### THE EISENHOWER LEADERSHIP DEVELOPMENT PROGRAM: A STUDY ON

### STUDENT LEADERSHIP SKILL DEVELOPMENT

A Dissertation

by

## CINDY SOUTHARD BLACKWELL

Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of

## DOCTOR OF PHILOSOPHY

December 2003

Major Subject: Agricultural Education

# THE EISENHOWER LEADERSHIP DEVELOPMENT PROGRAM: A STUDY ON

# STUDENT LEADERSHIP SKILL DEVELOPMENT

A Dissertation

by

# CINDY SOUTHARD BLACKWELL

Submitted to Texas A&M University in partial fulfillment of the requirements for the degree of

# DOCTOR OF PHILOSOPHY

Approved as to style and content by:

Richard L. Cummins (Chair of Committee)

Scott R. Cummings (Member) Christine D. Townsend (Member)

> Angela Bies (Member)

Glen Shinn (Head of Department)

December 2003

Major Subject: Agricultural Education

#### ABSTRACT

The Eisenhower Leadership Development Program: A Study on Student Leadership Skill Development.

(December 2003)

Cindy Southard Blackwell, B.J., The University of Texas at Austin; M.U.P., Texas A&M University

Chair of Advisory Committee: Dr. Richard L. Cummins

Although no one program exists for leadership development, there is an understanding among practitioners and researchers that leader and leadership development occur in many venues, with one of those venues being an academic classroom where experience and theory are juxtaposed. One such program is the Eisenhower Leadership Development Program. In an effort to strengthen the academic discipline of leadership and to garner further respect for leadership development programs such as ELDP, leadership development programs must be assessed and evaluated in order to ensure that the objective of the program is being met. Brungardt and Crawford noted that, "assessment and evaluation of leadership programs help ground programs in the needs of students while working within the constraints of academe" (1996, p. 37).

The purpose of this study was twofold. First, this study sought to ensure that the Eisenhower Leadership Development Program was producing the outcomes the program was designed to produce. Second, this study sought to demonstrate the worth of ELDP to past, current, and future stakeholders. Former ELDP students were surveyed regarding the perceptions of their learning outcomes based on four practical skills (problem definition, discovery of research alternatives, delegation/teamwork, and achievable challenge) and four complimentary adaptive skills (focusing on an issue, direct attention to detail, management of time and resources, and persistence).

This study found that students did perceive to have gained leadership skills in each of the practical and adaptive skill constructs. The comparison between students' perceptions of each skill before participating in ELDP and after participating in ELDP was positively correlated and statistically significant in every construct. In short, the relationship between the practical and adaptive skills taught in ELDP and the learning outcomes is not serendipitous. The findings show that ELDP is improving the development of students in terms of them becoming leaders and in terms of the greater concept of leadership as related to the four practical and adaptive skills emphasized by ELDP. Further research related to the interdisciplinary design through which the practical and adaptive skills are taught is recommended.

#### **DEDICATION**

If the truth were known, no diploma would have just one name printed on it. As I have recently realized, it also takes a village to earn a degree. My village is grander than anyone deserves and for it I am blessed. My three boys are the center of my village – one big and two little. To Scott, the big one, I thank you for your guidance, your patience, and sometimes even your tolerance. I know I can be a bit much at times – you are a superstar. To Ethan and Stuart, the two little boys, you need to know that you have both been so amazing since the start. You have really been the two most precious and most cooperative babies and now little boys. People often comment on how your daddy and I could possibly do all we do. Given how remarkable you both are, it is all really quite simple and extraordinarily rewarding.

My village also has a town hall and a bank – known as my parents, Damon and Sue. I thank you for your financial support and for your willingness to be here any time we needed an extra set of hands or two. However, I most of all thank you for providing me structured freedom and unconditional love for my entire life. I am proud of the person that I am. Although I realize that I have never been a particularly difficult child, I know I have not been the easiest. Given Ethan and Stuart, I now see the challenges and rewards of raising strong-willed children.

#### ACKNOWLEDGEMENTS

Five and a half years ago, as I was completing my master's degree, I made Scott promise not to ever let me go back to school. I am not much into selfaggrandizing, and I had no need for a Ph.D. So the past three years have not been quite what I expected. To begin, I am humbled. I never fashioned myself to be a Ph.D. type, because I saw such a person as erudite, arrogant, and stuffy. I was wrong. The Ph.D.s with which I have worked have been mentors, friends, and some are just downright humorous. I thought that such work would take me away from my family and friends and keep me isolated. To be sure, this work has kept me busy, but it has enriched my relationships with my family and friends. As the almighty dissertation – turns out it is a learning document.

And learn I have – both formally and informally from the faculty, my fellow students, and especially from my committee. Dr. Chris has been a role model as well as a teacher. Just as many have experienced before me, I am amazed at all you do and how you do it all with humor, honesty, and straightforwardness. For Dr. Cummings, I appreciate most of all your sense of humor, your intelligence, and your degree from The University of Texas. Your open-door policy really is an open door and for that, I thank you. Dr. Bies has been my qualitative champion from the start (not to mention Scott's sisters swimming teacher), which I have needed. You have also been a great inspiration as I witnessed you so gracefully flow through the process yourself. Of course, as the chair and the director of the Eisenhower Program, Dr. Dick has kept me on course and provided me with the needed information at all times. Your patience is extraordinary and your willingness to listen to sometimes, ridiculous things and provide your wisdom and thoughts has been above and beyond. I am not sure that I have more questions now versus when I began this process, but I now have a better understanding of what I do and do not know and more importantly what I want to learn about or more about.

I remember early on hearing about the "AGED family" and thinking that was a little odd for a workplace, however now I understand. Being a part of the AGED family for the past three years makes me realize that it is just like being a part of any family – it comes with heartfelt feelings as well as with feelings of heartburn. I am honored to have experienced both feelings. One of the people with whom I have shared such feelings is Jen. Jen you are my idol, and quite honestly, you should be listed as a committee member. You have been a great source of information both academically and socially and you are just a fabulous friend. Others in the AGED family are Charlene and Debbie who have been such a great help always, but especially during my pregnancy. Your enthusiasm towards Ethan and Stuart warms my heart. Finally, Clay has kept me online even when I could not leave my home. Thanks!

Finally, as I sat down to make a list of everyone that has helped me toward this goal, there were the obvious people with whom I interacted each day, and then there were the not so obvious. First, there is Jacquie Huff who encouraged me into going to get my master's degree – a feat I never before had even contemplated much less thought possible. Then there is my extended family, including the Bells (Kim and our hour long weekend phone conversations kept me entertained), the Southards (the camping trips gave us something to look forward to each semester), the Stewarts (for coming down so often to help out with Ethan and Stuart without the stress of a mother-in-law), the Blackwells (for a fantastic summer retreat), Valerie and David and Chet and Kathryn (for taking care of Ethan and Stuart in a pinch, for caring, and for just being such great role models and friends), and finally for Meredith (trusted friend and babysitter – the boys really miss you). I know there are many others who have assisted me in this endeavor (including Oslo and Kodak) and to all of those I am grateful. It really does take a village.

# TABLE OF CONTENTS

ABSTRACTiii
DEDICATIONv
ACKNOWLEDGEMENTS vi
TABLE OF CONTENTS ix
LIST OF TABLESxii
CHAPTER
IINTRODUCTION1ELDP Program Theory2ELDP Curriculum Design5The ELDP Student7Statement of Problem9Significance of the Study10Definition of Terms11Limitations11Assumptions12
II       REVIEW OF LITERATURE.       13         Leadership and Leadership Development.       13         Academic Leadership       16         Practical and Adaptive Skills as Related to ELDP       18         Problem Definition/Focusing on an Issue       19         Discovery of Research Alternatives/Direct Attention to Detail       20         Delegation/Teamwork/Management of Time and Resources       20         Achievable Challenge/Persistence       22         Experiential Learning       24         Interdisciplinary and Collaborative Learning Teams       26         Summary of the Review of Literature       28
IIIMETHODOLOGY30Purpose of the Study30Research Design30Hypotheses31Population and Sample32

	Instrumentation	32
	Data Collection	35
	Response Rate	36
	Data Analysis	39
IV	FINDINGS AND DISCUSSION	40
	Demographics	
	Findings Related to Hypothesis One	
	Findings Related to Hypothesis Two	
	Findings Related to Hypothesis Three	
	Findings Related to Hypothesis Four	
	Findings Related to Hypothesis Five	
	Findings Related to Hypothesis Six	
	Findings Related to Hypothesis Seven	
	Findings Related to Hypothesis Eight	
	Findings Related to Hypothesis Nine	
V	SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	63
v	Purpose of the Study	
	Hypotheses	
	Methodology	
	Instrumentation	
	Population and Sample	
	Summary of the Review of Literature	
	Summary of Findings and Conclusions	
	Related to Hypothesis One	
	Related to Hypothesis Two	
	Related to Hypothesis Three	
	Related to Hypothesis Four	
	Related to Hypothesis Five	
	Related to Hypothesis Six	
	Related to Hypothesis Seven	
	Related to Hypothesis Eight	
	Related to Hypothesis Nine	
	Programmatic Recommendations	
	Recommendations for Further Research	
REI	FERENCES	89
API	PENDIX A	95
API	PENDIX B	104

Page

CHAPTER		
APPENDIX C		
VITA	120	

# LIST OF TABLES

TABL	TABLE   Page		
1	Eisenhower Leadership Development Program Former Student Survey Leading Questions for Internal Constructs		
2	Reliability Coefficients (Alpha) for the Eisenhower Leadership Development Program Former Student Survey		
3	T-Test for Non-response Error		
4	Demographics of Sample Population41		
5	Demographics of Respondents42		
6	T-Test for Paired Means of Responses as Related to the Perceived Leadership Skills of the Eisenhower Leadership Development Program		
7	T-Test for Paired Means of Responses as Related to the Perceived Practical Leadership Skill of Problem Definition44		
8	Eisenhower Leadership Devleopment Program Former Student Survey Internal Construct for the Practical Skill of Problem Definition44		
9	T-Test for Paired Means of Responses as Related to the Perceived Practical Leadership Skill of Discovery of Research Alternatives45		
10	Eisenhower Leadership Devleopment Program Former Student Survey Internal Construct for the Practical Skill of Discovery of Research Alternatives		
11	T-Test for Paired Means of Responses as Related to the Perceived Practical Leadership Skill of Delegation/Teamwork47		
12	Eisenhower Leadership Development Program Former Student Survey Internal Constructs for the Practical Skill of Delegation/Teamwork48		
13	T-Test for Paired Means of Responses as Realted to the Perceived Practical Leadership Skill of Achievable Challenge50		

TABLEPage		
14	Eisenhower Leadership Development Program Former Student Survey Internal Construct for the Practical Skill of Achievable Challenge51	
15	T-Test for Paired Means of Responses as Related to the Perceived Adaptive Leadership Skill of Focusing on an Issue	
16	Eisenhower Leadership Development Program Former Student Survey Internal Construct for the Adaptive Skill of Focusing on an Issue53	
17	T-Test for Paired Means of Responses as Related to the Perceived Adaptive Leadership Skill of Direct Attention to Detail	
18	Eisenhower Leadership Development Program Former Student Survey Internal Construct for the Adaptive Skill of Direct Attention to Detail56	
19	T-Test for Paired Means of Responses as Realted to the Perceived Adaptive Leadership Skill of Managing Time and Resources	
20	Eisenhower Leadership Development Program Former Student Survey Internal Construct for the Adaptive Skill of Managing Time and Resources	
21	T-Test for Paired Means of Responses as Realted to the Perceived Adaptive Leadership Skill of Persistence	
22	Eisenhower Leadership Development Program Former Student Survey Internal Construct for the Adaptive Skill of Persistence60	

#### CHAPTER I

### INTRODUCTION

Experience and learning have historically traveled many the same paths. Unfortunately one path experience and learning have rarely traveled together is the path through academia, where the lecture all too often prevails and the student is seen as the mere receiver of information (Chickering, 1977; Keyser, 2000). Arthur W. Chickering observed that, "With the death of chivalry and the decline of the guilds, only the university survived – with its emphasis on content and authority and its rejection of direct experience and useful applications" (1977, p. 15). Fortunately, the emphasis on experiential learning, as it has become known in academia, is shifting as society begins to demand workers who not only posses the technical skills to perform a job, but also posses the adaptive and leadership skills required to function within the workplace. "Our rapidly changing society desperately needs skilled leaders who are able to address complex issues, build bridges, and heal divisions" (W. K. Kellogg Foundation [WKKF], 2000, p. 31).

One such experiential learning program is the Eisenhower Leadership Development Program (ELDP) at Texas A&M University. Since the 1994 Spring semester, over 1,300 students have completed the program. The program has offered students the experience of leadership skill development through academic insight coupled with practical application in an interdisciplinary group setting. ELDP has

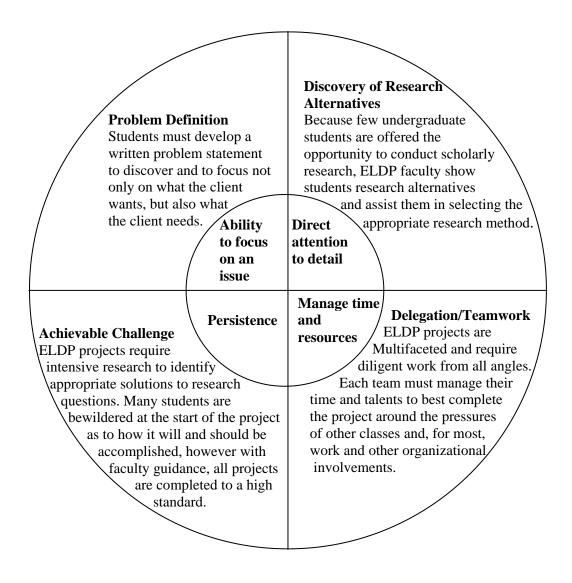
This dissertation follows the style of Journal of Agricultural Education.

included students from the Mays College of Business, the College of Liberal Arts, the College of Agriculture and Life Sciences, the Dwight Look College of Engineering, and the College of Architecture with up to 20 students coming from each college. Each semester, students have formed interdisciplinary groups and have worked on a real-world civic project, giving the students a pragmatic sample of professional civic stewardship and leadership.

#### ELDP Program Theory

Since the inception of ELDP at Texas A&M University, a primary focus of the program has been leadership development through service. Because of this focus, the program process theory of ELDP has been to develop and hone the practical and adaptive leadership skills of students through community service projects while working in groups. As stated in the Fall 2002 ELDP syllabus, the program "is organized to give participants both academic grounding and practical experience in issues that are facing the city, state and nation." For the practical skills, ELDP stresses the development or reinforcement of problem definition, discovery of research alternatives, delegation, and achievable challenge as competencies. It is through the application of these competencies to a group service project that the adaptive skills of focusing on an issue, direct attention to detail, teamwork, and persistence are developed (see Figure 1). The development or honing of both the practical and adaptive skills for each student embedded in an experiential learning environment has created the program impact theory. As noted by Mumford, Zaccaro, Harding, Jacobs, and Fleishman, "leadership can be framed not in terms of specific

behaviors, but instead in terms of the capabilities, knowledge, and skills that make effective leadership possible" (2000, p. 12).



### Figure 1

ELDP is designed to have each student experience the practical skills of the outer circle in order to develop and engrain the adaptive skills at the core of the circle. These core qualities offer a foundation upon which to build future experiences.

Because of its experiential learning basis, ELDP has offered a combination of instructional activities to enrich each student's experience. Drawing from David Kolb's Experiential Learning Cycle, ELDP offered students *abstract conceptualization* through lectures from faculty scholars, *active experimentation* through the development of problem statements and research outlines, *concrete experience* through data collection and evaluation, and *reflective observation* through evaluation within the interdisciplinary group process (Svinicki and Dixon, 1987; Kolb, 1984; Chickering, 1977). It has been the intent and the program impact theory of ELDP that, through this leaning cycle, students have learned not only how to approach, solve and report on a problem, but also have learned leadership skills and competencies which those students will continue to practice in both a professional setting as well as in a civic setting.

Although classroom lectures have included a brief overview of leadership theories, ELDP has been grounded in pragmatic leadership skill development. As noted by Reed Welch, former ELDP advisor, "the practical application of leadership skills and principles gained through work on the projects outweigh the benefits of spending more time on classroom exercises and readings" (2000, p. 80). Leadership development, as defined by the Center for Creative Leadership, is "the expansion of a person's capacity to be effective in leadership roles and processes. Leadership roles and processes are those that enable groups of people to work together in productive and meaningful ways" (Van Velsor, McCauley, & Moxley, 1998, p. 4). The ELDP aim has been on developing leadership competencies through classroom activities and leadership skills through projects. "Knowledge is a necessary first step, but by itself it is not sufficient for changing leadership behavior. The new knowledge must be put into action. Skills encompass the action domain of learning" (McDonald-Mann, 1998, p. 107). By combining practical experience and a safe, structured classroom environment, students have been afforded the opportunity to expand their leadership effectiveness capacities.

#### ELDP Curriculum Design

For the past three years, the ELDP curriculum design has been generally the same each semester with the greatest variable having been the availability of guest speakers. The core content of the program is taught in graduate format meeting only one day a week for two hours and forty minutes each class meeting. The introductory class meeting has provided an overview of both the class structure and the general concept of leadership. Wren, in his article "Teaching Leadership: The Art of the Possible", stated that, "it is critical in an introductory course in leadership that the general nature of the concept under study be understood from the very beginning. The importance of having some sort of initial definition is that it brings the notion of leadership down from the realm of the esoteric and mystical, and places it within the realm of the common understanding of the student" (1994, p. 79). During the second class meeting, students have formed the teams in which they will work for the entire semester and have been assigned their first project which provides both an introduction to research and a bonding element for the team. The project has required teams to develop a t-shirt design based on the guidelines offered by the ELDP

instructors. During the third class, students have presented their designs and discussed the methodology for their final selection including the cost of the proposed shirt based on the given guidelines.

The remainder of the semester has offered students information in various formats on topics including ethics, research methods, critical thinking and problem solving, presentation skills, and group dynamics. Guest speakers have also offered other points of information as availability allows. Information delivery formats have included, lecture, active learning, group work time with assigned faculty member, roll-playing, and problem solving activities. In addition, students are required to attend two faculty approved, outside leadership related lectures or read two additional leadership related readings dealing with contemporary policy issues and turn in a brief essay that critically evaluates the experience. At the start of each class, students have been asked to share their papers, which has offered the students experience with extemporaneous and concise speaking. Students also have been required to write a model leader paper of two to three pages in length critically analyzing a leader from the past 300 years. To emphasize the research point, students have been required to use a minimum of five non-internet sources for this assignment.

Intertwined within all of the weekly coursework has been the service project conducted in interdisciplinary teams. Teams have been given a service project working with government or non-profit organizations. Working in conjunction with a contact person or persons from the organization, student teams have undertaken each project as a research proposal and have developed problem statements, researched the literature, developed questionnaires if necessary, researched alternatives, and proposed solutions. The final product is a deliverable and a presentation both of professional quality.

