is all about being proactive. All parities involved should consider and deal with any potential barriers before training even begins. Strategies should be thought out and strategically placed throughout training.

Pre-Training Transfer Strategies for the *Manager*

- Collect baseline performance data: This will help provide managers and trainers with information as to where employees are currently in their positions, to measure how much was learned after training, and to identify transfer problems.
- Involve supervisors and trainees in needs analysis: Managers and trainees, along with the trainer, working together can provide useful information when it comes to organizational training needs. This information can be used in the designing of the training.

- Provide orientations for supervisors: It is helpful for managers to know what their employees will be learning during training so they can better support, role model, and reinforce positive behavior.
- Involve trainees in program planning: One way to ensure employee participation is to involve them with their own learning. They may be more committed to the goals of training if they have input.
- Brief trainees on the importance of the training and on course objectives, content, process, and application to the job: Employees need to know and understand the organizational objectives and expectations. If they are told why the training is taking place they are more likely to comprehend and accept it.
- Provide supervisory coaching skills: Not all managers may have the skills needed (i.e. observation, emotional support, and encouragement), to assist employees after training. These coaching skills should be reviewed and understood prior to training to provide a supportive environment once training is complete.
- Arrange conferences with prior trainees: Employees may be more excited about training if they first hear from co-workers that the training was beneficial, what to expect, and how to get the most out of their training. Positive testimonials can be very powerful.
- Send co-workers to training together: When employees attend training together and learn the same skills they are more likely to transfer those skills back to the work place because they can be supportive of each other.

- Provide a positive training environment (timing, location, facilities): The training environment is key to learning. Planning to insure proper timing, location, and facilities is of utmost importance.
- Plan to participate in training sessions: When management participates in the training, employees recognize the importance of the training and are more likely to stay committed.

Pre-Training Transfer Strategies for the *Trainer*

- Involve managers and trainees in the program development: Trainers can solicit valuable information from managers and employees through observation, surveys, and interviews that can be helpful in designing proper training.
- Systematically design instruction: Trainers can ensure that a training program produces the desired affect through: identifying desirable performance outcomes, stating trainee-oriented objectives for each session, selecting instructionally appropriate mixes of methods and evaluating the results.

Pre-Training Transfer Strategies for the *Trainee*

- Provide input into program planning: Employees should take the initiative when it comes to their learning by requesting specific training, identifying skill deficiencies, and clarifying cultural differences. Employees will be more committed to transferring new skills if they are involved upfront.
- Actively explore training options: Employees may resist training, especially if they perceive the style of training as uncommon or atypical. By keeping an

open mind and asking questions about the training, employees may find it beneficial and therefore may in fact look forward to the actual training.

During Training Transfer Strategies

While the training itself may only take a few hours or a couple of days, during this time all parties involved can focus on just the training. Here are a few strategies that can be taken to help ensure the effectiveness of the training.

Transfer Strategies for the *Manager* During Training

- Prevent interruptions and transfer work assignments to others: Employees will not be able to focus on the training if they are constantly distracted with job duty responsibilities or know that when they return to work their in-box will be more full than when they left. Managers need to make sure employees do not need to worry about their job responsibilities so they can concentrate on the training.
- Recognize trainee participation: Some type of recognition of accomplishment, such as a certificate, is appreciated by employees and should be presented to them at the completion of their training.
- Plan assessment of transfer of new skills to the job: Managers should develop an objective evaluation tool to assess the employee's level of transfer of new knowledge and skills. Regular evaluation and feedback on employee use of new skills will encourage employees to continue working on the transfer of new skills.

Transfer Strategies for the *Trainer* During Training

- Develop application-oriented objectives: These are behavioral statements that illustrate what the employee should do once they return to their jobs. By doing this the trainer is prompting the employee to think beyond the current training and apply the learning to their job.
- Manage the unlearning process: Employees may come to the training with years of experience. Before the new skills can be learned, employees must let go of their old habits. To assist them in this process, trainers should be empathetic and also create exercises to help employees unlearn old behavior.
- Answer the "WIIFM" (What's in it for me?) question: Most people are interested in personal gain. Trainers should be ready to answer the question, "What's in it for me?"
- Provide realistic work-related tasks: It is difficult for many employees to see how board principles apply to their specific job. The training should have work related training exercises to ensure transferability back to the work site.
- Provide job performance aids: Handouts are good reminders and provide references of new skills. Handouts may denote key points or steps on how to perform a task.
- Provide practice opportunities: For new skills to become habit, employees need to practice. Training is the best time and place to hone these new skills. It also provides an employee a safe environment to learn and apply these skills without fear of consequences.

Transfer Strategies for *Trainees* During Training

- Maintain an ideas and applications notebook: Employees can be encouraged to write down new ideas and list how these new ideas can be transferred to their job.
- Participate actively: Active participation will increase the level of knowledge and skills learned during training. Employees should use this time to try out new thoughts. Actively engaged employees will be better able to adapt the learning to their own needs and are more likely to retain the skills learned.
- Plan for applications: Employees should set work related goals. By doing so, they make a commitment to utilize the newly acquired skills. These goals are self-managed.

Post-Training Transfer Strategies

The most obvious time to examine transfer strategies is after training since this is when transfer takes place. Even though much effort had been done before and during training, transfer of new skills may fall short if action is not taken after training as well. What follows are strategies managers, trainers, and trainees should consider once the training is complete.

