EXPLORING THE EFFECTIVENESS OF LEADERSHIP TRAINING

ON ADULT LEARNERS: AN EVALUATION OF THE

LEADERSHIP AND COMMUNICATIONS WORKSHOP FOR

NATURAL RESOURCE PROFESSIONALS

by

Cheryl R. Westley

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ABSTRACT

The purpose of this quantitative study was to evaluate the effectiveness of a leadership training course offered to natural resource professionals through Virginia Polytechnic Institute and State University. The study explored the ways in which leadership training impacts participants over a period of time. The aim of the study was three fold: 1) provide the course leaders with evaluative information for continuous improvement, 2) identify the effective elements of the leadership training to assist course designers, trainers, and facilitators, and 3) assist future consumers of leadership training in choosing a quality program. Past participants of the USDA Forest Service's Leadership and Communications Workshop, who attended in course years 1988 to 2004, received and completed an electronic survey. Data were analyzed using descriptive and inferential statistics. Results demonstrated that participants found the course instruction effective, the course met their expectations, and the acquired leadership competencies were used in a variety of settings both in and out of the workplace. A significant relationship was found between importance to job performance and perceived skill improvement in the leadership competencies taught in the workshop. The study failed to show any significant difference in mean scores across all sixteen years, suggesting that effectiveness and satisfaction have remained constant over time. More research is needed to further understand the long term effects of training on knowledge, behavior, and understanding of leadership.

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CHAPTER ONE: INTRODUCTION

Background

Leadership training is a vital part of organizational learning opportunities in today's workplace. The 2003 United States Training Industry Study stated that 85% of U.S. companies examined offer leadership training to their employees (Gavin, 2003). Leadership training is popular for a number of reasons. One is the fact that the generation with the largest numbers, the so-called "baby-boomers," are approaching retirement in the next five to ten years; their departure will leave a huge void with the loss of their experience and leadership. Another factor is today's use of teams and teamwork in organizations. As organizations seek to empower their employees, leadership development is crucial to help teams and individuals move forward toward accomplishing the organization's goals. Change is a constant in our world and good leaders help people deal with change. Globalization and competition for resources, both natural and human, create a need for conflict resolution and problem solving skills, which are necessary for successful leadership.

Organizations need to develop leadership from within. According to Tichy (2002), the key ability of winning organizations is creating leaders. Organizations with a network of leaders are the ones most likely to thrive, and employees who are given the opportunity to develop leadership skills are more inclined to take responsibility and feel pride in their work (Gale, 2002).

In seeking information in my position of training specialist for the State of Alaska, Department of Fish and Game, I began to ask the question which initiated this study; "What is the long term effectiveness of leadership training on adult learners?" I was particularly interested in courses which trained natural resource professionals, my target population. My inquiry led me to the Leadership and Communications Workshop offered at Virginia Polytechnic Institute and State University (Virginia Tech) in Blacksburg, Virginia, and Dr. Steve McMullin, one of the course instructors. I asked him the same question about long term effectiveness of leadership training, and he said that he too was interested, and while the course had been offered each year since 1988, there had been no evaluation of the results of the course to date. He then approached me about researching the effectiveness of the course by using his lists of previous participants, who were predominately natural resource professionals employed by the U.S. Forest Service – Watershed, Fish, Wildlife and Air. We both recognized an opportunity to glean insights into the question of the effectiveness of leadership training over time by studying this course.

Statement of the Problem

The need for leadership training is crucial due to an aging workforce which will soon retire in record numbers. Leadership is also crucial in our communities and our world as the demand for sharing resources continues to grow. More and more adults are seeking leadership training for themselves or their employees, yet little is known about the effectiveness of leadership training over a period of time.

In our society time is valuable and most adult learners want to devote their time to something that produces results. When considering what type of leadership training to attend, adults want to know that the training is effective and produces an increase in knowledge and understanding of leadership, and an increase in a person's leadership skills. In the field of human resource development it is important to provide adults with effective leadership training at an affordable cost for the agency, company, or institution which funds the employee's participation. The cost of training leaders is high. Delahoussaye (2001b) reported that the per-participant cost of leadership training to U.S. corporations was approximately $6,000 to $7,500 annually. For large corporations the amount totals millions of dollars (Brown, Eager, & Lawrence, 2005). The time required for leadership development also adds to the cost. Learning more about what is effective in leadership training will benefit both those who attend and those who fund the programs and aid them in spending their time and money on training that has positive outcomes.

<center>Significance of the Problem</center>

While the topic of leadership training has been discussed in business and industry since the early 1960's, there is little research on evaluations of leadership training courses for natural resource professionals. In the sixteen year history of the Leadership and Communications Workshop, no formal evaluation had been conducted to discover the long term effectiveness of the course. The co-leaders will be able to view the results of the study to discover areas of strength and identify areas which need improvement.

Finding positive aspects of leadership training in one career area could provide a model for other professions to emulate.

Additionally few studies have targeted the impacts of leadership training over a long period of time. If topic areas can be identified which have a long lasting effect, then similar topic areas can be used in other leadership courses. The survey itself, which provided past participants with the opportunity to give their own opinions of the leadership course, was designed to discover the effective aspects from the learner's perspective. The results of the learner-reported study can be utilized by leadership training designers, facilitators and instructors, as well as those who seek effective leadership training.

Purpose of Research

The purpose of this research was to examine the effectiveness of leadership training on adult learners over a period of time in order to:

1) provide the leaders of the course with evaluative information for continuous improvement,

2) determine the effective elements of leadership training to assist course designers and trainers, and;

3) assist future participants of leadership training in choosing a quality training program.

Guiding this study is the overall question: What is the long term effectiveness of leadership training on adult learners?

The research questions formulated from the above are:

1. In what important leadership skill and knowledge areas do learners report improvement after attending leadership training?

2. Is leadership training as effective after changes in course leaders?

3. Is leadership training effective over a sixteen-year period?

4. In what ways does leadership training impact adult learners?

5. When does the learner believe he/she begins to benefit from leadership training?

<div style="text-align:center">Statement of Hypotheses</div>

Research Hypothesis I:

There is a linear relationship between the *Importance to Job Performance* and the learner's perception of *Improvement* in the leadership competencies of:

i.   A. Understanding yourself and others (i.e. Myers-Briggs Type Indicator)

ii. B. Understanding your own leadership style

iii. C. Using leadership styles appropriate to different situations

iv. D. Communicating clearly in writing

v.   E. Listening effectively

vi. F. Solving problems

vii. G. Managing meetings effectively

viii. H. Involving the public in decision-making processes (H)

ix. I. Resolving conflicts (I)

x. J. Working effectively with the media (J)

xi. K. Communicating effectively by speaking (K)

xii. L. Motivating others to accomplish a goal (L)

xiii. M. Helping your organization to change (M)

Research Hypothesis II:

There is a difference between the years 1998 and 2002 on the answers to the following survey questions about the Leadership and Communications Workshop:

i. The instruction was effective

ii. The course met my expectations

iii. Improvement in the leadership competency, A. Understanding yourself and others

iv. Improvement in the leadership competency, J. Working effectively with the media

v. Improvement in the leadership competency, M. Helping your organization to change

Research Hypothesis III:

There is a difference across the years from 1988 to 2004 on the following three variables:

i.   The instruction was effective

ii.   The course met my expectations

iii.   Improvement in the leadership competency, E. Listening effectively

Definition of Terms

The following terms were used throughout the study and were defined for more accurate understanding and general acceptance.

Leadership – Leadership is defined in many ways by many different experts. For the purposes of this research, leadership is defined as "the art of mobilizing others to want to struggle for shared aspirations" (Kouzes & Posner, 1995, p. 30). All leadership involves inspiration, vision, competence and interpersonal skills.

Training – Miller (1996) stated in *The ASTD Training & Development Handbook* that training is "the development process involved in passing on to others the knowledge and skills needed to be proficient in a particular area" (p. 4).

Leadership Development – The Center for Creative Leadership Handbook of Leadership Development defines this term as "the expansion of a person's capacity to be effective in leadership roles and processes…[that] enable groups of people to work together in productive and meaningful ways" (McCauley, Moxley, & Van Velsor, 1998, p. 4).

Effectiveness – "producing or designed to produce the desired impression or response" (Boyer, 1991, p. 439).

Adult Learner –This study used the definition from the U. S. National Advisory Council for Adult Education (1980) which defined the adult learner as "an adult who is enrolled in any course of study, whether special or regular, to develop new skills or qualifications, or improve existing skills and qualifications" (p. 3).

Natural Resource Professional – A person with university training and job responsibilities that deal with conservation and management of natural resources such as fisheries, wildlife, forests, plants, range, water and soils (S. McMullin, personal communication, April 15, 2005). They work for state or federal natural resource agencies, other governmental organizations, universities, non-profit natural resource or environmental agencies, and are members of professional society organizations and chapters. A shared value is a "dedication to the conservation and sustainable

management of the Earth's natural resources" (Natural Resources Council of America,

2005).

Survey Respondents or Participants – In this study the terms were used interchangeably

to indicate those who responded to the survey. They are representative of the entire

population who took the Leadership and Communications Workshop from 1988 to 2004.

CHAPTER TWO: LITERATURE REVIEW

Introduction

This chapter reviews literature on the overall concept of effective leadership

training and evaluation in the context of adult learning. Since the topic of leadership

training is very broad, the focus here is on workplace learning rather than university or

higher education settings. Section one of the review addresses the issues of participation,

motivation, and characteristics of adult learners. Section two describes leadership

training and what makes it effective, while section three explores research on evaluating

leadership training programs. The last section explores leadership training for natural

resource professionals.

Adult Learners: Participation, Motivation, and Characteristics

Participation

Who participates in adult learning activities? Researchers have explored this

question over the years with fairly consistent results (Houle, 1963; Knox, 1977; Aslanian

& Brickell, 1980; Cross, K.P., 1981; Brookfield, 1986). Houle (1963) drew general

conclusions from prior studies which described participants as high income, between late

20s to 50 years of age, in a professional, managerial, or technical occupation, and with a

higher formal education. The most significant determinant was the amount of schooling

of the participant. Further research by Knox (1977) verified this conclusion, as he found

that the percentage of adults who participated in continuing education ranged from 6%

for those with some grade school education to 24% for high school graduates, 39% for

college graduates, and 47% for those who have a year or more of graduate study. K. Patricia Cross (1981) also noted that of all the variables affecting educational interest and participation, the amount of formal schooling had more influence than any other. As K. P. Cross explained, "the more education people have, the more interested they will be in further education, the more they will know about available opportunities, and the more they will participate" (p. 55).

The second highest factor determining participation in adult learning was age. Aslanian and Brickell (1980) found that learners are considerably younger than non-learners, with half of all adult learners under the age of 40. Interest and participation was found to decline in the early 30s, continue to decline gradually through the 40s, then dropped precipitously for those 55 and older (Cross, K.P., 1981, p. 57). While Knox (1977) stated that "education is about twice as influential as age" (p. 185), he did address the age-related characteristics of adults who are most likely to participate in educational programs, linking the characteristics to changes in physical condition, societal expectations, and personal values. These characteristics reflect both generational changes of society and age changes of individuals and their developmental processes (pp. 7-10). Development, he stated, "refers to the orderly and sequential changes in characteristics and attitudes that adults experience over time" (p. 9). He also found that adults in all developmental stages engage in learning (p. 173).

In a survey conducted by *Training* magazine and the American Management Association, Delahoussaye (2001a) reported on the age of participants when entering leadership development programs. People younger than 30 years old made up 20% of the participant group, while the majority of participants came from the 30-39 age range (37%) and the 40-49 age range (31%). Only 14% were 50 years or older (p. 2). This seems to have organizational logic, as the goal of leadership development is to train leaders for the future. The 50 year old participants might not have as much time to contribute to the organization as the younger participants, thus fewer attend leadership training.

Race may be a factor, as participation rates seemed to be higher for whites than for blacks. However, a close examination of the statistics showed that middle and upper class blacks participated at the same rates as whites related to their level of formal education (Cross, K.P., 1981; Knox 1977). The real barrier to participation was poverty (Brookfield, 1986).

K.P. Cross (1981) stated, "certain groups are seriously underrepresented in organized learning activities: the elderly, blacks, those who failed to graduate from high school, and those with annual incomes under $10,000 and even those who are looking for work" which documented the "socioeconomic elitism of adult education" (p. 53). Confirming this statement are the results of Aslanian and Brickell's (1980) survey which found that adults with high incomes, adults engaged in professional and technical work,

more often white, and living in urbanized areas, are more likely to participate in learning.

Consistently the 2000 demographic studies described adult learners as "better educated,

younger, have higher incomes, and are most likely to be white and employed full time"

(Caffarella & Merriam, 2000, p. 57). However the demographics of adult learners do not

explain why adults choose to participate in learning.

Motivation

Aslanian and Brickell (1982) stated that "most adults learn because they want to

use the knowledge. The value of the learning lies in its utility" (p.161). They went on to

say that the "major purpose for adult learning is to acquire occupational skills" (p. 163),

because career changes are more likely to require learning and learning opportunities are

greater for career development. Houle (1963) found that the desire to learn is not shared

equally by everyone and his research divided participants into three subgroups. Goal-

oriented participants are those who use education as a means of accomplishing fairly

clear-cut objectives, such as adding new job skills or preparing for employment in a new

occupation. Activity-oriented individuals participate for a variety of reasons that have

little to do with the content, but allow them to be involved with others in a mutual and

beneficial activity, while learning-oriented individuals pursue knowledge for its own

sake. Caffarella and Merriam (2000) credit Boshier for development and use of the

Educational Participation Scale which concluded that factors such as cognitive interest,

professional advancement, and social contact/social stimulation aspects motivated adult

participation.

Theories of participation in adult education include Miller's force-field analysis, Boshier's congruency model, Rubenson's expectancy-valence model, Cookson's ISSTAL model, Darkenwald & Merriam's psychosocial interaction model and K.P. Cross's chair-of-response model (Merriam & Caffarella, 1999). These theories often include job-related reasons and both personal and social factors or events as motivators. Henry and Basile's (1994) decision model mentioned reasons to enroll in learning which included "improving one's work situation, meeting new people, or dealing with major life changes" (p. 64), and these reasons combined with other factors like course attributes, and institutional reputation, which contributed to the decision to take a course. The authors stated that vocational reasons were a particularly strong motivator and that "work-related factors pile up in favor of participation: Typical is a person who has a job-related interest, received a course brochure at work, and has an employer who is willing to pay the course fees" (p. 80). Merriam & Clark (1991) also found that motivation to learn in adulthood was often related to a person's work domain. The National Center for Education Statistics (2004) reported that 40% of adults ages 16 and above participated in adult education for work-related reasons in 2002-03 and business or industry was the most common provider (51%) of work-related adult education. K.P. Cross (1981) also found similar connections to employment and the workplace and stated that "people who have good jobs would like to advance in them" (p. 91). Knox (1977) found that the most common reason for engaging in adult learning projects was "the desire to use or apply the knowledge and skill, and the second most frequent reason was curiosity about a topic (p.

180). Tough (1979) used the words pleasure, self-esteem and confidence which come from gaining knowledge and learning.

Characteristics

Adult learners have their own set of characteristics which they bring to the learning environment. Knowles (1996) stated that adult learners have a wealth of life experience, a need to be self-directed, and are motivated to learn by both intrinsic and extrinsic motivators. Adults want to know why they should learn about a topic, how it adds value to their life, and don't want to be told by someone else that it "would be good for them" (p. 255). He believed that adults are ready to learn when they realize they need to know more in order to perform more effectively, and they learn best when they choose to learn (p. 256). Weinstein (2000), writing in the journal *Training and Development*, said that adult learners want practical knowledge, not theory, have preferred learning styles, are diverse, unique, and curious, and need problem-solving skills so the information can be applied to real-world problems. Adults want to use what they learn soon after they learn it (Knox, 1977).

Building on the characteristics of adult learners, Brookfield (1986) provided principles of effective practice for those who facilitate learning for adults. He said that practitioners must understand that participation in learning is voluntary and only the learner can decide to learn. There must be mutual respect among participants, a collaborative element, and action and reflection activities to engage the learner. The goal

of effective facilitation should be self-directed learners. Knowles (1996) urged trainers to design programs around the tasks, problems, or life situations that are relevant to the learner, so they will learn the content with the intention of using it, thus creating a more effective learning experience. But effectiveness does not lie with the trainer or facilitator alone. Learning effectiveness is also affected by the learners' abilities, creativity and critical thinking skills, as well as their approach to learning activities, and their ability to process information (Knox, 1977).

The review of research demonstrated that adult learners were more likely to have a higher formal education, be 20 to 50 years of age, and have a higher economic level than those who did not participate in formal learning activities. In terms of leadership development training, most participants were between 30 and 50 years of age. The studies showed that motivation for attendance was strongly connected to the workplace in order to develop job skills and to professionally advance one's career. Adult learners wanted learning experiences to be voluntary, useful, and engaging. They identified effective training as that which could be applied to the problems and concerns in their every day life.

<center>Leadership Training and Development</center>

"All organizations must provide for the growth and development of their members and find ways of offering them opportunities for such growth and development. This is the one true mission of all organizations and the principal challenge to today's organizations" (Bennis, 1989, p. 187). There is a demand for continual learning,

according to Apps (1991) because workers constantly need to learn something new.

Learning to lead is also a continual process. Societal pressures have spotlighted it more

recently and leadership training or leadership development, terms which will be used

interchangeable in this review, was provided to 57% of employees in the best learning

organizations in the nation, according to the ASTD 2004 State of the Industry report

(Sugrue & Kim, 2004, p. 21).

When addressing the topic of leadership training and development, one question

often arises: Can leadership be taught? This question is based on the idea that leaders

are born not made. As Kotter (1996) explains, "some people believe the task of

developing many leaders is hopeless. You're either born with it or you're not, they say,

and most people aren't" (p. 165). Family influences do exist, according to Bass (1990),

who says that childhood relationships and factors such as birth order, family size, and

parental treatment may help a person emerge as a leader (p. 807). Yet Maxwell (1998)

asked people at leadership conferences how they became leaders and only 10% of them

said it was due to natural "gifting," while 85% mentioned the influence of another leader

who mentored them (pp. 133-34). Kouzes and Posner (1995) stated: "Contrary to the

myth that only a lucky few can ever decipher the mystery of leadership, our research has

shown us that leadership is an observable, learnable set of practices" (p. 16). The

internationally recognized Center for Creative Leadership assumes that "everyone can

learn and grow in ways that make them more effective in the various leadership roles and

processes they take on" thus expanding their leadership capacities (McCauley et. al.,

1998, p. 5). Leadership training addresses and develops these capacities, and according

to Conover (1996) "leadership development is one of the most sought-after training

experiences" (p. 582). "A common consensus about leadership is emerging.

Experts…[agree], … leadership is usable, diagnosable, and yes, teachable" (Aldrich,

2003, p. 34).