#### The ELDP Student

Just prior to registration each semester, students that have completed between 60 and 90 hours in the participating colleges and have a cumulative 3.0 grade point ratio or better are invited to participate in ELDP. (Due to the rigor of the program, students within their graduating semester are not permitted to enroll in the program.) Electronic mail messages are sent through the Student Information Management System to qualified students briefly stating the purpose and process of the program and inviting interested students to apply for the program. Applications are reviewed and selections are made by faculty members representing each college. It is through this selection process that ELDP matriculates students with generally great dedication and interest in the program, because "students should not be forced to enroll in a leadership program or take any of the leadership courses if they are not willing to do so" (Hashem, 1997, p 93).

In addition and in general, a great opportunity exists to engage the generation coming of age in service because this generation has experienced organizational involvement and service unlike any other generation. Neil Howe and William Strauss have studied this generation of youth as well as others and, through their book *Millennials Rising: The Next Great Generation*, have helped in labeling and defining them as the Millennial Generation. The authors explain how the Millennials (born after 1982) are poised to make a difference in that they are "more numerous, more affluent, better educated, and more ethnically diverse. More important, they are beginning to manifest a wide array of positive social habits that older Americans no longer associate with youth, including a new focus on team work, achievement, modesty, and good conduct" (Howe and Strauss, 2000, p. 4).

The Millennials also have an engrained commitment to service. With the recognition of the drastic decline of participation in the American democracy during the latter 1970s and early 1980s, it was not just institutions of higher education that recognized the need to engage students in our democratic society. Primary and secondary schools began developing community service programs. Between 1984 and 1997, the number of high school students involved in a service related program increased by 686 percent (Shumer and Cook, 1999). With the Millennials entering high school for the first time around 1996, the service emphasis has made a great impact on these students. The US Department of Education statistics from 1997 show that 49 percent of high school students reported participating in some community service that year, with about half (26 percent) participating in service on a regular basis (Shumer and Cook, 1999). Similarly, the Cooperative Institutional Research Program reported that in 1998, 74 percent of college freshmen volunteer, also with about half doing so on a regular basis (Sax, 2000). In short, students who have participated in ELDP were well poised to do so.

#### Statement of Problem

In an effort to strengthen the academic discipline of leadership and to garner further respect for leadership development programs such as ELDP, leadership development programs must be assessed and evaluated in order to ensure that the objective of the program is being met. Brungardt and Crawford noted that, "assessment and evaluation of leadership programs help ground programs in the needs of students while working within the constraints of academe" (1996, p. 37). Critical study of the benefits former ELDP students have perceived to have gained from their semester in ELDP offers program administrators insight into the past semesters and a compass to guide the future of ELDP. Specifically, this research sought to discover if ELDP has developed students' practical and adaptive leadership skills. In other words, what specifically are the learning outcomes of the Eisenhower Leadership Development Program's experiential learning process and curriculum design?

From the curriculum design standpoint, ELDP requires that students experience a process that highlights four primary practical skills and four complimentary adaptive skills. The practical skills are problem definition, discovery of research alternatives, delegation, and achievable challenge. Experience with each of these practical skills should, by design, lead to the development or honing of core leadership adaptive skills, including the ability to focus on an issue, direct attention to detail, management of time and resources (including human resources given the team setting), and persistence. In addition, because students work in the time confines of a semester, real time plays a significant part in the experience, offering students insight into the stresses of professional deadlines and standards. It is the purpose of this research to discover if this process is effective and appropriately designed.

#### Significance of the Study

According to Brungardt and Crawford, "Assessment is the collection and measurement of data, while evaluation is the judgment of that data" (1996, p. 38). More specifically, evaluation research is unique in that it examines a program, which is so unique the results are generally not transferable, but yet are of great worth. As defined by Gall, Borg, and Gall, "Educational evaluation is the process of making judgments about the merit, value, or worth of educational programs" (1996, p. 680). For this study, the value of the results will offer insight to ELDP administrators and stakeholders to assist them in mapping the future of ELDP. For community agencies with which ELDP students work, this study will help to show the two-fold value of the agency having a project completed and the students learning through experience. Finally, for other colleges at Texas A&M University, this study should show the benefit ELDP can offer their students should those colleges decide to join the program. "Leadership educators in an era of fiscal tightness understand the importance of program justification and survival" (Brungardt and Crawford, 1996, p. 47).

#### **Definition of Terms**

**Practical skills:** skills that can directly be taught through a systematic process. For the purpose of this study, practical skills include problem definition, discovery of research alternatives, delegation/teamwork, and achievable challenge.

Adaptive skills: skills that are adopted only through direct experience with a closely related practical skill. For the purpose of this study, adaptive skills include, ability to focus on an issue, direct attention to detail, management of time and resources, persistence.

Interdisciplinary: consisting of group members from different academic disciplines. Limitations

- The scope of this study was limited to investigation of the learning outcomes of the practical and adaptive skills of former students of the Eisenhower Leadership Development Program who participated from the Fall 2000 semester to the Fall 2002.
- The generalizability of this study is limited to ELDP at Texas A&M University.
- 3. Responses may be varied due to the respondents' attitude toward leadership and perceived prior individual leadership experience.
- This study was primarily conducted for the benefit and future process improvement of the Eisenhower Leadership Development Program at Texas A&M University.
- 5. This study was conducted using self-report data.

### Assumptions

The following assumptions were made during the process of this study:

- The instrument used in the study measured the learning outcomes of the practical and adaptive skills of the Eisenhower Leadership Development Program curriculum.
- 2. The interpretation of the data collected did reflect the perceptions of those surveyed.
- 3. The interdisciplinary, cooperative curriculum design served as a conduit for the learning of the practical and adaptive skills.
- Respondents did have an accurate perception of the select practical and adaptive leadership skills both prior to and after the Eisenhower Leadership Development Program.
- 5. The practical and adaptive skills taught in ELDP can be learned.

#### **CHAPTER II**

### **REVIEW OF LITERATURE**

Given the nature of the Eisenhower Leadership Development Program's curriculum structure, an overview of related literature is offered here to briefly explore the concepts of leadership and leadership development, academic leadership, practical and adaptive leadership skills as related to ELDP, experiential learning, and interdisciplinary and collaborative learning teams.

#### Leadership and Leadership Development

In his *Handbook of Leadership*, leadership scholar Bernard M. Bass began the first chapter stating that, "Leadership is one of the world's oldest preoccupations" (1990, p. 3). Burns notes that, "For two millennia at least, leaders of thought did grapple with the vexing problems of the rulers vs. the ruled. Long before modern sociology Plato analyzed not only philosopher-kings but the influences on rulers of upbringing, social and economic institutions, and responses of followers. Long before today's calls for moral leadership and 'profiles in courage', Confucian thinkers were examining the concept of leadership in moral teaching and by example. Long before Gandhi, Christian thinkers were preaching non-violence" (1978, p. 2). Peter Northouse noted at the start of his book *Leadership: Theory and Practice* that, "leadership is a highly sought-after and highly valued commodity" (2001, p. 1). But what is leadership besides an elusive concept, which is essential yet difficult to define? Even Bass' *Handbook of Leadership* does not contain a specific definition of leadership, but rather offers the explanation that there are as many definitions of

leadership as there have been attempts to define it (1990). "Leadership has been conceived as the focus of group processes, as a matter of personality, as a matter of inducing compliance, as the exercise of influence, as particular behaviors, as a form of persuasion, as a power relation, as an instrument to achieve goals, as an effect of interaction, as a differentiated role, as initiation of structure, and as many combinations of these definitions" (Bass, 1990, p. 11). Some agreement does exists that a definition of leadership does and should contain the common components of a person or persons, influence, process, a common goal, and a group (Northouse, 2001; Bass, 1990; Greenwood, 1996). Leadership, therefore, "is about coping with change" (Kotter, 1998, p. 40).

Similar to the complexity of defining leadership is the attempt to define leadership development. Rick Foster of the W. K. Kellogg Foundation noted that, "there are likely to be as many approaches to developing leadership capacity as there are circumstances to address" (2000, p. 90). Although no solid definition is available, proven methods and models of leadership development do exist. One model offered by the Center for Creative Leadership (CCL) has demonstrated how the components of assessment (feedback), challenges, and support each equally feed into developmental experiences and "make developmental experiences more powerful" (Van Velsor, McCauley & Moxley, 1998, p. 6). The CCL model explains how, during the development process, the assessment, challenges, and support offered through events, coupled with a person's ability to learn from experiences create the leadership development of that person (Van Velsor, McCauley & Moxley, 1998, p. 7). Bass noted that "a developmental learning process occurs in which capacities and skills that are gained in one stage should prepare the adult leader for new and bigger tasks and responsibilities in later stages" (Bass, 1990, p. 813).

Day (2001) dichotomizes the concepts of leader and of leadership when considering development, by expressing leader development as human capital and leadership development as social capital. "In the case of leader development, the emphasis typically is on individual-based knowledge, skills, and abilities associated with formal leadership roles" (Day 2001, p. 584) whereas, "Leadership development can be thought of as an *integration* strategy by helping people understand how to relate to others, coordinate their efforts, build commitments, and develop extended social networks by applying self-understanding to social and organizational imperatives" (Day, 2001, p. 586). Similarly, Hitt and Ireland (2002) in an article for The Journal of Leadership and Organizational Studies stressed that it is the leadership of managing such human and social capital that offers organizations a competitive advantage. Referred to by Hitt and Ireland as strategic leadership, their concept proposed that human capital, being a person's knowledge, skills, and capabilities comprise an organization's most unique resource, and that "social capital entails a web of relationships that includes norms, values and obligations, but also yields potential opportunities for the holders of the capital" (Hitt and Ireland, 2002, p. 5). When strategically led, the human capital can be utilized to its maximum potential and the social capital can help to create dynamic teams and environments prepared to the challenges of the future.

15

Above all, development related to leadership should stress active learning methods versus theory, since leadership is an active process (Bass, 1990). Of course, just as assessment, challenge, and support balance one another in the CCL's leadership developmental model, theory must also balance active learning in all leadership development methods, models, and curriculum. "Those who wish to develop leaders must understand much more than the current state of knowledge about leadership if they are to do more than engage in the documentation of trivia. Leadership development is an important personal and social skill. But it is a goal dependent upon better understanding the nature of leadership" (Spitzberg, 1995, p. 36).

#### Academic Leadership

Just as there are many takes on the definition of leadership and leadership development, opinions differ as to what is academic leadership and that is no wonder. "We can now look back on over seventy years of scientific research on leadership in small groups. For much of that time, the literature has been characterized by false starts, dead ends, and bitter controversies. Even today, the student of leadership is consistently confronted with acrimonious debates among theorists, giving the field an appearance of chaotic disarray" (Chemers, 1995, p. 96). Brungardt simply noted that, "[L]eadership education is only one component of aspect of the leadership development puzzle" (1996, p.87). It is of course an essential component. "Students can learn to discern and define situations and contexts within which leadership has flourished. Students can learn about the fallibility of the trait theory. Students can learn about the contextual problems of leadership, of why and when leadership is sometimes transferable, and sometimes not. Students can learn about the crucial role that advisors and supports play in the leadership equation. Students can also learn about countless problem-solving strategies and theories, and participate in role playing exercises that sharpen their own skills in such undertakings" (Cronin, 1995, p. 31).

But what should be taught? In his article, *The Role of Faculty in Teaching Leadership Studies*, Hashem stated that, "A special emphasis should be placed on teaching the effects of various leadership behaviors on others, the situation, and the organization of the community as a whole" (1997, p. 92). In an article specifically about the Eisenhower Leadership Development Program, Welch wrote that "at the heart of leadership education, most would include the need to train students to grasp the problems and issues facing society, to develop analytical and problem-solving skills, to learn to communicate and work effectively as members of a team, to have experience working in groups, to learn to work with people of diverse backgrounds, cultures, and academic disciplines, to learn to establish goals and motivate others to achieve those goals, and to know how to speak and write effectively" (2000, p. 71).

In addition, creating a linkage to how leadership can be applied to society beyond the academic community also appears to have an important place in the leadership curriculum. Reed recognized in an article in *The Journal of Leadership Studies* that "Civic leaders are a group of persons who challenge society through questioning, identifying and framing issues, sharing new perspectives, and outlining

17

alternative solutions" (1996, p. 100). Hashem also noted that, "One of the most important roles of faculty is the ability to explain to students and the public at large that everyone has the capacity to assume one or more aspects of leadership in the life we live, the type of work we do, and the way we deal with one another in various contexts" (1997, p. 91). Finally, Wren stresses that students of leadership should gain an understanding of the purpose of leadership, meaning that leadership "is a process intended to achieve group goals which better our society" (1994, p. 76).

#### Practical and Adaptive Skills as Related to ELDP

Research studies documenting the qualities possessed by leaders have provided leadership literature a broad range of traits and skills necessary to be a leader. These traits and skills range from the unattainable or unalterable, including age, gender and height to those a person can work to develop such as confidence, intelligence, insight, and knowledge (Northouse, 2001; Bass 1990). Of course no one list has been or could be developed, as studies have found that "different leadership skills and traits were required in different situations" (Bass, 1990, p. 78). Despite this, some characteristics have appeared in several research studies. In addition, the Skills-Based Model conceptualized by Mumford, Zaccaro, Harding, Jacobs and Fleishman, demonstrated that "skills are seen as developing as a function of the interaction between traits and experience" (2000, p. 156).

ELDP classroom activities focus on building four practical skills, including problem definition, discovery of research alternatives, delegation/teamwork, and achievable challenge. Through experience with the primary project, each competency can be fostered into a complimentary adaptive skill, including ability to focus on an issue, direct attention to detail, management of time and resources (including human resources), and persistence. These practical and adaptive skills constitute leadership qualities found in several notable studies.

#### Problem Definition/Focusing on an Issue

In an effort to replicate previous studies related to best leadership practices, Frank Toney surveyed 1,100 chief executive officers. Toney found that one of the strongest actions related to goal attainment was the leader maintaining constant focus on the goal (1996). Zaleznik, in an article for Harvard Business Review, wrote that leaders "are active instead of reactive, shaping ideas instead of responding to them. Leaders adopt a personal and active attitude toward goals" (1998, p. 66). In addition, Mumford, Zaccaro, Connelly, and Marks, through their review of the skills-based model of leader performance noted that, "Leadership within this model is based on an individual's capability for solving the kind of novel, ill-defined problems with which people are presented in organizational leadership roles. Leaders must define significant problems, gather information, formulate ideas, and construct prototype plans for solving the problem" (2000, p. 157). Sadly, as noted by Edens, many students are not equipped with such a skill during their academic career and therefore, "cannot perform decision-making and problem-solving tasks associated with their profession" (2000, p. 55).

#### Discovery of Research Alternatives/Direct Attention to Detail

Drawing from previous research, Kirkpatrick and Locke noted that cognitive ability is an important factor that differentiates leaders from non-leaders (Northouse, 2001). Toney noted from his research with CEOs that the "most successful leaders" critically analyze alternatives and opportunities" (1996, p. 122). Similarly, Stogdill, in a factor analysis of leadership traits found scholarship to be one of the five determinates of a person in a leadership position (1995, p.128). In addition, the second component to the skills-based model of leader performance as reviewed by Mumford, Zaccaro, Connelly, and Marks demonstrated the importance of being able to generate solutions to problems. "Viable solutions to leadership problems are those that work within the context of the organization. Thus, leaders must go outside themselves, appraising the implications of a solution within the organizational context" (2000, p. 157). Finally, Heifetz and Laurie, in their article for Harvard Business Review on Leadership, emphasized the need to learn by being attentive to differing points of view. These authors maintain that, "People need leadership to help them maintain their focus on the tough questions. Disciplined attention is the currency of leadership" (Heifetz and Laurie, 1998, p. 183).

#### Delegation/Teamwork Management of Time and Resources

A factor analysis of leadership studies published between 1948 and 1970 showed that social and interpersonal skills were listed as an important leader quality in 16 of the 52 studies (Bass, 1990, p. 85). "Evidence of interpersonal competence has included a wide variety of behaviors, such as showing understanding, caring, and consideration for others; displaying authenticity, rather than transparency; communicating easily and clearly; fostering and maintaining good relations with others; and serving to increase harmony, reduce tensions, and resolve conflicts" (Bass, 1990, p. 110). Developing the above skills takes the understanding that such skills are vital to teamwork. Zaccaro, Mumford, Connelly, Marks, and Gilbert in a study assessing the problem-solving capabilities of leaders noted that, "Leader problem solving takes place in a social context. Thus...effective problem solving requires social judgment skills that reflect an understanding of people and social systems. Such system skills are particularly useful and apparent in the diagnosis of mistakes and errors in complex social systems" (2000, p. 46).

In addition, Kouzes and Posner, in their research on best leadership practices noted that collaboration improves performance and increases credibility. "Shared goals bind people together in collaborative pursuits. As individuals jointly work together and recognize that they need each other in order to be successful, then become convinced that everyone should contribute and that, by cooperating, they can accomplish the task successfully" (Kouzes and Posner, 1995, p. 155). Such collaboration is orchestrated by what Hitt and Ireland termed strategic leadership, which is defined as "a person's ability to anticipate, envision, maintain flexibility, think strategically, and work with others to initiate changes that will create a viable future for the organization" (Hitt and Ireland, 2002, p. 4).

Similarly, Kotter emphasized the need for leader-managers in order to both cope with change and the complexity that comes with any large project or

organization (1997). "Managers 'organize' to create human systems that can implement plans as precisely and efficiently as possible" (Kotter, 1997, p. 28). Mintzberg, in his article The Manager's Job: Folklore and Fact, demonstrated that the role of leader is one aspect of a manager's greater interpersonal roles and as such, the manager is responsible for the work accomplished by his unit. "The influence of managers is most clearly seen in the leader role. Formal authority vests them with great potential power; leadership determines in large part how much of it they will realize" (Mintzberg, 1997, p. 43). Stewart and Manz, while researching the leadership of self-managing work teams, found that the form of leadership that best works for self-managed teams is a passive, democratic style of leadership whereas the "leader serves more as a resource and less as an authority figure attempting to influence behavior" (1997, p. 405). In addition, the Leader-Member Exchange Theory offers the important caveat that the strength of the relationship developed between leader and follower directly relates to the followers willingness to perform beyond prescribed roles (Bauer & Green, 1996; Northouse, 2001). Therefore, well-developed leader to follower relationships improve the process of goal attainment. Delegation is one technique to assist in the development of followers and to help followers become better connected to the leader and the goal (Bauer & Green, 1996).