Post-Training Transfer Strategies for the *Manager*

- Psychologically support transfer and give positive reinforcement: Managers needs to immediately assure the employee that they are interested in what was learned during training and that they are supportive of the transfer of these

new skills learned. Managers also need to acknowledge employees when they apply these new skills.

- Reduce job pressures initially: When employees return to work, it is instinctive to get back into their normal routine. They may also find that the time off work for the training initially increased their workload and they need to catch up. Managers can help eliminate these pressures, and at the same time give employees a chance to practice what was learned.
- Set mutual expectations for improvement: If not done prior to training, the manager should discuss, collaborate, and establish measurable goals with the employee. By getting the employee involved in goal setting the employee will more likely have the acceptance and motivation to reach those goals.
- Arrange practice (refresher) sessions: Practice sessions should be made available to employees so they can refresh their memories for tasks that are not performed regularly or are highly important.
- Give promotional preference: This is a huge motivation to transfer skill. Employees receive preferential promotions (job and pay advancement) based on successful training and skill transfer.

Post-Training Transfer Strategies for the *Trainer*

- Apply the Pygmalion effect or create a self-fulfilling prophecy: If a person believes that he/she can accomplish a task they are more likely to do just that. The trainer's job is to encourage the employees so they can and will transfer the new learning back to their job.

- Conduct evaluation surveys and provide feedback: After training, surveys or evaluation of the training is important for two reasons. First, it reminds the employee what they learned and the need to apply it. Secondly, the survey produces tangible results as to the effects of training. This information gathered can be shared with both the managers and the employees.
- Provide refresher/problem-solving sessions: Many times employees may not have time to completely absorb the new learning. Follow-up courses may assist employees in refreshing their memories.

Post-Training Transfer Strategies for the *Trainee*

- Practice self-management: Employees are capable and should take responsibility for managing and maintaining their own application of training.
- Review training content and learned skills: Employees should schedule time to review their training materials.

Ropes Course Training and Transference

The use of ropes course training, one aspect of adventure education, has become a popular means of team training for many organizations. Companies are learning that ropes course training holds many benefits – improved problem solving skills, improved communication, and trust within the company -- needed for a successful organization. While these benefits seem to be valuable, some company representatives wonder if the skills learned from this training will transfer back to the workplace. Profit is the bottom line so if the training does not increase earnings the companies are then less likely to spend time and money on this type of training (Gass, Goldman & Priest, 1992).

Unfortunately, little research has been done in the area of transferability of skills learned from ropes course training back to the workplace. One reason may be that this is particularly challenging since the training usually occurs in an environment that is very different from the typical workplace. Another reason is that this training model is relatively new and innovative and studies have not yet been performed. In addition, the training has caught on and is growing faster than the associated literature on the topic (Wagner, 1995).

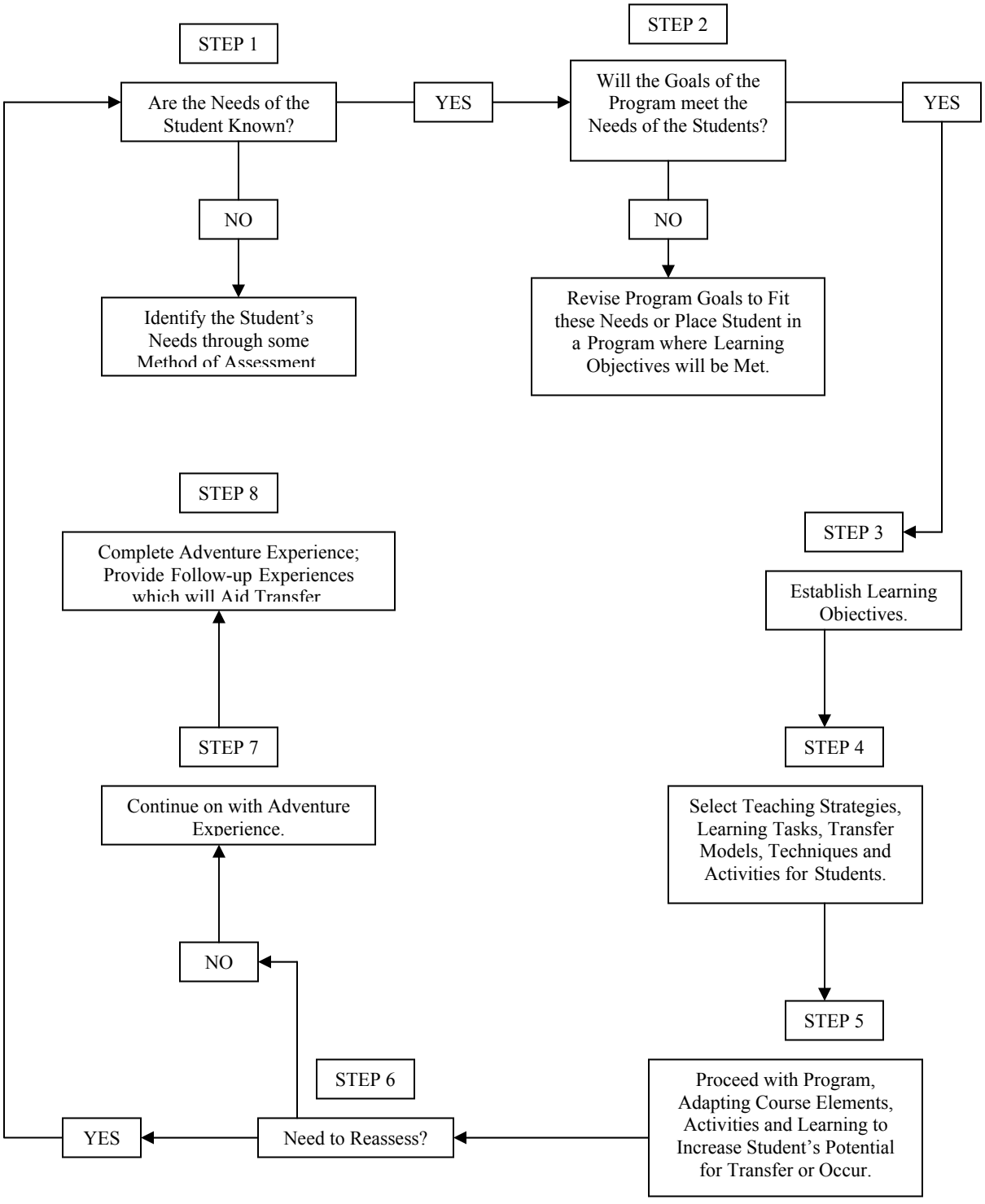
However, transferability remains extremely important and companies are working with trainers to develop simulated job related activities to assure transferability. As stated earlier, research has found that there are three main times during the training process in which techniques can be used to increase the transfer of skills learned during ropes course training. These three times are: pre-training, during training, and post-training. What follows are strategies that can be used during each of these times to assist in the transfer of skills learned during ropes course training.