Goals of Leadership Training

Bass (1990) stated that one of the basic goals of early leadership training

programs was to increase the supervisor's human relationship knowledge, skills, and

abilities, in order to solve interaction problems between the supervisor and his or her

subordinates. This human dimension is reflected by Bennis (1989) who believed that

"the process of becoming a leader is much the same as the process of becoming an

integrated human being" (p. 4), and Hitt (1992) said that "the effective leader is a fully

functioning person" (p. xii). With this goal in mind competencies have been identified

and taught which target both people skills like communication, inspiration, motivation,

and team building, and knowledge-based skills, such as reasoning, logical thinking,

creativity, and problem solving (Hitt, 1992; Giber, Carter, & Goldsmith, 2000; Kouzes &

Posner, 1995). Giber et al. (2000) found that the top leadership competencies taught in

leadership programs included individual, team, and organizational aspects such as

building teamwork, understanding the business, conceptual thinking, and emotional

intelligence (p. 442). In many programs leadership development is a process of self-

development" (Kouzes & Posner, 1995, p. 336).

Effectiveness

Millions of dollars are spent each year on leadership training (Brown, et al. 2005; Delahoussaye, 2001b; Giber et al. 2000) for a number of reasons. Organizations forecast a future shortage of workers due to changing workforce demographics, retirement of an older generation, and the demands of the global market economy, which includes intense competition. All factors create the need for leaders, so it is important for leadership training to be effective. There are many ideas about what constitutes effective leadership training and what major elements should be included in training (Bass & Vaughan, 1966; Giber et al. 2000; McCauley et al. 1998; Schmidt, 2003; Van Velsor, 1984).

Warren Bennis stated in the forward to *Linkage Inc.'s Best Practices in Leadership Development Handbook,* edited by Giber et al. (2000), that "the programs that make a difference include some or all of three critical components: formal training, 360-degree feedback, and most important, exposure to senior executives, including mentoring programs" (p. xiii). Furthermore they found that effective programs take a systems approach, which includes training to build skills through on-the-job experience and finding real solutions to real problems. Nextel's Leadership Institute, as described by Schmidt (2003), used a systems approach which included assessment, challenging experiences and formal developmental relationships, such as mentoring, plus reflective practice which included action plans and/or learning journals (p. 1). According to McCauley et al. (1998), the Center for Creative Leadership identified three factors in their leadership development model: assessment, challenge, and support, which added

more impact to the learning experience. McCauley et al. (1998) also stated that "a

training program that encourages lots of practice and helps participants examine mistakes

is usually more developmental than one that provides information but no practice" (p. 6).

The methods and activities for delivering leadership training sessions are similar

to those used in any other adult learning environment. Lectures and discussion, including

films and TV shows can provide information and stimulate thinking, however discussion

of issues in small groups is likely to be more effective, particularly if attitudes must be

changed before the new ways will be accepted and used by the learner (Bass, 1990).

Role playing, simulation, and behavioral modeling are activities which provide the

learner the chance to practice leadership skills. These hands-on, practical, active learning

methods are well received and top rated by the learners as Giber et al. (2000) reported

after a review of leadership development programs in the U.S. Schmidt (2003) believed

it is important to incorporate reflection into the learning process to facilitate the learning.

The action plans and/or learning journals helped the learner examine the underlying

beliefs and assumptions that affected how he/she made sense of the training experience.

Whatever method or activity used in face-to-face training sessions is only one part of

delivering effective leadership training.

Assessment

Learner assessment, a factor in effective programs, is a critical component of

leadership development, according to Schmidt (2003). Assessment is important because

it gives people an understanding of where they are, what their current strengths are, the

level of their current leadership skills, and what skills need to be developed. It identifies

the gaps between current and ideal capacities or performance. (McCauley et al., 1998, p.

9) Writing in 1966, Bass & Vaughan said the same about the need for assessment when

they wrote, "effectiveness in improving leadership performance depends first on

identifying what needs improvement and then on demonstrating or helping the trainee

[learner]…discover how to change his or her perceptions, cognitions, attitudes, and

behavior" (p. 76). Learner assessment information can be gathered in a variety of ways,

both formally or informally. Formal assessment tools include 360-degree feedback,

where the learner him/herself, a supervisor, peers, and all who report directly to the

learner, give their opinion of the current leadership skills and capacities they observe.

Giber et al. (2000) found 360-degree feedback to have the second highest impact on

participants of leadership training programs. Performance evaluations, customer surveys,

and any kind of information-gathering survey are other formal assessments that can be

utilized. Informal assessments are more subjective and may be based on unsolicited

feedback from peers or the supervisor. Good assessment data help people clarify what

needs to be learned, improved, or changed. (McCauley et al., 1998)

Challenge

Kouzes and Posner (1995) have used their research to divide leadership into

practices and commitments. The first practice titled "challenge the process" is broken

into two commitments which are 1) to search out challenging opportunities to change,

grow, innovate, and improve; and 2) experiment, take risks, and learn from the accompanying mistakes (p. 18). This is an excellent way to sum up the challenging situations that leadership training and development programs utilize in improving leadership skills. One of the ways to do this is through on-the-job training described by Bass (1990) as "the performance of regularly assigned duties [which] may be as effective as formalized training programs" (p. 832). He also described other ways to learn from experience, such as new assignments in different areas, coaching, and job rotation. Giber et al.'s (2000) research on the key features of leadership training programs mentions hands-on, action learning with a practical component, which program participants (the learners) report have greater impact than traditional methods of training. Action learning tops the list of the most impactful key features of leadership training programs, a list that includes coaching, cross-functional rotations, and global rotations. These challenging situations get people out of their comfort zone, help them to stretch and grow, and require them to develop new capacities if they are to be successful. McCauley et al. (1998) at The Center for Creative Leadership identified sources of challenge as situations with novelty, difficult goals, conflict, and loss, failures or disappointments. All provided the opportunity to develop and learn by doing, and therefore, were considered the most potent developmentally.

Organizational Support

Van Velsor (1984) wrote that for leadership training to have an impact, "the organization must show that it supports what is to be learned" (p. 1). The support and

involvement of senior management was listed as 100% critical for success by leadership

development experts, as reported by Giber et al. (2000). Senior leaders can be

champions, faculty, and even co-designers of leadership development programs. Formal

developmental relationships, offered through mentoring programs, provide this kind of

support, through advising and providing suggestions for development (Schmidt, 2003).

McCauley et al. (1998) found that receiving "the support of one's current boss is a

particularly important factor when trying to change behaviors or learn new skills" (p. 16).

Bennis (1989) echoed that finding and said that "the organization itself should serve as a

mentor. Its behavior…and its value, both human and managerial, prevail" (p. 186).

Leadership training should also support and benefit the organization by connecting the

training effort to certain defined organizational outcomes and business results. (Zenger,

Ulrich, & Smallwood, 2000) Nextel's Leadership Institute adopted this idea and

Schmidt (2003) wrote that "the greatest lesson that has been learned is linking the

leadership development initiatives to business measures from the very beginning, so that

organizational impact can be studied" (p. 2).

Application

Effectiveness of leadership training depends on the trainee, the trainer, the

composition of the training group, follow-up reinforcement and feedback, and

particularly whether there is congruence between the training and the organizational

environment for which the trainee is being prepared (Bass, 1990). Van Velsor (1984)

added that follow-up activities should include post session debriefing, maintenance of

alumni groups, consultation, continued training as needed, reward for improvement and the application of what has been learned. To address application Caffarella (2002) strongly advocated that concrete and workable transfer-of-learning plans be incorporated into programs. Transfer of learning is defined by Caffarella (2002) as "the effective application by program participants of what they learned as a result of attending an education or training program" (p.204), and involve individual learning plans, coaching, job rotation, journals, and post-training support groups and networking.

The literature on leadership training and development demonstrated that leadership can be taught, but it required more than classroom training. The main emphasis of effective leadership training was to develop people skills, such as communication and motivation, and knowledge skills, including decision-making and problem solving. Most leadership development programs improved self-knowledge and understanding of leadership. Effective leadership training had the elements of learner assessment, challenge, and organizational support, and provided the opportunity for application to the job once training was completed.

Evaluation of Leadership Training

"Evaluation is the capstone—the point at which the organization can gain insight on how to revise and strengthen a program" (Giber et al., 2000, p. xxii). Evaluation of training programs is different from evaluation in traditional classrooms, which often use paper and pencil tests to measure learning objectives. In 1959, Donald Kirkpatrick wrote

a series of articles in *Training and Development,* the professional journal of the American

Society for Training and Development (ASTD), which identified four levels of evaluation

(Kirkpatrick, 1994). These four levels are widely used today in the field of human

resource development and are important for professionals in the fields of education,

training, and development. They are defined and described as:

➢ Level 1 – Reaction.

- Measures the reactions, initial response and/or feelings of those who

  participate in the training, and are often gathered by using "happiness

  sheets" or "smile sheets."

➢ Level 2 – Learning.

- Measures the extent to which participants change attitudes, improve

  knowledge, and/or increase skill as a result of attending training through

  the administration of pre and post tests or questionnaires.

➢ Level 3 – Behavior.

- Measures the extent that change in behavior has occurred as a result of

  participation in training. In the workplace this is connected to job

  performance and how the participants apply learning on the job. These

  data are gathered over time through observation of the individual.

➢ Level 4 – Results.

- Measures what occurred due to program attendance and what effect the

  training had on the organization. This data is gathered by examining

factors such as productivity, quality, costs and profit, or turnover rates.

(Kirkpatrick, 1994, pp. 22-27)

To Kirkpatrick (1994) all four levels are important and provide valuable information. Level 1, which seems to only address customer satisfaction, can help trainers determine how effective a training program is and how it can be improved. Giber et al.'s (2000) study of leadership development programs found that 93% measured reaction, 33% learning, 86% behavior, and 73% results, and noted that "the success of a leadership development program should be observed in how participants use their education and respond to it" (p. 446). Phillips and Stone (2002) added another level to Kirkpatrick's original four. "Level 5 - Return on Investment" (p. 3), measures whether the benefits of training outweighs the costs, and is used more frequently in business and industry.

Rice (1988) reported that critics of leadership training charged that the training was seldom evaluated, was "faddish, and based on faith, not facts" (p. 26). Mintzberg (2004), who helped create a Master's Program for practicing managers that costs $45,000, doesn't believe that the effectiveness of a program can be measured (p. 37). But Bass (1990) stated that "meta-analyses of available evaluation studies have provided evidence that leadership and management training, education, and development are usually effective" (p. 856). An overview of the literature found on the evaluation of leadership training programs provided more insight on effectiveness.

An early study by Andrews (1966) looked at six thousand responses from executives who had attended one of thirty-nine different university programs in management development, a precursor to leadership development. The benefits most frequently mentioned were increased understanding of self and others, greater tolerance for differences in opinion, and heightened awareness of other solutions to problems. Most (85%) saw no relationship between attending the training and their subsequent advances in salary. Blake (1960) who studied a management development program in Norway found that participants reported a greater understanding of other people, and themselves. They also reported more self-confidence in dealing with superiors, peers, and subordinates.

Sogunro (1997) looked at the impact of leadership training over the long term, as the program had been offered over a 19-year period. The quantitative and qualitative research studied 234 adults connected to a leadership training program offered by the Rural Education and Development Association in Alberta, Canada from 1976 to 1994. The researcher used questionnaires and interview guides to get information from the participants, instructors, representatives of the sponsoring organizations from the rural areas, and program administrators. This provided a wider picture of the impacts of the training, as the information was not only self-reported by the participants, but obtained from others who viewed the participants in action—in the classroom or back on the job. The questionnaires were administered at four stages of the process: pre-workshop, end of session, post-workshop, and follow-up. Both the questionnaires and interviews were

administered and conducted between 2 months and 19 years after participation in the

leadership training. Pre and post tests were administered to each session, and post

session evaluations were examined. The study looked at improvement in leadership

knowledge, skills, attitudes and on-the-job behavioral changes. Descriptive and

correlation statistics were used to determine significant differences. The results showed

that participants perceived that the training increased their knowledge, skills, and

attitudes, while significant differences were found in behavior on the job. The main

implications discussed included the need to train all employees in leadership and the need

to create more dynamic leadership training programs in the future. Most importantly

Sogunro strongly recommended more research on leadership training or development

programs to link particular training efforts with changes in participants' leadership

knowledge, skills, and attitudes.

Fredricks (2003) examined how leadership training programs attempt to create,

maintain, foster and utilize networks for and among their participants. The findings

demonstrate that networking is an outcome of leadership training whether it was planned

for or whether it just happened. As a result, networks should be an important component

of course curricula. To gather the data a survey was conducted of all program alumni

from two different well-established leadership programs, a total of 763 people in all.

Both a qualitative and quantitative study was designed which included not only the

survey, but follow-up interviews. A pilot study was used to strengthen the survey in

terms of reliability. The results were different for the two separate programs, one group

agreeing that their leadership program created and maintained networks on various issues, and the other only somewhat agreeing to the same conclusion. However the qualitative findings suggested that networking and leadership enjoy a reciprocal relationship. Overall Fredricks' study suggested that networking be included in leadership program design.

The purpose of Azzam & Riggio's (2003) study was to provide a clearer understanding of the shape and structure of civic leadership programs in California. Seventy-two separate civic leadership program directors were surveyed in a semi-structured telephone interview, while some responded to the questions via email. Descriptive statistics were applied to represent the collected data. The survey provided basic information on the type, number, and status of civic leadership programs, and showed that the programs were relatively new and had a growing number of alumni who wanted to act as instruments of positive change in their communities. While this study only gave very basic information and did not compare programs or evaluate the effectiveness of each program over the long term, it did call attention to the need for more study in this area to better understand and assist in the development of community leadership. An important conclusion of Azzam & Riggio's study was that the potential for the program to be an instrument of change was high and that programs of this kind are likely to grow in many communities.

Frese, Beimel, and Schoenborn (2003) worked with midlevel managers from a German mobile phone company and a German construction company, and designed a program to teach managers to improve their skills to charismatically communicate a vision, which is an important aspect of leadership. They looked at the specific skill of "inspirational communication of a vision" which was presented over a 1.5 day period through an action training program. The research design was very different in that it compared the trained behaviors (inspirational communication) with behaviors that were not trained (public speaking). The actual data were compiled from video tapes of the three role play speeches made by each participant over the one and a half days, and a questionnaire completed by each student after each speech. Raters then used a coding form to determine how often a trained behavior was present in a speech. In addition, telephone interviews were conducted 10 weeks after the training to see if the participants were using what they learned in the workplace. Results of the study showed that the program participants were better able to communicate a vision through inspirational speech, an important leadership skill.

Collins' (2001) research analyzed the outcomes of available leadership development studies from 1984 to 2000 to determine if leadership development programs had changed in focus from individual performance to organizational performance. Fifty-four studies were chosen and analyzed. Each study was evaluated for certain criteria, including the kind of leadership development activities provided and the type of evaluation used to measure results of the training. An assessment model was used to

determine if the results of the leadership training were organizational or group outcomes, or if they were individual learning outcomes. The results showed that 30% of the leadership trainings had organizational or group performance increases, while 70% were focused on increasing the individual's knowledge or expertise. The research also found that formal training continues to be the primary category for leadership development programs and many methods are utilized to evaluate effectiveness. Conclusions of this study state that "leadership development is a young but growing field that we still know very little about" (p. 8), and "completion of more well-designed, thoroughly-reported empirical studies are needed to provide the necessary data to support that leadership development programs truly enhance organizational effectiveness" (p. 9).

Jones, Simonetti, and Vielhaber-Hermon (2001) examined a program designed to help scientists learn to lead others. The program, offered to managers of Parke-Davis's pharmaceutical research and development division, involved provision of a leadership training curriculum and two follow-up sessions. The study concluded that the leadership development program improved self-knowledge and an understanding of leadership behavior. The method used to gather information on the program relied on feedback gathered after the sessions and on self-reports, however no clear explanation was given as to how or when the information was completed or what evaluative questions were asked. The results from the feedback showed that managers who attended the leadership development program reported a clearer idea of the tasks and values of leadership, as well as greater self-confidence, communication, teambuilding and problem-solving skills.

Important to this study is the conclusion that scientists can learn leadership skills and benefit from leadership training in a variety of ways.

Delahoussaye (2001a & 2001b) reported on research conducted by *Training* magazine and the American Management Association on leadership development programs used by U.S. corporations. The study wanted to find how successful leadership development was in preparing people for increased managerial responsibility and how well it did in raising leadership competencies. Survey respondents were asked to rank skills in regard to their importance to the organization, then to rank them as they were currently demonstrated in the organization. The most important were:

- Communication skills

- Managing change

- Strategic visioning

- Developing others

The survey then asked how successful their organization's leadership development program was in addressing the identified skills. Almost half said they were satisfied that their program targeted the required skills and abilities. Interestingly fewer than 10% said that participation in leadership development "highly" effected future employment decisions, yet more than half got salary increases or promotions within two years of attendance in the programs.

Brown, Eager, and Lawrence (2005) worked as a team on evaluating the

leadership development program for first level leaders at British Petroleum (BP). While

the program had been well received and attended, there was no formal plan in place to

measure the success of the program and its value to the company. Prior evaluation

information was based on participant reaction only, not what was recalled and used from

the training experience. The team addressed one of the challenges to adding other levels

of evaluation by saying that "the subject matter of leadership isn't well suited to that

straightforward manner of testing the learner to validate knowledge gained" and

supervisors were often skeptical that leadership training was effective (p. 36). They

decided if they could show that the program had an effect on the behaviors that the

organization believed directly impacted bottom-line performance, then the value of the

training would be demonstrated. The evaluation model they created consisted of first

identifying key behaviors that the leadership training was expected to change, then

evaluating first line leaders on the behaviors. The evaluation was done by getting

feedback from employees via telephone and internet surveys. Meanwhile the first level

leaders were also surveyed and two separate groups were established: those who had

been to training and those who had not and the two groups were compared. Statistically

significant better performance was found on every behavior for the first level leaders who

had attended leadership training as compared to those who had not (p. 41). Results also

showed that those who worked closest to the trained leaders noticed the improvements in

behavior much more than the self-report of behavioral change of that leader. One

conclusion of the evaluation is that it is very important to survey people who come in direct contact with the leaders who have been trained in order to get a full understanding of the effect of the training on the participants. The survey process has become an annual event at BP to measure behavioral change after leadership training.

The review of literature on the evaluation of leadership training provided evidence that leadership training has been evaluated using a variety of methods, and confirmed that leadership training was effective. Only one research article was found which studied effectiveness over a long period of time. The review also confirmed that more work needs to be done in evaluating leadership training.