### Achievable Challenge/Persistence

J. Thomas Wren, in the Preface of the book *The Leader's Companion* stated that the end result of leadership should be "the achievement of mutual goals which are intended to enhance one's group, organization, or society" (1995, p. xi). Bass wrote that achieving appropriate challenges offers a less experienced manager (or leader) the opportunity for greater development (1990, p. 833). In his article, *The Making of Leaders: A Review of the Research in Leadership Development and* 

*Education*, Brungardt noted that, "Tasks that are complex and ambiguous serve to enhance development" (1996, p. 86). Kirkpatrick and Locke furthered this idea when they wrote that, "Leaders have a relatively high desire for achievement. The need for achievement is an important motive among effective leaders... High achievers obtain satisfaction from successfully completing challenging tasks, attaining standards of excellence, and developing better ways of doing things" (1995, p. 135).

Why a person will continue to work towards achievement is explained by Vroom's expectancy theory, which states that, "motivation is determined by two elements, the *belief* that effort will be rewarded and the *value* attached to specific rewards" (Buford & Lindner, 2002, p. 77). When an outcome is positively valued, a person's self-efficacy will lead to the needed effort (Buford & Lindner, 2002). Similarly, McClelland's Trichotomy of Needs Theory denotes three reasons for personal motivation, including the need for power, the need for drive and achievement, and the need for affiliation. People with the need for achievement are motivated by problem solving, competitiveness, and are motivated by a challenging opportunity and an accomplishment (Shriberg, Shriberg & Lloyd, 2002). In addition, the CCL's Handbook of Leadership Development notes that "people with high selfesteem are less likely to be affected by various kinds of stress and more apt to work harder in response to negative feedback than people with low self-esteem. It seems

23

reasonable to believe that self-esteem has a similar relationship to learning – that having a strong sense of self-worth and a good measure of confidence in their abilities helps people face the possibility that their familiar skills are no longer adequate to the new challenges they face. For people with relatively high self-esteem, engaging in a new and challenging opportunity seems like less of a risk" (Van Velsor & Guthrie, 1998, p. 247). Finally, Bass (1990) summarized several historic studies relating to the need of leaders to be persistent. Dating from between 1915 and 1942, each of these nine studies found a positive correlation between stubbornness or persistence and leadership.

#### **Experiential Learning**

"For I am so confident of the potentialities of education when it is treated as intelligently directed development of the possibilities inherent in ordinary experience that I do not feel it necessary to criticize here the other route nor to advance arguments in favor of taking the route of experience" (Dewey, 1938, p. 114). This quote from one of Dewey's many writings on education demonstrates his adamancy regarding the need to move away from pure educational theory towards a more balanced system of theory and application. Unfortunately, over sixty years later, education continues to remain heavily grounded in theory and lecture (McKeachie, 2002; Cashin, 1985). Although theory and lecture do have their place in education to convey interest and state-of-the-art information, classes offering only one teaching style also only offer one learning style – one that may or may not be conducive to the needs of all students (McKeachie, 2002). Enter, albeit slowly, experiential learning which "is a dramatic contrast to learning under the old epistemological model, by which scientific, objective, and relatively inert formal education and training were supposedly transferred to impressionable minds" (Beckett, 2001, p. 73). With experiential or active learning, students must take an active role in their learning, often increasing their motivation (Chickering, 1977). In addition, Chickering offers several other genuine benefits of experiential learning including:

- demanding higher order intellectual skills;
- exposing students to social issues increasing the potential for continued "enlightened citizenship";
- ✤ increasing retention and understanding of ideas and realities;
- the opportunity to understand that the written word is not always gospel, but that neither is experience; and
- bridging the chasm between the collegiate and the professional work world with experience (Chickering, 1977).

Of course it is important to note that experiential learning is not to replace lecture or theory, but rather to compliment each (Keyser, 2000). In Kolb's Experiential Learning Model, abstract conceptualization is at the base of the cycle. Information therefore is essential, but it is only one aspect of a complete learning cycle. The learning environment should be a deliberate balance of explanation to experience, teacher-centered to student-centered, and information to understanding. Writing specifically regarding teaching the discipline of leadership, Wren noted that, "providing the student with the opportunity to observe or participate in actual leadership situations enhances and reinforces the lessons of the classroom" (1994, p. 76). More importantly, the learning environment should be as Dewey hoped, contagious. "The best that education can do during these years is to arouse intellectual interests which carry over and onwards" (Dewey, 1931/1964, p. 425).

#### Interdisciplinary and Collaborative Learning Teams

The word *team* is derived from the Indo-European word *deuk*, meaning "to pull", as in "to pull together" (Senge, et.al., 1994). In our society teams are important and widely used. "Teams are viewed as being more suitable for complex tasks because they allow members to share the workload, monitor the work behaviors of other members, and develop and contribute expertise on subtasks," (Mathieu, et. al., 2000, p. 273). Cross and Rieley, in an article for the National Productivity Review noted that, "Teams have become the social context as many organizations have turned to team based structures to improve collaboration, integrate specialized functional and technical knowledge, and increase responsiveness to demanding stakeholders," (1999, p. 10). Because of this, employers are expecting employees to have team skills prior to entering the workplace. Colbeck, Campbell, and Bjorklund noted that, "As companies rely more on teams to improve productivity, they also emphasize the need for college graduates to be skilled in teamwork and effective communication" (2000, p. 60). Furthermore Colbeck, Campbell, and Bjorklund noted that, "Industry representatives emphasize that recent graduates should have developed abilities to work in teams, to communicate effectively, to think critically, and to solve openended design problems" (2000, p. 63). Bensimon and Neumann in their book Redesigning Collegiate Leadership: Teams and Teamwork in Higher Education, noted that "as the world grows more complex – that is, as we come to appreciate its

growing complexity – it is likely that we will stop thinking of leadership as the property or quality of just one person. We will begin to think of it in its collective form: leadership as occurring among and through a group of people who think and act together" (1993, p, 2).

One proven way to develop teamwork skills is through collaborative or cooperative learning. "The umbrella term 'collaborative learning' refers to a variety of instructional practices that encourage students to work together as they apply course material to answer questions, solve problems, or create a product" (Colbeck, Campbell, & Bjorklund, 2000, p. 61). Research has shown that collaborative and cooperative learning have a positive impact on scholastic retention and satisfaction, interpersonal skills, learning attitudes, idea generation, and higher-order reasoning (Colbeck, Campbell, & Bjorklund, 2000; Cohn, 1999; Robyn, 2000). One study conducted by Colbeck, Campbell, and Bjorklund found that, "working together with other students on open-ended design projects had enhanced their [the students'] problem-solving skills. The students had learned that they need not feel daunted because real world problems rarely have one right answer" (2000, p. 76). The experience however must be well designed. "Every student in a cooperative learning group should have a role or part to play in order to accomplish the task. It is not just any 'group work.' Like active learning, the particular group exercise must be chosen for the academic task and the students who must accomplish it" (Keyser, 2000, p. 36).

Moving beyond simple single discipline collaborative or cooperative learning and into interdisciplinary collaborative learning can increase the positive effects, but sadly interdisciplinary collaborative learning is scarce in the academic world. "Even though intellectual interaction across disciplines seems to improve the ability of scholars to address societal problems, the caliber of solutions they pose, and the quality of academic life in general, disciplinary specialty erodes the vitality of local connections" (Frost and Jean, 2003, p.120). The structure of academia in general has become compartmentalized and insofar as academic disciplines, works against the diversity offered by interdisciplinary learning. "Leadership programs must come to understand leadership through collective action, where it is not confined to individuals or established organizations" (Reed, 1996, p. 103).

#### Summary of the Review of Literature

Although no one definition of leadership exists, for the purposes of this paper the definition of leadership is based upon the components of a person or persons, influence, process, a common goal, and a group (Northouse, 2001; Bass, 1990; Greenwood, 1996). Similarly, although no one program exists for leadership development, there is an understanding that leader and leadership development occur in many venues, with one of those venues being an academic classroom where experience and theory are juxtaposed.

The Eisenhower Leadership Development Program curriculum is based upon four practical skills, including problem definition, discovery of research alternatives, delegation/teamwork and achievable challenge, and four adaptive skills, including ability to focus on an issue, direct attention to detail, management of time and resources, and persistence. Each practical and adaptive skill is a skill readily found in a notable leadership study or theory as a quality important to leadership development.

ELDP is taught in an experiential and interdisciplinary learning curriculum design in order to allow students to gain not only practical and teachable skills through the classroom activities, but also adapt those skills to a tangible project for further development. The interdisciplinary emphasis of any learning enriches that learning experience by placing students in arenas unlike the compartmentalized college of which they are accustomed and challenging the assumptions they have learned from those college cultures.

#### CHAPTER III

#### METHODOLOGY

#### Purpose of the Study

The purpose of this study was twofold. First, this study sought to ensure that the Eisenhower Leadership Development Program was producing the outcomes the program was designed to produce. Second, this study sought to demonstrate the worth of ELDP to past, current, and future stakeholders. Studying the outcomes of a program assists in the evaluation of the effectiveness of that program and can lead to process improvement within the program design (Brungardt & Crawford, 1996). Such studies can also prove the value of a program. "Outcome studies are unlike any other type of evaluation or program review because they require greater depth of thought and consideration than studies that merely count enrollees, audit budgets, or report clients satisfaction. Outcome studies look for behavioral changes in the clients served or changes in the circumstances of their lives and indications that these changes are related to the service received. These efforts, on their own, make outcome studies complex and controversial" (Mika, 2001, p. 545). Because there is no one proven method to develop leadership competencies and skills, the primary purpose of this study was to discover if the ELDP has produced the leadership learning outcomes intended through the curriculum design.

#### Research Design

A basic correlation research design was used for this study to discover the relationship between the ELDP curriculum design and the learning outcomes as perceived by former ELDP participants. The dependent variables include the practical skills of problem definition, discovery of research alternatives, delegation, and achievable challenge and the adaptive skills of focusing on an issue, direct attention to detail, teamwork, and persistence. Due to the interdisciplinary nature of the course, the independent variable is the college from which each student participated.

#### <u>Hypotheses</u>

Although many aspects of the ELDP would serve as excellent research studies, careful delineation pointed to the study of the perceived learning outcomes of the ELDP experience. The intended learning outcomes, or program goals as stated by Welch, in an article for *The Journal of Leadership Studies* are "(1) to develop students' leadership skills and abilities, and (2) to foster in students a desire to use their leadership abilities to address the different problems that communities and society face" (2000, p. 70). Based upon these intended program goals, the following hypotheses will be addressed in this study:

 $H_{01}$ : There is no difference in the perceived leadership skills as related to the ELDP curriculum prior to and following ELDP. (Statistical test: t-test).  $H_{02}$ : There is no difference in the perceived practical leadership skill of problem

definition prior to and following ELDP. (Statistical test: t-test).

 $H_{03}$ : There is no difference in the perceived practical leadership skill of discovery of research alternatives prior to and following ELDP. (Statistical test: t-test).  $H_{04}$ : There is no difference in the perceived practical leadership skill of delegation/teamwork prior to and following ELDP. (Statistical test: t-test).  $H_{05}$ : There is no difference in the perceived practical leadership skill of achievable challenge prior to and following ELDP. (Statistical test: t-test).

 $H_{06}$ : There is no difference in the perceived adaptive leadership skill of focusing on an issue prior to and following ELDP. (Statistical test: t-test).

 $H_{07}$ : There is no difference in the perceived adaptive leadership skill of direct attention to detail prior to and following ELDP. (Statistical test: t-test).

 $H_{08}$ : There is no difference in the perceived adaptive leadership skill of managing

time and resources prior to and following ELDP. (Statistical test: t-test).

 $H_{09}$ : There is no difference in the perceived adaptive leadership skill of

persistence prior to and following ELDP. (Statistical test: t-test).

#### Population and Sample

The population for this study was comprised of students involved in academic leadership development programs at the collegiate level. A purposive sample was derived from former ELDP students who were enrolled in the program from the Fall 2000 semester to the Fall 2002 semester. Students from the sample population were enrolled in the course through one of five participating colleges, including the Mays College of Business, the College of Liberal Arts, the College of Agricultural and Life Sciences, the Dwight Look College of Engineering, and the College of Architecture. Instrumentation

In order to specifically address the four adaptive skills and four practical skills, an instrument was created by compiling sections of related assessment instruments from David A. Whetten and Kim S. Cameron's book, *Developing* 

*Management Skills*. In addition, one section from the instrument created and used by Michael J. McCormick in his unpublished doctoral dissertation entitled *The Influence of Goal-Orientation and Sex-Role Identity on the Development of Leadership Self-*

*Efficacy During a Training Intervention* was used to measure the adaptive skill of persistence. Because each instrument section was initially weighted on a six point Likert type scale of 1 – Strongly Disagree, 2 – Disagree, 3 – Slightly Disagree, 4 – Slightly Agree, 5 – Agree, and 6 – Strongly agree, this scale was maintained in the final instrument. Constructs of the instrument were not overtly related to the four practical and four adaptive skills, however adaptive and practical skills are listed in Table 1 with the leading question of each construct. The instrument was designed in a post-then format in to allow for the reflection of the participants' perceived leadership abilities before and after their ELDP experience and to control for response-shift bias (Van Velsor, 1998; Rohs, 2002). In addition, an open-ended question was included at the end of the instrument to allow for the input of qualitative data. A copy of the instrument is included in Appendix A.

Table 1.

Construct	Leading Question for Scale
Problem Definition	When I encounter a routine problem:
Discovery of Research Alternatives	When trying to foster more creativity and innovation among those with whom I work:
Delegation	In situations where I have an opportunity to empower others:
Teamwork	When I am in the role of team member:
Achievable Challenge	When I am in the role of leader in a team
Ability to Focus on an Issue	When faced with an ambiguous or difficult problem that does not have an easy solution:
Direct Attention to Detail	When I desire to make my team perform well, regardless of whether I am a leader or member:
Management of Time and Resources	When delegating work to others:
Persistence	I believe that:

**Eisenhower Leadership Development Program Former Student Survey Leading Questions for Internal Constructs** 

Because the instrument was compiled from sections of other instruments, the SPSS procedure RELIABILITY was used to determine the internal reliability of each construct of the instrument. Cronbach's coefficient alpha was computed for each of the eight sections, both for the before and the after, and are found in Table 2.

Construct	Ν	Alpha	Items per scale
Problem Definition			
Before	83	.77	5
After	83	.72	5
Discovery of Research Alternatives			
Before	82	.65	5
After	82	.68	5
Delegation/Teamwork			
Before	84	.89	13
After	84	.87	13
Achievable Challenge			
Before	84	.87	8
After	84	.86	8
Ability to Focus on an Issue			
Before	83	.87	10
After	83	.87	10
Attention to Detail			
Before	84	.89	8
After	84	.87	8
Management of Time and Resources			
Before	84	.78	6
After	84	.73	6
Persistence			
Before	84	.83	16
After	84	.81	16
All			
Before	77	.96	71
After	77	.95	71

Table 2.Reliability Coefficients (Alpha) for the Eisenhower Leadership DevelopmentProgram Former Student Survey

# Data Collection

A pilot test was conducted on the instrument in February of 2003 to identify any problematic instructions and questions and to determine face validity. Twenty-six graduate students and 48 undergraduate students participated in the pilot test and, at the time of the test, all students were enrolled in an academic leadership course. Based on the feedback from the pilot test, surveys were modified and printed in booklet format to make the survey response as simple as possible (Dillman, 2000).

Surveys packets were mailed to 297 former ELDP students in May of 2003. Addresses were compiled using both the Texas A&M University Student Information Management System and the Texas A&M University Association of Former Students' Aggie Network database. Survey packets included a coded survey, a cover letter explaining the purpose of the study and Institutional Review Board requirements, and a postage paid business reply envelope to make responding as simple as possible for respondents (Dillman, 2000). Reminder postcards were sent to all non-respondents in mid June and a final reminder message was sent by electronic mail in August to all non-respondents for which an electronic mail address could be obtained (n = 105). As responses were received, each was systematically inventoried, quantitative data were entered into SPSS, and qualitative data were transcribed into a Word document.

#### Response Rate

In his book, *Mail and Internet Surveys: The Tailored Design Method*, Dillman stated that "giving respondents reasons that a survey is being done, providing a toll-free number to call with questions and personally addressing correspondence are small, but not inconsequential ways of showing positive regard to questionnaire recipients" (2000, p. 15) and can have a positive impact on response rates. Such measures were taken into account for this study, however an electronic mail address was offered versus a toll-free number. After invalid addresses were noted through

return mail, the survey sample size was reduced to 280 possible respondents and of those 88 surveys were returned yielding a 31.4 percent response rate.

Data were tested for non-response bias using Method I as explained by Lindner, Murphy, & Briers (2001). The data showed no statistical difference of means between surveys received early in the study (within the four weeks) and those received after reminder prompts were sent indicating that the findings are generalizable to the remainder of the sample population. Fifty surveys (17.8%) including two with only qualitative data were returned on or before June 25, 2003 and thirty-eight surveys (13.6%) arrived after June 25, 2003 for a total of 88 surveys. A summary of the non-response error tests for each scale are found in Table 3.

<b>T-Test for Non-response Error</b>					
Dependent Variables	Ν	Μ	SD	t	р
Problem Definition - Before					
Early Response	46	4.04	.771	.651	.517
Late Response	37	3.94	.658	.662	.510
Problem Definition – After					
Early Response	46	4.87	.537	249	.804
Late Response	37	4.90	.674	243	.809
Discovery of Research					
Alternatives – Before					
Early Response	45	4.01	.818	1.086	.281
Late Response	37	3.83	.657	1.110	.270
Discovery of Research					
Alternatives - After					
Early Response	45	4.74	.708	.616	.539
Late Response	37	4.64	.743	.613	.541
Delegation/Teamwork - Before					
Early Response	47	4.31	.684	356	.723
Late Response	37	4.36	.689	355	.723

#### Table 3. T-Test for Non-response Error

Table 3 (continued).	Ν	Μ	SD	4	n
Dependent Variables	IN	IVI	<b>SD</b>	t	р
Delegation/Teamwork – After Early Response	47	4.96	.572	972	.334
Late Response	47 37	4.90 5.08	.546	972 978	.334
Achievable Challenge Before	57	5.08	.340	970	.551
6	47	4.51	701	265	716
Early Response			.784	.365	.716
Late Response	37	4.45	.569	.379	.706
Achievable Challenge - After	47	516	570	442	650
Early Response	47	5.16	.578	443	.659
Late Response	37	5.21	.570	444	.658
Ability to Focus on an Issue –					
Before	4 7	2.55	0.07	002	0.2.4
Early Response	45	3.65	.887	083	.934
Late Response	38	3.66	.636	085	.932
Ability to Focus on an Issue –					
After			0.44		
Early Response	45	4.42	.864	663	.509
Late Response	38	4.53	.708	675	.502
Attention to Detail – Before					
Early Response	46	4.02	.813	.317	.752
Late Response	38	3.96	.768	.319	.750
Attention to Detail – After					
Early Response	46	4.81	.729	987	.327
Late Response	38	4.97	.730	987	.327
Management of Time and					
Resources – Before					
Early Response	47	4.06	.768	.657	.513
Late Response	37	3.96	.736	.660	.511
Management of Time and					
Resources – After					
Early Response	47	4.74	.643	525	.601
Late Response	37	4.82	.644	525	.601
Persistence – Before					
Early Response	46	4.53	.620	-1.502	.137
Late Response	38	4.72	.548	-1.520	.132
Persistence – After					
Early Response	46	4.98	.537	.054	.957
Late Response	38	4.97	.567	.054	.957

#### Data Analysis

Data were analyzed using the Texas A&M University Department of Agricultural Education's Statistical Package for Social Science (SPSS) Version 11.0 with confidence intervals for statistical significance set at the .05 level *a priori*. The data generated by the instrument were comparative and descriptive for evaluative purposes. Hypotheses one through nine were statistically tested using a paired t-test.