Pre-Training

Before the training begins, the trainer and the manager must determine the training needs of the work team. This ensures that the correct training can be designed to meet the team's specific goals (Gass, Golman & Priest, 1992; Gall, 1987). Gass (1985) determined that transfer of skills should be planned before the training begins just like setting training objectives. He created the Learning Process Model (Figure 1) to assist in the needs assessment, design and development of the activities, and implementation of the training. In doing so use of the model assist in the transfer of learning. By knowing

what skills need to be transferred ahead of time, the trainer or facilitator can design the training to meet those objectives.

Figure 1: Learning Process Model with an Emphasis on the Transfer of Learning



During Training

The facilitator plays a critical role in the transfer process (Wagner, 1995; Cacioppe & Adamson, 1988). Wagner and Roland (1992) found that the skills of the facilitator do make a difference on group effectiveness. Facilitators need to be trained in business and human behavior. The facilitator should create elements or activities used during training that are similar to the employee's work environment and use metaphors to link the activities and skills learned during training to tasks and relationships on the job (Gass, 1985). Trainers cannot assume that the participants will automatically make the connections between the training and their job (Gall, 1987). These links are the foundation for the transfer of skills.

During the course of the training, the facilitator needs to provide students with an opportunity to practice what they have learned while still in the process of the training. This will help ensure that the skills learned will be transferred and repeated in the workplace. It is also important to have the consequences of the learning be natural and not artificial (Gass, 1985). The actions and reactions of the team members must be real. This is when the true learning takes place.

At the end of the training day, the team needs to set goals and create an action plan for transferring the skills learned back to the job (Buller, Cragun & McEvoy, 1991; Gall, 1987). The facilitator and manager should be included in this planning. Because participants may also experience "post-training euphoria" (MacRae, Moore, Savage, Sochner & Priest, n.d.) or the feeling of individual and/or united group success, this too should be discussed. The euphoria is a common occurrence, which over time will diminish. This is why post-training strategies are important.