Leadership Training for Natural Resource Professionals

There is a growing need for leadership training for those in scientific professions and particularly for natural resource professionals in the fisheries and wildlife areas due to the increased retirement rate of current leaders, and the complexity of balancing resource management and public demands (Amidei, 1987; Bass, 1990; Boxrucker, 2003; Guynn & Angus-Guynn, 1999; McMullin & Wolff, 1997; Murphy, Cross, G.H. & Helfrich, 1995). As Bass (1990) stated, "although supervision and leadership become major responsibilities for…scientists as they progress in their organization, their preparation for these responsibilities is left until they have graduated…and are at work" (p. 847). However, there are few leadership programs available for natural resource professionals and fewer still that have been researched or evaluated.

An overview of leadership training for natural resource professionals showed that a small number of programs were available from national or state organizations. One long running program "The Management Program for Natural Resource Managers" had been offered to middle and senior level managers for more than twenty years through Smeal College of Business at Pennsylvania State University. The week-long course focused on both leadership competencies and decision-making skills and was specifically designed for natural resource professionals who needed to balance both scientific, governmental, and public opinion demands. When contacted by telephone on August 11, 2004, for evaluation information on the success of the program, the researcher found there was none available. The program administrators wrote Executive Summaries after each session, but no formal evaluation had been done. The program, however, is no longer available under this name. As of March 20, 2005, it is called "Management Program for Emerging Leaders in Public Service" and has been redesigned to apply to all leaders in the public-service sector. (Smeal College of Business, 2005)

The U.S. Fish and Wildlife Service continues to offer two leadership development opportunities through its National Conservation Training Center in West Virginia. Their *FY 2004 Catalog of Training* described both programs which were limited to U.S. Fish and Wildlife Service personnel only (pp. 99-100). "Stepping Up to Leadership" targeted middle managers and provided the participant with leadership skill assessment, coaching, group exercises, and developmental assignments. The program required attendance at one two-week session, two work assignments over a six month period which included

coaching and a work project, then a final one-week session which included a final

presentation. The second course title was "Advanced Leadership Development Program"

for senior management, defined as U.S. Fish and Wildlife employees at the GS13 and

GS14 levels. This program included three phases focusing on self, group, and the

organization, and utilized a 360-degree feedback tool and assigned coaches for each

participant. The course consisted of one two-week session, a 30-day job swap and a 60-

day developmental work assignment, plus two one-week sessions all in an eleven month

time frame. In response to an email request for evaluation information sent on August

11, 2004, data were received which showed that over a 3-year period, 40 % of course

participants in the middle manager group, and 34% of course participants in the senior

manager group had received promotions (B. Ashforth, personal communication,

September 21, 2004).

Virginia Tech's Department of Fisheries and Wildlife Sciences currently offers a

series of three modules on leadership for natural resource professionals through the

College of Natural Resources and Outreach Program Development. The web page

description (2004) included the content, objectives, and time required for each module.

Module 1 "Foundations of Leadership – Understanding Yourself and Leading Others," is

presented over 2.5 days and could be augmented with a one-day workshop on high-

performance teams. Module 2 "Tools for Decision Making, Public Involvement and

Conflict Resolution" is 2.5 days in length, and Module 3 targets "Communication Skills

for Natural Resource Professionals" in three days of training. The benefit of these

modules is the convenience and cost savings which result from having the training done on-site, rather than at a central location away from the workplace.

The American Fisheries Society (AFS) worked to provide AFS-sponsored leadership training for several years. Boxrucker (2003) wrote about the plans for the AFS Leadership Institute which would "provide a useful course curriculum and a user-friendly delivery system at a cost that agencies/individuals can afford" (p. 18). While the report on leadership training was approved by the AFS Governing Board in August 2003, little work on the issue has transpired since that date (J. Boxrucker, personal communication, April 11, 2005).

On the state level, there are Natural Resources Leadership Institutes in Alaska, Florida, Indiana, Kentucky, Montana, North Carolina, and Virginia. Usually offered through a state university, these programs bring natural resource professionals from government agencies together with private sector and community organizations to build collaboration among diverse groups who care about the environment. (See Appendix A, p. 109 for web addresses) In most programs participants attend a series of multiple-day workshops and several require practicum projects (Alaska, Florida, Kentucky, North Carolina). None of these programs were contacted for evaluation data, as some were very new or just beginning to provide training.

In state fish and wildlife agencies various programs are available for employees. Guynn & Angus-Guynn (1999) described their effort to provide three-day workshops to

help fifteen state agencies begin the development of their own leadership programs (pp. 539-542). As a result, several states now offer leadership training to employees, and do so in a variety of ways. Texas Parks and Wildlife Department designed an extensive program based on The Center for Creative Leadership's assessment tools and basic training, plus mentoring and a stretch work assignment. While costing the agency approximately $5,000 per participant, the program was considered to be effective (J. Lopp, personal communication, June 5, 2002). Arizona's Game and Fish uses Franklin Covey's training on The 7 Habits of Highly Effective People and The 4 Roles of Leadership (J. Sunderlund, personal communication, September 30, 2002). Wyoming does the same for the employees of the state's Game and Fish Department (W. Gasson, personal communication, October 17, 2002).

In Alaska the Division of Sport Fish, in the Alaska Department of Fish and Game, identified the problem in the following introduction to their leadership development program:

Rapid growth during the early 1980s strained the bridge across which organizational knowledge, values and culture are shared within the Division from one generation to the next. Increases in public demand on fish resources led to heightened user conflicts, increased public involvement in management decisions, and large program budgets, all of which increased demands on the Department. Recently the Department experienced a loss of a generation of leaders to

retirement, to other agencies … [leaving] a greater number of vacancies with a dearth of applicants for positions at all levels. We expect these problems, if not addressed, to continue as the Department competes with higher wages and lower workloads offered by other agencies. (Brookover, Burch, Clark, et.al., 2003, p. 1)

To address the issues of recruitment, training, and retention, the Division of Sport Fish Leadership Development Program began in 2004. The program core consists of training (Franklin Covey's The 7 Habits of Highly Effective People is the course content), on-the-job experiences through stretch work assignments, and facilitated mentoring. The program is now in the second year of operation and no evaluation has been done to date (S. Timmons, personal communication, April 12, 2005).

The program most relevant to this research is the Leadership and Communications Workshop offered to United States Department of Agriculture (USDA) Forest Service – Watershed, Fish, Wildlife, and Air employees through the Continuing Education Program for Natural Resource Professionals. The workshop is in the broad category titled "Program Leadership," and eligible candidates include wildlife, fisheries, botany, hydrology, recreation, timber and other resource professionals with three year's experience in resource management. (www.fs.fed.us/biology/education) Resource specialists from state, tribal, and other federal agencies are also invited to attend. The eight-day workshop is held each year in Blacksburg, Virginia, at the Virginia Polytechnic Institute and State University (Virginia Tech) and has been offered since 1988. The course was designed to enhance leadership skills for participants in any agency position

(S. McMullin, personal communication, March 28, 2005). The USDA Forest Service Continuing Education Program Leader stated that the agency goal was to get biologists into leadership roles and become leaders wherever they worked in the agency (S. Witt, personal communication, April 2, 2005). One course leader designed and facilitated the program until 2001, when a second leader was added to provide a team teaching approach (S. McMullin, personal communication, December 21, 2004). Other speakers and experts are brought in to share their specific knowledge and expertise on certain topics. Tuition for the 2005 class was $2400, including room and board, for the eight days of training. The objectives of the workshop include the improvement of:

- interpersonal and communications skills,

- group process skills to deal with natural resource issues and problems,

- problem-solving and decision-making skills and abilities

- self-management skills and sensitivity to one's own values and values of others

- leadership skills to increase public involvement in natural resource management

- agency and personal image by working more effectively with the media. (Cross, G.H., & McMullin, 2002).

Level 1 evaluation is received from participants at the end of each year's workshop, but an overall long-term course evaluation, the subject of this research, had not been completed until now.

Recognizing the need to better prepare natural resource professionals for leadership roles, McMullin and Wolff (1997) stated that: "If we can provide promising

leaders with the mentoring and support they need to succeed as leaders, and if we begin to address the need for leadership… more seriously, we may see the best and brightest in the profession accept the challenge of leadership more often" (p. 25).

Summary

The preceding four sections of this chapter described several aspects of the research problem, which was to discover whether leadership training was effective for adult learners over a long period of time. Literature was reviewed on adult learner participation, motivation, and characteristics, leadership training and development as provided by organizations, past evaluation of leadership training, and leadership training for natural resource professionals.

Research conclusions demonstrated that adult learners wanted training to be useful and applicable to the problems faced in the workplace and in life. Effective leadership training and development programs improved self-knowledge and a participant's understanding of leadership. This resulted from training that emphasized the development of people skills, such as interpersonal communication, and knowledge skills, such as problem solving. Leadership training programs have been evaluated using a variety of methods, but little has been done to evaluate leadership programs for natural resource professionals. With limited studies available on evaluating the effectiveness of leadership training over a long period of time, it became apparent that more research is needed in this area.

Above all the research verified that leadership training works. This is an important message to communicate to those who choose to attend leadership training. In the current environment in which individuals have too little time to do too many tasks, participants need to know that the time they devote to leadership training is well spent.

Leadership is an important and timely topic which requires adult educators to get involved, not only with the provision of leadership development and training in a variety of workplace settings, but also with the effective evaluation of the programs over time.

CHAPTER THREE: METHOD

This chapter describes the subjects of the study, the instrument used to gather

data, the procedures, the design and analysis of the data, including detailed information

on the research hypotheses, and any known limitations of the research study.

Subjects

The subjects of this study were those who attended the Leadership and

Communications Workshop offered to United States Department of Agriculture (USDA)

Forest Service employees from 1988 to 2004. Dr. Steve McMullin, a course leader and

associate professor at Virginia Tech, worked with a college intern in the summer of 2003

who updated contact information and current email addresses for as many of the past

participants as possible. Dr. McMullin then sent the participant database to this

researcher in August 2003 and wrote a letter of support for the study. The participants

were natural resource professionals, most of whom were employees of the USDA Forest

Service from all regions of the United States. However resource specialists from state,

tribal, and other federal agencies could also attend the workshop and were part of the

sample population. In February 2004, the twenty-three participants of that year's

workshop were added to the list to use in a pilot study. To ensure a significant sample

size, all participants with email addresses, 363 out of 480, were included in the electronic

survey. Those without email addresses were not included in the study. A total of 386

electronic invitations were sent to ask participants to complete a survey of the course.

The subject line of the email was "LAC workshop past participants survey: Heads up."

The second email was an electronic letter from the researcher and an invitation to participate. The subject line of that email was "Leadership and Communication Workshop Survey." The researcher letter also contained a link to the web address of the survey hosted on a server at the Alaska Department of Fish and Game. Text of both messages is reproduced in Appendix B, p. 111.

<div align="center">Instrument</div>

A researcher-designed survey was the instrument used to gather information on the research questions (Appendix B, p. 111). The survey was a self-report instrument designed to obtain the data desired for analysis and was developed from several sources: the generated research questions, the descriptive brochures of the course itself, the daily outline and evaluation forms utilized for the course, and the leadership competencies identified by Dr. Jerry Cross, one of the course instructors. The USDA Forest Service recommended the survey be short and easy to complete in order to minimize the time impact on busy subjects and to encourage participation and completion.

Numerous drafts of the survey were created and reviewed by all members of the thesis committee, a research consultant, and the Continuing Education National Program Leader for the U.S.D.A. Forest Service. The draft was then given to the survey expert at the Alaska Department of Fish and Game, who contributed ideas to facilitate consistency of the responses. He also reviewed each survey question to understand how the data could best be set up for computer collection and analysis. Revisions were made based on

the recommendations of all the experts, yet the final product was determined by the researcher who takes full responsibility for the tool.

The survey contained sixteen questions requiring a variety of responses. The first question asked for the respondent's opinion on six different statements describing the overall course. A Likert scale, which provided an interval scale of measure, was utilized to allow respondents to choose how strongly they agreed or disagreed with each statement. Each response was then converted into a score on a rating scale of one to five with one, indicating the most agreement to the statement and five indicating the least agreement. This format was used continually throughout the survey in order to facilitate easy responses, in keeping with the advice of Salant & Dillman (1994) for "consistency, consistency, and consistency" (p. 117).

The next three questions asked participants why they took the course, how it affected them, and how they used the workshop's information and skills. Each question was partially close-ended. Partially close-ended questions provide a list of answers to choose from and a place for the respondent to write in his or her own answer (Salant & Dillman, 1994). Participants were asked to rate their response to each answer on a Likert scale and the responses were converted to numbers between one and five with a lower number indicating a more positive answer to the question.

Questions 5 and 6 addressed the course competencies which were taught. There were thirteen competency areas listed in each question. In question 5 respondents were

asked to evaluate how important each competency was to their job performance, while question 6 asked them to rate how they thought they improved in each competency. Again a Likert scale was utilized with the choices in question 5 ranging from "Very Important" to "Very Unimportant," and the choices in question 6 ranging from "Greatly Improved" to "No Improvement." The respondents chose the best answer, then the textual answer was converted into a numerical score with one corresponding to a more positive response to the question.

The next three questions (#7-9) explored the issue of when competency improvement began, appropriate career timing for attending the course, and whether the participant would recommend the course to others. Question 7 was partially close-ended, as it provided a blank for a written response, while questions 8 and 9 were close-ended only.

The last set of questions (#10-15) requested demographic information on age (Question 10), sex (Question 11), race/ethnicity (Question 12), job position both currently and during the time of course attendance (Question 13 and 14), and education level (Question 15). Questions 13 and 14 asked for both office level and grade of the subject. Only the grade results were analyzed for this study. The office level information is reproduced in Appendix C, p. 121 The final question (#16) was open-ended and asked for any other comments a respondent wished to provide about the course. The responses were not analyzed, but were included in Appendix D, p. 131.

Procedure

The survey instrument met the requirement in 45 CFR 46, '46.101(b) as being

exempt from full Institutional Review Board review and was initially approved on April

26, 2004 with modifications approved on May 13, 2004. Utilizing the assistance of

several experts in the Division of Sport Fish of the Alaska Department of Fish and Game,

the survey was loaded into Easy Survey Pro, a software program specially designed to

electronically distribute surveys, and hosted on a computer server operated by the

department in Anchorage. This effort was approved by the Director of the Division of

Sport Fish in the Department of Fish and Game.

Distribution of the survey was done in two phases: to a pilot group, then to the

main group of former workshop participants who took the training from 1988 to 2003.

The pilot group were those who had attended the most recent workshop in February

2004. These 23 participants were first sent an introductory email announcement as

notification of the survey and encouragement to participate. This was sent by Forest

Service's Continuing Education National Program Leader on May 14, 2004. Four days

later on May 18, 2004 the official cover letter and information on how to complete the

survey was emailed to the pilot group. The cover letter displayed the link to the survey's

web page, as well as an introduction to the research project and the researcher.

Respondents were assured that their participation was voluntary and personal responses

would not be disclosed. Completion of the survey implied their consent to participate in

the research. Survey respondents were assigned an encrypted identifier by the computer

program to track who had responded, prevent duplicate responses, and keep personal responses confidential. Only the researcher and the survey expert had access to the identifiers. On May 27, 2004, a follow-up email message was sent to all who had not responded in the pilot group.

The 12 responses of the pilot group were reviewed to reveal any response pattern difficulties or software problems. The questions appeared to be consistently answered and no holes or gaps were discovered that might indicate confusion or lack of clarity. However, several problems appeared on the collection database written to hold the survey responses, and those errors were corrected.

On May 26, 2004 an introductory email was issued by the Forest Service to 363 people in the main group of the study as notification of the survey and encouragement to participate. The cover letter was sent via email to this group on May 27, 2004 which contained information on how to complete the survey, an introduction to the research project and the researcher and assurance that participation was voluntary and confidential. On June 10, 2004, a follow-up email was sent to all non-respondents in the main group.

Reliability of the Method

There have been no reliability co-efficients reported on this survey in the literature.

Design and Analysis

The survey responses were collected by the survey software and transferred into two database files, one in MS Excel and one in Statistical Package for Social Sciences (SPSS). The data were analyzed using descriptive and inferential statistics. For the demographic questions, frequency counts were conducted. A correlation analysis (Pearson's) was used to determine a relationship between the importance to job performance of the leadership competency and the learner's perception of improvement in the leadership competency (Questions 5 and 6). A prediction was made that the competencies perceived as important to job performance would be the ones which resulted in more perceived improvement. An independent t-test for significance of difference was performed to analyze improvement scores between two years, 1998, when the course had a sole leader, and 2002, a year after a co-leader was added to see what effect that had on learner's perception of the course. A one-way analysis of variance (ANOVA) was used to compare the means on three selected variables between all attendance years examined (1988 to 2004) to determine if a difference existed between the scores of those who took the course years ago and those who took the course more recently. It was predicted that scores from those who took the course in more recent years would have higher means. An alpha level of .05 was used in all statistical tests. The research hypotheses were tried against the collected data and all calculations done by the researcher.

Research Hypothesis I:

There is a linear relationship (*r*) between the *Importance to Job Performance* and

the learner's perception of *Improvement in* the following leadership competencies:

Importance to Job Performance	*Improvement in*

i. A. Understanding yourself and others, i.e. Myers-Briggs Type Indicator (x)

i. A. Understanding yourself and others, i.e. Myers-Briggs Type Indicator (y)

ii. B. Understanding your own leadership style (x)

ii. B. Understanding your own leadership style (y)

iii. C. Using leadership styles appropriate to different situations (x)

iii. C. Using leadership styles appropriate to different situations (y)

iv. D. Communicating clearly in writing (x)

iv. D. Communicating clearly in writing (y)

v. E. Listening effectively (x)

v. E. Listening effectively (y)

vi. F. Solving problems (x)

vi. F. Solving problems (y)

vii. G. Managing meetings effectively (x)

vii. G. Managing meetings effectively (y)

viii. H. Involving the public in decision-making processes (x)

viii. H. Involving the public in decision-making processes (y)

ix. I. Resolving conflicts (x)

ix. I. Resolving conflicts (y)

x. J. Working effectively with the media (x)

x. J. Working effectively with the media (y)

xi. K. Communicating effectively by speaking (x)

xi. K. Communicating effectively by speaking (y)

Importance to Job Performance	***Improvement in***
xii. L. Motivating others to accomplish a goal (x)	xii. L. Motivating others to accomplish a goal (y)
xiii. M. Helping your organization to change (x)	xiii. M. Helping your organization to change (y)

Statistical Hypotheses:

H_0: rxy = 0 (null hypothesis)

H_1: rxy ≠ 0 (alternative hypothesis)

Statistical Test: Pearson's Product Moment Correlation Coefficient (2-tailed). The correlation coefficient expresses quantitatively the magnitude and direction of the relationship between two variables. The correlation coefficient does not compare mean scores, but "provides an index of the degree or the extent to which two variables are related" (Cohen & Holliday, 1979, p. 90). For this study the two variables are defined as x and y as seen in the lists above. When relationships between variables can best be described by a straight line, they are referred to as linear relationships and are symbolized by the small letter, *r* (Cohen & Holliday, 1979, p. 94).