The SPSS procedure FREQUENCIES was used to generate descriptive statistics including frequencies and percentages for the variables and SPSS procedure COMPARE MEANS was used to compare the means of each of the eight skills sections of the instrument prior to and after ELDP. A paired samples t-test was used to evaluate differences among those means. For the scale related to the adaptive skill of persistence (hypothesis nine), ten of the sixteen items were weighted and therefore reversed for computation purposes. These items are noted in Table 22 found in Chapter IV.

#### CHAPTER IV

#### FINDINGS AND DISCUSSION

#### Demographics

The Eisenhower Leadership Development Program participants are selected through an application process. Applicants must have a grade point ratio of at least a 3.0 and must have at least 60 academic credit hours, but generally should have no more than 90 credit hours. Due to the rigor of the program, graduating seniors are not permitted to enroll in the program. The purposive sample population included all ELDP participants from the five academic colleges that participated in the program during the 2000 Fall semester, the 2001 Spring semester, the 2001 Fall semester, the 2002 Spring semester, and the 2002 Fall semester. Of the five semesters which the study encompassed, participation varied for each of the colleges and are as follows: the College of Agriculture and Life Sciences and the Dwight Look College of Engineering both participated in all five semesters, the Mays College of Business and the College of Liberal Arts both participated in four semesters, and the College of Architecture participated in one semester during the study's timeframe.

For the five semesters comprising the purposive sample population of former students (n = 280), males accounted for 46% (n = 130) of the sample population and females accounted for 54% (n = 150) of the sample population. Breakdown of the sample population by college through the students were enrolled are as follows: 70 were enrolled in the program through the College of Agriculture and Life Sciences, 78 were enrolled through the Dwight Look College of Engineering, 53 were enrolled

through the Mays College of Business, 69 participants were enrolled through the College of Liberal Arts, and 10 participants were enrolled in the program through the College of Architecture. A summary of the sample population is found in Table 4.

College	Males	Females	Total Sample Population	Percentage
Agriculture and Life Sciences	23	47	70	25%
Engineering	54	24	78	27.9%
Business	26	27	53	18.9%
Liberal Arts	21	48	69	24.6%
Architecture	6	4	10	3.5%
All	130	150	280	

Table 4.
<b>Demographics of Sample Population</b>

Eighty-eight (31.4%) students from the sample population responded by returning the survey. Of the 88 respondents, 32 (36%) were male and 56 (64%) were female. Table 5 is an illustration of the respondents' by college and gender. The total number of respondents from each college are as follows: 26 respondents were enrolled through the College of Agriculture and Life Sciences, 25 respondents were enrolled through the Dwight Look College of Engineering, 20 respondents were enrolled through the Mays College of Business, 15 were enrolled through the College of Liberal Arts, two were enrolled through the College of Architecture. A decision to retain the responses from the College of Architecture was made, however no

conclusions were drawn from this sample cohort.

College	Males	Females	Total Respondents	Percentage
Agriculture and Life Sciences	6	20	26	29.5%
Engineering	16	9	25	28.4%
Business	6	14	20	22.7%
Liberal Arts	3	12	15	17.0%
Architecture	1	1	2	2.3%
All	32	56	88	

# Table 5.Demographics of Respondents

# Findings Related to Hypothesis One

Hypothesis one was a null hypothesis that stated, "There is not difference in perceived leadership skills prior to and following ELDP." A t-test for paired means using the SPSS procedure COMPARE MEANS was used to test this hypothesis. Statistically significant differences were found for the participants' perceptions of their overall skills before ELDP and after ELDP; therefore, the null hypothesis is rejected. Following ELDP, the respondents' perceptions of their skills were greater. Results of the t-test for paired means are depicted in Table 6.

Skills of the Eisenhower Leadership Development Program								
	Ν	<b>M**</b>	SD	t	Significance			
Leadership Skills				-14.267	.000*			
Before ELDP	77	4.11	.562					

4.85

.513

T-Test for Paired Means of Responses as Related to the Perceived Leadership

77

\*Indicates a significant difference at alpha = .05

\*\* Scale of 1=Strongly disagree, 2=Disagree, 3=Slightly disagree, 4=Slightly agree, 5=Agree, and 6=Strongly agree

#### Findings Related to Hypothesis Two

Table 6.

After ELDP

Hypothesis two was a null hypothesis that stated, "There is no difference in the perceived practical leadership skill of problem definition prior to and following ELDP." A t-test for paired means using the SPSS procedure COMPARE MEANS was used to test this hypothesis. Statistically significant differences were found for the participants' perceptions of their abilities as related to problem definition construct; therefore, the null hypothesis is rejected. Following ELDP, the respondents' perceptions of their abilities were greater. Results of the t-test for paired means are depicted in Table 7. The five statements that comprise the problem definition scale are listed in Table 8 along with descriptive statistics for each item in the construct.

Table 7.

**T-Test for Paired Means of Responses as Related to the Perceived Practical Leadership Skill of Problem Definition** 

	Ν	M**	SD	t	Significance
Problem Definition				-12.745	.000*
Before ELDP	83	3.99	.721		
After ELDP	83	4.88	.598		

\*Indicates a significant difference at alpha = .05

\*\* Scale of 1=Strongly disagree, 2=Disagree, 3=Slightly disagree, 4=Slightly agree, 5=Agree, and 6=Strongly agree

# Table 8.

<b>Eisenhower Leadership Development Program Former Student Survey Internal</b>
Construct for the Practical Skill of Problem Definition

	Ν	Μ	SD
When I encounter a routine problem:			
I state clearly and explicitly what the problem			
is. I avoid trying to solve it until I have defined			
it.			
Before ELDP	84	4.08	.867
After ELDP	84	4.88	.767
I always generate more than one alternative			
solution to the problem, instead of identifying			
only one obvious solution.			
Before ELDP	85	4.05	.975
After ELDP	85	4.95	.858
I keep in mind both long-term and short-term			
consequences as I evaluate various alternative			
solutions.			
Before ELDP	85	4.33	1.073
After ELDP	85	4.98	.886
I gather as much information as I can about			
what the problem is before trying to solve it.			
Before ELDP	85	3.94	.992
After ELDP	85	5.01	.794
I keep steps in the problem-solving process			
distinct; that is, I define the problem before			
proposing alternative solutions, and I generate			
alternatives before selecting a single solution.			
Before ELDP	84	3.60	1.077
After ELDP	84	4.61	1.006

#### Findings Related to Hypothesis Three

Hypothesis three was a null hypothesis that stated, "There is no difference in the perceived practical leadership skill of discovery of research alternatives prior to and following ELDP." A t-test for paired means using the SPSS procedure COMPARE MEANS was used to test this hypothesis. Statistically significant differences were found for the participants' perceptions of their abilities as related to the discovery of research alternatives construct; therefore, the null hypothesis is rejected. Following ELDP, the respondents' perceptions of their abilities were greater. Results of the t-test for paired means are depicted in Table 9. The five statements that comprise the discovery of research alternatives construct are listed in Table 10 along with descriptive statistics for each item in the construct.

Table 9.T-Test for Paired Means of Responses as Related to the Perceived PracticalLeadership Skill of Discovery of Research Alternatives

	Ν	M**	SD	t	Significance
Discovery of Research				-12.321	.000*
Alternatives					
Before ELDP	82	3.93	.751		
After ELDP	82	4.70	.721		

\*Indicates a significant difference at alpha = .05

\*\* Scale of 1=Strongly disagree, 2=Disagree, 3=Slightly disagree, 4=Slightly agree, 5=Agree, and 6=Strongly agree

Table 10.

Eisenhower Leadership Development Program Former Student Survey Internal Construct for the Practical Skill of Discovery of Research Alternatives

	Ν	Μ	SD
When trying to foster more creativity and			
innovation among those with whom I work:			
I make sure there are divergent points of view			
represented or expressed in every complex			
problem-solving situation.			
Before ELDP	85	3.67	1.062
After ELDP	85	4.64	1.045
I sometimes make outrageous suggestions to			
stimulate people to find new ways of			
approaching problems.			
Before ELDP	85	3.13	1.437
After ELDP	85	3.60	1.583
I try to acquire information from individuals			
outside the problem-solving group who will be			
affected by the decision, mainly to determine			
their preferences and expectations.			
Before ELDP	85	4.04	1.128
After ELDP	85	4.96	.851
I sometimes involve outsiders (e.g., clients or			
recognized experts) in problem solving			
discussions.			
Before ELDP	83	4.29	1.132
After ELDP	83	5.10	.919
I try to provide recognition not only to those			
who come up with creative ideas but also to			
those who support others' ideas and who			
provide resources to implement them.			
Before ELDP	84	4.51	1.035
After ELDP	84	5.17	.889

# Findings Related to Hypothesis Four

Hypothesis four was a null hypothesis that stated, "There is no difference in the perceived practical leadership skill of delegation/teamwork prior to and following ELDP." A t-test for paired means using the SPSS procedure COMPARE MEANS was used to test this hypothesis. Statistically significant differences were found for the participants' perceptions of their abilities as related to the delegation/teamwork constructs; therefore, the null hypothesis is rejected. Following ELDP, the respondents' perceptions of their abilities were greater. Results of the t-test for paired means are depicted in Table 11. The 13 statements that comprise the delegation/teamwork constructs are listed in Table 12 along with descriptive statistics for each item in the constructs.

Table 11.
<b>T-Test for Paired Means of Responses as Related to the Perceived Practical</b>
Leadership Skill of Delegation/Teamwork

	Ν	M**	SD	t	Significance
Delegation/Teamwork				-11.411	.000*
Before ELDP	84	4.33	.682		
After ELDP	84	5.01	.561		

\*Indicates a significant difference at alpha = .05

----

\*\* Scale of 1=Strongly disagree, 2=Disagree, 3=Slightly disagree, 4=Slightly agree, 5=Agree, and 6=Strongly agree

Ν Μ SD In situations where I have an opportunity to empower others: I help people feel competent in their work by recognizing and celebrating their small successes. Before ELDP 85 4.47 1.087 After ELDP 85 5.13 .842 I try to demonstrate successful task accomplishment. Before ELDP 84 4.61 .850 5.07 After ELDP 84 .690 I point out other successful people who can serve as role models. Before ELDP 85 3.99 1.239 After ELDP 85 4.53 1.278 I frequently praise, encourage, and express approval of other people. Before ELDP 85 4.56 .981 After ELDP 85 5.19 .748 I provide regular feedback and needed support. 85 .918 Before ELDP 4.42 85 4.98 .816 After ELDP I try to foster friendships and informal interaction. Before ELDP 85 4.86 1.104 After ELDP 85 5.45 .794 I highlight the important impact that a person's work will have. Before ELDP 85 4.18 .953 4.79 After ELDP 85 1.048 As I become aware of it, I pass along relevant information to people on a continuous basis. Before ELDP 85 4.66 .880 After ELDP 85 5.34 .646 I exhibit care and personal concern for each person with whom I have dealings. Before ELDP 85 4.75 .962 After ELDP 85 5.22 .746

**Eisenhower Leadership Development Program Former Student Survey Internal Constructs for the Practical Skill of Delegation/Teamwork** 

Table 12.

Table 12 (continued).			
	Ν	$\mathbf{M}$	SD
When I am in the role of team member:			
I know a variety of ways to facilitate task			
accomplishment in the team.			
Before ELDP	85	3.96	1.149
After ELDP	85	5.02	.938
I know a variety of ways to help build strong			
relationships and cohesion among team			
members.			
Before ELDP	85	4.04	1.029
After ELDP	85	4.88	.892
I confront and help to overcome negative,			
dysfunctional, or blocking behaviors by others.			
Before ELDP	85	3.92	1.207
After ELDP	85	4.85	1.052
I shift roles from facilitating task			
accomplishment to helping build trusting			
relationships among members, depending on			
what the team needs to move forward.			
Before ELDP	85	3.89	1.134
After ELDP	85	4.72	1.019

#### Findings Related to Hypothesis Five

T.LL. 10 (

...

1

Hypothesis five was a null hypothesis that stated, "There is no difference in the perceived practical leadership skill of achievable challenge prior to and following ELDP." A t-test for paired means using the SPSS procedure COMPARE MEANS was used to test this hypothesis. Statistically significant differences were found for the participants' perceptions of their abilities as related to the achievable challenge construct; therefore, the null hypothesis is rejected. Following ELDP, the respondents' perceptions of their abilities were greater. Results of the t-test for paired means are depicted in Table 13. The eight statements that comprise the achievable challenge construct are listed in Table 14 along with descriptive statistics for each

item in the construct.

# Table 13.T-Test for Paired Means of Responses as Related to the Perceived PracticalLeadership Skill of Achievable Challenge

	Ν	M**	SD	t	Significance
Achievable Challenge				-12.945	.000*
Before ELDP	84	4.48	.694		
After ELDP	84	5.18	.571		

\*Indicates a significant difference at alpha = .05

\*\* Scale of 1=Strongly disagree, 2=Disagree, 3=Slightly disagree, 4=Slightly agree, 5=Agree, and 6=Strongly agree

Table 14.

Eisenhower Leadership Development Program Former Student Survey Internal Construct for the Practical Skill of Achievable Challenge

Construct for the Fractical Skin of Achievable	N	Μ	SD
When I am in the role of leader in a team:			
I know how to establish credibility and			
influence among team members.			
Before ELDP	84	4.13	.979
After ELDP	84	5.14	.778
I behave congruently with my stated values			
and I demonstrate a high degree of integrity.			
Before ELDP	85	4.94	.891
After ELDP	85	5.34	.716
I am clear and consistent about what I want to			
achieve.			
Before ELDP	85	4.66	.867
After ELDP	85	5.25	.688
I create positive energy by being optimistic and			
complimentary of others.			
Before ELDP	85	4.54	1.129
After ELDP	85	5.18	.875
I build a common base of agreement in the			
team before moving forward with task			
accomplishment.			
Before ELDP	85	4.31	1.012
After ELDP	85	5.08	.916
I encourage and coach team members to help			
them improve.			
Before ELDP	86	4.35	.955
After ELDP	86	5.03	.846
I share information with team members and			
encourage participation.			
Before ELDP	86	4.71	.879
After ELDP	86	5.35	.699
I articulate a clear, motivating vision of what			
the team can achieve along with specific short-			
term goals.			
Before ELDP	86	4.29	.993
After ELDP	86	5.10	.895

# Findings Related to Hypothesis Six

Hypothesis six was a null hypothesis that stated, "There is no difference in the perceived adaptive leadership skill of focusing on an issue prior to and following ELDP." A t-test for paired means using the SPSS procedure COMPARE MEANS was used to test this hypothesis. Statistically significant differences were found for the participants' perceptions of their abilities as related to the focusing on an issue construct; therefore, the null hypothesis is rejected. Following ELDP, the respondents' perceptions of their abilities were greater. Results of the t-test for paired means are depicted in Table 15. The ten statements that comprise the focusing on an issue construct are listed in Table 16 along with descriptive statistics for each item in the construct.

Table 15.T-Test for Paired Means of Responses as Related to the Perceived AdaptiveLeadership Skill of Focusing on an Issue

	Ν	<b>M</b> **	SD	t	Significance
Focusing on an Issue				-10.741	.000*
Before ELDP	83	3.66	.778		
After ELDP	83	4.47	.794		

\*Indicates a significant difference at alpha = .05

\*\* Scale of 1=Strongly disagree, 2=Disagree, 3=Slightly disagree, 4=Slightly agree, 5=Agree, and 6=Strongly agree

Table 16.

Eisenhower Leadership Development Program Former Student Survey Internal Construct for the Adaptive Skill of Focusing on an Issue

	Ν	Μ	SD
When faced with an ambiguous or difficult			
problem that does not have an easy solution:			
I try out several definitions of the problem. I			
do not limit myself to just one way to define it.			
Before ELDP	85	3.67	1.138
After ELDP	85	4.58	1.199
I try to be flexible in the way I approach the			
problem by trying out several different			
alternative methods rather than relying on the			
same approach every time.			
Before ELDP	86	4.10	.983
After ELDP	86	4.98	.840
I try to find underlying patterns among			
elements in the problem so that I can uncover			
underlying dimensions or principles that help			
me understand the problem.			
Before ELDP	85	3.89	1.080
After ELDP	85	4.65	1.055
I try to unfreeze my thinking by asking lots of			
questions about the nature of the problem			
before considering ways to solve it.			
Before ELDP	86	3.81	1.203
After ELDP	86	4.83	1.098
I try to think about the problem from both the			
left (logical) side of my brain and the right			
(intuitive) side of my brain.			
Before ELDP	83	3.60	1.115
After ELDP	83	4.45	1.202
To help me understand the problem and			
generate alternative solutions, I use analogies			
and metaphors that help me identify what else			
this problem is like.			
Before ELDP	86	3.40	1.383
After ELDP	86	4.08	1.457
I sometimes reverse my initial definition of the			-
problem to consider whether or not the exact			
opposite is also true.			
Before ELDP	84	2.93	1.149
After ELDP	84	3.50	1.375

Table 16 (continued).			
	Ν	$\mathbf{M}$	SD
I do not evaluate the merits of an alternative			
solution to the problem before I have generated			
a list of alternatives. That is, I avoid selecting			
one solution until I have developed several			
possible solutions.			
Before ELDP	85	3.52	1.130
After ELDP	85	4.46	1.129
I often break down the problem into smaller			
components and analyze each one separately.			
Before ELDP	86	4.00	1.085
After ELDP	86	4.84	.956
I have some specific techniques that I use to			
help develop creative and innovative solutions			
to problems.			
Before ELDP	86	3.64	1.157
After ELDP	86	4.37	1.198

#### Findings Related to Hypothesis Seven

Table 16 (continued)

Hypothesis seven was a null hypothesis that stated, "There is no difference in the perceived adaptive leadership skill of direct attention to detail prior to and following ELDP." A t-test for paired means using the SPSS procedure COMPARE MEANS was used to test this hypothesis. Statistically significant differences were found for the participants' perceptions of their abilities as related to the direct attention to detail construct; therefore, the null hypothesis is rejected. Following ELDP, the respondents' perceptions of their abilities were greater. Results of the t-test for paired means are depicted in Table 17. The eight statements that comprise the direct attention to detail construct are listed in Table 18 along with descriptive statistics for each item in the construct.