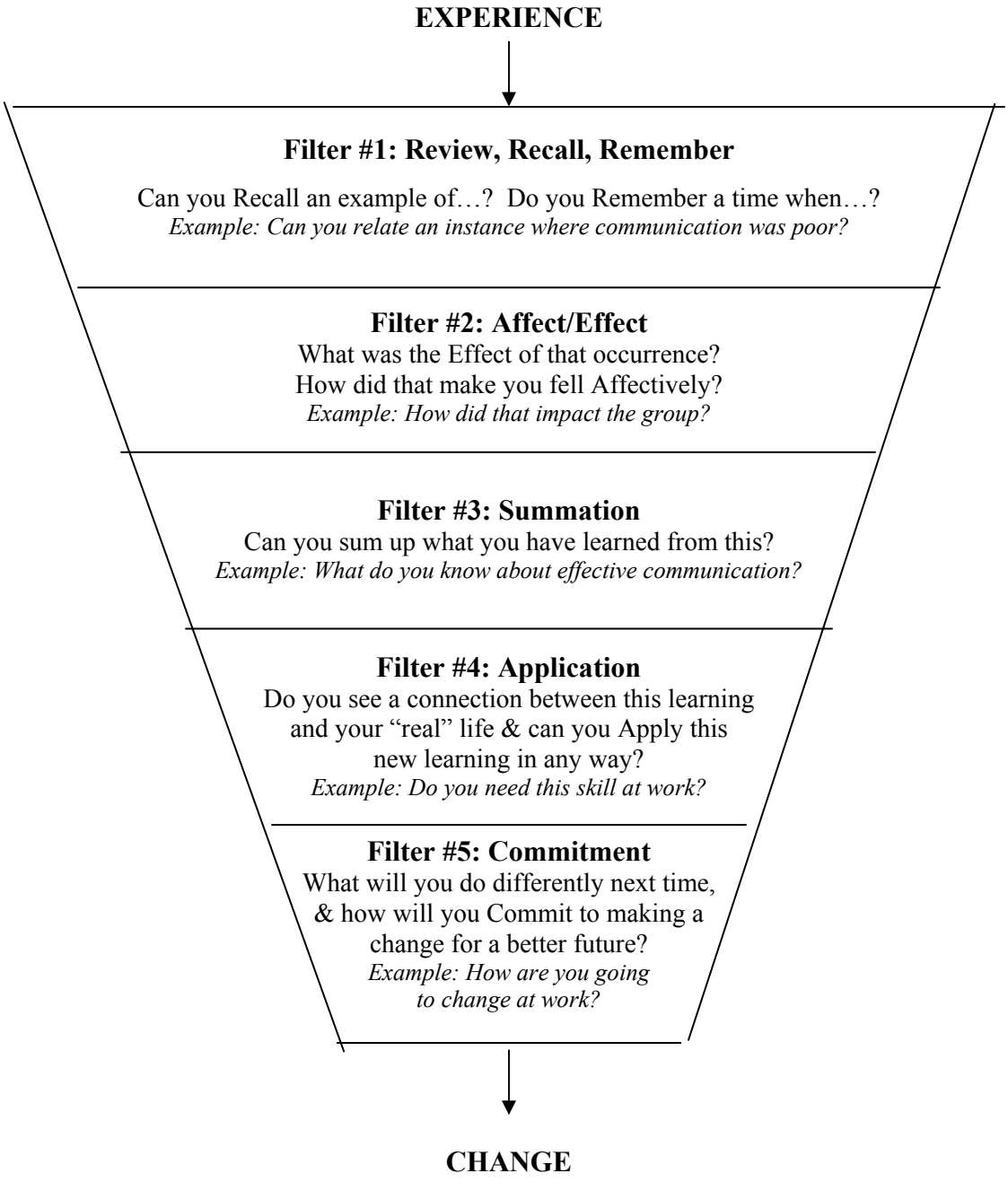
Debriefing During Training

The debriefing process is a critical component of the training process. At the end of each activity and at the end of the training day, the facilitator must carefully lead discussions among the participants (Gall, 1987). Here the facilitator focuses more on the way the tasks were carried out instead of the results. Priest & Naismith (1993) defines the debriefing process as a guiding reflection on experience. They state "in order to learn from an experience, participants must actively reflect on their experience by evaluating the good and bad, by analyzing their mistakes or successes, by considering the impact of actions or decisions, and by anticipating consequences or committing to behaviors for next time" (p. 20). By allowing the participants to talk about their experiences, they are better able to interpret the training and transfer it more effectively into the work place. A carefully facilitated feedback session also helps to build acceptance, trust, and understanding among the team members.

A properly conducted debriefing session assists in the transfer process. The facilitator may want to prepare key questions ahead of time to gear the conversation in a direction to help ensure better transfer, but it is also important that the facilitator remain flexible. Priest & Naismith (1993) came up with the Debriefing Funnel (Figure 2) as a systematic process to review in detail the day's training activities. The funnel is sectioned into five different filters. Each "reflective filter" is one step closer to understanding the importance of the training, what was learned, and how the new skills can be transferred to the job. Filter #1 starts with refreshing the participants' minds about issues that might have come up during the training. Filter #2 examines how each participant felt and how the activities' outcomes influenced the group. During Filter #3

participants are asked to summarize what was learned, and Filter #4 applies the learning to their jobs. Finally, Filter #5 asks participants to commit to the new learning.

Figure 2: The Debriefing Funnel Model
Preiest & Naismith (1993)



Post-Training

Once the training day is completed, training still needs to continue. Follow up with the team a few weeks after the training is done is an essential step to determine if the participants have transferred and are using the skills learned at the training session. Any difficulties participants are having should be discussed at this meeting. This is the time to "identify and solve major roadblocks to transfer that the trainees maybe experiencing…and to foster networking among participants" (Buller, Cragun & McEvoy, 1991, p. 61).

In addition to pre-training, training, and post-training activities, the company and/or organization also plays an important role in the transferability of skills. Management must be open to and supportive of the training. This is why buy-in and support at the start of training is so important. The organization must offer support, such as organizational strategy, structure, and reinforcement. This could be in the form of a reward system, which could result in the training being more effective and lasting.

CHAPTER THREE

Methods and Procedures

The methods and procedures used in this study of transferability of ropes course training are explained in this chapter. The following headings are discussed: (1) method of study, (2) population, (3) instrumentation, (4) procedures followed, and (5) method of analysis.

Method of Study

This study used a quantitative research design. The data collection technique used was a critique on team effectiveness.

The material covered in the literature review was valuable in determining the critique to use. The purpose of the critique is to measure various factors that lead to team development. The rational behind the critique is to gain insight of the participants.

Population

The participants were a voluntary group from a local technical college. The ten individuals who participated made up a department work team. All members of the team participated in the study.

The reason this particular team was chosen for the study is because their team is fairly new, and they were interested in doing some activities in which they could get to know one another better, develop some trust and communication skills, and overall, just feel more like a team. The difficulty with this team is that their jobs are fairly

independent of each other. The team as a whole has one mission but how the members go about fulfilling that mission is quite different.