Level of Significance: α = .05   or   α= .01

Significance levels were α = .05 or α= .01 with 202 degrees of freedom (df = N-2 = 204-2 = 202

Decision Rule on Hypothesis I:

Reject the null (H_0) if r table critical value is equal to or greater than

$r_{critical} = 0.138$ (.05) or 0.181 (.01)

Research Hypothesis II:

There is a difference between the years 1998 and 2002 on the answers to the

following survey questions about the Leadership and Communications Workshop:

    i.   The instruction was effective

    ii.   The course met my expectations

    iii.   Improvement in the leadership competency A. Understanding yourself and

         others

    iv.   Improvement in the leadership competency J. Working effectively with

         the media

    v.   Improvement in the leadership competency M. Helping your organization

         to change

Statistical Hypotheses:

H_0: $\overline{D}_{obs} = 0$ (null hypothesis)

H_1: $\overline{D}_{obs} \neq 0$ (alternative hypothesis)

Statistical Test: An independent *t*-test. The *t* test for independent samples is used to

compare the mean scores for two separate groups (Gay & Airasian, 2003, p. 460).

Significance Levels: $\alpha = .05$ or $\alpha = .01$

Decision Rule on Hypothesis II:

Reject the null (H$_0$) if t with 30 df (16 + 16 – 2 = 30)

$t_{critical}$ = 2.042 (.05) or 2.750 (.01)

Research Hypothesis III:

There is a difference across the years from 1988 to 2004 on the following three

variables:

       i.   The instruction was effective

      ii.   The course met my expectations

     iii.   Improvement in leadership competency E. Listening Effectively

Statistical Hypotheses:

H$_0$: $\overline{D}_{obs}$ = 0 (null hypothesis)

H$_1$: $\overline{D}_{obs}$ ≠ 0 (alternative hypothesis)

Statistical Test: A one-way analysis of variance (ANOVA). A one-way analysis of

variance is used to determine whether there is a significant difference between two or

more means. It is similar to a *t*-test but compares more than two separate groups. The

variance of scores can be divided into variance between groups and variance within

groups (Gay & Airasian, 2003, p. 467).

Significance Levels: α = .05 or α= .01

Decision Rule on Hypothesis III:

Reject the null (H$_0$) if F$_{obs}$ is ≥ F$_{critical}$

Numerator df = K-1 = 17 – 1 = 16

Denominator df $= N - K = 201 - 16 = 184$

$F_{critical} = 1.75$ (.05) or 2.19 (.01)

Limitations

This study is dependent on a self-report instrument and therefore contains only the observations of the participant him/herself. It does not include any observations of the participant behavior from co-workers or supervisors. The study was voluntary only, and not required by the employer, nor were there any tangible incentives for responding. Therefore only those who wished to respond for whatever reason did so. The timing of this study may have impacted the overall response rate, as some participants may not have had computer access by the time the survey was distributed in May 2004. The Forest Service stated that the survey should be distributed by the month of June, which happened, but some employees were called to their field work earlier than anticipated in 2004. The lack of email addresses for participants in certain course years may account for an unequal number of responses from each course year's group. It is not known how many email messages were not received due to SPAM filters which would not allow delivery of messages from an unknown address. Those without email addresses were not mailed a paper survey and therefore did not have a chance to participate.

CHAPTER FOUR: RESULTS

Electronic mail messages were sent to a total of 363 former participants of the

Leadership and Communications Workshop who took the course in the years 1988 to

2004. After reading the information describing the survey, 194 subjects responded to the

online questions, resulting in an overall response rate of 53%. The 206 total consisted of

12 responses from the 2004 pilot group and 194 responses from the larger group. All

answers were analyzed together, as no questions were changed from the pilot study.

Only one message was returned due to an undeliverable address. Some of the questions

were not fully answered by all respondents, consequently sample size varied from 200 to

206.

Section 1: Hypotheses Testing

Questions Five and Six on the survey presented a list of thirteen leadership

competencies taught in the Leadership and Communications Workshop and asked the

respondents to evaluate two aspects: the importance of each leadership competency to

their job performance, and how much improvement they felt they acquired as a result of

the workshop. A Likert scale was utilized with the values ranked "1" for highest

importance or improvement to "5" for lowest importance or no improvement. This scale

is different than those used in many other surveys which consider "5" as the highest

value. However, many strive to be #1 and consider that the top or best, as does this

survey's scale.

Table 1 shows the actual mean scores for each of the thirteen leadership competencies in the survey.

Table 1

Mean Scores for Thirteen Leadership Competencies

Leadership Competency	Importance to Job Performance	Improvement in Competency
A. Understanding self and others (i.e., Myers-Briggs Type Indicator)	1.34	1.61
B. Understanding your own leadership style	1.33	1.73
C. Using leadership styles appropriate to different situations	1.41	2.01
D. Communicating clearly in writing	1.39	2.53
E. Listening effectively	1.21	2.01
F. Solving Problems	1.39	2.23
G. Managing meetings effectively	1.58	2.39
H. Involving the public in decision-making processes	1.87	2.72
I. Resolving conflicts	1.49	2.25
J. Working effectively with the media	2.37	2.74
K. Communicating effectively by speaking	1.47	2.31
L. Motivating others to accomplish a goal	1.57	2.24
M. Helping your organization to change	2.02	2.74

Scale: 1 = highest importance or improvement, 5 = lowest importance or no improvement

The leadership competency with the highest mean score for importance to job performance was "Listening effectively" (1.21), followed by "Understanding your own leadership style" (1.33) and "Understanding yourself and others" (1.34) On the improvement side "Understanding yourself and others" was the competency with the highest improvement (1.61) and "Understanding your own leadership style" was the second highest (1.73) Both competencies showed ratings of high importance to job performance and high improvement after the workshop. The learner's perceived improvement after the workshop in "Listening effectively" was in the somewhat improved area (2.01) The leadership competencies with the lowest mean scores for learner's perception of improvement after the workshop were in "Working effectively with the media" (2.74) and "Helping your organization to change" (2.74), followed closely by "Involving the public in decision-making processes" (2.72). Table 2 displays the order of each leadership competency's importance to job performance as perceived by the learner. Table 3 displays the order of each leadership competency's improvement after the course as perceived by the learner.

Table 2

Leadership Competencies in Ranked Order for Importance to Job Performance.

Leadership Competency	Importance to Job Performance
E. Listening effectively	1.21

Leadership Competency	Importance to Job Performance
B. Understanding your own leadership style	1.33
A. Understanding self and others	1.34
D. Communicating clearly in writing	1.39
F. Solving Problems	1.39
C. Using leadership styles appropriate to different situations	1.41
K. Communicating effectively by speaking	1.47
I. Resolving conflicts	1.49
L. Motivating others to accomplish a goal	1.57
G. Managing meetings effectively	1.58
H. Involving the public in decision-making processes	1.87
M. Helping your organization to change	2.02
J. Working effectively with the media	2.37

Table 3

Leadership Competencies in Ranked Order for Learner Perceived Improvement.

Leadership Competency	Improvement in Competency
A. Understanding self and others (i.e., Myers-Briggs Type Indicator)	1.61

Leadership Competency	Improvement in Competency
B. Understanding your own leadership style	1.73
C. Using leadership styles appropriate to different situations	2.01
E. Listening effectively	2.01
F. Solving Problems	2.23
L. Motivating others to accomplish a goal	2.24
I. Resolving conflicts	2.25
K. Communicating effectively by speaking	2.31
G. Managing meetings effectively	2.39
D. Communicating clearly in writing	2.53
H. Involving the public in decision-making processes	2.72
J. Working effectively with the media	2.74
M. Helping your organization to change	2.74

Research Hypothesis I

A Pearson's Product Moment Correlation Coefficient (2-tailed) was used to determine significance in relationship between variables on importance of thirteen leadership competencies to job performance and the learners' perceptions of improvement in thirteen leadership competencies.

Results:

i.   A. Understanding yourself and others (i.e., Myers-Briggs Type Indicator)

r_{obs} (.467) > 0.181 (.01) $p < .01$

Reject the null hypothesis (H_0)

Results Statement: There is a significant relationship between the importance to job performance of understanding yourself and others and the learner's perception of his or her improvement in this competency.

ii. B. Understanding your own leadership style

r_{obs} (.474) > 0.181 (.01) $p < .01$

Reject the null hypothesis (H_0)

Results Statement: There is a significant relationship between the importance to job performance of understanding your own leadership style and the learner's perception of his or her improvement in this competency.

iii. C. Using leadership styles appropriate to different situations

r_{obs} (.532) > 0.181 (.01) $p < .01$

Reject the null hypothesis (H_0)

Results Statement: There is a significant relationship between the importance to

job performance of using leadership styles appropriate to different situations and

the learner's perception of their improvement in this competency.

iv.   D. Communicating clearly in writing

r_{obs} (.265) > 0.181 (.01) $p < .01$

Reject the null hypothesis (H_0)

Results Statement: There is a significant relationship between the importance

to job performance of communicating clearly in writing and the learner's

perception of their improvement in this competency.

v.   E. Listening effectively

r_{obs} (.157) > 0.138 (.05) $p < .05$

Reject the null hypothesis (H_0)

Results Statement: There is a significant relationship between the importance to

job performance of listening effectively and the learner's perception of their

improvement in this competency.

vi.   F. Solving problems

r_{obs} (.231) > 0.181 (.01) $p < .01$

Reject the null hypothesis (H_0)

Results Statement: There is a significant relationship between the importance to job performance of solving problems and the learner's perception of their improvement in this competency.

vii. G. Managing meetings effectively

r_{obs} (.366) > 0.181 (.01) $p < .01$

Reject the null hypothesis (H_0)

Results Statement: There is a significant relationship between the importance to job performance of managing meetings effectively and the learner's perception of their improvement in this competency.

viii. H. Involving the public in decision-making processes

r_{obs} (.339) > 0.181 (.01) $p < .01$

Reject the null hypothesis (H_0)

Results Statement: There is a significant relationship between the importance to job performance of involving the public in decision-making processes and the learner's perception of their improvement in this competency.

ix. I. Resolving conflicts

r_{obs} (.420) > 0.181(.01) $p < .01$

Reject the null hypothesis (H_0)

Results Statement: There is a significant relationship between the importance to job performance of resolving conflicts and the learner's perception of their improvement in this competency.

x.   J. Working effectively with the media

r_{obs} (.529) > 0.181 (.01) $p < .01$

Reject the null hypothesis (H_0)

Results Statement: There is a significant relationship between the importance to job performance of working effectively with the media and the learner's perception of their improvement in this competency.

xi.   K. Communicating effectively by speaking

r_{obs} (.419) > 0.181 (.01) $p < .01$

Reject the null hypothesis (H_0)

Results Statement: There is a significant relationship between the importance to job performance of communicating effectively by speaking and the learner's perception of their improvement in this competency.

xii.   L. Motivating others to accomplish a goal

r_{obs} (.473) > 0.181(.01) $p < .01$

Reject the null hypothesis (H_0)

Results Statement: There is a significant relationship between the importance to job performance of motivating others to accomplish a goal and the learner's perception of their improvement in this competency.

xiii.   M. Helping your organization to change

r_{obs} (.506) > 0.181 (.01)   p < .01

Reject the null hypothesis (H_0)

Results Statement: There is a significant relationship between the importance to job performance of helping your organization to change and the learner's perception of their improvement in this competency.

Research Hypothesis II

A causal comparative *t*-test was used to discover if there is any significant difference in the mean scores for instructional effectiveness, learner expectations of the course, and improvement in three leadership competencies. The leadership competencies chosen were "Understanding yourself and others," "Working effectively with the media," and "Helping your organization to change." These were chosen as they represent both the highest mean score for improvement (Understanding yourself and others with a mean of 1.61) as well as the lowest mean score for improvement (Working effectively with the media, and Helping your organization to change – both with means of 2.74). The years of 1998 and 2002 were chosen as comparison groups because they represent a change in course leaders. In 2001 a new co-leader of instruction was added to the course.

Prior years had a sole leader/facilitator for the workshop. Allowing one year as a "beta test" year, the researcher chose 2002 as a good comparison group and then chose an earlier year that had the same number of respondents (N = 16), which was 1998. Other comparisons, including pooling of years, were not analyzed.

Results:

    i.   For the statement "The instruction was effective"

        $t_{obs} = 1.253$ $p > .05$

        Do not reject the null hypothesis (H_0).

        Results Statement: There is no significant difference between the mean scores for course years 1998 and 2002 on the statement "The instruction was effective."

    ii.   For the statement "The course met my expectations"

        $t_{obs} = .488$ $p > .05$

        Do not reject the null hypothesis (H_0).

        Results Statement: There is no significant difference between the mean scores for course years 1998 and 2002 on the statement "The course met my expectations."

    iii.   For improvement in the leadership competency of "Understanding yourself and others"

        $t_{obs} = .739$ $p > .05$

        Do not reject the null hypothesis (H_0).

Results Statement: There is no significant difference between the mean scores for course years 1998 and 2002 for improvement in the leadership competency of "Understanding yourself and others."

iv. For improvement in the leadership competency of "Working effectively with the media"

$t_{obs} = .368$ $p > .05$

Do not reject the null hypothesis (H_0).

Results Statement: There is no significant difference between the mean scores for course years 1998 and 2002 for improvement in the leadership competency of "Working effectively with the media."

v. For improvement in the leadership competency of "Helping your organization to change"

$t_{obs} = -.449$ $p > .05$

Do not reject the null hypothesis (H_0).

Results Statement: There is no significant difference between the mean scores for course years 1998 and 2002 for improvement in the leadership competency of "Helping your organization to change."

Research Hypothesis III

In order to discover whether leadership training is effective over the long term, a one-way analysis of variance was used to determine if there was a significant difference between the means for all the attendance years of the course (1988 to 2004) and if there

was more variability between groups than within groups. The mean scores were

compared for the statements "The instruction was effective," "The course met my

expectations," and improvement in the leadership competency of "E. Listening

effectively." This one competency was analyzed because it had the highest mean score

for importance to job performance.

Results:

    i.   Mean scores for the responses to the statement "The instruction was

          effective" did not differ significantly between years.

          $F = 1.310$ $p > .05$

          Do not reject the null hypothesis (H_0).

          Results Statement: There is no significant difference across the years of

          course attendance (1988 to 2004) for the mean scores of the responses to

          the statement "The instruction was effective."

    ii.   Mean scores for the responses to the statement "The course met my

          expectations" did not differ significantly between the years.

          $F = .689$ $p > .05$

          Do not reject the null hypothesis (H_0).

          Results Statement: There is no significant difference across the years of

          course attendance (1988 to 2004) for the mean scores of the responses to

          the statement "The course met my expectations."

iii.   Mean scores for the level of improvement in the leadership competency of

"Listening effectively" did not differ significantly between the years.

$F = 1.490$ $p > .05$

Do not reject the null hypothesis (H_0).

Results Statement: There is no significant difference across the years of

course attendance (1988 to 2004) for the mean scores for the level of

improvement in the leadership competency of "Listening effectively."

Section 2: Descriptive Study

Demographics

Sixty-two percent (62%) of the survey respondents were male and 37% were

female. One percent of the respondents did not identify their sex. The survey asked for

the current age of each person so that the researcher could calculate his/her age when

each attended the workshop. The results show that 9 respondents attended the workshop

while in their 20s, 99 attended the workshop when they were 30-39 years old, 78 attended

in the 40-49 age group, and 14 respondents attended in the 50-59 age group. When

looking at individual ages, age 38 had the highest number of respondents with 16 who

attended at that age. A chart showing the age of the participants when each attended the

workshop is found in Figure 1.
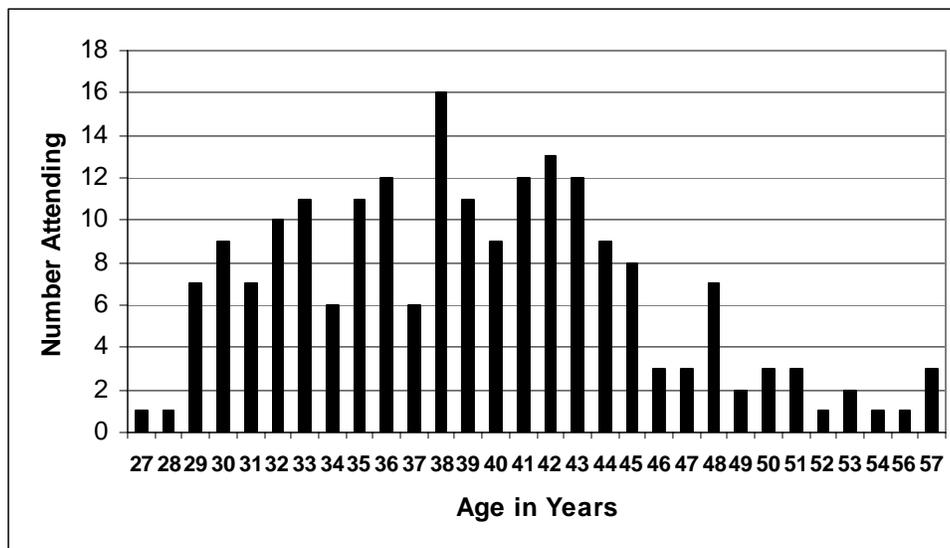
Figure 1. Age When Attending Workshop

The race or ethnicity of the workshop participants as reported was predominately

white. A total of 191 people responded to the question and 15 people chose not to

identify themselves by race or ethnicity. Data are summarized in Table 4.

Table 4

Distribution of Responses for Race/Ethnicity

	(n=191)	
Black or African American	1	.5%
Native American Indian/Alaska Native	7	3.7%
Asian	7	3.7%
Hispanic	9	4.7%
White	167	87.4%
Total	191	100.0%
Missing Answer	15	

The education level of the workshop participants who responded to the survey showed that almost all had a bachelor's degree of higher. Only one responder did not have a college degree, and two people did not answer the question. The answers are diagramed in Figure 2.