Table 17.T-Test for Paired Means of Responses as Related to the Perceived AdaptiveLeadership Skill of Direct Attention to Detail

	Ν	<b>M**</b>	SD	t	Significance
Direct Attention to Detail				-12.469	.000*
Before ELDP	84	3.99	.789		
After ELDP	84	4.88	.730		

\*Indicates a significant difference at alpha = .05

\*\* Scale of 1=Strongly disagree, 2=Disagree, 3=Slightly disagree, 4=Slightly agree, 5=Agree, and 6=Strongly agree

Table 18.

Eisenhower Leadership Development Program Former Student Survey Internal Construct for the Adaptive Skill of Direct Attention to Detail

When I desire to make my team perform well, regardless of whether I am a leader or a member: a m knowledgeable about the different stages of team development experienced by most eams. Before ELDP After ELDP Thelp establish clear expectations and purpose as well as help team members feel comfortable with one another at the outset of a team. Before ELDP After ELDP After ELDP Encourage team members to become as committed to the success of the team as to their own personal success. Before ELDP	86 86 86	3.66 4.80	1.058 1.027
a member: a m knowledgeable about the different stages of team development experienced by most eams. Before ELDP After ELDP Thelp establish clear expectations and purpose as well as help team members feel comfortable with one another at the outset of a team. Before ELDP After ELDP After ELDP encourage team members to become as committed to the success of the team as to their own personal success.	86 86	4.80	
am knowledgeable about the different stages of team development experienced by most eams. Before ELDP After ELDP Thelp establish clear expectations and purpose as well as help team members feel comfortable with one another at the outset of a team. Before ELDP After ELDP Encourage team members to become as committed to the success of the team as to their own personal success.	86 86	4.80	
of team development experienced by most eams. Before ELDP After ELDP Thelp establish clear expectations and purpose as well as help team members feel comfortable with one another at the outset of a team. Before ELDP After ELDP Tencourage team members to become as committed to the success of the team as to their own personal success.	86 86	4.80	
eams. Before ELDP After ELDP Thelp establish clear expectations and purpose as well as help team members feel comfortable with one another at the outset of a team. Before ELDP After ELDP Tencourage team members to become as committed to the success of the team as to their own personal success.	86 86	4.80	
Before ELDP After ELDP help establish clear expectations and purpose is well as help team members feel comfortable with one another at the outset of a team. Before ELDP After ELDP encourage team members to become as committed to the success of the team as to their own personal success.	86 86	4.80	
After ELDP help establish clear expectations and purpose as well as help team members feel comfortable with one another at the outset of a team. Before ELDP After ELDP encourage team members to become as committed to the success of the team as to their own personal success.	86 86	4.80	
<ul> <li>help establish clear expectations and purpose</li> <li>as well as help team members feel comfortable</li> <li>with one another at the outset of a team.</li> <li>Before ELDP</li> <li>After ELDP</li> <li>encourage team members to become as</li> <li>committed to the success of the team as to their</li> <li>own personal success.</li> </ul>	86		1.027
as well as help team members feel comfortable with one another at the outset of a team. Before ELDP After ELDP encourage team members to become as committed to the success of the team as to their own personal success.			
as well as help team members feel comfortable with one another at the outset of a team. Before ELDP After ELDP encourage team members to become as committed to the success of the team as to their own personal success.			
with one another at the outset of a team. Before ELDP After ELDP encourage team members to become as committed to the success of the team as to their own personal success.			
After ELDP encourage team members to become as committed to the success of the team as to their own personal success.			
encourage team members to become as committed to the success of the team as to their own personal success.		3.99	.988
committed to the success of the team as to their own personal success.	86	4.99	.901
committed to the success of the team as to their own personal success.			
1			
Before ELDP			
Defore EEDT	85	4.14	1.071
After ELDP	85	4.92	1.071
help team members become committed to the			
eam's vision and goals			
Before ELDP	86	4.35	.955
After ELDP	86	4.93	.930
help the team avoid groupthink by making			
sure that sufficient diversity of opinions are			
expressed in the team.			
Before ELDP	86	3.67	1.045
After ELDP	86	4.72	1.113
can diagnose and capitalize on my team's			
core competencies, or unique strengths.			
Before ELDP	86	4.07	1.125
After ELDP	86	5.06	.899
encourage the team to continuously improve			
as well as to seek for dramatic innovations.			
Before ELDP	84	3.83	1.074
After ELDP	84	4.70	.954

Table 18 (continued).	N	М	SD
I encourage exceptionally high standards of performance and outcomes that far exceed	N	Μ	50
expectations.			
Before ELDP	86	4.26	1.119
After ELDP	86	5.01	1.122

#### Findings Related to Hypothesis Eight

Hypothesis eight was a null hypothesis that stated, "There is no difference in the perceived adaptive leadership skill of managing time and resources prior to and following ELDP." A t-test for paired means using the SPSS procedure COMPARE MEANS was used to test this hypothesis. Statistically significant differences were found for the participants' perceptions of their abilities as related to the managing time and resources construct; therefore, the null hypothesis is rejected. Following ELDP, the respondents' perceptions of their abilities were greater. Results of the t-test for paired means are depicted in Table 19. The six statements that comprise the managing time and resources construct are listed in Table 20 along with descriptive statistics for each item in the construct.

Table 19.
<b>T-Test for Paired Means of Responses as Related to the Perceived Adaptive</b>
Leadership Skill of Managing Time and Resources

Leader sing 5km of Managing Time and Resources							
	Ν	<b>M**</b>	SD	t	Significance		
Managing Time and				-10.958	.000*		
Resources							
Before ELDP	84	4.02	.751				
After ELDP	84	4.77	.640				

\*Indicates a significant difference at alpha = .05
\*\* Scale of 1=Strongly disagree, 2=Disagree, 3=Slightly disagree, 4=Slightly agree, 5=Agree, and 6=Strongly agree

Table 20.

Construct for the Adaptive Skill of Managing	nstruct for the Adaptive Skill of Managing Time and Resources					
	Ν	Μ	SD			
When delegating work to others:						
I specify clearly the results I desire.						
Before ELDP	86	4.01	1.111			
After ELDP	86	4.94	.886			
I specify clearly the level of initiative I want						
others to take (e.g., wait for directions, do part						
of the task and then report, do the whole task						
and then report, etc.)						
Before ELDP	86	3.87	1.22			
After ELDP	86	4.78	.963			
I allow participation by those accepting						
assignments regarding when and how work						
will be done.						
Before ELDP	85	4.40	.928			
After ELDP	85	4.96	.865			
I identify constraints and limitations that						
people will face but also provide needed						
support.						
Before ELDP	86	4.06	.925			
After ELDP	86	4.94	.831			
I maintain accountability for results, not for						
methods used.						
Before ELDP	85	4.13	1.021			
After ELDP	85	4.59	1.137			
I delegate consistently – not just when I'm						
overloaded.						
Before ELDP	86	3.60	1.295			
After ELDP	86	4.35	1.215			

**Eisenhower Leadership Development Program Former Student Survey Internal Construct for the Adaptive Skill of Managing Time and Resources** 

# Findings Related to Hypothesis Nine

Hypothesis nine was a null hypothesis that stated, "There is no difference in the perceived adaptive leadership skill of persistence prior to and following ELDP." A t-test for paired means using the SPSS procedure COMPARE MEANS was used to test this hypothesis. Ten of the sixteen items were weighted and therefore reversed for computation purposes. These items are noted in Table 22.

Statistically significant differences were found for the participants'

perceptions of their abilities as related to the persistence construct; therefore, the null hypothesis is rejected. Following ELDP, the respondents' perceptions of their abilities were greater. Results of the t-test for paired means are depicted in Table 21. The 16 statements that comprise the persistence construct are listed in Table 22 along with descriptive statistics for each item in the construct.

Table 21.T-Test for Paired Means of Responses as Related to the Perceived AdaptiveLeadership Skill of Persistence

	Ν	M**	SD	t	Significance
Persistence				-8.181	.000*
Before ELDP	84	4.62	.593		
After ELDP	84	4.97	.548		

\*Indicates a significant difference at alpha = .05

\*\* Scale of 1=Strongly disagree, 2=Disagree, 3=Slightly disagree, 4=Slightly agree, 5=Agree, and 6=Strongly agree

Table 22.

Eisenhower Leadership Development Program Former Student Survey Internal Construct for the Adaptive Skill of Persistence

Construct for the Adaptive Skill of Persistence			
	Ν	Μ	SD
I believe that:			
When I make plans, I am certain I can make			
them work.			
Before ELDP	86	4.48	1.135
After ELDP	86	4.94	.873
One of my problems is that I cannot get down			
to work when I should.			
Before ELDP	86	2.92*	1.581
After ELDP	86	2.73*	1.545
If I can't do a job the first time, I keep trying			
until I can.			
Before ELDP	86	4.73	.900
After ELDP	86	5.21	.869
When I set important goals for myself, I rarely			
achieve them.			
Before ELDP	86	1.78*	.860
After ELDP	86	1.57*	.848
I give up on things before completing them.			
Before ELDP	86	2.03*	1.079
After ELDP	86	1.71*	.956
I avoid facing difficulties.	00		.,
Before ELDP	86	2.45*	1.298
After ELDP	86	2.03*	1.202
If something looks too complicated, I will not			
even bother to try it.			
Before ELDP	85	2.12*	1.017
After ELDP	85	1.80*	.998
When I have something unpleasant to do, I		1.00	.,,,
stick to it until I finish it.			
Before ELDP	86	4.01	1.111
After ELDP	86	4.40	1.295
When I decide to do something, I go right to	00	1.10	1.27
work on it.			
Before ELDP	86	4.10	1.237
After ELDP	86	4.10	1.143
When trying to learn something new, I soon	00	7.57	1.14.
give up if I am not initially successful.			
Before ELDP	86	2.55*	1.175
After ELDP	80 86	2.33* 2.06*	1.17.
	00	2.00	1.120

Table 22 (continued).			
	Ν	$\mathbf{M}$	SD
When unexpected problems occur, I don't			
handle them well.			
Before ELDP	86	2.73*	1.231
After ELDP	86	2.23*	1.205
I avoid trying to learn new things when they			
look too difficult for me.			
Before ELDP	86	2.21*	1.042
After ELDP	86	1.91*	1.025
Failure just makes me try harder.			
Before ELDP	86	4.49	1.049
After ELDP	86	4.90	1.006
I feel insecure about my ability to do things.			
Before ELDP	86	2.37*	1.256
After ELDP	86	2.07*	1.196
I am a self-reliant person.			
Before ELDP	85	5.09	.840
After ELDP	85	5.31	.802
I give up easily.			
Before ELDP	86	1.74*	.754
After ELDP	86	1.51*	.732

\* Scales were reversed for computation of paired t-test statistical analysis

#### **CHAPTER V**

#### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Purpose of the Study

The purpose of this study was twofold. First, this study sought to ensure that the Eisenhower Leadership Development Program was producing the outcomes the program was designed to produce. Second, this study sought to demonstrate the worth of ELDP to past, current, and future stakeholders. Studying the outcomes of a program assists in the evaluation of the effectiveness of that program and can lead to process improvement within the program design (Brungardt & Crawford, 1996). Such studies can also prove the value of a program. "Outcome studies are unlike any other type of evaluation or program review because they require greater depth of thought and consideration than studies that merely count enrollees, audit budgets, or report clients satisfaction. Outcome studies look for behavioral changes in the clients served or changes in the circumstances of their lives and indications that these changes are related to the service received. These efforts, on their own, make outcome studies complex and controversial" (Mika, 2001, p. 545). Because there is no one proven method to develop leadership competencies and skills, the primary purpose of this study was to discover if the ELDP has produced the leadership learning outcomes intended through the curriculum design.

## Hypotheses

Although many aspects of the ELDP would serve as excellent research studies, careful delineation pointed to the study of the perceived learning outcomes of the

ELDP experience. The intended learning outcomes, or program goals as stated by Welch, in an article for *The Journal of Leadership Studies* are "(1) to develop students' leadership skills and abilities, and (2) to foster in students a desire to use their leadership abilities to address the different problems that communities and society face" (2000, p. 70). Based upon these intended program goals, the following hypotheses will be addressed in this study:

H<sub>01</sub>: There is no difference in the perceived leadership skills as related to the
ELDP curriculum prior to and following ELDP. (Statistical test: t-test).
H<sub>02</sub>: There is no difference in the perceived practical leadership skill of problem
definition prior to and following ELDP. (Statistical test: t-test).
H<sub>03</sub>: There is no difference in the perceived practical leadership skill of discovery
of research alternatives prior to and following ELDP. (Statistical test: t-test).
H<sub>04</sub>: There is no difference in the perceived practical leadership skill of
delegation/teamwork prior to and following ELDP. (Statistical test: t-test).
H<sub>05</sub>: There is no difference in the perceived practical leadership skill of achievable
challenge prior to and following ELDP. (Statistical test: t-test).
H<sub>06</sub>: There is no difference in the perceived adaptive leadership skill of focusing

on an issue prior to and following ELDP. (Statistical test: t-test). H<sub>07</sub>: There is no difference in the perceived adaptive leadership skill of direct

attention to detail prior to and following ELDP. (Statistical test: t-test).

 $H_{08}$ : There is no difference in the perceived adaptive leadership skill of managing time and resources prior to and following ELDP. (Statistical test: t-test).

 $H_{09}$ : There is no difference in the perceived adaptive leadership skill of persistence prior to and following ELDP. (Statistical test: t-test).

#### Methodology

A basic correlation research design was used for this study to discover the relationship between the ELDP curriculum design and the learning outcomes as perceived by former ELDP participants. The dependent variables include the practical skills of problem definition, discovery of research alternatives, delegation, and achievable challenge and the adaptive skills of focusing on an issue, direct attention to detail, teamwork, and persistence. Due to the interdisciplinary nature of the course, the independent variable is the college from which each student participated. Instrumentation

In order to specifically address the four adaptive skills and four practical skills, an instrument was created by compiling sections of related assessment instruments from David A. Whetten and Kim S. Cameron's book, *Developing Management Skills*. In addition, one section from the instrument created and used by Michael J. McCormick in his unpublished doctoral dissertation entitled *The Influence of Goal-Orientation and Sex-Role Identity on the Development of Leadership Self-Efficacy During a Training Intervention* was used to measure the adaptive skill of persistence. Because each instrument section was initially weighted on a six point Likert type scale of 1 – Strongly Disagree, 2 – Disagree, 3 – Slightly Disagree, 4 – Slightly Agree, 5 – Agree, and 6 – Strongly agree, this scale was maintained in the final instrument. Constructs of the instrument were not overtly related to the four

65

practical and four adaptive skills, however adaptive and practical skills are listed in Table 1 with the leading question of each construct. The instrument was designed in a post-then format in to allow for the reflection of the participants' perceived leadership abilities before and after their ELDP experience and to control for response-shift bias (Van Velsor, 1998; Rohs, 2002). In addition, an open-ended question was included at the end of the instrument to allow for the input of qualitative data. A copy of the instrument is included in Appendix A.

### Population and Sample

The population for this study was comprised of students involved in academic leadership development programs at the collegiate level. A purposive sample was derived from former ELDP students who were enrolled in the program from the Fall 2000 semester to the Fall 2002 semester. Students from the sample population were enrolled in the course through one of five participating colleges, including the Mays College of Business, the College of Liberal Arts, the College of Agricultural and Life Sciences, the Dwight Look College of Engineering, and the College of Architecture. <u>Summary of the Review of Literature</u>

Although no one definition of leadership exists, for the purposes of this paper the definition of leadership is based upon the components of a person or persons, influence, process, a common goal, and a group (Northouse, 2001; Bass, 1990; Greenwood, 1996). Similarly, although no one program exists for leadership development, there is an understanding that leader and leadership development occur

66

in many venues, with one of those venues being an academic classroom where experience and theory are juxtaposed.

The Eisenhower Leadership Development Program curriculum is based upon four practical skills, including problem definition, discovery of research alternatives, delegation/teamwork and achievable challenge, and four adaptive skills, including ability to focus on an issue, direct attention to detail, management of time and resources, and persistence. Each practical and adaptive skill is a skill readily found in a notable leadership study or theory as a quality important to leadership development.

ELDP is taught in an experiential and interdisciplinary learning curriculum design in order to allow students to gain not only practical and teachable skills through the classroom activities, but also adapt those skills to a tangible project for further development. The interdisciplinary emphasis of any learning enriches that learning experience by placing students in arenas unlike the compartmentalized college of which they are accustomed and challenging the assumptions they have learned from those college cultures.

### Summary of Findings and Conclusions

Given the statistical significance of each hypothesis, the relationship between the practical and adaptive skills taught in ELDP and the learning outcomes is not serendipitous. The findings show that ELDP is improving the development of students in terms of them becoming leaders and in terms of the greater concept of leadership as related to the four practical and adaptive skills emphasized by ELDP. The following is a summary of both findings and conclusions for each hypothesis.

67

### Related to Hypothesis One

A t-test for paired means was used to test  $H_{01}$ . The hypothesis stated that, "There is no difference in the perceived leadership skills as related to the ELDP curriculum prior to and following ELDP." Means of all items within the eight constructs demonstrated a positively correlated, statistically significant difference from before to after the ELDP. The findings related to this hypothesis were:

- 1. Following ELDP, former students self-perceptions of their perceived leadership skills as related to the ELDP curriculum were stronger.
- 2. Reject hypothesis one.

Given the findings of hypothesis one, it is concluded that ELDP does improve students' self-perceived leadership skills as related to the ELDP curriculum. Since the inception of ELDP at Texas A&M University, a primary focus of the program has been leadership development through service. Because of this focus, the program process theory of ELDP has been to develop and hone the practical and adaptive leadership skills of students through community service projects while working in groups. As stated in the Fall 2002 ELDP syllabus, the program "is organized to give participants both academic grounding and practical experience in issues that are facing the city, state and nation." The development or honing of both the practical and adaptive skills for each student, embedded in an experiential learning environment has created the program impact theory. As noted by Mumford, Zaccaro, Harding, Jacobs, and Fleishman, "leadership can be framed not in terms of specific behaviors, but instead in terms of the capabilities, knowledge, and skills that make effective leadership possible" (2000, p. 12).

Bass noted that "a developmental learning process occurs in which capacities and skills that are gained in one stage should prepare the adult leader for new and bigger tasks and responsibilities in later stages" (Bass, 1990, p. 813). Above all, development related to leadership should stress active learning methods versus theory, since leadership is an active process (Bass, 1990). Chickering (1977) noted that, with experiential or active learning, students must take an active role in their learning, often increasing their motivation. Because of this, ELDP is steeped in both experiential learning and teamwork. Research has shown that collaborative and cooperative learning have a positive impact on scholastic retention and satisfaction, interpersonal skills, learning attitudes, idea generation, and higher-order reasoning (Colbeck, Campbell, & Bjorklund, 2000; Cohn, 1999; Robyn, 2000). One study by Colbeck, Campbell, and Bjorklund found that, "working together with other students on open-ended design projects had enhanced their [the students'] problem-solving skills. The students had learned that they need not feel daunted because real world problems rarely have one right answer" (2000, p. 76). Although little research was available on the topic of interdisciplinary learning, it is concluded that the interdisciplinary aspect of ELDP contributes to the learning environment.