While this team is fairly new, the length of time each member has worked for the technical college varies. Three have worked there for over 20 years, two for approximately 10 years, and the remaining five have only worked there less than a year. This divides the group even more since half of them are still learning the corporate culture of this organization.

Instrumentation

For this study, *The Team Effectiveness Critique* (Alexander, 1985), developed by Mark Alexander was used. The critique consists of nine questions with the topics for the questions being: goal and objectives, utilization of resources, trust and conflict, leadership, control and procedures, interpersonal communications, problem solving/decision making, experimentation/ creativity, and evaluation. This inventory was chosen because it covers the various objectives of experiential education. Each question was answered using a seven-point likert scale.

The critique was designed to be used as an observational tool and a "useful method for improving a team's effectiveness" (Alexander, 1985, p. 104). Alexander also states that this critique can be used as an experiential training device. While Alexander did not intend for this critique to be used for statistical or research purposes because statistical validity has not been established, the researcher felt that the critique met the need for this particular project.

Procedures Followed

In order to complete this study of transferability of ropes course training the following plan was implemented:

- The work team had scheduled a daylong ropes course training. The researcher, who facilitates on the ropes course, approached the team leader to see if they would be interested in participating in this study. The team leader consulted with the team and they all agreed to participate.
- A letter (Appendix A) describing the study and participation in the study was sent to all participants one week prior to the ropes course training. A consent form (Appendix B) and *The Team Effectiveness Critique* (Appendix C) were also sent with the letter. These forms were filled out and turned in the day of the ropes course.
- The team participated in a daylong ropes course. See Appendix D for the training schedule and activities used.
- All participants completed *The Team Effectiveness Critiq*ue for the second time following the rope course.
- Approximately one month later, each participant completed *The Team Effectiveness Critique* for the third and final time.

Method of Analysis

The answers from the critique were tallied for each question, for each of the three times it was taken. The score for each time the critique was taken was also totaled. Since *The Team Effectiveness Critique* was not made for statistical purposes, the inventory was

used as a training and team development tool. Therefore, “the face validity of the form and its usefulness is team work speak for themselves” (Alexander, 1985, p. 104).

The conclusion and recommendations were made on the basis of the material collected in the inventories.

CHAPTER IV

Analysis of Data

The main objective of this study was to determine if the skills learned on a ropes course got transferred back to the workplace. The 10 respondents, who participated in this study, work in the same department at a local technical college. Their department has a mission but since each person has a very different position how they go about reaching their goals can be very different. Some colleagues are new to the organization while others have worked at the college for many years.

A quantitative approach was used for this study. The method used in this project was a critique on team effectiveness. In this chapter the researcher will describe the findings from the critique.

The Critique

The Team Effectiveness Critique was completed by the 10 participants on three different occasions. The first time they completed the critique was the day prior to their participation on the ropes course. The second time was immediately following the ropes course. And the finial time was approximately one month later.

The critique consists of nine sections that are evaluated on a seven-point Likert Scale, 7 being high team effectiveness. The responses for all sections were tallied, analyzed and organized in the form of tables. Refer to Tables 1 for the point and percentage differences between the first time and the second time the critique was taken. Refer to Table 2 for the point and percentage differences between the first critique and the third critique. And refer to Table 3 for the point and percentage differences of the second and third critiques.

Goals and Objectives

The shared goals and objectives section of the critique measured each participant's perception of how well the group understands the goals of the team and how committed they are to achieving them.

The first time the critique was taken the total points equaled 46, out of a possible 63 points, for the goals and objectives section. Immediately following the rope course the total points for this section added up to 56. That is an increase of 10 points or 21.7%. The third time the critique was taken one month later this section totaled 54 points. When comparing the first time the critique was taken or baseline (46 points) with the third time (54 points) the total was an increase of eight points or 17.4%. When evaluating the differences between the second and third time the critique was taken there was a decrease of two points or 3.6%.

Utilization of Resources

The utilization of resources section measured each participant's view of how effectively the team uses their resources, such as if all team members have the opportunity to contribute and if all opinions are heard and considered.

The score for the first time the critique was given totaled 41 points for this section. Following the ropes course the score totaled 58, a 17 point or 41.5% increase. The third time the critique was completed one month later the total score added up to 55 points, an increase of 14 points or 34.1% when comparing the baseline to the last time it was taken. When comparing the second and third times, there was a decrease of three points or 5.2%.

Trust and Conflict

The trust and conflict section measured each participant's opinion of the group's ability to recognize and resolve conflict and at the same time the group's ability to create "a feeling of mutual trust, respect, and understanding" (Alexander, 1985. p.102) within the team.

50 points was the total score for this section the first time the critique was taken. Following the ropes course the score totaled 61, and increase of 11 points or 22% from the first time. The final time it was taken the score totaled 58 points. When comparing it to the baseline and score increased by eight points or 16%. There was a decrease of three points or 4.9% from the second to the third time the critique was taken.

Leadership

The shared leadership section measured each participant's perception of how well the team members distribute the task functions, necessary job duties, and maintenance functions, to keep the group together and interacting effectively.

The total score for leadership from the first critique was 45 points. The second time the critique was taken this section totaled 59 points, a 14 point or 31% increase. The total points for the third time it was taken was 51, an increase of six points or 13% when comparing it to the baseline of 45 points. There was a decrease of eight points or 13.5% from the second to the third time the critique was taken.