Education Level

140	
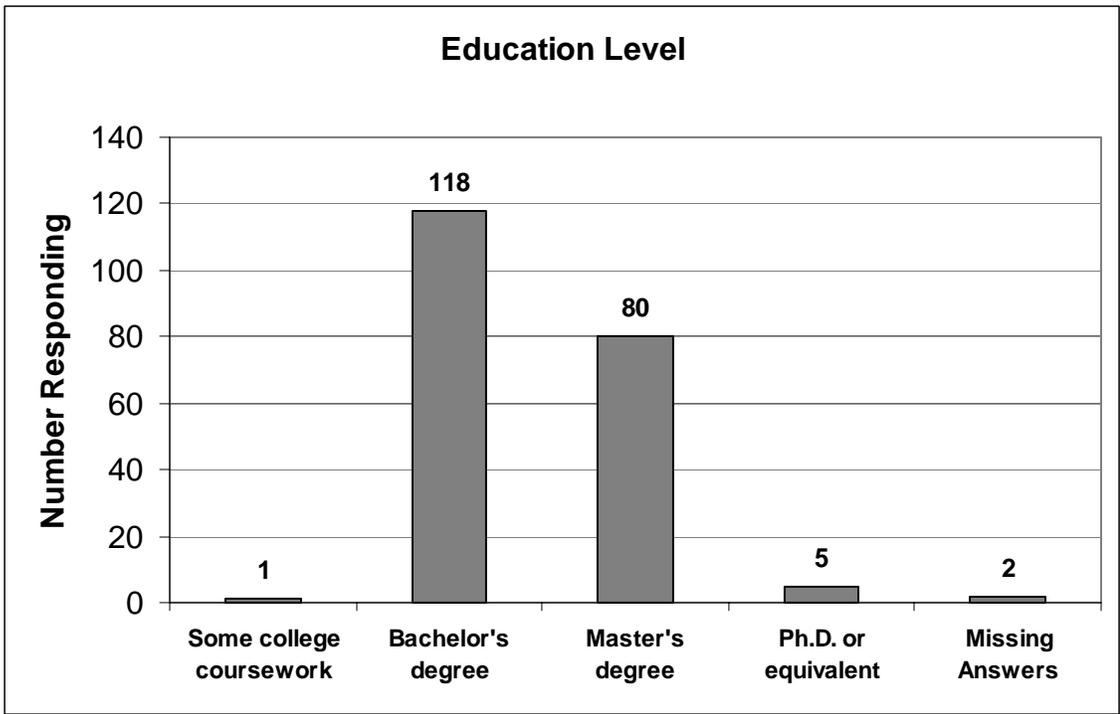
Figure 2. Distribution of Responses by Education Level.

Two survey questions asked respondents to identify the job grade level they held when participating in the Leadership and Communications Workshop and the job grade level they now hold. This question was designed to determine if there was job movement for individuals from the time of workshop attendance to the current date of the survey. The results show that most respondents attended the workshop while holding jobs in GS-

7 to GS-11, but now hold higher level jobs in GS-11 to GS-14. See Figure 3 for details

and page 96 for further discussion. Appendix C, p.121 contains respondents' office

levels.

Job Movement
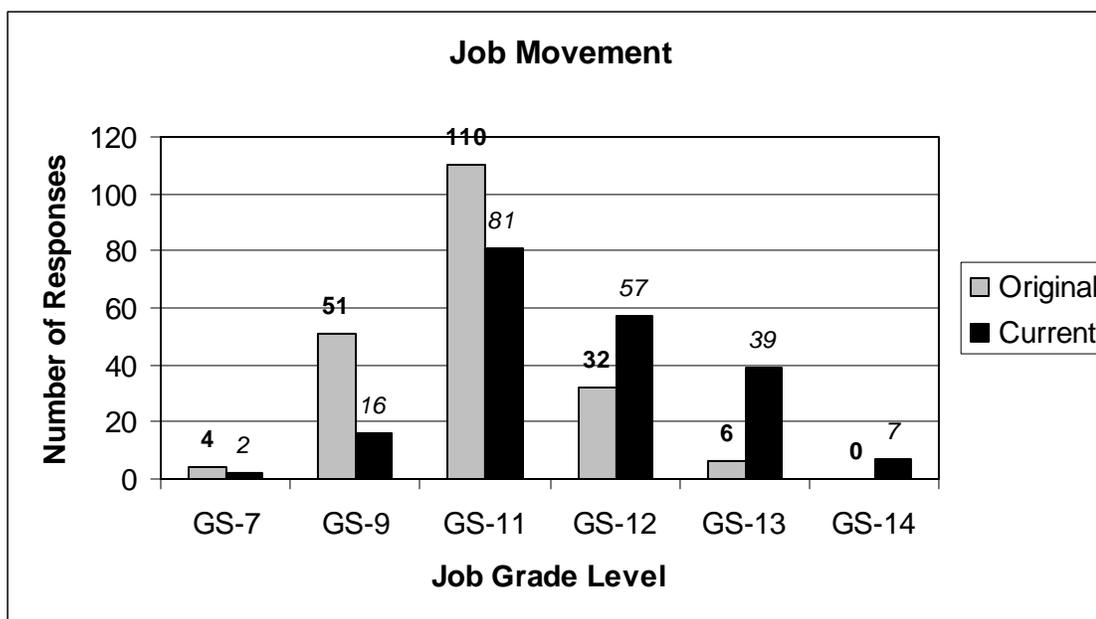
Figure 3. Job Level When Attending Workshop and Current Job Level.

Reflections on the Workshop

Question One of the survey contained six opinion questions. There was strong

agreement with Statement 1 "The instruction was effective." Respondents also strongly

agreed with Statement 2 "The course met my expectations," and with Statement 3 "The

course came at an appropriate time in my career." Statement 3 was explored further by

looking at the number who strongly agreed with this statement and their age ranges when

they attended the course. Figure 4 summarized the results of the two variables.

The course came at an appropriate time in my career.
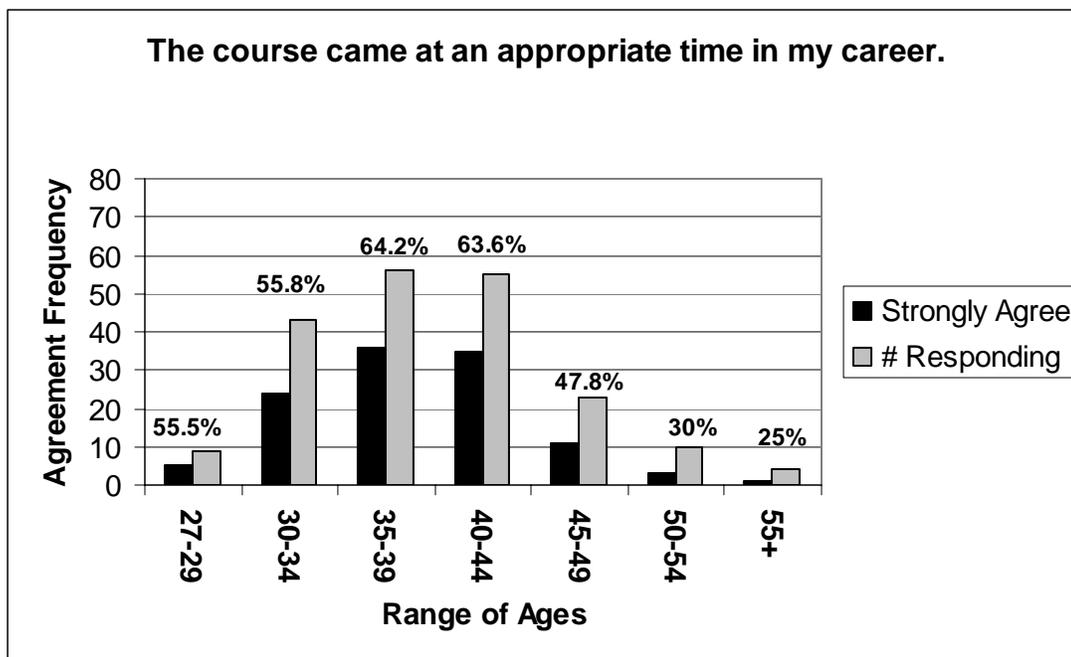
Figure 4. Percentage Who Strongly Agreed with Career Timing and Age Range When Attending

Respondents moderately agreed with Statement 4 "The course addressed the leadership skills I needed for my job at the time." They strongly agreed with Statement 5 that "The course provided opportunity for my professional development." Moderate agreement was indicated in Statement 6 "The course enhanced my personal life," with a seven person difference between moderate agreement and strong agreement. Mean scores for the six opinion statements are reported in Table 5. Frequency of responses to the opinion statements are summarized in Table 6.

Table 5

Mean Scores and Standard Deviation (sd) for Opinion Statements

Statement	N =	Mean	sd
1. The instruction was effective	205	1.38	.635
2. Met expectations	205	1.48	.683
3. Came at an appropriate time in career	204	1.59	.834
4. Addressed leadership skills needed for job	204	1.78	.796
5. Opportunity for professional development	204	1.54	.771
6. Enhanced personal life	203	1.91	.836

Table 6

Frequency of Respondents' Opinions on the Leadership and Communications Workshop

1. The instruction was effective.

	Strongly Agree	Moderately Agree	Unsure/ Undecided	Moderately Disagree	Strongly Disagree	Total
Frequency	140	56	5	4	0	205
Percent	68.3%	27.3%	2.4%	2.0%	0%	100.0%

2. The course met my expectations.

	Strongly Agree	Moderately Agree	Unsure/ Undecided	Moderately Disagree	Strongly Disagree	Total
Frequency	124	66	13	1	1	205
Percent	60.5%	32.2%	6.3%	.5%	.5%	100.0%

3. The course came at an appropriate time in my career.

	Strongly Agree	Moderately Agree	Unsure/ Undecided	Moderately Disagree	Strongly Disagree	Total
Frequency	118	61	16	8	1	204
Percent	57.8%	29.9%	7.8%	3.9%	.5%	100.0%

4. The course addressed the leadership skills I needed for my job at the time.

	Strongly Agree	Moderately Agree	Unsure/ Undecided	Moderately Disagree	Strongly Disagree	Total
Frequency	79	101	14	9	1	204
Percent	38.7%	49.5%	6.9%	4.4%	.5%	100.0%

5. The course provided opportunity for my professional development.

	Strongly Agree	Moderately Agree	Unsure/ Undecided	Moderately Disagree	Strongly Disagree	Total
Frequency	122	61	14	7	0	204
Percent	59.8%	29.9%	6.9%	3.4%	0%	100.0%

6. The course enhanced my personal life.

	Strongly Agree	Moderately Agree	Unsure/ Undecided	Moderately Disagree	Strongly Disagree	Total
Frequency	74	81	41	7	0	203
Percent	36.5%	39.9%	20.2%	3.4%	0%	100.0%

Question Nine included another opinion statement: "I would recommend the

Leadership and Communications Workshop to other natural resource professionals."

Almost 96% agreed with the statement with 81% strongly agreeing. Only one person

strongly disagreed. Table 7 displays all responses to Question Nine.

Table 7

Respondents' Recommendation of the Workshop

I would recommend the Leadership and Communications Workshop to other natural resource professionals.	Frequency N = 204	Percent	Cumulative Percent
Strongly Agree	165	80.9	80.9
Moderately Agree	30	14.7	95.6
Unsure/Undecided	5	2.5	98.0
Moderately Disagree	3	1.5	99.5
Strongly Disagree	1	.5	100.0

Motivation to Attend

Question Two asked respondents to address their motivation for attending the

Leadership and Communications Workshop, and to determine the importance of seven

different choices provided to them. Three choices were considered very important by the

respondents: "Learn more about leadership," "Improve my job performance," and

"Develop myself professionally," which gathered the most responses in this category.

Three other reasons were considered somewhat important; "Enhance my chances for

promotion," "Connect with other leaders," and "Improve my self-confidence." Only

"Complete a training requirement" was rated very unimportant by the majority of those

responding to the survey. Thirty-three people chose to write a response in the "Other"

option box and can be found in Appendix D, p 124. Table 8 records the results of

Question Two.

Table 8

Frequency of Responses for Reasons for Workshop Attendance

Statement	Very Important	Somewhat Important	Unsure/ Undecided	Somewhat Unimportant	Very Unimportant
Learn more about leadership	114	79	6	5	0
Develop professionally	148	51	4	1	0
Improve job performance	101	84	13	6	0
Enhance chances for promotion	44	78	27	42	13
Complete a training requirement	8	39	18	56	83
Connect with other leaders	39	80	25	44	16
Improve self-confidence	41	82	31	37	13

Effect of Participation

The statements in Question Three can be equally divided into two areas:

leadership-related effects and job-related effects. When asked to evaluate on a Likert

scale (1-5) the extent that participation in the Leadership and Communications Workshop

affected them, the survey respondents chose "My understanding of leadership increased"

as the one which affected them to the greatest extent. This is a leadership-related area in

which more respondents said they received the greatest effects of participating in the

workshop. Other effects in this area include increased confidence in leadership abilities, increased interest in leadership, and gained a network for leadership information. Mean scores for the leadership-related effects are reported in Table 9.

Table 9

Mean Scores and Standard Deviation for Extent of Participation's Effect on Leadership-Related Area

Effect	N =	Mean	sd
Increased understanding of leadership	204	1.76	.88
Increased confidence in leadership abilities	203	2.12	1.01
Increased interest in leadership	203	2.13	1.09
Gained a network for leadership information	205	2.90	1.23

Likert Scale: 1 = greatest extent to 5 = no extent

Survey responses show less extent of effect from participation in the workshop in the job-related area. Only the effect of "improved job performance" resulted in the same mean score as an effect in the leadership-related area, and "increased commitment to the organization's future" was just slightly higher than the very lowest rated effect in the leadership-related area. Mean scores for the job related effects are displayed in Table 10.

Table 10

Mean Scores and Standard Deviation for Extent of Participation's Effect on

Job-Related Area

Effect	N =	Mean	sd
Improved job performance	204	2.12	.86
Increased commitment to organization's future	204	2.85	1.27
Increased motivation for higher level position	204	3.02	1.45
Career advanced after participation	205	3.12	1.46

Likert Scale: 1 = greatest extent to 5 = no extent

The mean scores only provide one way to look at the extent of the effects of

participation in the workshop. The frequency which the survey respondents chose the

extent of effect of each statement gives more information. In the leadership related area,

80% of respondents said that their understanding of leadership had increased to a great or

moderate extent. Seventy-eight percent (78%) said that confidence in their leadership

abilities had increased to a great or moderate extent, and 75% said their interest in

leadership increased to a great or moderate extent. However, only 46% responded that

they felt they gained a network for leadership information and assistance to a great or

moderate extent. The majority here were unsure or felt there was little or no effect.

Table 11 summarizes the frequencies for responses to the Leadership-Related statements

in Question Three.

Table 11

Effect of Participation in Leadership and Communications Workshop on Leadership-

Related Area

Increased understanding of leadership	Frequency N = 204	Percent	Cumulative Percent
To a great extent	39	19.1	19.1
To a moderate extent	125	61.3	80.4
Unsure/Undecided	20	9.8	90.2
To a lesser extent	17	8.3	98.5
To no extent	3	1.5	100.0
Increased confidence in leadership abilities	Frequency N = 203	Percent	Cumulative Percent
To a great extent	54	26.6	26.6
To a moderate extent	105	51.7	78.3
Unsure/Undecided	16	7.9	86.2
To a lesser extent	22	10.8	97.0
To no extent	6	3.0	100.0
Increased interest in leadership	Frequency N = 203	Percent	Cumulative Percent
To a great extent	61	30.0	30.0
To a moderate extent	92	45.3	75.4
Unsure/Undecided	22	10.8	86.2
To a lesser extent	18	8.9	95.1
To no extent	10	4.9	100.0

Gained a network for leadership information	Frequency N = 205	Percent	Cumulative Percent
To a great extent	25	12.2	12.2
To a moderate extent	69	33.7	45.9
Unsure/Undecided	32	15.6	61.5
To a lesser extent	59	28.6	90.2
To no extent	20	9.8	100.0

In the job-related area 80% of the respondents said that their ability to perform their job duties improved to a great or moderate extent, but 61% of that number decided the effect was moderate rather than great. Only 47% felt they were greatly or moderately committed to the future of their organization after workshop attendance. Similarly less than half (46%) said they were motivated to move into a higher level position, and 45% said their career advanced after workshop attendance. However, a look at the demographic information on job movement shows the respondents did move into higher level positions after workshop participation. Table 12 summarizes the frequencies for the job-related statements in Question Three. Appendix D, p. 127 provides the "Other" open responses for Question 3.

Table 12

Effect of Participation in Leadership and Communications Workshop on Job-Related

Area

Improved job performance	Frequency N = 204	Percent	Cumulative Percent
To a great extent	39	19.1	19.1
To a moderate extent	125	61.3	80.4
Unsure/Undecided	20	9.8	90.2
To a lesser extent	17	8.3	98.5
To no extent	3	1.5	100.0
Increased commitment to organization's future	Frequency N = 204	Percent	Cumulative Percent
To a great extent	27	13.2	13.2
To a moderate extent	70	34.3	47.5
Unsure/Undecided	44	21.6	69.1
To a lesser extent	33	16.2	85.3
To no extent	30	14.7	100.0
Increased motivation for higher level position	Frequency N = 204	Percent	Cumulative Percent
To a great extent	33	16.2	16.2
To a moderate extent	61	29.9	46.1
Unsure/Undecided	30	14.7	60.8
To a lesser extent	29	14.2	75.0
To no extent	51	25.0	100.0

Career advanced after participation	Frequency N = 205	Percent	Cumulative Percent
To a great extent	27	13.2	13.2
To a moderate extent	65	31.7	44.9
Unsure/Undecided	28	13.7	58.5
To a lesser extent	26	12.7	71.2
To no extent	51	28.8	100.0

Use of Information and Skills

Question Four asked respondents to evaluate how they use the information and skills learned in the Leadership and Communications Workshop in dealing with certain groups of people. The question used a Likert scale to rank their agreement with each statement, with choices ranging from 1 for strongly agree to 5 for strongly disagree. Therefore a lower score indicated a higher level of agreement with the use of the information and skills in dealing with a particular group. The respondents strongly agreed that they use the information and skills in dealing with their co-workers (1.54), their supervisor (1.68), and their direct reports (1.77). They moderately agreed to using the information and skills with the public (1.86), their community (2.04), and with their family (2.16), but the number who strongly agreed in these areas was also fairly high. Table 13 reports the frequencies of the responses to Question Four. Responses to the "other" option are in Appendix D, p. 129.

Table 13

Use of Information and Skills After Leadership and Communications Workshop.

My co-workers	Frequency N = 200	Percent	Cumulative Percent
Strongly Agree	100	50	50.0
Moderately Agree	93	45.1	96.5
Unsure/Undecided	6	3.0	99.5
Moderately Disagree	1	.5	100.00
Strongly Disagree	0	0	0
Employees who directly report to me	Frequency N = 193	Percent	Cumulative Percent
Strongly Agree	86	44.6	44.6
Moderately Agree	76	39.4	83.9
Unsure/Undecided	24	12.4	96.4
Moderately Disagree	4	2.1	98.4
Strongly Disagree	3	1.6	100.0
My supervisor	Frequency N = 200	Percent	Cumulative Percent
Strongly Agree	93	46.5	46.5
Moderately Agree	85	42.5	89.0
Unsure/Undecided	16	8.0	97.0
Moderately Disagree	4	2.0	99.0
Strongly Disagree	2	1.0	100.0
The public	Frequency N = 199	Percent	Cumulative Percent
Strongly Agree	68	34.2	34.2
Moderately Agree	100	50.3	84.4
Unsure/Undecided	22	11.1	95.5
Moderately Disagree	8	4.0	99.5
Strongly Disagree	1	.5	100.0

My community	Frequency	Percent	Cumulative
	N = 199		Percent
Strongly Agree	54	27.1	27.1
Moderately Agree	98	49.2	76.4
Unsure/Undecided	34	17.1	93.5
Moderately Disagree	11	5.5	99.0
Strongly Disagree	2	1.0	100.0
My family	Frequency	Percent	Cumulative
	N = 199		Percent
Strongly Agree	50	25.1	25.1
Moderately Agree	93	46.7	71.9
Unsure/Undecided	35	17.6	89.4
Moderately Disagree	17	8.5	98.0
Strongly Disagree	4	2.0	100.0

When Change Occurred

Question Seven asked the respondents to pick one leadership competency from
the thirteen identified as A to M in which they thought they had improved the most.
Eighty percent (80%) of the respondents chose four competencies from the list. The top
four competencies were Understanding yourself and others, Understanding your own
leadership style, Using leadership styles, and Effective listening. All responses are
shown in Table 14.