Qualitative data gathered also support this finding with the following statements:

- "I did not appreciate participating in the program until it was over. I still find myself thinking about the class when working with others and try to overcome obstacles using the skills I learned in Eisenhower." (282)
- "My experience with the Eisenhower Program was the first time I had a really challenging project to complete with people from backgrounds significantly different from my own." (021)
- 3. "I believe the Eisenhower Program is a great way to bring diverse students together and form a team to learn about teamwork, leadership, and real life experiences." (052)
- 4. "The group interaction did allow me and prepare me to perform well in a group environment composed of individuals with varying backgrounds, for the group and the personalities that I worked with during my Eisenhower experience definitely enabled me to work well in the real world." (078)
- "It was by far the best experience, opportunity I have ever received. I enjoyed every minute of it. It really gave [me] the knowledge and confidence that I needed to succeed." (296)
- 6. "I honestly didn't think our group would be able to pull off an 'A' by the end of the semester, but we all pulled together and challenged ourselves even more and got an 'A' for the semester." (101)
- 7. "It fostered leadership and broadened my experiences at A&M through interaction with students outside the business school...I have a bachelors and

masters degree from A&M and this class ranks at the top of my list when compared to all other classes I had." (063)

- 8. "I found the program very enjoyable and a very educating and memorable experience. Working with skilled people from other fields was a joy, and helped change some of my prejudices about other fields/professions." (109)
- 9. "ELDP directly helped get me every job offer I received and my learnings from ELDP helped shape my behaviors in specific ways that have allowed me to excel in the workplace...I think the single biggest benefit of ELDP is exposure to very bright students of diverse disciplines. That broadened my perspective significantly." (093)
- 10. "The best thing about Eisenhower was working with students of different disciplines and experiencing the different points of view. Also, solving a REAL problem for a REAL client gave me important experience for the future... and a great thing to talk about during interviews." (121)

Qualitative data also demonstrate that former students do not find all aspects of the program beneficial or agreeable. The following are examples of such data:

"At the time, my team and I were confused about our purpose. We knew we
were solving a problem for an organization, but we didn't understand why we
were solving the problem and what we would benefit from. After the program
was over with I have a better understanding of the class and the purpose of my
team." (052)

- "On the whole, I did not enjoy my time in the ELDP. It was a waste of time and energy... It was too demanding and was a free consulting job for our client." (126)
- 3. "The readings I remember were not very beneficial. I can't remember specifically what the readings were, but I remember them not doing much for my personal leadership skills. It seemed difficult to relate the readings for the class to any of the skills I think are necessary to become an effective leader." (078)
- "Even though you can evaluate group members' performance those who don't work still get the benefit of those who did the work." (105)
- 5. "I believe the fundamental principles of the Eisenhower program are essential for building leadership skills, however I think the scope of the program is overwhelming for one semester. It was difficult to accomplish our goals as a team in the limited amount of time. I felt that the quality of some of the work was compromised due to time constraints and rapidly approaching deadlines." (062)
- 6. "It seemed to me that some of the lectures were not tied as closely toleadership as they could've been, either because of an appreciable connectionto begin with or because the connection was insufficiently emphasized." (113)
- "I think ya'll need to give more instruction regarding the writing assignments/reports. We did not get the requirements or guidelines until after

our papers were returned, so there were different qualities of work turned in." (209)

- "Class time sometimes seemed a little long the project took so much time that I feel that it would have been more beneficial to have more class time for working on the project." (121)
- "In regards to projects, perhaps the students could suggest specific projects if given guidelines regarding them. Being required to do something is also more difficult and less rewarding than doing something that is interesting to you." (284)
- 10. "Most of the other speakers and presentations are very time consuming when the teams could be working on the project. I know for our team it became increasingly difficult to meet outside of class." (198)

# Related to Hypothesis Two

A t-test for paired means was used to test  $H_{02}$ . The hypothesis stated that, "There is no difference in the perceived practical leadership skill of problem definition prior to and following ELDP." Means of all items within the problem definition construct both before and after ELDP were compared for each respondent and were all positively correlated. The findings related to this hypothesis were:

- 1. Following ELDP, former students self-perception of their problem definition skills were stronger.
- 2. Reject hypothesis two.

Given the findings of hypothesis two, it is concluded that ELDP does improve students' self-perceived problem definition abilities, which, according to Mumford, Zaccaro, Connelly and Marks (2000), is an important skill for leaders to have. As noted by Edens (2000), not enough students are equipped with problem related skills prior to entering the workforce, which strengthens the value of these findings. Qualitative data gathered also supports this finding with the following statements:

- "[ELDP] introduced me to new ways of thinking about problems and developing their solutions." (208)
- 2. "Made me think in ways different than normal." (220)
- 3. "I greatly enjoyed the problem solving that my team had to perform." (113)
- 4. "The research and problem solving methods have proved to be exceptionally helpful in upper-level and graduate course work." (001)
- 5. "The program was a great opportunity to solve real-life problems and work on a team. I especially enjoyed the opportunity to identify team member strengths and weaknesses and use the information for problem solving process." (108)

## Related to Hypothesis Three

A t-test for paired means was used to test  $H_{03}$ . The hypothesis stated that, "There is no difference in the perceived practical leadership skill of discovery of research alternatives prior to and following ELDP." Means of all items within the discovery of research alternatives construct both before and after ELDP were compared for each respondent and were all positively correlated. The findings related to this hypothesis were:

- 1. Following ELDP, former students self-perception of their discovery of research alternatives skills were stronger.
- 2. Reject hypothesis three.

Given the findings of hypothesis three, it is concluded that ELDP does improve students' self-perceived discovery of research alternatives abilities, which greatens their ability to operate in a leadership context. As Tooney (1996) noted, it is a leader's ability to analyze alternatives that can determine a leader's success. Going beyond the commonly known to gather information is a critical skill for leaders as noted by Mumford, Zaccaro, Connelly, and Marks (2000). Qualitative data gathered also support this finding with the following statements:

- "I Feel like I learned how to set up a formal research paper well this helped me in a class down the road." (056)
- "I credit my scholarship at SMU law school in large part to the ELDP..."
   (113)
- 3. "The research and problem solving methods have proved to be exceptionally helpful in upper-level and graduate course work." (001)
- 4. "The Eisenhower Leadership Program is a great program for individuals who are self-motivated, have desire and who want to take the initiative to meet new people, think outside the box, and make a difference." (200)
- "As an engineer, my problem-solving methods and group dynamics exposure were totally different from what I experienced in ELDP." (093)

### Related to Hypothesis Four

A t-test for paired means was used to test  $H_{04}$ . The hypothesis stated that, "There is no difference in the perceived practical leadership skill of delegation/teamwork prior to and following ELDP." Means of all items within the delegation/teamwork constructs both before and after ELDP were compared for each respondent and were all positively correlated. The findings related to this hypothesis were:

- Following ELDP, former students self-perception of their delegation/teamwork skills were stronger.
- 2. Reject hypothesis four.

Given the findings of hypothesis four, it is concluded that ELDP does improve students' self-perceived delegation/teamwork abilities and therefore strengthens their ability to operate within a leadership context. Because a group is vital to the concept of leadership, the ability to work within the context of a group is therefore also vital to leaders and to leadership. Bass (1990) highlighted the importance of a leader's interpersonal competence. Kouzes and Posner (1995) emphasize the importance of task completion through individuals working together. In addition, the Leader-Member Exchange Theory offers the important caveat that the strength of the relationship developed between leader and follower directly relates to the followers willingness to perform beyond prescribed roles (Bauer & Green, 1996; Northouse, 2001). Therefore, well-developed leader to follower relationships improve the process of goal attainment. Delegation is one technique to assist in the development of followers and to help followers become better connected to the leader and the goal (Bauer & Green, 1996).

Furthermore Colbeck, Campbell, and Bjorklund noted that, "Industry representatives emphasize that recent graduates should have developed abilities to work in teams, to communicate effectively, to think critically, and to solve openended design problems" (2000, p. 63). Qualitative data gathered also support this finding with the following statements:

- "The program was a good tool for exploring group dynamics...It gives individuals the opportunity to learn to work together (with others) and to gain insight into the characteristics that make a team successful in accomplishing its goal." (208)
- 2. I have been a team leader in multiple projects since Eisenhower, and was able to clearly set a course for the project, effectively distribute work, and also help instruct to improve needed skills." (021)
- 3. "I did learn about teamwork and leadership through the group activity." (052)
- 4. "I learned many great things, especially about team work and job efficiency."(122)
- "The group interaction did allow me and prepare me to perform will in a group environment..." (078)
- 6. "The most significant change in my behavior before and after the Eisenhower Program involves the way in which I approach team situations in general.Before I was much more aggressive and controlling in such a situation. Now, I

appreciate the team atmosphere and I am able to work in a more calmed manner. I feel comfortable with not taking charge of a situation and allowing other to control certain activities." (102)

- "I believe the strength of the program is bringing people from different majors together and placing them in the same team or group." (134)
- 8. "For me the greatest benefit was getting to work on a difficult project with students from other majors. We were forced to learn each others strengths and weaknesses and then use that info to complete the project." (074)
- 9. "I loved the Eisenhower class because although it is not as technically applicable to my degree in electrical engineering, it teaches you, or more wellstated, the class exercises the principles and good methods of teamwork and goal planning into a real client situation...But as the class progressed, I really began to learn much more about my role I play in teams and what I would like to expand into or detract from." (226)
- 10. "This program really gave me the chance to learn while working with others. My team and I worked towards a common goal together and in the end I was/am a better person for it." (289)
- 11. "I believe this experience had a tremendous impact in the way I deal with working in groups." (012)
- 12. "[ELDP] taught me a lot about how to delegate..." (033)

Qualitative data also demonstrates the importance of proper team development, which, according to the data, does not always occur. The following qualitative statements demonstrate weaknesses within the teamwork structure of ELDP. Given the infrequencies of this finding, however it is concluded that this is not a systemic problem within the program.

- "I was in a group of all males. We were an example of what not have (sic) in teamwork." (169)
- 2. "Pick a better way to form groups to ensure a good balance of people types and strengths." (067)
- "I mostly learned about dysfunctional groups and how to overcome the lack of effort by some group members." (105)
- 4. "We had 9 people on my project; four of us did the whole thing." (126)
- 5. "The group assignments need more analysis. My group had 7 males 0 females and 4 of the guys were in the same fraternity. They were nearly impossible to deal with and all gave up the week of the presentation." (044)

## Related to Hypothesis Five

A t-test for paired means was used to test  $H_{05}$ . The hypothesis stated that, "There is no difference in the perceived practical leadership skill of achievable challenge prior to and following ELDP." Means of all items within the achievable challenge construct both before and after ELDP were compared for each respondent and were all positively correlated. The findings related to this hypothesis were:

- 1. Following ELDP, former students self-perception of their achievable challenge skills were stronger.
- 2. Reject hypothesis five.

Given the findings of hypothesis five, it is concluded that ELDP does improve students' self-perceived abilities to achieve challenges and therefore strengthens their ability to operate within a leadership context. As Bass (1990) and Brungardt (1996) noted, challenging tasks do enhance the development process. Similarly, Kirkpatrick and Locke (1995) stated that leaders desire achievement and gain from the success that accompanies completing a challenging task. It does however help, as noted by Van Velsor and Guthrie (1998), for the leader to have high self-esteem prior to engaging in a new challenge. The following statements from the qualitative data support hypothesis five:

- "I think the most valuable lesson I learned through the program was that I loved to be challenged...I will be going to law school this fall and I know that I would not have the confidence to do something like that if it hadn't been for the Eisenhower Program." (101)
- "I feel it was successful in making me a more confident, self-reliant leader."
   (125)
- "As I tackle new problems and challenges, I definitely see myself using the lessons I learned from ELDP." (290)
- "The scope of some of the projects was daunting to complete in one semester." (062)
- "The individual [in ELDP] must have a desire to seek the challenge and go above and beyond what is expected." (200)
- 6. "Good things about Eisenhower: new challenges..." (105)

- "If I could take the class again, I would do it in a heartbeat even though the group project becomes frustrating at times." (282)
- 8. "My experience with the Eisenhower Program was the first time I has a really challenging project to complete." (021)
- 9. "Positives definitely include having a challenging project which must be completed in a tight time frame." (236)

### Related to Hypothesis Six

A t-test for paired means was used to test  $H_{06}$ . The hypothesis stated that, "There is no difference in the perceived adaptive leadership skill of focusing on an issue prior to and following ELDP." Means of all items within the focusing on an issue construct both before and after ELDP were compared for each respondent and were all positively correlated. The findings related to this hypothesis were:

- 1. Following ELDP, former students self-perception of their focusing on an issue skills were stronger.
- 2. Reject hypothesis six.

Given the findings of hypothesis six, it is concluded that ELDP does improve students' self-perceived abilities of focusing on an issue and therefore strengthens their ability to operate within a leadership context. As Toney (1996) found in his research on chief executive officers, leaders must have the ability to stay focused on a goal. Zaleznik (1998) emphasized that leaders must take a proactive attitude towards goals. The ELDP curriculum design is such that, the adaptive skill of focusing on an issue is learned through the application of the problem definition practical skill. As noted by Mumford, Zaccaro, Connelly, and Marks through their review of the skillsbased model of leader performance, "Leaders must define significant problems, gather information, formulate ideas, and construct prototype plans for solving the problem" (2000, p. 157). The ability to focus on an issue allows a leader to properly identify and define a problem and see the solution through to fruition. Qualitative data that support this finding are as follows:

- "Each person uses their skills and expertise to accomplish their part of the overall project." (240)
- 2. "This program is designed to take knowledgeable individuals from various experiences or majors and allow their great minds to become one and work together." (200)
- "[ELDP] introduced me to new ways of thinking about problems and developing their solutions." (208)
- 4. "I greatly enjoyed the problem solving that my team had to perform." (113)
- 5. "The research and problem solving methods have proved to be exceptionally helpful in upper-level and graduate course work." (001)

# Related to Hypothesis Seven

A t-test for paired means was used to test  $H_{07}$ . The hypothesis stated that, "There is no difference in the perceived adaptive leadership skill of direct attention to detail prior to and following ELDP." Means of all items within the direct attention to detail construct both before and after ELDP were compared for each respondent and were all positively correlated. The findings related to this hypothesis were:

- Following ELDP, former students self-perception of their direction attention to detail skills were stronger.
- 2. Reject hypothesis seven.

Given the findings of hypothesis seven, it is concluded that ELDP does improve students' self-perceived abilities of direct attention to detail and therefore strengthens their ability to operate within a leadership context. Heifetz and Laurie (1998), in their article for *Harvard Business Review on Leadership*, emphasized the need for leaders to learn by being attentive to differing points of view. These authors maintain that, "People need leadership to help them maintain their focus on the tough questions. Disciplined attention is the currency of leadership" (Heifetz and Laurie, 1998, p. 183). The ELDP curriculum design is such that, the adaptive skill of direct attention to detail is learned through the application of the discovery of research alternatives practical skill. Having student explore problem solving and research possibilities beyond those commonly known to them has offered them expanded methods of scholarship and the opportunity to critically analyze a problem and the potential solutions with meticulous detail.

## Related to Hypothesis Eight

A t-test for paired means was used to test  $H_{08}$ . The hypothesis stated that, "There is no difference in the perceived adaptive leadership skill of management of time and resources prior to and following ELDP." Means of all items within the management of time and resources construct both before and after ELDP were compared for each respondent and were all positively correlated. The findings related to this hypothesis were:

- 1. Following ELDP, former students self-perception of their management of time and resources skills were stronger.
- 2. Reject hypothesis eight.

Given the findings of hypothesis eight, it is concluded that ELDP does improve students' self-perceived ability of managing time and resources (including human resources) and therefore strengthens their ability to operate within a leadership context. The ELDP curriculum design is such that, the adaptive skill of management of time and resources is learned through the application of the delegation/teamwork practical skill. According to Kotter (1997) and Mintzberg (1997) having the ability both to lead and manage within the context of a group allows that group to operate efficiently and effectively. While conducting research on self-managed work teams, Stewart and Manz (1997) concluded that, "Self-managing work teams with passive, democratic leaders will obtain the highest level of self-regulation; and will therefore realize the most significant long-term improvements in quality, productivity, and employee morale" (1997, p. 405). Having a group member or group members who are able to initially take charge and both lead and manage the group will empower the group and allow for maximum performance.

Qualitative data that support this finding are as follows:

- "[ELDP] taught me a lot about how to delegate, work with other people on numerous issues, and coordinate group and individual efforts and thoughts into one cohesive project." (033)
- "My experience working with that group greatly helped me realize the personal strengths and weaknesses of team members and how to distribute work accordingly." (021)
- 3. "Learning to work with people who are dedicated and hardworking as well as encouraging those who didn't participate as much to do so, showed how to work with very dif [sic] personalities." (236)
- 4. "This program does teach you to think and learn to work with others as well as being creative and efficient in the planning." (200)

## Related to Hypothesis Nine

A t-test for paired means was used to test  $H_{09}$ . The hypothesis stated that, "There is no difference in the perceived adaptive leadership skill of persistence prior to and following ELDP." Means of all items within the persistence construct both before and after ELDP were compared for each respondent. The findings related to this hypothesis were:

- 1. Following ELDP, former students self-perception of their ability to persist were stronger.
- 2. Reject hypothesis nine.

Given the findings of hypothesis nine, it is concluded that ELDP does improve students' self-perceived ability to persist despite challenges and therefore strengthens their ability to operate within a leadership context. The ELDP curriculum design is such that, the adaptive skill of persistence is learned through the application of the achievable challenge practical skill. According to Bass (1990) and Brungardt (1996), it is through challenge that leaders develop. Similarly, Kirkpatrick and Locke (1995) stated that leaders have a need for achievement and, according to McClelland, it is this need that keeps such people working toward achievement (Schriberg, Schriberg & Lloyd, 2002). Finally, Bass (1990) summarized several historic studies relating to the need of leaders to be persistent. Dating from between 1915 and 1942, each of these nine studies found a positive correlation between stubbornness or persistence and leadership.