Control and Procedures

This section measured each participant's view of how well the group established and uses procedures, such as schedules and agendas, and if there is agreement of how control is maintained.

The first time the score totaled 44 points for this section. The second time 54 points. That was an increase of 10 points or 22.7% between the first two times the critique was taken. The final time the score totaled 53 points, an increase of nine points or 20.5% from the first time it was taken. There was a decrease of one point or 1.9% when comparing the second and the final critique.

Interpersonal Communications

The interpersonal communication section measured each participant's opinion of how well the team "communicate[s] with one another in an open and honest manner" (Alexander, 1985, p. 103).

The total for interpersonal communications equaled 52 points when taking the critique for the first time. The total point for the second time was 63. That is an increase of 11 points or 21.2%. The final time it was taken the total points came to 61. That is an increase of 9 points or 17.3% from the first time it was taken. When comparing the second and third time the total points decreased by two or 3.2%.

Problem Solving and Decision Making

This section measured the degree to which each participant thought whether the team has "an agreed-on approach to problem solving and decision making that is shared and supported by all members" (Alexander, 1985, p. 103).

The points tallied for the first time the critique was taken totaled 40 points for this section. The second time they totaled 53 points, an increase of 13 points or 32.5%. The total points equaled 52 for the third time the critique was done. When comparing the first and third times the total pointes increased 12 points or 30%. There was a one-point decrease or 1.9% when comparing the total scores of the second and third times.

Experimentation and Creativity

This section measured the degree to which each participant believes the group is capable of stepping outside the box and being creative and open to new thoughts or ways of doing things.

This section totaled 48 points the first time it was taken. The second time the group scored experimentation and creativity a total of 62 points. That is an increase of 14 points or 29.2%. The final time it was completed the total points came to 61, an increase of 13 points or 27.1% when comparing it to the baseline. When comparing the second and third times the critique was taken the total points decreased by one point or 7.1%.

Evaluation

The evaluation section measured the degree of skill level each participant felt the team would accomplish and also evaluated how each individual member was doing and how they could improve on what they were doing.

The group scored a total of 40 points on the evaluation section the first time it was given. The second time they scored 54 points, an increase of 14 points or 35%. The final time it was completed the score on this section totaled 52 points, an increase of 12 points or 30% when compared to the baseline. There was a decrease of two points or 3.7% when comparing the second and third times it was taken.

Table 1 – The Point & Percentage Differences of Critique 1 and Critique 2

Factors	Critique 1	Critique 2	Difference	Percentage Increase
Goals & Objectives	46	56	+ 10	21.7%
Utilization of Resources	41	58	+ 17	41.5%
Trust & Conflict	50	61	+ 11	22%
Leadership	45	59	+ 14	31%
Control & Procedures	44	54	+ 10	22.7%
Interpersonal Communications	52	63	+ 11	21.2%
Problem Solving/Decision Making	40	53	+ 13	32.5%
Experimentation/Creativity	48	62	+ 14	29.2%
Evaluation	40	54	+ 14	35%
Total	406	520	114	

Table 2 – The Point and Percentage Difference of Critique 1 and Critique 3

Factors	Critique 1	Critique 3	Difference	Percentage Increase
Goals & Objectives	46	54	+8	17.4%
Utilization of Resources	41	55	+14	34.1%
Trust & Conflict	50	58	+8	16%
Leadership	45	51	+6	13%
Control & Procedures	44	53	+9	20.5%
Interpersonal Communications	52	61	+9	17.3%
Problem Solving/Decision Making	40	52	+12	30%
Experimentation/Creativity	48	61	+13	27.1%
Evaluation	40	52	+12	30%
Total	406	497	91	

Table 3 – The Point and Percentage Difference of Critique 2 and Critique 3

Factors	Critique 2	Critique 3	Difference	Percentage Decrease
Goals & Objectives	56	54	- 2	3.6%
Utilization of Resources	58	55	- 3	5.2%
Trust & Conflict	61	58	- 3	4.9%
Leadership	59	51	- 8	13.5%
Control & Procedures	54	53	- 1	1.9%
Interpersonal Communications	63	61	- 2	3.2%
Problem Solving/Decision Making	53	52	- 1	1.9%
Experimentation/Creativity	62	61	- 1	7.1%
Evaluation	54	52	- 2	3.7%
Total	520	497	-23	

Summary Statement of the Findings

Results from the critique indicate that all areas evaluated were improved upon following the ropes course and stayed improved one month later. The four areas that demonstrate the greatest improvement immediately following the ropes course were Utilization of Resources (+17), Leadership (+14), Experimentation/Creativity (+14), and Evaluation (+14). When taken one month later the four areas of the critique that proved to most effected by the ropes course were Utilization of Resources (+14), Experimentation/Creativity (+13), Evaluation (+12), and Problem Solving/Decision Making (+12). The section of the critique that showed the largest decline in team effectiveness one month later was Leadership (-8).

Conclusions are drawn, and recommendations are made in the following chapter.

CHAPTER V

Summary, Conclusions, and Recommendations

This chapter contains three sections: a summary of the study, conclusions based on the results of the study, and recommendations related to the study

Summary

The focus of this study was to determine if training done on a ropes course is effectively transferred back to the workplace. This section contains a brief description of the problem, the methods and procedures used in the study, and major findings.