Table 14

Leadership Competency Areas Chosen as Most Improved After Workshop.

Competency	Chosen Most Improved By	Cumulative Percent
Understanding yourself and others	103	50.0
Understanding your own leadership style	27	63.1
Using leadership styles appropriate to different situations	22	73.8
Effective listening	13	80.1
Resolving conflicts	6	83.0
Communicating clearly in writing	5	85.4
Communicating effectively by speaking	5	87.8
Solving problems	4	89.7
Managing meetings effectively	4	91.6
Helping your organization to change	3	93.1
Involving the public in decision-making processes	2	94.1
Working effectively with the media	2	95.1
Motivating others to accomplish a goal	1	95.6
Undecided	1	96.1
Missing Answers	8	100.0
Total	206	100.0

To determine when training began to make an impact, the respondents were asked to indicate when they believed the improvement began for the competency they selected as most improved. Most (72%) said the improvement began immediately upon workshop completion, and 20% said improvement began within the first six months after the workshop ended. A few (7%) believed improvement happened after one year, and two individuals indicated they noticed the change after five years. Eight people did not

respond to the question. See Figure 5 for a graphic representation of results. Appendix D, p.130 lists "Other" open responses to the question of when improvement began.
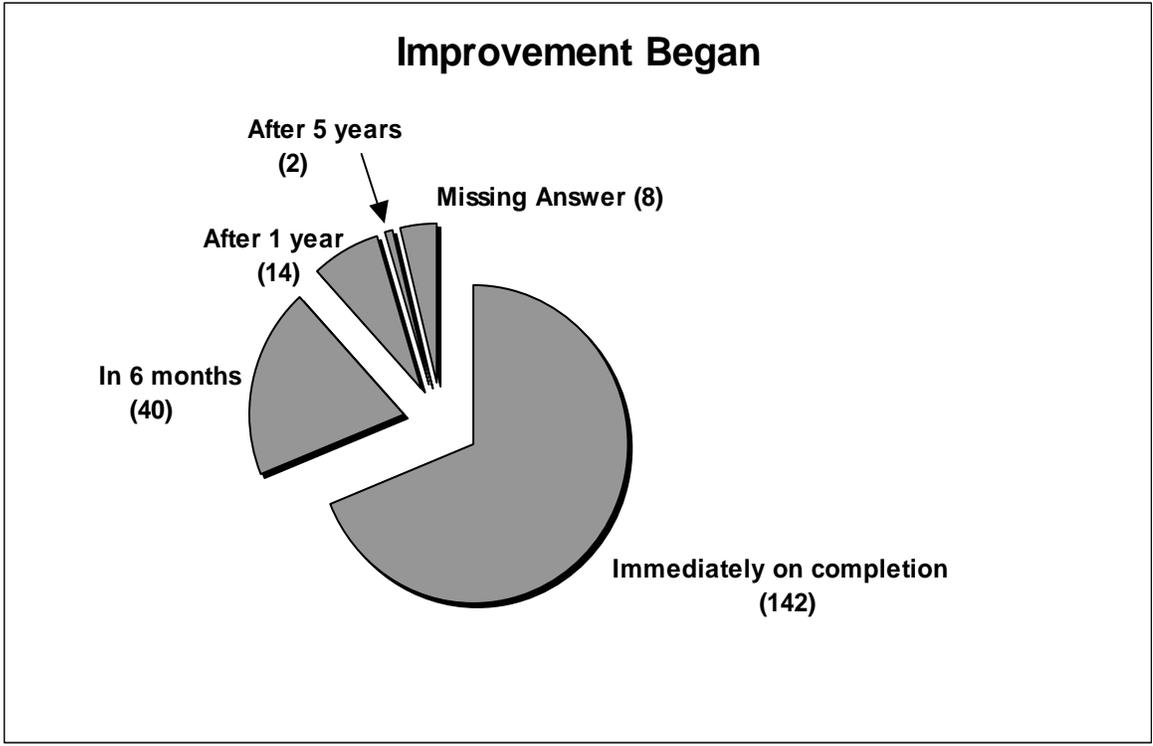
Figure 5. Responses Indicating When Improvement Began After Workshop

Question Eight explored another timing issue, which was at what point in one's career would workshop attendance be most advantageous. The majority (52%) responded that a person should have at least five years on the job before attending the workshop. Another 40% chose Year 2 to 4 as a good time for workshop attendance. Figure 6 displays the responses to Question Eight.
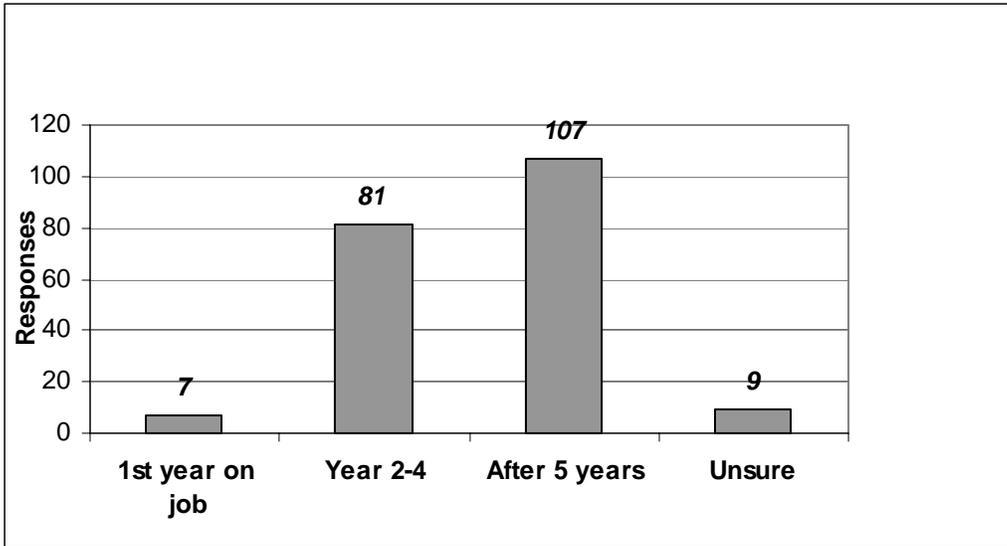
Figure 6. Best Career Timing for Workshop Attendance

Other Comments

Question 16 was a completely open-ended question asking for any other comments about the Leadership and Communication Workshop. The comments were not qualitatively analyzed, but are included in Appendix D, p. 131 and have very useful and interesting information. However, some responses were cut off before the response was completed, as the survey program only recorded the first 250 characters of each answer.

CHAPTER FIVE: CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

Concluding Statements

Section 1: Hypotheses

Hypothesis I:

There is a significant relationship between the importance of 13 leadership

competencies to job performance and the learner's perception of improvement in

each of those thirteen leadership competencies. (Discussion begins on page 93).

Hypothesis II:

There is no significant difference between the course years of 1998 and 2002

for the mean scores on course effectiveness, course expectations, and three leadership

competencies of understanding yourself and others, working with the media, and

helping the organization to change. (Discussion begins on page 94).

Hypothesis III:

There is no significant difference across the years of course attendance (1988

to 2004) for the mean scores of the responses to the statements on course

effectiveness, course expectations, and improvement of effective listening skills.

(Discussion begins on page 94).

Section 2: Descriptive Study

Demographics

Males made up 62% of the survey respondents and females 37%, 89% of

respondents attended the workshop while in their 30's or 40's, and 87% of respondents

reported their race or ethnicity as white. Educationally, 57% of respondents had

bachelor's degrees, and 39% had master's degrees, while five respondents had doctorate

degrees. Job levels showed movement out of the GS-9 and GS-11 levels, and into GS-12

to GS-14 levels after the workshop.

Reflections on the Workshop

The data showed strong agreement by the respondents that the workshop

instruction was effective, the course met expectations, came at the appropriate time

career-wise, and provided opportunity for professional development. Respondents

moderately agreed that the course addressed the leadership skills needed for the job at the

time of workshop attendance, and agreed that the course enhanced their personal life

(37% strongly agreed, 40% moderately agreed). Respondents strongly recommended the

Leadership and Communications Workshop to other natural resource professionals.

Motivation to Attend

The three highest reasons to attend the workshop were 1) to develop

professionally, 2) to learn more about leadership, and 3) to improve job performance.

Next came the motivators of improving self-confidence, enhancing chances for

promotion, and connecting with other leaders. Completing a training requirement was seen as unimportant by most respondents, although 47 people indicated it was very or somewhat important.

Effect of Participation

The effects of participating in the workshop can be divided into two areas: leadership-related effects and job-related effects. In the leadership-related area, most (89%) said their understanding of leadership increased, confidence in their leadership abilities increased for 78%, and interest in leadership increased for 75% of the respondents. However only 46% felt they had gained a network for leadership information and assistance, with most saying they were unsure or it had little effect. In the job-related area, 80% felt their ability to perform their job duties improved, while lower numbers were found on commitment to organizational future (47%), motivation to get a higher level position (46%), and actual career advancement post workshop (45%).

Use of Information and Skills

Respondents said they use their workshop information and skills most often when dealing with co-workers, supervisors, and people who report to them directly. While the majority moderately agreed that they use the skills with the public, their community, and their families, the number who strongly agreed in these areas was also high. It appears the skills are well utilized in dealing with people, both in and outside the workplace.

What Improvement Occurred and When

Improvement in understanding self and others was chosen most frequently as the area in which participants perceived the most improvement, followed by understanding your own leadership style, using leadership styles, and listening effectively. As to when the improvement began, the respondents (72%) said that improvement started immediately upon workshop completion and another 20% said it began within the first six months. A majority (52%) indicated that a person should have at least five years of experience before taking the workshop, with another large group (40%) choosing two to four years of experience. Almost all agreed that the first year of employment is not a good time to attend the course.

Leadership Competency Importance and Improvement

Another way to visually demonstrate the results of Question Five and Six is to design a scatter chart which plots the points where the two means intersect (See page 56 for the table with mean score comparisons). Since the Likert scale was based on 1 as the highest level of importance or improvement, the quadrant where the two meet is quadrant one. A trainer or course designer wants all the mean scores located somewhere within quadrant one, which shows high importance to job performance and high improvement in that competency. The chart also tells the trainer or course designer which competencies to concentrate on when revising the course. If a competency's mean score for importance to job performance is low, then that is an area to ignore or possibly even remove when making improvements. If however, the competency is rated as high for importance to job

performance and the mean score demonstrates that learner's do not perceive much

improvement in that area, then that becomes a topic for revision and course improvement.

Figure 6 provides a scatter chart of the mean scores from Question Five and Six.
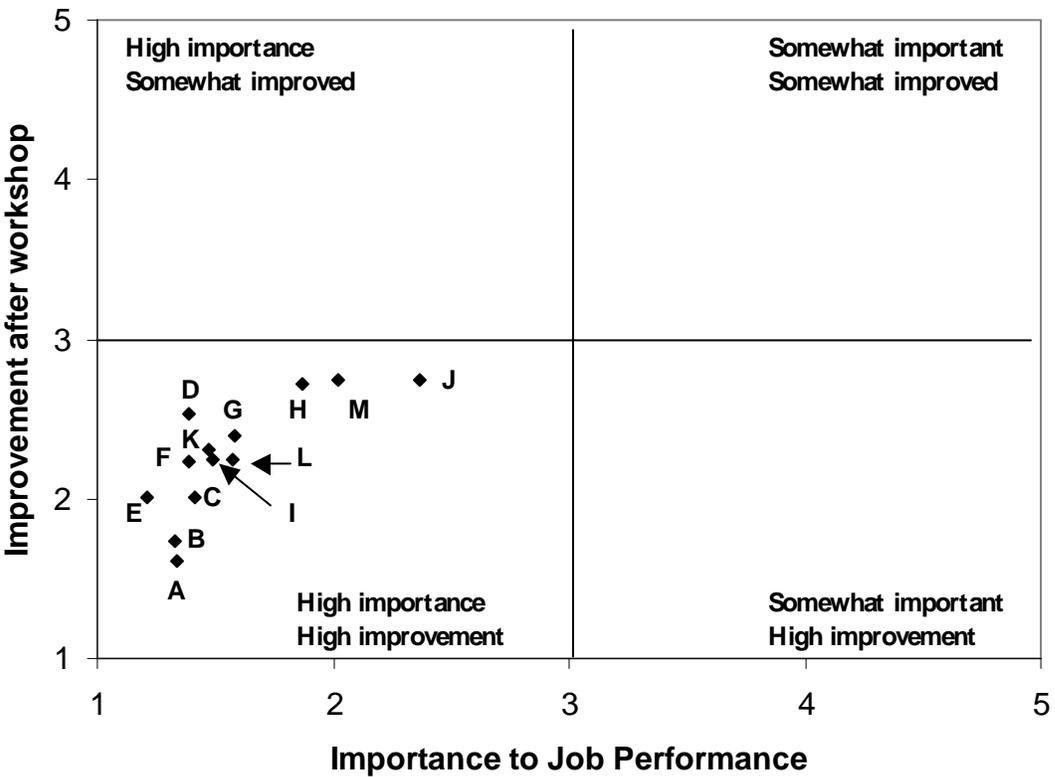
See Page 56 for Leadership Competency Identification.

Figure 7. Scatter Chart of Leadership Competencies Mean Scores Plotted for Importance

to Job Performance and Perceived Improvement after Workshop

Discussion

Research Question 1: Areas of Improvement After Leadership Training

The results of this study show that there is a significant relationship between the importance of the leadership competencies taught in the workshop and the learner's perception of improvement in those competencies. The scatter chart shows that course designers chose to target competencies that survey respondents determined were very important to job performance, as all the mean scores were high for this variable. All the plotted points for both importance to job performance and perceived improvement of the leadership competency were in quadrant one, which is excellent. The lowest mean came in the competency area of working effectively with the media (J), which leads to a question about how often the participants may need to work with the media, or how they view the importance of working with the media. This may be an area that people like to ignore because it is uncomfortable, so it may have been rated lower for that reason. There may be policies which require people in higher positions to deliver the media statements, so that most did not rate it as highly important. It would be interesting to find out more about this. The competencies on organizational change and involving the public in decision-making are also ones to examine more closely. Effective listening (E) is a competency to examine, because its importance to job performance was rated high, but improvement was not quite as high, as seen in the Pearson's *r* correlation results. Since this area is so important, the improvement score may mean that more practice is needed in this competency, or it may mean that it takes much longer to develop listening

skills and learners may now realize its importance, but not be quite as satisfied with their

improvement in this area. Overall the survey respondents said that the leadership skills

that are *important* to job performance are closely related to *improvement* in that skill area.

Leadership training was effective in these areas and not a waste of time because

improvement was perceived by the learner.

Research Question 2: Effectiveness and Change in Instruction

When comparing two years, one before program leader changes and one after,

little difference was found between mean scores. The comparison of five different

statements resulted in very similar means on all five. Both class years agreed strongly

that the instruction was effective and the course met their expectations, and improvement

in the area of understanding self was high. Consistency remained when a co-leader was

added, which is a positive outcome for a successful course like this one. The results of

the statistical test stated that mean scores on the five statements studied were similar and

consistent between the two years studied. It does not say how beneficial it is to have two

leaders, and the instructors of each unit stayed constant, which may account for the

consistent results.

Research Question 3: Long Term Effectiveness of Leadership Training

When looking at the results of training over the long term, one might predict that

scores from those who took the course more recently would have higher mean scores on

numerous statements of the survey, because they were closer to the training. However

the study failed to show any significant difference across time periods from 1988, the first year of workshop availability, and 2004, the last year in the study. This is seen as no difference in the effectiveness over the long term, and interpreted that the learners were satisfied with the workshop in regards to course effectiveness, meeting course expectations, and improvement of effective listening skills, the factors that were examined. Looking at the individual mean scores from each year (1988 to 2004) shows that most participants rated instructor effectiveness and course expectations highly. Mean scores for improvement in listening skills were not quite as high, although means did not vary more than one point between years and were in the greatly improved or somewhat improved category. Overall the course was effective throughout the years and those who took it sixteen years ago found it as effective as those who took it one year ago.

One of the more interesting aspects to me is the question, "who responded to the survey?" Since so many people over all the years found the instruction to be effective, their expectations met by the course, and improvement in many competency areas, did it mean that only those who were happy with the training bothered to respond to the survey? If someone didn't respond, does that indicate they didn't like the workshop, or didn't they have any memory of it or any responses to provide? If a participant really didn't like the training, were they more inclined to respond or not to respond? It would be interesting to get answers to these questions.

Research Question 4: Impact of Leadership Training on Learners.

Demographically the study respondents were what most research has found; mainly male, mostly white, and highly college educated. The interesting factor of job movement provides areas for more research. Did the leadership training help the participants move into higher level positions or would that have happened naturally? Did the leadership training help them want to move into those levels? When asked about motivation, job promotion was only rated as somewhat important, but often people are reluctant to state its true importance and the literature review of a 1966 study by Andrews said that most saw no relationship between attendance and promotion. When asked about the effect of participation, only 46% of this study's respondents said they were motivated to get a higher level position. This is also consistent with this particular workshop which was designed to enhance the leadership and communication skills of the participants rather than help them climb the organizational ladder. Delahoussaye (2001b) mentioned a similar aspect from his study and said only 10% of respondents said the leadership training "highly" affected their future employment decisions. This connection between leadership training and job advancement would be interesting to study in more depth.

The number one motivator for attending the workshop was to develop professionally. With that in mind, trainers and course promoters can emphasize the professional development aspect of the workshop, thus motivating more people to attend. All trainers look for the answer to the question "What's in it for me?" Tying professional development to improving job performance will also increase interest. However, it is

important to point out that professional development seems to be seen as something different than job advancement. Maybe professional development is connected to a deeper understanding and more knowledge of leadership which is needed for current positions. This is consistent with 80% of respondents agreeing they felt their ability to perform their job duties improved.