Qualitative data that support this finding are as follows:

- 1. "Although it was the hardest class I took at A&M and I didn't think that semester would end, I learned so much from the class." (101)
- "My group project was faced with many adverse situations. We were able to overcome and complete our project even though we had to modify it a bit."
   (125)
- 3. "I also learned a great deal in coordinating our work with that of the other teams working on our project; that posed several challenges that were very satisfying to overcome." (113)
- 4. "It's just such a deal because you get this task, with very little guidance and end up pulling something off you never thought you would." (298)

## Programmatic Recommendations

The following recommendations for action are based on the findings and conclusions of this study:

- At the time of this study, three colleges were participating in ELDP. It is concluded that much of the value comes from the interdisciplinary design of the program and that the participation of multiple colleges strengthens the program. It is therefore recommended that the Mays College of Business and/or the College of Liberal Arts be recruited back to the program. Other colleges should also be considered for participation.
- 2. As Brungardt noted, "Tasks that are complex and ambiguous serve to enhance development" (1996, p. 86). However, even though the ELDP curriculum is designed to allow students to grapple with the research process, it is recommended that students are made more aware of the intentions of this process so that frustrations could be potentially reduced.
- 3. Although this study demonstrated that, through the ELDP curriculum, certain practical and adaptive leadership skills are learned, a closer tie to academic leadership theories could offer students a greater connection to the discipline of leadership studies.

## Recommendations for Further Research

The completion of this study magnifies the opportunities for additional research which include:

- 1. It is recommended that this study be replicated specifically with future classes of ELDP in order to validate the methodology used.
- 2. A parallel longitudinal, qualitative study would enrich the data found such that it could be discovered further how students use the perceived skills they gain while in ELDP and thereafter. Qualitative data could also point and contribute to more specific programmatic improvements.
- 3. From the qualitative data, it is concluded that the interdisciplinary nature of ELDP adds great value to the learning process, especially to the learning of the adaptive skills. Further research on the relation and value of the interdisciplinary design is recommended not only within the ELDP program, but also in other arenas.
- Further research on the delineation of which specific skills students from each college primarily glean would assist with curriculum development and process improvement.
- 5. An additional study to correlate students' prior leadership experiences with their perceived benefits of the program could assist in strengthening the application process of the program.

#### REFERENCES

- Bass, B. M. (1990). *Handbook of leadership: Theory, research and managerial applications* (3<sup>rd</sup> ed.). New York: The Free Press.
- Bauer, T. N. & Green, S. G. (1996). Development of leader-member exchange: A longitudinal test. Academy of Management Journal, 39 (6), 1538-1567.
- Beckett, D. (2001). Hot action at work: A different understanding of "understanding". *New Directions for Adult and Continuing Education*, 92, 73-84.
- Bensimon, E. M. & Neumann, A. (1993). *Redesigning collegiate leadership: Teams and teamwork in higher education*. Baltimore: The Johns Hopkins University Press.
- Brungardt, C. (1996). The making of leaders: A review of the research in leadership development and education. *The Journal of Leadership Studies*, 3 (3).
- Brungardt, C. & Crawford, C. B. (1996). A comprehensive approach to assessing leadership students and programs: Preliminary findings. *The Journal of Leadership Studies*, 3 (1), 37-48.
- Buford, Jr., J. A. & Lindner, J. R. (2002). Human resource management in local government: Concepts and applications for HRM students and practitioners. Cincinnati, OH: South-Western.
- Burns, J. M. (1979). Leadership. New York: Harper & Row, Publishers.
- Cashin, W. E. (1985). *Improving lectures*. (Idea Paper No. 14). Kansas State University: Center for Faculty Evaluation and Development.
- Chemers, M. M. (1995). Contemporary leadership theory. In Wren, J. T. (Ed.) *The leader's companion: Insights on leadership through the ages.* New York: The Free Press.
- Chickering, A. W. (1977). *Experience and learning: An introduction to experiential learning*. New Rochelle, New York: Change Magazine Press.
- Cohen, L., Manion, L. & Morrison, K. (2000). *Research methods in Education* (5<sup>th</sup> ed.). London: RoutledgeFalmer.
- Cohn, C. L. (1999). Cooperative learning in a macroeconomics course: A team simulation. *College Teaching*, 47 (2), 51-54.

- Colbeck, C. L., Campbell, S. E., & Bjorklund, S. A. (2000). Grouping in the dark: What college students learn from group projects. *The Journal of Higher Education*, 71 (1), 60-83.
- Cronin, T. E. (1995). Thinking and learning about leadership. In Wren, J. T. (Ed.) *The leader's companion: Insights on leadership through the ages.* New York: The Free Press.
- Cross, R. & Rieley, J. B. (1999). Team learning: Best practices and tools for an elusive concept. *National Productivity Review*, 19, 9-18.
- Day, D. V. (2001). Leadership development: A review in context. *The Leadership Quarterly Yearly Review of Leadership*, 11 (4), 581-613.
- Dewey, J. (1931/1964). The way out of educational confusion. In Archambault. R. D. (Ed.), *John Dewey on education: Selected writings* (pp.422-426). New York: The Modern Library.
- Dewey, J. (1938). *Experience and education*. New York: The Macmillan Company.
- Dillman, D. A. (2000). *Mail and internet surveys: The tailored design method*. 2<sup>nd</sup> ed. New York: John Wiley & Sons, Inc.
- Edens, K. M. (2000). Preparing problem solvers for the 21<sup>st</sup> century through problembased learning. *College Teaching*, 48 (2), 55- 60.
- Foster, R. (2000). Leadership in the Twenty-first century: Working to build a civil society. *National Civic Review*, 89 (1), 87-93.
- Frost, S. H. & Jean, P. M. (2003). Bridging the disciplines: Interdisciplinary discourse and faculty scholarship. *The Journal of Higher Education*, 74 (2), 119-149.
- Gall, M. D., Borg, W. R, & Gall, J. P. (1996). *Educational research: An introduction* (6<sup>th</sup> ed.). White Plains, New York: Longman Publishers.
- Greenwood, R. G. (1996). Leadership theory: A historical look at its evolution. *The Journal of Leadership Studies*, 3 (1), 3-16.
- Hashem, M. (1997). The role of faculty in teaching leadership studies. *The Journal of Leadership Studies*, 4 (2), 89-100.

- Heifetz, R. A. & Laurie, D. L. (1998). The work of leadership. In *Harvard Business Review on Leadership* (171-197). Boston: Harvard Business School Publishing.
- Hitt, M. A. & Ireland, R. D. (2002). The essence of strategic leadership: Managing human and social capital. *The Journal of Leadership and Organizational Studies*, 9 (1), 3-14.
- Howe, N. & Strauss, W. (2000). *Millennials rising: The next great generation*. New York: Vintage Books.
- Isaacs, W. (1994). Dialogue. In Senge, P. et. al. *The Fifth Discipline Fieldbook: Strategies and tools for building a learning organization*. New York: Currency/Doubleday.
- Keyser, M. W. (2000). Active learning and cooperative learning: Understanding the difference and using styles effectively. *Research Strategies*, 17, 35-44.
- Kirkpatrick, S. A. & Locke, E. A. (1995). Leadership: Do traits matter? In Wren, J. T. (Ed.) *The leader's companion: Insights on leadership through the ages.* New York: The Free Press.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- Kotter, J. P. (1998). What leaders really do. In *Harvard Business Review on leadership* (pp. 37-60). Boston: Harvard Business School Publishing.
- Kotter, J. P. (1997). What leaders really do. In *Leadership: Understanding the dynamics of power and influence in organizations* (pp. 24-34). Notre Dame, Indiana: University of Notre Dame Press.
- Kouzes, J. M. & Posner, B. Z. (1995). *The leadership challenge*. San Francisco: Jossey-Bass Inc., Publishers.
- Lindner, J. R., Murphy, T. H., & Briers, G. E. (2001). Handling nonresponse in social science research. *Journal of Agricultural Education*, 42 (4), 43-52.
- Mathieu, J. E., Goodwin, G. F., Heffner, T. S., Salas, E., & Cannon-Bowers, J. A. (2000). The influence of shared mental models on team process and performance. *Journal of Applied Psychology*, 85 (2), 273-283.

- McCormick, M. J. (1999). The influence of goal-orientation and sex-role identity on the development of leadership self-efficacy during a training intervention. Unpublished doctoral dissertation. College Station, TX, Texas A&M University.
- McDonald-Mann, D. G. (1998). Skill-based training. In McCauley, C. D., Moxley, R. S., & Van Velsor, E. (Eds.). *The Center for Creative Leadership handbook of leadership development*. San Francisco: Jossey-Bass.
- McKeachie, W. J. (2002). *McKeachie's teaching tips: Strategies, research, and theory for college and university teachers*. Boston: Houghton Mifflin Company.
- Mika, K. L. (2001). A focus on outcomes. Families in Society, 82 (6), 545-547.
- Mintzberg, H. (1997). The manager's job: Folklore and fact. In *Leadership:* Understanding the dynamics of power and influence in organizations (pp. 24-34). Notre Dame, Indiana: University of Notre Dame Press.
- Mumford, M. D., Zaccaro, S. J., Connelly, M. S., & Marks, M. A. (2000). Leadership skills: Conclusions and future directions. *The Leadership Quarterly*, 11 (1), 155-170.
- Mumford, M. D., Zaccaro, S. J., Harding, F. D., Jacobs, T. O., & Fleishman, E. A. (2000). Leadership skills for a changing world: Solving complex social problems. *The Leadership Quarterly*, 11 (1), 11-35.
- Northouse, P. G. (2001). *Leadership: Theory and practice* (2<sup>nd</sup> ed.). Thousand Oaks, California: Sage Publications, Inc.
- Reed, T. K. (1996). A new understanding of "followers" as leaders: Emerging theory of civic leadership. *The Journal of Leadership Studies*, 3 (1), 95-104.
- Roberts, C. (1994). What you can expect ... from team learning. In Senge, P. et. al. *The Fifth Discipline Fieldbook: Strategies and tools for building a learning organization.* New York: Currency/Doubleday.
- Robyn, E. (2000). Creating tribes. College Teaching, 48 (2), 65-68.
- Rohs, F. R. (2002). Improving the evaluation of leadership programs: Control response shift. *Journal of Leadership Education*. 1 (2), 1-12.
- Sax, L. (2000). Citizenship development and the American college student. In T. Ehrlich (Ed.), *Civic responsibility and higher education* (pp. 3-18). Phoenix: The Oryx Press.

- Senge, P. M., Kleiner, A., Roberts, C., Ross, R. B., & Smith, B. J. (1994). The fifth discipline fieldbook: Strategies and tools for building a learning organization. New York: Doubleday.
- Shriberg, A., Shriberg, D. L., & Lloyd, C. (2002). *Practicing leadership: Principles* and applications (2<sup>nd</sup> ed.). New York: John Wiley & Sons, Inc.
- Shumer, R. & Cook, C. C. (1999). The status of service-learning in the United States: Some facts and figures. Retrieved December 8, 2000 from the National Service-learning Clearinghouse Web site: http://www.nicsl.coled.umn.edu/res/mono/status.htm
- Spitzberg, I. J. (1995). Paths of inquiry into leadership. In Wren, J. T. (Ed.) *The leader's companion: Insights on leadership through the ages.* New York: The Free Press.
- Stewart, G. L. & Manz, C. C. (1997). Leadership for self-managing work teams: A typology and integrative model. In *Leadership: Understanding the dynamics* of power and influence in organizations (pp. 24-34). Notre Dame, Indiana: University of Notre Dame Press.
- Stogdill, R. M. (1995). Personal factors associated with leadership. In Wren, J. T. (Ed.) *The leader's companion: Insights on leadership through the ages.* New York: The Free Press.
- Svinicki, M. D. & Dixon, N. M. (1987). The Kolb model modified for classroom activities. *College Teaching*, 35 (4), 141-146.
- Toney, F. (1996). A leadership methodology: Actions, traits, and skills that result in goal achievement. *The Journal of Leadership Studies*, 3 (2), 107-127.
- Van Velsor, E. (1998). Assessing the impact of development experiences. In McCauley, C. D., Moxley, R. S., & Van Velsor, E. (Eds.). *The Center for Creative Leadership handbook of leadership development*. San Francisco: Jossey-Bass.
- Van Velsor, E. & Guthrie, V. A. (1998). Enhancing the ability to learn from experience. In McCauley, C. D., Moxley, R. S., & Van Velsor, E. (Eds.). The Center for Creative Leadership handbook of leadership development. San Francisco: Jossey-Bass.

- Van Velsor, E., McCauley, C. D. & Moxley, R. S. (1998). Our view of leadership development. In McCauley, C. D., Moxley, R. S., & Van Velsor, E. (Eds.). *The Center for Creative Leadership handbook of leadership development*. San Francisco: Jossey-Bass.
- Welch, R. L. (2000). Training a new generation of leaders. *The Journal of Leadership Studies*, 7 (1), 70-81.
- Whetten, D. A. & Cameron, K. S. (2002). *Developing management skills* (5<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice Hall.
- W. K. Kellogg Foundation. (2000). *Leadership reconsidered: Engaging higher* education in social change. Battle Creek, MI: W. K. Kellogg Foundation.
- Wren, J. T. (1994). Teaching leadership: The art of the possible. *The Journal of Leadership Studies*, 1 (2), 73-93.
- Zaccaro, S. J., Mumford, M. D., Connelly, M. S., Marks, M. A. & Gilbert, J. A. (2000). Assessment of leader problem-solving capabilities. *Leadership Quarterly*, 11 (1), 37-64.
- Zaleznik, A. (1998). Managers and leaders: Are they different? In *Harvard Business Review on Leadership* (61-88). Boston: Harvard Business School Publishing.

# **APPENDIX A**

# THE EISENHOWER LEADERSHIP DEVELOPMENT PROGRAM

# FORMER STUDENT SURVEY – SPRING 2003

# The Eisenhower Leadership Development Program Former Student Survey — Spring 2003



Thank you for completing this survey.

For each of the items below, in the LEFT column, please circle the ONE number that best reflects your behaviors and abilities BEFORE your participation in the Eisenhower Leadership Development Program. Then, in the RIGHT column, please circle the ONE number that you think best reflects your behaviors and abilities AFTER your participation in the Eisenhower Leadership Development Program.

1	2	3	4	5	6
Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree

	Personal Practice BEFORE the Eisenhower Program						Personal Practice AFTER <u>the Eisenhower Program</u>							
When I encounter a routine problem:														
• I state clearly and explicitly what the problem is. I avoid trying to solve it until I have defined it.	1	2	3	4	5	6		1	2	3	4	5	6	
• I always generate more than one alternative solution to the problem, instead of identifying only one obvious solution.	1	2	3	4	5	6		1	2	3	4	5	6	
• I keep in mind both long-term and short-term consequences as I evaluate various alternative solutions.	1	2	3	4	5	6		1	2	3	4	5	6	
• I gather as much information as I can about what the problem is before trying to solve it.	1	2	3	4	5	6		1	2	3	4	5	6	
• I keep steps in the problem- solving process distinct; that is, I define the problem before proposing alternative solutions,	1	2	3	4	5	6	I	1	2	3	4	5	6	

and I generate alternatives

	1 Stroi disag	ngly	Dis	2 agre		3 lightly sagree	4 Slight agree	-	5 Agre	e S	6 tron agı	gly	
When trying to foster more creativity and innovation among those with whom I work:	BEFORE A						AF'	al Practice F <b>TER</b> ower Program					
• I make sure there are divergent points of view represented or expressed in every complex problem-solving situation.	1	2	3	4	5	6	1	2	3	4	5	6	
• I sometimes make outrageous suggestions to stimulate people to find new ways of approaching problems.	<sup>3</sup> 1	2	3	4	5	6	1	2	3	4	5	6	
• I try to acquire information from individuals outside the problem-solving group who will be affected by the decisio mainly to determine their preferences and expectations.		2	3	4	5	6	1	2	3	4	5	6	
• I sometimes involve outsiders (e.g., client or recognized experts) in problem solving discussions.		2	3	4	5	6	1	2	3	4	5	6	
• I try to provide recognition not only to those who come up with creative ideas bu also to those who support others' ideas an who provide resources to implement them	d	2	3	4	5	6	1	2	3	4	5	6	
In situations where I have an opportunity to empower others:													
• I help people feel competent in their work by recognizing and celebrating their small successes.		2	3	4	5	6	1	2	3	4	5	6	
• I try to demonstrate successful task accomplishment.	1	2	3	4	5	6	1	2	3	4	5	6	
• I point out other successful people who ca serve as role models.	ın 1	2	3	4	5	6	1	2	3	4	5	6	
• I frequently praise, encourage, and express approval of other people.	s 1	2	3	4	5	6	1	2	3	4	5	6	
• I provide regular feedback and needed support.	1	2	3	4	5	6	1	2	3	4	5	6	
• I try to foster friendships and informal interaction.	1	2	3	4	5	6	1	2	3	4	5	6	

	1 Stror disag	ngly	Dis	2 sagre		3 Slightly isagree	4 Sligh agr		5 Agr	ee	Stro	6 ngly gree
In situations where I have an opportunity to empower others (continued):		B	BEF	Pra OR wer	Е	e <u>gram</u>			AF'	e gram		
• I highlight the important impact that a person's work will have.	1	2	3	4	5	6	1	2	3	4	5	6
• As I become aware of it, I pass along relevant information to people on a continuous basis.	1	2	3	4	5	6	1	2	3	4	5	6
• I exhibit caring and personal concern for each person with whom I have dealings.	1	2	3	4	5	6	1	2	3	4	5	6
When I am in the role of team member:												
• I know a variety of ways to facilitate task accomplishment in the team.	1	2	3	4	5	6	1	2	3	4	5	6
• I know a variety of ways to help build strong relationships and cohesion among team members.	1	2	3	4	5	6	1	2	3	4	5	6
• I confront and help to overcome negative, dysfunctional, or blocking behaviors by others.	1	2	3	4	5	6	1	2	3	4	5	6
• I shift roles from facilitating task accomplishment to helping build trusting relationships among members, depending on what the team needs to move forward.		2	3	4	5	6	1	2	3	4	5	6
When I am in the role of leader in a team:												
• I know how to establish credibility and influence among team members.	1	2	3	4	5	6	1	2	3	4	5	6
• I behave congruently with my stated values and I demonstrate a high degree of integrity.	1	2	3	4	5	6	1	2	3	4	5	6
• I am clear and consistent about what I want to achieve.	1	2	3	4	5	6	1	2	3	4	5	6
• I create positive energy by being optimistic and complimentary of others.	1	2	3	4	5	6	1	2	3	4	5	6
• I build a common base of agreement in the team before moving forward with task accomplishment.	1	2	3	4	5		I	2				
							Eisenh	owe	r Su	rvey	5.7	Page