Restatement of the Problem

Two questions that should be asked when using a ropes course for corporate training are: Is the ropes course an effective means for training work teams in the skills they need, and are the skills learned during a ropes course transferred back to the job? Unfortunately, there has been limited quantitative research done on the effectiveness of ropes courses, but even less research has been done on the transferability of the skills learned from participating in such training.

This study included background information of ropes course training and the advantages and disadvantages of such training, especially in the area of transferability. The objective of this study was to determine if ropes courses are an effective tool to be used to improve workplace relationships, trust, communication, problem solving, and productivity; and to determine what level these skills are developed and subsequently used when the participants are back on the job.

Methods and Procedures

The researcher approached a work team from a local technical college to participate in this study. The team was made up of 10 professionals, all of which had a different position in the department and had been with the organization for varying lengths of time. The team concept had just been developed at the college and this team had been recently formed prior to participating in the training.

The instrument used was the *Team Effectiveness Critique,* designed by Mark Alexander. The critique was designed to be used as a tool to evaluate how a team is doing in nine distinct areas: Goals and Objectives, Utilization of Resources, Trust and Conflict Resolution, Leadership, Control and Procedures, Interpersonal Communication, Problem Solving and Decision Making, Experimentation/Creativity, and Evaluation. Each area is measured on a seven-point Likert Scale, with seven being ranked as the most effective team.

The *Team Effectiveness Critique* was given to the work team on three different occasions: prior to participating on the ropes course, immediately following the ropes course, and one month following the ropes course.

Major Findings

The results of this study showed that the ropes course training had benefits to the newly formed team. When comparing the first time the critique was taken prior to the training to the second time it was taken immediately following the training, the participants ranked higher in all areas. They felt that they as a whole were more effective as a team following the training than they were prior to the training. The four areas

where their scores indicated the team showed the most improvement were: Utilizations of Resources (member resources are recognized and utilized), Leadership (full participation in leadership and leadership roles are shared by members), Experimentation/Creativity (the team experiments with different ways of doing things and is creative in its approach), and Evaluation (the group often evaluates its functioning and progress). The total points for these four areas increased by an average of 34%. The total points for all areas of the critique increased by an average of 28.5%.

When evaluating the work team one month later, all sections of the critique decreased by one to three points, except Leadership which decreased by eight points. When comparing the final time the critique was taken to the first time, the total points for all areas of the critique increased by an average of 22.8%. That is an average decrease of 5% from the second time the critique was taken. This overall decrease was to be expected because of the euphoric feeling one experiences after participating on a ropes course. The euphoric feeling naturally will increase the scores of the critique when taken immediately following the ropes course. One month later, however, the euphoric effect has decreased, as did the scores. The first time the critique was taken, the group had collectively accumulated a score of 406 points. Immediately following the ropes course the accumulated score rose 114 points to a total of 520 points. One month later the score decreased slightly by 23 points to a total 497 points. Between the first critique and the last critique the overall increase was 91 points.

The 91 point overall increase demonstrates that the work team felt the ropes course training was beneficial. It also means that one month later they felt they had

retained much of the knowledge learned and were still utilizing the skills gained from that training.

Conclusions

Conclusions are based on the findings and limited to the group studied.

1. Ropes course training improves the utilization of team resources, problem-solving skills, and enhances creativity.
2. Ropes course training enhanced communication and cohesiveness within the group.
3. There is a euphoric effect following ropes course participation.
4. Ropes course training was not forgotten after one month. Benefits of the training where still very apparent.

Overall, this researcher feels there are positive benefits to ropes course training. During a ropes course session the activities or initiatives completed challenge the participants in several ways. Participants are encouraged to be creative, listen to one another, learn each other's strengths and resources, and discover how to solve problems more effectively as a group. They learn the importance of needing each other to complete the task given them. Not only do the team members find that they need the encouragement from their fellow workers, they also need the input and suggestions of the other team members on how to complete the task. They discover that the proverbial "two heads are better than one" is important in completing the ropes course training. It does not matter what level of management a person has – what matters is the background, knowledge, and skill each individual brings to the group. The idea of completing a task, be it a work project or a ropes course challenge, both individually and as a group is

reinforced. Much of the 'I did it' is gone and the "we did it" surfaces. The camaraderie developed among the team members was essential. By learning or improving these skills together as a team, participants begin to trust and communicate with each other better. These skills are encouraged and supported by the facilitator during the training.

For many of these skills to be effectively used back on the job, the work environment and the people in it must be open and conducive to these changes. This is one reason why it is helpful if everyone in the organization, or at least the department, participates in the ropes course training. If only the employees partake and the supervisor does not, the supervisor may not understand nor be supportive of the changes the employees are trying to make to improve their work skills and their work environment. This is also true if only the supervisors in a company obtain the training and not the employees they manage. It is important that this is a cooperative effort.

Recommendations

Recommendations for future action and future research are based on the implications of the findings. The limitations of this study are also identified in this section.

Limitations to this Study

This researcher noted several limitations to the study. These limitations should be acknowledged and considered for future research.

1. The lack of reliability and validity of the critique used.
2. The level of skill of the ropes course facilitator.

3. The lack of control of the workplace environment and job descriptions.
4. The lack of input from the work team prior to the design of the ropes course training.
5. The uniqueness of the training.