While connecting to other leaders was chosen as a somewhat important motivation for attending, only 46% felt they gained a network for leadership information and assistance. There seems to be a gap here that could be beneficial to fill. Leadership courses often try to set up small groups of people to continue discussing and sharing together after training, as a method for transferring learning to the workplace after training.

The fact that the respondents reported using the leadership information and skills in all aspects of their lives is good feedback for the instructors and for future participants of leadership training. This workshop has impacted people's lives.

I think it is important to note that participants were asked to reflect on each of these questions at the time of the survey, not right after the actual training took place. This provides a wider variety and more depth to the responses because much can happen in terms of experience, use of the competencies, practice of skills, and development of ideas about leadership. Asking people about the impacts of the training after a number of years have gone by provides another view of the workshop. The participants' positive

recommendation of the course to other natural resource professionals, even after a number of years, is a very strong endorsement of the course.

Research Question 5: When Benefits of Training Begin.

One of the surprises of the survey came in the discovery of *when* the participants believe the competency improvement began. It appears the overwhelming majority (72%) believed the improvement began immediately after taking the workshop. Another 20% said they believed it began within six months. This raises the question of awareness versus actual skill improvement or behavioral change, which is not what was tested in this self-report study. However, it would be interesting to pursue this aspect by interviewing those who work with, or supervise, the workshop participants. Asking about specific behavior before and after the workshop, and when the behavior changed, would provide better understanding of when benefits are derived from training.

Recommendations

1. Continue providing the course to natural resource professionals. The workshop was seen as very effective by the participants. It is working, and working very well!

2. Consider adding other levels of evaluation. A Level 2 evaluation could be accomplished by providing pre and post tests on the major categories of instruction: communication, understanding yourself and others, and public involvement. Writing the business results desired by the USDA Forest Service and evaluating those outcomes would fulfill a Level 4 evaluation. This would create stronger evidence of

course effectiveness than the self-report and reaction level, and help sustain the program.

3. Gather information on behavioral change by interviewing those who work with the participants; supervisors, peers, and direct reports. Interviews could be completed at some interval from the training, such as after six months or one year.

4. Increase networking by establishing cadres or groups to teleconference or email over a period of time to talk about the issues they faced back at the workplace and how to deal with them by using their new leadership skills and knowledge. This adds to the transfer of learning from training to the job and provides support and encouragement.

5. Encourage the USDA Forest Service to find ways to expand the diversity of the course participants, by exploring what barriers, if any, may exist for minority applicants.

6. Consider adding a work project element to the session, using a project that participants are working on currently. This would allow practice and experience in leadership and increase the learning.

7. A mentoring option within USDA Forest Service may already exist, but if not, it would be good to advocate for the implementation of such a program. Mentoring would provide the opportunity for people to continue to learn from those who have come before, and prepare leaders for the future of the organization.

8. Add a qualitative aspect to this research by interviewing the attendees from all

    attendance years to gather expanded comments on what leadership competencies they

    continue to use, what has worked, what didn't work, problems, insights, etc. This

    would provide the opportunity to find out the connection between leadership training

    and job advancement. The new data would provide a deeper understanding of the

    long term effects of training on participants' knowledge, behavior, and understanding

    of leadership.

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Appendix A

Natural Resource Leadership Institutes

Natural Resource Leadership Institutes

Alaska   http://enri.uaa.alaska.edu/rs/index.html

Florida   http://nrli.ifas.ufl.edu/

Indiana   http://www.agriculture.purdue.edu/fnr/nrldi/

Kentucky   http://www.uky.edu/Agriculture/Forestry/NRLI.htm

Montana   http://mcc.state.mt.us/Training/leadership_institute.asp

North Carolina   http://www.ces.ncsu.edu/depts/agecon/nrli/

Virginia   http://www.virginia.edu/ien/VNRLI_home.html

Appendix B

Survey Instrument

First Message sent by USDA Forest Service, WFW-CONTINUING EDUCATION NATIONAL PROGRAM LEADER

Hello Everyone,

As past participants in the "Leadership & Communications" workshop at VPI (Virginia Polytechnic Institute & State University), you are receiving this email from me as a heads up. Within the next few days Cheryl Westley, a graduate student at the University of Alaska-Anchorage, will contact you via email. Cheryl is conducting an online (electronic) survey asking past "LAC" participants how the 'Leadership & Communications' workshop has impacted their careers. Your participation is optional. If you do participate your information is confidential and unidentifiable.
Amazingly, this is a very short survey!

There are nearly 400 of you still "around"! Hopefully you aren't receiving this a SPAM and having it automatically reject.

The survey "cover letter" from Cheryl will have details (such as the URL). Your information will help a wide audience of natural resource professionals, including those in our agency and our "Leadership & Communications" workshop. We will post a copy of the final dissertation at our WFW-Continuing Education website (http://www.fs.fed.us/biology/education).

This research is supported by the University of Alaska-Anchorage, Alaska Fish & Game and Virginia Polytechnic Institute and State University. Obviously we, the US Forest Service, are partners in this effort as well.

We greatly appreciate your time in completing the survey and understand how busy your day is. Thank you for your commitment and support of this work. If you have questions about this email being a fake-virus carrying email, you can give me a call. There isn't an attachment, so nothing to open or download (so no virus contamination).

%%%%%%%%%%%%%%%%%%%%%%%%%%%
Shelly Witt
USDA Forest Service, WFW-Continuing Education National Program Leader
860 North 1200 East, Logan UT 84321
435-753-4838
switt@cc.usu.edu (daily)   switt01@fs.fed.us (weekly)
http://www.fs.fed.us/biology/education

Introductory Letter Sent By Email from Researcher

Dear Participant;

Leadership training: does it really make a difference? With so many demands on your time and resources, is it worth attending leadership training? Does the training impact your work or your life? I want to find answers to these and other questions in my research on effective leadership training. That's why I am contacting you, as a former participant of the Leadership & Communications Course. You should also have received a pre-notice email from Shelly Witt of the USDA Forest Service with a brief description of myself and my research.

You are important to the success of this study! Please share your experience and opinions with me. The information you provide will increase our knowledge of effective leadership training for natural resource professionals. It will also help the course designers improve the program for future participants.

This survey will take 6-8 minutes to fill out. To begin, click on the web link below by June 10. Completion of the survey implies your consent to participate in my research.

To complete the survey, please clink on the link below:
http://www.sf.adfg.state.ak.us/Surveys/westley2/ezs.exe?DATABASE=leadr_survey4&IFMUID=ccduvjx&IFMUID1=2yfu9fx

Your participation in this study is voluntary and there is no penalty or loss of benefits if you decline to respond. If you decide to participate, you may discontinue later with no repercussions of any kind.

A computer program will automatically compile your responses and assign an encrypted identifier to determine who has responded and prevent duplicate responses. I will keep all responses strictly confidential and will not disclose your name or personal answers to anyone. Once the results are compiled, all research records will be kept in a locked safe accessible only to me.

The results of my research will be given to the USDA Forest Service, Steve McMullin at Virginia Polytechnic Institute and State University, and the University of Alaska Anchorage (UAA). You may receive a copy of the final thesis by accessing the WFW-Continuing Education website at http://www.fs.fed.us/biology/education or by contacting me directly.

If you have any questions pertaining to the research, please contact me using the

information below. You can also contact the Office for Academic Affairs at the University of Alaska Anchorage at 907-786-1921 with questions about your rights as a research subject.

Thank you for your assistance.

Sincerely,

Cheryl Westley
Graduate Student, UAA
cwestley@alaska.net
907-349-8144
8500 Greenhill Way
Anchorage, Alaska 99502

Leadership And Communications (LAC)
SURVEY

Hello and Welcome!

I am conducting this online survey of the Leadership and Communications Workshop with the support of the U.S. Forest Service, Virginia Tech, and University of Alaska Anchorage to gain a better understanding of the impacts of leadership training on adult learners. I appreciate your time and thank you in advance for your assistance.

Cheryl Westley, 8500 Greenhill Way, Anchorage, Alaska 99502

907-349-8144

cwestley@alaska.net

1. **Please reflect on the Leadership and Communications Workshop, then indicate your opinion on each statement.**

	Strongly Agree SA	Moderately Agree MA	Unsure/ Undecided U	Moderately Disagree MD	Strongly Disagree SD
The instruction was effective.	SA	MA	U	MD	SD
The course met my expectations.	SA	MA	U	MD	SD
The course came at an appropriate time in my career.	SA	MA	U	MD	SD
The course addressed the leadership skills I needed for my job at the time.	SA	MA	U	MD	SD
The course provided opportunity for my professional development.	SA	MA	U	MD	SD
The course enhanced my personal life.	SA	MA	U	MD	SD

2. **Why did you attend the Leadership and Communications Workshop? Please indicate the importance of each reason below.**

I took the course to	Very Important	Somewhat Important	Unsure/ Undecided	Somewhat Unimportant	Very Unimportant
Learn more about leadership	VI	SI	U	SU	VU
Develop myself professionally	VI	SI	U	SU	VU
Improve my job performance	VI	SI	U	SU	VU
Enhance my chances for promotion	VI	SI	U	SU	VU
Complete a training requirement	VI	SI	U	SU	VU
Connect with other leader	VI	SI	U	SU	VU
Improve my self-confidence	VI	SI	U	SU	VU
Other: (Please add here)	VI	SI	U	SU	VU

3. To what extent did your participation in the Leadership and Communications Workshop affect you?

It affected me to the extent that….	To a great extent	To a moderate extent	Unsure/ Undecided	To a small extent	To no extent
I was better able to perform my job duties	**GE**	**ME**	**U**	**SE**	**NE**
My career advanced after completing the course	**GE**	**ME**	**U**	**SE**	**NE**
I was motivated to move to a higher level position	**GE**	**ME**	**U**	**SE**	**NE**
I gained more confidence in my leadership abilities	**GE**	**ME**	**U**	**SE**	**NE**
My understanding of leadership increased	**GE**	**ME**	**U**	**SE**	**NE**
I became more committed to the future of my organization	**GE**	**ME**	**U**	**SE**	**NE**
My interest in leadership increased	**GE**	**ME**	**U**	**SE**	**NE**
I gained a network for leadership information and assistance	**GE**	**ME**	**U**	**SE**	**NE**
Other: (Please add here)	**GE**	**ME**	**U**	**SE**	**NE**

4. How do you use the information and skills you learned in the workshop?

I use the information and skills in dealing with…	Strongly Agree	Moderately Agree	Unsure/ Undecided	Moderately Disagree	Strongly Disagree
My co-workers	SA	MA	U	MD	SD
Employees who directly report to me	SA	MA	U	MD	SD
My supervisor	SA	MA	U	MD	SD
The public	SA	MA	U	MD	SD
My community	SA	MA	U	MD	SD
My family	SA	MA	U	MD	SD
Other: (Please add here)	SA	MA	U	MD	SD

5. **Thinking about the Leadership and Communications Workshop, how IMPORTANT are these leadership competencies to your job performance?**

Competencies	Very Important	Somewhat Important	Unsure/ Undecided	Somewhat Unimportant	Very Unimportant
A. Understanding yourself and others (i.e. Myers-Briggs Type Indicator)	VI	SI	U	SU	VU
B. Understanding your own leadership style	VI	SI	U	SU	VU
C. Using leadership styles appropriate to different situations	VI	SI	U	SU	VU
D. Communicating clearly in writing	VI	SI	U	SU	VU
E. Listening effectively	VI	SI	U	SU	VU
F. Solving problems	VI	SI	U	SU	VU
G. Managing meetings effectively	VI	SI	U	SU	VU
H. Involving the public in decision-making processes	VI	SI	U	SU	VU
I. Resolving conflicts	VI	SI	U	SU	VU
J. Working effectively with the media	VI	SI	U	SU	VU
K. Communicating effectively by speaking	VI	SI	U	SU	VU
L. Motivating others to accomplish a goal	VI	SI	U	SU	VU
M. Helping your organization to change	VI	SI	U	SU	VU

6. **As a result of the workshop, rate how you IMPROVED in each competency area.**

Competencies	Greatly Improved	Somewhat Improved	Unsure/ Undecided	Somewhat Unimproved	Very Unimproved
A. Understanding yourself and others (i.e. Myers-Briggs Type Indicator)	GI	SI	U	SU	VU
B. Understanding your own leadership style	GI	SI	U	SU	VU
C. Using leadership styles appropriate to different situations	GI	SI	U	SU	VU

Competencies	Greatly Improved	Somewhat Improved	Unsure/ Undecided	Somewhat Unimproved	Very Unimproved
D. Communicating clearly in writing	GI	SI	U	SU	VU
E. Listening effectively	GI	SI	U	SU	VU
F. Solving problems	GI	SI	U	SU	VU
G. Managing meetings effectively	GI	SI	U	SU	VU
H. Involving the public in decision-making processes	GI	SI	U	SU	VU
I. Resolving conflicts	GI	SI	U	SU	VU
J. Working effectively with the media	GI	SI	U	SU	VU
K. Communicating effectively by speaking	GI	SI	U	SU	VU
L. Motivating others to accomplish a goal	GI	SI	U	SU	VU
M. Helping your organization to change	GI	SI	U	SU	VU

7. **Pick ONE competency above in which you think that you improved the most and write the corresponding letter of that competency in the blank.** _____

   Now indicate when you believe the improvement began for that competency.

   1 Immediately upon workshop completion
   2 Within six months of workshop completion
   3 After one year
   4 After 5 years

   5 Other; _____ (*Please write in your response)*

8. **At what point in a person's career should he or she take the Leadership and Communications Workshop?**

   1- First year on the job

   2- 2 - Year 2 thru 4

   3- 3 - After 5 years

   4- 4- Unsure

9. **I would recommend the Leadership and Communications Workshop to other natural resource professionals.**

Strongly Agree	Moderately Agree	Unsure/ Undecided	Moderately Disagree	Strongly Disagree
SA	MA	U	MD	SD

10. **What is your current age?** _____

   Are You: _____ **Male**   _____**Female**

11. **What is your race or ethnicity**

   1 Black or African American
   2 Native American Indian or Alaska Native
   3 Asian
   4 Hawaiian/Pacific Islander
   5 Hispanic
   6 White
   7 Other _____

12. **What office level and grade did you hold when you participated in the Leadership and Communications Workshop?**

   Office Level   _GS_

   1 District   _____5
   2 Forest   _____7
   3 Regional Office   _____9
   4 Washington Office   _____11
   5 Other _____   _____12
                        _____13
                        _____14 or higher

13. What office level and grade do you <u>currently</u> hold?

Office Level		*GS*
1 District		_____5
2 Forest		_____7
3 Regional Office		_____9
4 Washington Office		_____11
5 Other _____		_____12
		_____13
		_____14 or higher

14. What level of education have you completed?

1 High school or GED
2 Some college coursework
3 Associate Degree
4 Bachelor's Degree
5 Master's Degree
6 Ph.D. or equivalent

15. If there is anything else you would like to say about the Leadership & Communication Course, please do so here.

Thank you again for taking the time to fill out this survey

Appendix C

Frequency of Response on Office Levels of Respondents

Frequency of Response on Office Levels of Respondents

Questions Thirteen A and Fourteen A

What office level and grade did you hold when you participated in the Leadership and Communications Course?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	District	125	60.7	62.5	62.5
	Forest	62	30.1	31.0	93.5
	Regional Office	9	4.4	4.5	98.0
	Washington Office	4	1.9	2.0	100.0
	Total	200	97.1	100.0	
Missing	System	6	2.9		
Total		206	100.0		

What office level and grade do you CURRENTLY hold?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	District	95	46.1	49.0	49.0
	Forest	67	32.5	34.5	83.5
	Regional Office	22	10.7	11.3	94.8
	Washington Office	10	4.9	5.2	100.0
	Total	194	94.2	100.0	
Missing	System	12	5.8		
Total		206	100.0		

Appendix D

"Other" Responses as Open Responses

from Questions 2, 3, 4, and 16

Question 2: Open Responses and Value Assigned

Why did you attend the Leadership and Communications Workshop?

(1 = highest, 5 = lowest, NV = No Value Given)

1 expand on ideas/methods

1 I wanted to develop a strategic plan for my forest.

1 help in organizational changes

1 Connect with Peers from other Regions, Forests

1 reputation of course

1 Recommendation from mentors as part of my career/professional development.

NV Forced to go

1 good training opportunity

NV Due to my supervisor being influenced by another individual on the Forest who I was having a very difficult time working with. My supervisor took this individual's advice and required me to attend.

1 increase my awareness and knowledge on good communication skills

1 Learn more about my leadership style. I enjoyed the personality profiles and Myers Briggs.

1 understand others better

1 Improve my communication skills

1 Learn about different leadership/management styles, different from my own, and learn how to effectively deal with those.

1 Contribute to discussions by exposing others to differing points of view.

1 Supervisor said it was a great course. Said I had to go.

1	great opportunity for continuing education

1	opportunity to interact with peers from other areas of the country and exchange ideas and issues

1	improve communication, identify skills and attributes associated with leadership

2	learn more about communication

1	Improve communication skills

NV	I heard many times that it was an excellent course.

1	Review/oversee

NV	Continuing education and exposure to new concepts and ideas regarding effective leadership and communications

NV	It was a great opportunity, as I was the only non-wildlife person, as well as a line officer, that was in attendance.

2	Better understand the Forest Service "culture"

NV	Develop leadership and communication skills

2	Part of the core classes

2	To take the opportunity of continuing ed courses

2	For me personally I learned the most in 2 areas: 1) personal development as a team leader and 2)the use of "Don's Toolbox" which can be used to assist in partnerships, education, marketing, and environmental document developments.

1	Enhance my understanding and skills for interacting with and leading a wide variety individuals with diverse personalities, and learning and communication styles

2	being new to the FS, meet FS personnel

1	My supervisor insisted that I attend.

1   location in VA

1   To recharge my batteries, and have some personal improvement experiences.

NV   Decide on my career direction

1   I was told it was a good class to attend. I had no idea what to expect. To date it is the best CE: class I have attended, by a long way. Not only did they make you feel welcome a part of something larger, but they gave you tools to understand how people (comment too lengthy and was cut off)

NV   interact with other resource professionals

1   Better understanding of why co-workers, supervisors and subordinates act and change in response to internal and external changes. Better understanding of interpersonal relationships.

1   At the time, I believed the Forest Service needed to change, and I believed this course would provide me some of the tools to help me effect change at the District and Forest levels.

1   Self Improvement of communication and leadership skills. I enjoy learning new skills.

1   To learn more about communication skills

1   I heard it was excellent

1   Coping/dealing with organizational inertia.

Question 3: Open Responses and Value Assigned

To what extent did your participation in the Leadership and Communications Workshop affect you?

(1 = highest, 5 = lowest, NV = No Value Given)

NV   I recognize the importance of having a plan.

1   All I recall is the Myers-Briggs test. Cold trail.

1   Changed the way I run my program in terms of meetings, interactions with co-workers, and position in my organization.