Recommendations Related to this Study

Recommendations for this study if it is to be replicated are:

1. Do a thorough needs analysis prior to developing the ropes course training.
2. Determine if a ropes course is the right type of training needed.
3. Discuss the goals for the training with the work team and supervisor before the training begins.
4. Conduct an extensive debriefing session at the end of the ropes course training. The debrief serves as a way to discuss what took place during the training and how to modify the skills learned on the ropes course into work terminology and projects.
5. Conduct an extensive interview one month later with the participants to assist in determining the effects of the rope course training. Was the training useful? Were skills learned transferred? What were the obstacles in the transfer?

Recommendations for Further Study

This study provided the foundation to further research in the area of transferability of ropes course training. But more research is still needed in all areas: the benefits of

ropes course training, the transfer of training, and the transfer of ropes course training. What follows are some suggestions for future research:

1. Continued quantitative and qualitative research in the benefits of ropes course training.
2. Ways to better transfer the training learned on a ropes course.
3. Analyze the specific rope course activities to determine which are the most effective to job improvement.

The information acquired from this study will add to the minimal research done in the area of ropes course training and assist practitioners in utilizing ropes courses more effectively. Hopefully this research will also help companies and organizations determine if and how ropes courses could be beneficial for their work teams. Continuous research in these areas is needed and will broaden the limited resources and knowledge that is currently available.

Appendix A

Dear Team Member:

Thank you for agreeing to participate in my study which is required for the completion of my masters thesis in Training and Development from the University of Wisconsin-Stout. This study is to help determine if team skills learned during the ropes course training are transferred back to the work place. The information learned from the study will not only benefit myself but I hope it will help determine how effective (or non-effective) the ropes course training is for your work team.

Each person will fill out a short critique on his/her perception of their team's effectiveness. This critique will be given out a total of three times: (1) before participating in the ropes course, (2) immediately following the ropes course, and (3) approximately one month later. No name is required on the inventory and all information is confidential.

Please complete the two enclosed forms and bring them the day of the ropes course training. The two forms are:

- A consent form to participate in the study
- *The Team Effectiveness Critique*

Once again, thank you for participating in this study. Your participation in this study is strictly voluntary. If you have any questions or concerns regarding either the study or the ropes course, please do not hesitate to contact me.

Genuinely,

Alisa S. Hoepner

Appendix B

Consent Form

I understand that my participation in this study is strictly voluntary and I may discontinue my participation at any time without prejudices. I understand that the purpose of this study is to investigate the transferability of ropes course training back to the workplace. I further understand that any information about me that is collected during the study will be held in the strictest confidence and will not be part of my permanent record. I understand that at the conclusion of this study all records that identify individual participants will be destroyed.

Signature of Participant: _____ Date: _____

NOTE: Questions or concerns about the research study should be addressed to Alisa Hoepner, the researcher, at 715-878-4457 or Joe Benkowski, the research advisor, at 715-232-5266. Questions about the rights of research subjects can be addressed to Sue Foxwell, Human Protections Administrator, UW-Stout Institutional Review Board for the Protection of Human Subjects in Research, 11 Harvey Hall, UW-Stout, Menomonie, WI 54751, phone 715-232-1126.

Appendix C

THE TEAM EFFECTIVENESS CRITIQUE

Mark Alexander

Instructions: Indicate on the scales that follow your assessment of your team and the way it functions by circling the number on each scale that you feel is most descriptive of your team.

1. Goals and Objectives

There is a lack of commonly understood goals and objectives.						Team members understand and agree on goals and objectives.
1	2	3	4	5	6	7

2. Utilization of Resources

All member resources are not understood and/or utilized.						Member resources are fully recognized and utilized.
1	2	3	4	5	6	7

3. Trust and Conflict

There is little trust among members, and conflict is evident.						There is a high degree of trust among members, and conflict is dealt with openly and worked through.
1	2	3	4	5	6	7

4. Leadership

One person dominates, and leadership roles are not carried out or shared.						There is full participation in leadership; leadership roles are shared by members.
1	2	3	4	5	6	7

5. Control and Procedures

There is little control, and there is lack of procedures to guide team functioning

There are effective procedures to guide team functioning; team members support these procedures and regulate themselves.

1 2 3 4 5 6 7

6. Interpersonal Communications

Communication between members are closed and guarded.

Communication between members are open and participative.

1 2 3 4 5 6 7

7. **Problem Solving/Decision Making**

The team has no agreed-on approaches to problem-solving and decision making

The team has well-established and agreed-on approaches to problem solving and decision making.

1 2 3 4 5 6 7

8. Experimentation/Creativity

The team is rigid and does not experiment with how things are done.

The team experiments with different ways of doing things and is creative in its approach.

1 2 3 4 5 6 7

9. Evaluation

The group never evaluates its functioning or process.

The group often evaluates its functioning and process.

1 2 3 4 5 6 7

Thank You

The 1985 Annual: Developing Human Resources

Appendix D

Ropes Course Schedule

9:00-9:30am	Welcome, objectives, expectations/group goals, warm-ups
9:30-9:45am	Warp Speed
9:45-10:30am	Blindfold Line-Up and Blindfold Square
10:30-11:00am	Electric Fence
11:00-12:00noon	Mohawk Traverse
12:00-12:30pm	Lunch
12:30-1:30pm	Initiative Wall
1:30-2:30pm	Multi-Vine Traverse
2:30-3:30pm	Wild Woosey
3:30-4:30pm	Zip Line
4:30-5:00pm	Debrief
5:00-5:30pm	Closing, Inventory

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