NV   It affected me negatively, I was uncomfortable throughout the course

1   opportunity for networking with other professionals

1   This course reaffirmed for me that the more you know the less you know

1   My understanding of what makes people "tick" increased

1   gained course materials for future reference

2   I demonstrate better communication skills

NV   It has been 6 years. I pulled out the course materials and reread them. The leadership ideals are still interesting. However, with my current position, geographical location, District program direction, and supervisor, leadership opportunities are minimal.

1   I learned a valuable concept in the Meyers-Briggs Type Indicator which greatly helped with a personnel issue

2   Improved writing skills and improved ability to "read" others

2   Better understanding of self

2   gained a network for natural resource work 'at large'

2   better able to make and understand biological and personal connections

NV   The course was about teams not leadership and communication. great course for team building but had nothing to do with leadership and communication

1   these questions should say "communication" not "leadership"

1   Intensive Meyers-Brigs w/wife.

1   It helped to rebuild and develop new insights and understandings of human interactions and dynamics.

1   It allowed me to better understand how people interact.

1   I applied to and have gotten through the first hoop of being part of the senior leadership program.

1   Understanding of self. Everyone employee should have this the first year of their career.

1   It helped me to better understand co-worker's and supervisor's methods of communication

Question 4: Open Responses and Value Assigned

How do you use the information and skills you learned in the workshop?
(1 = highest, 5 = lowest, NV = No Value Given)

1   Difficult to recall content. Needs refreshing.

2   Friends

NV   I already possessed the skills presented, so I cannot accredit the training for these skills.

1   my supervisor has far greater leadership/communications skills than anyone I know.

NV   Use personality types occasionally to deal with others. Skills in writing, dealing with media, negotiation I learned outside of course. The info presented in this course was generally already known to me.

1   My profession

3   Not a good question. Unable to differentiate with other learning.

NV   Church leadership

1   my external partners

2   I had an irrational boss when I took this course. I learned that he was in fact a problem and I wasn't so I learned to deal with that mess.

NV   I found no linkage between the course information and my family personally; but rather how the information may be used to enhance my professional objectives and long-term effectiveness. Such activities may then be "indirectly related" to my family in time

1   When I have a task or action to carryout, I stop and think about my responses, action or strategy.

1   The MBTI assessment and understanding was worth the entire course expense and time.

Question 7: Open Responses

When you believe the improvement began?

I have been involved with strategic planning on the forest since the training

I probably understood the some of the concepts of this class more as time went on, and was able to apply the concepts more effectively. I also learned more about Competencies D, G, H, I, J, K and M from other training courses or from experience.

During the workshop

Previously with Myers Briggs training at Learning Exchange/Leadership and Empowerment

Leadership/Communications is important and highly recommended to anyone at any level of any organization.

I really expanded on this about 7 years later when learning about how people learn and those styles. That gave me alot of "aha!" moments and insights to why folks do what they do.

Prior to taking the workshop; I received reinforcement from the workshop

As soon as I understood you might be able to define people.

Has made me very conscience of listening harder.

The course was 6 months long with the group meeting for 3x during that period for 3 days each., plus I just finished the course so hard to tell about the future.

Question 16: Open Responses

If there is anything else you would like to say about the Leadership and

Communications Workshop, please do so here.

I find that, time and time again, the most time consuming aspect of my management efforts are centered around conflict resolution or conflict management (i.e. sometimes there will be no resolution! i.e. deeply held beliefs that are based on passion, not facts

The workshop was the first time I had any exposure to MBTI - since then, I have had several more opportunities to do so, and have learned every time. The workshop was the single most effective and important training I have attended in my career.

Keep up the good work. I just hope there is going to be a USDA Forest Service in the future that will allow its employees to have a rewarding career with the agency. It might also be nice to get back to actively managing resources, but maybe that's asking too much.

Probably the best training class I have ever taken

I've told others that I think the Forest Service really made a good investment when they send me to Leadership and Communications training.

Organizers may want to consider splitting the course in two with a Basic Course with a developmental emphasis, and an Advanced Course to focus on additional development to prepare an individual for more complicated L&C levels.

The workshop was a great blend of topics. One of the most effective FS Workshops that I have attended. I was able to use most of the info. to some degree in my work duties.

I enjoyed my brief stay at Virginia Tech and felt that the instructors were very supportive and open to differing views.

Regarding Question #8, I think that the answer is dependent upon the total amount of experience a person has, including outside the FS. If they have more than 3 years supervisory experience in the natural resources field outside the FS but only 1 year of

Keep up the good work! I continue to hear good things from recent attendees. I attended in 1998 and it sounds like the quality of the program has remained high.

Need more example of how people work through various situations. How to deal with difficult employees. How to deal with angry members of the public.

It was a great session for understanding more about my personality, how I work with others, and ways to provide leadership in different situations.

One of the best courses available to USFS employees...keep it around!

LAC was the best short-course I have attended to date in my career. Steve and the other instructors did a great job!

The class I attended had very excellent instructors. I was very pleased with the overall class and have recommended it to others. I would recommend this class for everyone who becomes a supervisor. 90% of my leadership time is spent on personnel issues

This and similar courses helped me get to positions of influence far more effectively than I had imagined, earlier in my career. A must for natural resource professionals who want to maximize their value to the agency and the resources it manages.

This was one of the most valuable courses I have taken in my career. The information provided was fantastic and the instructors were top-notch. I have been using information from the course throughout my career and will continue to do so in the future.

The survey is a good tool to gather data however, the questions and choices to the answers really do not allow you to really give a good answer. I would strongly suggest you visit/interview a few folks about the same questions. I am pretty confident the

I had a difficult time remembering the course material and recalling/isolating the impact it has had over the years. At the time I thought it was one of the better courses I'd taken. I am in a leadership position now, and need a refresher. Nationwide, w

While the course was fantastic, and the professional and personal contacts made there maintained over time, the agency itself does not value the content of this course and shows this by not allowing these leadership principles to be expressed in the workplace

the personal style discussions helped clarify why our staff group differed from other staff groups, since most of our staff tended toward the same types

This course is not for everybody, but some people really thrive on it. I enjoyed the Meyers Briggs information, but had already had a lot of exposure to it in college. I was required to go to this course (because nobody else on the Forest could go, they

I'd say the workshop reaffirmed that my leadership and communication skills were already quite good, which is why I don't believe the class actually improved them all that much. There was a time I thought I wanted to advance up the career ladder, but real

Eight years after taking the course it is difficult to remember all of the specifics of the workshop. Certainly topics like Myers-Briggs stands out and the knowledge was imparted to us by one of the instructors that some of our nations top industries

I believe this course should not only be offered in early career development, but some type of refresher course should be offered for mid-career level employees too. A strong emphasis should be placed on developing support groups amongst the group members

I have strongly recommended this course to my employees. It was the best training I have attended during my FS career.

The instructors were excellent.

Great Course which I have recommended to others that could benefit.

It was a valuable experience that helped me learn about myself and others. It also gives me more understanding about people and the diversity of styles people have. I would like a copy of the report when completed.

I really enjoyed the course and would recommend it in a minute to others thinking of taking it. The learning environment was terrific - kept fun while still accomplishing the goals. The course had a good selection of students in differing levels of the

After a really long time (!) I still think about the experiences of and people I met in this short-course. Nearly every day I use my understanding of how people differ (Myers-Briggs stuff)to help me get things accomplished--professionally and personally.

It was a great workshop and I would recommend it for all natural resource professionals - even if they don't supervise anyone. The things I learned about communicating with people has served me well in both my personal and professional life.

This was my favorite of all continuing education course and other training courses taken. It was interesting, fun, applicable, and directly helped me in my professional and personal

life.

I think this workshop is best for those relatively new to the FS, but I also would like to see a refresher course or advanced course developed for mid career professionals.

Have highly recommended the course to co-workers

The books that were given as part of the course were very motivational and I've used them off & on since the course. The staff & speakers for the course were outstanding.

Best and engaging Continuing Education workshop I have taken since 1991

This was the BEST course I have completed in the Forest Service - not just the Con. Ed. program. It made me more tolerant of others views and opinions and I came out a better team player. The instructors were excellent. This course has helped me in my work

I have a larger leadership role now, than when I took the course. Because Virginia Tech did such a great job in teaching the Leadership course, I was able to recall what I learned from the past and refer back to the information that I need today.

Unless an entire working group attends the session together, it is less than effective. Having 1 individual attend, out of a workforce of 50+ is of little use. On the other hand, it was a great sabbatical away from the BS paid for by the Government.

I would love to have some kind of refresher course for those of us who have already taken it.

A brief explanation to my answers on career advancement. I have been a biologist on a district with no desire to advance in the system so using the leadership and communication course as a tool for career advancement had no bearing on my decision to take

Share the results of this survey when ready.

None

I feel the class was a good one. It is my implementation of the information and skills that is lacking. This has nothing to do with the quality of instruction or the information passed on. My hesitancy in saying that I would recommend it is not from the

It is a great training that I highly recommend to everyone! It should be something offered not just to biologists. I would like more problem solving/leadership training, but wouldn't reduce any of the other topics. Too bad adding a week would be too much

Thank You. Keep up the good work.

For me this course had some refresher material from when I attended Region Five's Learning Exchange/Leadership and Empowerment. There was also some new material (working with the media) that was very helpful.

With such busy work schedules it is difficult to not slip back into old habits - to remember to apply what you have learned from ANY training. On the other hand, the busy work schedule gives you plenty of opportunity to practice what you have learned.

It was a great training and a great location. I would like to attend the training again to see if I could learn more since I am now in a leadership position.

I was the only participant in my session that represented my resource specialty (Timber Management). Consequently, I found that often I was voicing opinions and viewpoints regarding the my Agency's mission that differed from those held by participants re

Jerry Cross did an excellent job.

It was a good opportunity to address issues related to Program management in the Forest Service.

Teaching writing and speaking in one day is difficult. People who need writing and speaking skills should probably take a more intensive class. Dealing with the media could be valuable for those unfamiliar with its working. I have a degree in journalism,

I think I took the class too early in my career. I would have gained a lot more out of it now than I did back then. Also the thing I remember the most about the class was the amazing Dr. Jerry Cross (what a fine example of loving leadership) and the net

Jerry Cross was Great!!! It has been 12 years since I attended the course, but still use skills & info I picked up at VPI.

One of the best courses I have been to. Good for certain aspects of my job.

It's been "forever" since I took the course, so these answers are my best estimates.

It was great, and I have sent members of my staff to the session as a result of my own experience.

The Meyers-Briggs Type Indicator was BY FAR the best thing I got from the session, and I have used it in my personal and professional life extensively since then. (It's actually the only specific thing I remember from the session, although I know I got a

I would like to see a Leadership and Communications II course. Especially for those of us with several years of FS service.

This was one of the best courses I have ever attended.

This is a great course and one that I would recommend to anyone who supervises or plans on supervising. I took this as a journeyman wildlife biologist at a district. I now occupy the Public Relations Officer position for the forest and continue to take

I felt the workshop was outstanding. It gave me the tools to be more effective in almost all areas of leadership. The challenge in a busy and demanding job is finding the time to focus on, or the continuity to ensure behavioral changes occur.

I enjoyed the Leadership and Communication workshop not because it developed my skills to be a leader, as much as it helped me understand who I am and to use the skills I have more effectively. I think understanding the different personality types

The "dealing with the media session" could have been presented better.

It hard to truly do a good job with this survey when I completed the course in the 80's.

I would like to have attend the course with several of the key people I work with. I came back with new knowledge into the same old situation. I wasn't sure at first how to use that new knowledge.

Success/value of course should not be judged on how many GS levels on climbs. Leadership comes at every level of the organization. LAC would be extremely valuable for crew supervisors and technicians who may not ever have or want the opportunity to work

I also benefitted from the presentations on Organization and working efficiently. I greatly appreciated the work ethic presented/encouraged/demanded during the course. The Meyers-Briggs testing and exercises were amazing and realizing how different

It was the best training session I've ever attended. I still vividly recall a number of statements, lessons, issues, opinions, events, places, people and their facial expressions that made a lasting impression on me. Dr. Jerry Cross was a fantastic

Seemed like there were two distinct groups that attended the workshop. One group was fairly happy with their jobs and the organization. Seemed like they wanted to really learn about leadership and advancing their career. The other group seemed like they

I think it was one of the most valuable training sessions I have attended in 22 years of service. I think it should be mandatory for all line or aspiring line officers. Excellent course!

Regarding the survey - for a couple questions I needed the "not applicable" option...but I'm probably an outlier. So I left those questions blank. I wasn't "undecided" or "unsure"...it just didn't apply to me.

Even though my answer to #13 and 14 indicate that my GS level has stayed the same, the course enhanced my ability and interest in working with other people.

Great mix of topics and diversity of professional instructors. The "Cascade Survival" exercise was a great way to bridge PROCESS (team work, meeting management, listening, speaking, motivating) with PRODUCT (good decisions). Leaders often put great importance

This comment is not about the workshop. Sadly, after 26 years in the Forest Service, I continue to believe that it is not what you know or what you know about the organization, but who you know. Unless you have a mentor or someone who can assist in "growing

It really was a good class except I had already had Myers Briggs and most of the classes seemed geared toward team building rather that leadership.   Only one day out of 2 weeks was really spent on communication and that was just focused on communicating

As important as we class participants felt this session was for ourselves, we strongly believed that more persons in influential supervisory and leadership roles, and particularly FS line officers (DR's and FS's), should participate in this or a similar p

the instructor were great it was a great chance to Network and make life long friends

Excellent workshop, knowledgeable instructors

I took this course several years ago. I wanted to take all the continuing ed courses for self-improvement and potential career support. I took about four of the continuing ed courses. However, I had no career path to which these were aimed. As it turns

I gained more tools to use in my job and personal life from this two week session than I have with all the rest of my training (over 20 other courses) combined.

This was probably the most useful and enjoyable continuing ed course I've ever taken. I think that it has value both during the early years of one's career, and also later on, to push you out of the ruts you've inevitably fallen into over time. I strongly

I remember that I really enjoyed it and thought it well-worthwhile.

The workshop exceeded my expectations. Thank you!

I have highly recommended this course to others. I found the first week (understanding personality traits) the single most valuable lesson of this course. While the media information was helpful, I do not interact with the media on a frequent enough basis

A reality of the FS, is that leadership positions are not necessarily filled with leaders, nor does it appear to be a criteria for selection. Too often, other factors take precedence.

I was very impressed by the instructors and the location was a nice one to hold the training at. This said, I think that more time could have been spent in the instruction of the class.

things like this shouldn't be a one-time deal. more often than not, it's all forgotten in 6 months. we need a clearer strategy to continue the learning...

Great session, with great cadre! Learned almost as much from interacting with the other participants. Would like to see a basic leadership and communications and an advanced session.

The books were nice, but frankly I've rarely opened them Question 7 needs a second part regarding how long the improvement lasted...- while I immediately was influenced by what I learned in the course, gradually most has faded away since it's been 9 years

I would like to have access to updates and other topics that have since been covered in subsequent Leadership trainings.

It has been a long time since I participated in the workshop but the greatest value at the time included those subjects that allowed insight into yourself and others styles and personalities. I have since been involved in other leadership projects that I

Interesting survey; not perfect, some questions get obvious and routine answers; since my wife went with me, it was a significant event for us; I wish I had taken it 10 years sooner; it was great; good location in VA and excellent staff, Gerry especially

Even as reflected in this survey, issues of leadership and communications are not simply a one-time contact or event in a person's career or life, rather more of a journey. IN that sense, it would be good to have an early and "continued exposures" through

This was one of those experiences that makes changes (some subtle, some more overt) in the way you approach your job and co-workers. I learned a lot about myself and have recommended this course to others for the same reasons.

This was the watershed event that allowed me to move from being a scientist/technical expert into management with confidence.

This was the most interesting and beneficial training that I have ever attended. The mix of lecture, activities, and presenters was fantastic. I have always and will continue to HIGHLY RECOMMEND this training to anyone serious about a career with the

Note that Q6, above, asks responder to indicate how much improvement occurred. Therefore, a "little" improvement response, for example, does not necessarily reflect on the quality of the class. It may reflect on the skill level of the responder at the t

I feel that this course was a good refresher for me. Although i have not increased grade level, etc since the course, i have held many Forest-level details and currently am on Forest-level teams and a regional rep for the FS on a multi-agency state-wide

Would like to take it again!

This course should be mandatory at the GS-9 or 11 level.

Absolutely the best and most lasting class I have taken in FS training. Fast moving, effective. Effects were immediately apparent as well as easily incorporated into long term actions. Leadership style was most useful over my time as a supervisor. I s

This is a very good class. If you are measuring the class on the questions asked, then I am not sure the power or effectiveness of the class will be understood.

Since I have 27 years in the organization and been in a leadership role (Forest Fish Program Manager, Technology Transfer Leader), I have had similar training, but not at this intensity or duration. A lot of the materials and concepts were not knew, but t

This training was the first I had received in the Forest Service that wasn't a botany workshop that was actually something that I would use in my everyday job. I really have used the information I gained quite a lot. It was great.

Question #8-Leadership and Communication Training should be given throughout a person's career. Leadership should be considered a continual process that individuals work through. At some point we are all leaders, professionally and personally, so once a

This was one of the best courses I have taken in the government. I learned more about my leadership style and how I can influence positive change in the organization than any other forum I have attended.

This was a very well organized and informative workshop. However, like most workshops, the participant gets out of it what he or she really wants, often relevant to their expectations. I think it is impossible to truly change one's leadership and communication

Some people have natural leadership style. I do not. I don't have the personality to be a leader. But I have that desire. I greatly appreciated being able to take the Leadership Class. It helped in my outlook on the future of my career. My profession

This course help me understand that leadership is not an assigned position. From that I was able to start leading many issues in my field at many different levels. I am a District Ranger today because I learned about being a leader in a new way and

Pretty decent course.

I feel that there were people at my session that were too new to the Forest Service to benefit. Also, some regions such as mine limit these courses to only fish and wildlife biologists. This is not limited to this course.

This course was, if not THE turning point in my career, certainly among several that I took (public speaking, media training, collaborative leadership, Grey Towers meeting

with Eddie Brannon)that began to frame my future role with the Forest Service.

Dr. Jerry Cross puts on one of the best programs available. When the Forest Service gets into a budget crisis, training is the first thing traditionally cut. The leadership and communication training and the insight of self and others that the MBTI provided

I am a biologist. I find that most biologists or related folks that have forest or ecosystem conservation as a goal or value or in more or less conflict with the organization most of the time. I wish the course, or another related course addressed this mo

It was a very useful course when I took it in 1989. I continue to recommend it to other biologists.

I greatly enjoyed the class, both the instructors and the participants!

I learned a lot from the workshop that I was not taught in academia. However I have recently been involved in a leadership program outside the FS that has blown me away. Although I've been involved in this program for just over two years and the workshop

My responses are faded through passage of many years since I took the course. I think this was the best course offered through Wildlife Continuing Education. I was selected for a 12 month leadership development course shortly after taking this course. T