Eisenhower Survey  $\stackrel{\bullet}{\leftarrow}$  Page 3

When I am in the role of leader in a team (continued):	disag	ngly gree Perso <b>B</b>	Dis onal <b>SEF</b>	Pra OR	d ictic E	3 lightly isagree e g <u>ram</u>	agre I	tly e Perso	onal AF	Pra	aş actic <b>X</b>	gree
• I encourage and coach team members to help them improve.	1	2	3	4	5	6	1	2	3	4	5	6
• I share information with team members and encourage participation.	1	2	3	4	5	6	1	2	3	4	5	6
• I articulate a clear, motivating vision of what the team can achieve along with specific short-term goals.	1	2	3	4	5	6	1	2	3	4	5	6
When faced with an ambiguous or difficult problem that does not have an easy solution:												
• I try out several definitions of the problem. I do not limit myself to just one way to define it.	1	2	3	4	5	6	1	2	3	4	5	6
• I try to be flexible in the way I approach the problem by trying out several differer alternative methods rather than relying or the same approach every time.		2	3	4	5	6	1	2	3	4	5	6
• I try to find underlying patterns among elements in the problem so that I can uncover underlying dimensions or principles that help me understand the problem.	1	2	3	4	5	6	1	2	3	4	5	6
• I try to unfreeze my thinking by asking lots of questions about the nature of the problem before considering ways to solve it.	1	2	3	4	5	6	1	2	3	4	5	6
• I try to think about the problem from both the left (logical) side of my brain and the right (intuitive) side of my brain.	1	2	3	4	5	6	1	2	3	4	5	6
• To help me understand the problem and generate alternative solutions, I use analogies and metaphors that help me identify what else this problem is like.	1	2	3	4	5	6	1	2	3	4	5	6
• I sometimes reverse my initial definition of the problem to consider whether or not the exact opposite is also true.		2	3	4	5	6	1	2	3	4	5	6

Eisenhower Survey  $\stackrel{\bullet}{\underbrace{\baselineskip}{\label{eq:Eisenhower}} Page 4$ 

probler	When faced with an ambiguous or difficult roblem that does not have an easy solution continued):		gree Perso E	onal BEF	Pra OR	ć ictic E	lisagree	4 5 6 Slightly Agree Strongly agree agree Personal Practice AFTER the Eisenhower Program								
•	I do not evaluate the merits of an alternative solution to the problem before I have generated a list of alternatives. That is, I avoid selecting one solution until I have developed several possible solutions.	1	2	3	4	5	6	1	2	3	4	5	6			
•	I often break down the problem into smaller components and analyze each one separately.	1	2	3	4	5	6	1	2	3	4	5	6			
•	I have some specific techniques that I use to help develop creative and innovative solutions to problems.	1	2	3	4	5	6	1	2	3	4	5	6			
	desire to make my team perform well, ess of whether I am a leader or r:															
•	I am knowledgeable about the different stages of team development experienced by most teams.	1	2	3	4	5	6	1	2	3	4	5	6			
•	I help establish clear expectations and purpose as well as help team members feel comfortable with one another at the outset of a team.	1	2	3	4	5	6	1	2	3	4	5	6			
•	I encourage team members to become as committed to the success of the team as to their own personal success.	1	2	3	4	5	6	1	2	3	4	5	6			
•	I help team members become committed to the team's vision and goals.	1	2	3	4	5	6	1	2	3	4	5	6			
•	I help the team avoid groupthink by making sure that sufficient diversity of opinions are expressed in the team.	1	2	3	4	5	6	1	2	3	4	5	6			
•	I can diagnose and capitalize on my team's core competencies, or unique strengths.	1	2	3	4	5	6	1 Eise		3 wer						
											~ `		-			

					Dis	2 agre	3 e Sligh	ntly	Slig		A	5 .gree		6 rongly	
	desire to make my team perform well,		isag Perso		Pra	ictic	disag e	ree		gree Perso		Pra		agree e	
regard (contin	less of whether I am a leader or member ued):	he F		BEF nhov			<u>gram</u>	AFTER the Eisenhower Program							
•	I encourage the team to continuously improve as well as to seek for dramatic innovations.	1	2			5		_	1	2				6	
•	I encourage exceptionally high standards of performance and outcomes that far exceed expectations.	1	2	3	4	5	6		1	2	3	4	5	6	
When o	delegating work to others:														
•	I specify clearly the results I desire.	1	2	3	4	5	6		1	2	3	4	5	6	
•	I specify clearly the level of initiative I want others to take (e.g., wait for directions, do part of the task and then report, do the whole task and then report, etc).	1	2	3	4	5	6		1	2	3	4	5	6	
•	I allow participation by those accepting assignments regarding when and how work will be done.	1	2	3	4	5	6		1	2	3	4	5	6	
•	I identify constraints and limitations that people will face but also provide needed support.	1	2	3	4	5	6		1	2	3	4	5	6	
•	I maintain accountability for results, not for methods used.	1	2	3	4	5	6		1	2	3	4	5	6	
•	I delegate consistently – not just when I'm overloaded.	1	2	3	4	5	6		1	2	3	4	5	6	
I believ	e that:														
•	When I make plans, I am certain I can make them work.	1	2	3	4	5	6		1	2	3	4	5	6	
•	One of my problems is that I cannot get down to work when I should.	1	2	3	4	5	6		1	2	3	4	5	6	
•	If I can't do a job the first time, I keep trying until I can.	1	2	3	4	5	6		1	2	3	4	5	6	

Eisenhower Survey  $\stackrel{\bullet}{\not\sim}$  Page 6

I believe	that (continued):	Stro disa F	gree Perso B	onal SEF	Pra OR	ictic E	3 Slightl <u>y</u> disagree e gram	y Slig e ag I	ree Pers	onal AFI	gree Pra <b>FEF</b>	a ictic R	gree
	When I set important goals for myself, I rarely achieve them.	1	2	3	4	5	6	1	2	3	4	5	6
	I give up on things before completing them.	1	2	3	4	5	6	1	2	3	4	5	6
•	I avoid facing difficulties.	1	2	3	4	5	6	1	2	3	4	5	6
	If something looks too complicated, I will not even bother to try it.	1	2	3	4	5	6	1	2	3	4	5	6
	When I have something unpleasant to do, I stick to it until I finish it.	1	2	3	4	5	6	1	2	3	4	5	6
	When I decide to do something, I go right to work on it.	1	2	3	4	5	6	1	2	3	4	5	6
	When trying to learn something new, I soon give up if I am not initially successful.	1	2	3	4	5	6	1	2	3	4	5	6
	When unexpected problems occur, I don't handle them well.	1	2	3	4	5	6	1	2	3	4	5	6
	I avoid trying to learn new things when they look too difficult for me.	1	2	3	4	5	6	1	2	3	4	5	6
•	Failure just makes me try harder.	1	2	3	4	5	6	1	2	3	4	5	6
	I feel insecure about my ability to do things.	1	2	3	4	5	6	1	2	3	4	5	6
•	I am a self-reliant person.	1	2	3	4	5	6	1	2	3	4	5	6
•	I give up easily.	1	2	3	4	5	6	1	2	3	4	5	6

On the back page, please write any additional comments you have regarding your experience with the Eisenhower Leadership Development Program. Again, thank you for your time and participation.

Eisenhower Survey  $\stackrel{\bullet}{\Sigma}$  Page 7


Eisenhower Survey 🔀 Page 8

### **APPENDIX B**

## **COVER LETTER AND SURVEY REMINDERS**

#### Cover Letter

May 13, 2003

Stephanie Abbott 4202 Oaklawn Street Bryan, TX 77801

Dear Stephanie:

The Eisenhower Leadership Development Program has become a great academic tradition at Texas A&M University. As a past participant of the Eisenhower Program, you hold valuable insight into the future of the program. Because of this, I am requesting your participation in a study of the learning outcomes of the Eisenhower Program.

Because I have served as a graduate teaching assistant for the Eisenhower Program for four semesters, my interest in the program is great. I believe in the Eisenhower Program; therefore I am asking you to assist me in making the program even better. Although I am conducting this study for my doctoral dissertation, I am working closely with Dr. Richard Cummins, the Eisenhower Program Director, so that the results of the study will unquestionably be used to strengthen the program.

Enclosed you will find the survey form as well as a postage paid return envelope. The survey should not take more than ten minutes to complete, and your contribution will help make the Eisenhower Program tradition an enhanced learning experience for current and future Aggies.

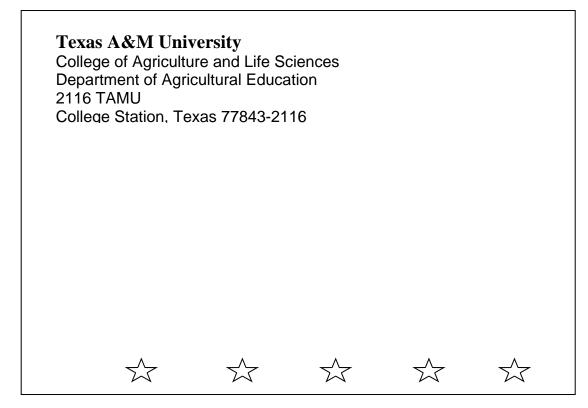
This research study is surveying 300 former Eisenhower Program students. Your participation is voluntary and all responses are confidential. You are not obligated to respond to any questions that make you feel uncomfortable and in no way will your responses be associated with your name or code. By completing and returning the survey, you are giving consent to participate in this study. This research study has been reviewed and approved by the Institutional Review Board – Human Subjects in Research, Texas A&M University. For research-related problems or questions regarding subjects' rights, please contact the Institutional Review Board through Dr. Michael W. Buckley, Director of Support Services, Office of Vice President for Research at 979/458-4067. If you have any questions regarding the purpose of this research or need additional information, please feel free to contact me by telephone at 979/458-0436.

Thank you for your time and attention and especially for contributing to the betterment of the Eisenhower Leadership Development Program.

Sincerely,

Cindy Blackwell Graduate Teaching Assistant Post card reminder

**Eisenhower Leadership Development Program** As a past participant of the Eisenhower Leadership Development Program at Texas A&M University, you should have recently received a survey regarding the Eisenhower Program. Your completion of this survey will strengthen the results of the study and therefore help to strengthen the Eisenhower Program for future Aggies. Please take ten minutes to complete the survey and return it in the postage paid envelope which accompanied the survey. If you no longer have the survey or the postage paid envelope, please contact me by electronic mail at cblackwell@aged.tamu.edu so that I may get another survey and/or envelope to you. You may also use the above email address if you have any questions or concerns regarding this survey. Thank you for helping to make the Eisenhower Program a great academic tradition at Texas A&M University. Sincerely, **Cindy Blackwell Graduate Teaching Assistant** 



#### Electronic Message Reminder Sample

From: Blackwell, Cindy Sent: Wednesday, August 06, 2003 8:51 PM To: keithsewell@hotmail.com Subject: Eisenhower needs your help

Dear Keith

Time is running out for you to contribute to the Eisenhower Leadership Development Program survey. Many of your classmates have already contributed to the survey results, but your thoughts would still be of great value.

If you no longer have the survey or the postage paid envelope, please contact me by electronic mail at cblackwell@aged.tamu.edu so that I may get another survey and/or envelope to you. Also, please include your current address. You may also use the above email address if you have any questions or concerns regarding the survey.

Thank you for helping to make the Eisenhower Program a great academic tradition at Texas A&M University.

Sincerely,

Cindy Blackwell

## **APPENDIX C**

# QUALITATIVE DATA BY COLLEGE

#### College Of Agricultural and Life Sciences

289 This program really gave me the chance to learn while working with others. My team and I worked towards a common goal together and in the end I was/am a better person for it.

287 I learned to work with others while we had little direction from our advisors. I gained great experience working with professionals in the individual studies. The ELDP served as a great hands on learning experience for the real world.

243 ELDP really forced me to work in a different kind of group. Most group work in college involves both hardworking, reliable and motivated people in conjunction with unreliable, lazy slackers!

In Eisenhower I had a full 9 person group of motivated task oriented partners. I felt like I was working in a very professional atmosphere where we could accomplish quite a lot simply because everyone carried their own weight. My leadership abilities were directed at performing the task with excellence rather then just trying to get people to do their work.

I really got a lot out of the ELDP!

222 This program was great. I fully support it as it was a completely valuable experience.

220 Great experience. Made me think in ways different than normal. Learning experience. Met lots of great people.

209 I think ya'll need to give more instruction regarding the writing assignments/reports. We did not get the requirements or guidelines until after our papers were returned, so there were different qualities of work turned in. Then, we had to re-do the reports. It would've been easier on everyone to have given us some guidelines to follow instead of making us try to find out how to write a report from researching on the internet.

Also, I felt that the projects were unequal, but I'm not sure how to solve that problem. Some groups only had to send out surveys, yet my group was responsible for a huge project including surveys, interviews, research & coming up w/ a creative solution. It was a bit overwhelming and I think it was difficult to complete over just one semester. This is just an observation, as I have not suggestions for this.

Overall, I felt this was an interesting experience. One of the challenges I faced in my group was working with people of different majors. I found out that engineers approach a situation one way, where others did things another way. I also realized that everyone has different agendas for being in the Eisenhower class. Unfortunately, if there is a person who has a negative outlook on the project, those negative feelings are contagious to others. I loved our project, especially since I am involved in agricultural. However, some of my group mates made fun of Entomology, or took our project lightly, and that wasn't good for us. But, I think we did a good job w/ the project.

200 – The Eisenhower Leadership Program is a great program for individuals who are self-motivated, have desire and who want to take the initiative to meet new people, think outside the box, and make a difference. This program is designed to take knowledgeable individuals from various experiences or majors and allow their great minds to become one and work together. It's the differences coming together that compliments one another. The Eisenhower Program makes you think outside the box and gets you to find solutions that may not even exist. The individual must have a desire to seek the challenge and go above and beyond what is expected. The Eisenhower Leadership Program makes a difference in the lives of people participating and also to the companies and people who are receiving the solution. Overall, the program says what it is and that is definitely leadership. The program was an excellent program and I am proud to day I was one of the team members. This program does teach you to think and learn to work with others as well as being creative and efficient in the planning.

198 Great program. I really like how you let the teams make their own decisions without too many deadlines and specific tasks.

The class time seemed to be a little pointless. It did not help me with the overall project.

The t-shirt is good at the beginning because it gets the team working together.

Most of the other speakers and presentations are very time consuming when the team could be working on the project. I know for our team it became increasingly difficult to meet outside of class. I really liked my team and our project. I learned a lot from this class.

134 I believe the strength of the program is bringing people from different majors together and placing them in the same team or group. Working with people from different backgrounds was a good prep for working in the "real world".

129 The Eisenhower Program was a great experience. I enjoyed it and learned a lot. My younger sister was just accepted to the program and I hope she has as great an experience as I did.

125 I truly enjoyed participating in the program. My group project was faced with many adverse situations. We were able to overcome and complete our project even though we had to modify it a bit. I learned a lot about my leadership style and about myself as a person. I feel it was successful in making me a more confident, self-reliant leader.

122 This program taught me <u>so</u> much about myself and how I work. I learned many great things, especially about team work and job efficiency.

105 Good things about Eisenhower:

- new challenges
- group work similar to real world
- speakers
- variety of student backgrounds

Bad things about Eisenhower:

- Even though you can evaluate group members' performance those who don't work still get the benefit of those who did the work maybe need a few more indiv. Assignments
- Would be nice to have class twice a week

Perhaps more deadlines throughout semester would help Overall – Eisenhower was a beneficial experience. I mostly learned about dysfunctional groups and how to overcome the lack of effort by some group members.

067 Project was beneficial but class was pointless and boring.

Do surveys (like this) semester after take class OR complete same survey 1<sup>st</sup> and last day of class.

Pick a better way to form groups to ensure a good balance of people types and strengths.

062 I believe the fundamental principles of the Eisenhower program are essential for building leadership skills, however I think the scope of the program is overwhelming for one semester. It was difficult to accomplish our goals as a team in the limited amount of time. I felt that the quality of some of the work was compromised due to time constraints and rapidly approaching deadlines. The scope of some of the projects was daunting to complete in one semester.

I enjoyed many of the speakers.

056 I enjoyed the Eisenhower program. I feel like I learned how to set up a formal research paper well – this helped me in a class down the road.

I already had experience with many groups so I didn't feel like I learned much more about this, but I did realize more about setting group norms and expectations.

052 When I was a participant of the Eisenhower Program many changes in the program were taking place. At the beginning of the program I thought we would learn techniques and styles of leadership, teamwork, etc. however I did learn about teamwork and leadership through the group activity. Looking back, I wish more styles and techniques would have been taught. I believe in doing that it would have given us (my team and I) a more clear and concise steps/information to deal with problem solving and working with different people with different personalities, leadership styles, etc. Also giving the participants a vision/mission statement and objectives would have been helpful. That would have given me a purpose of what I

was going to be learning and achieve in the program. At the time, my team and I were confused about our

purpose. We knew we were solving a problem for an organization, but we didn't understand why we were solving the problem and what we would benefit from. After the program was over with I have a better understanding of the class and the purpose of my team.

I believe the Eisenhower Program is a great way to bring diverse students together and form a team to learn about teamwork, leadership and real life experiences. I am so glad I had the opportunity to be a part of this program.

018 I think that more of the time spent in class should be spent working on our projects. I also feel that the teams should have some training in how to develop a team.

001 The Eisenhower program was a great jump-start into working with real-life practical teams. The search and problem solving methods have proved to be exceptionally helpful in upper-level and graduate course work.

#### Dwight Look College of Engineering

290 This program was an invaluable experience for me. As I tackle new problems and challenges, I definitely see myself using the lessons I learned from ELDP.

282 The program was a great experience! I did not appreciate participating in the program until it was over. I still find myself thinking about the class when working with others and try to overcome obstacles using the skills I learned in Eisenhower. The team building skills have really paid off and I learned a lot from the various leaders we were fortunate enough to hear from in class and outside of class. If I could take the class again, I would do it in a heartbeat even though the group project becomes frustrating at times. I was very sorry to hear it was not offered last semester and I hope in the future other students will have the opportunity to participate in the program.

240 The most important and valuable aspect of the program that I never experienced in any other course situation was the opportunity to work in such a large and diverse group. With each member having a different background and different skills, the group truly mirrored what I have so far encountered in the work place. Each person uses their skills and expertise to accomplish their part of the overall project.

Individually, I learned a lot from the various speakers and topics that were covered. I think that before becoming a leader you must know the role of a leader and when, where, and how to use your leadership skills. The ELDP strengthened my knowledge in all of these areas.

183 Thanks! Great program.

109 I found the program very enjoyable and a very educating and memorable experience. Working with skilled people from other fields was a joy, and helped change some of my prejudices about other fields/professions.

106 Overall it was a pleasurable experience.

093 The ELDP was a truly ground breaking experience for me. As an engineer, my problem-solving methods and group dynamics exposure were totally different from what I experienced in ELDP. I BELIEVE ELDP helped prepare me to lead in the work environment better than any other experience at TAMU.

ELDP directly helped get me every job offer I received and my learnings from ELDP helped shape my behaviors in specific ways that have allowed me to excel in the workplace.

I am currently in grad school (MS in engineering) at Stanford and I owe my acceptance partly to ELDP experiences.

So I'm thrilled with the program.

I think the single biggest benefit of ELDP is exposure to very bright students of diverse disciplines. That broadened my perspective significantly.

074 For me the greatest benefit was getting to work on a difficult project with students from other majors. We were forced to learn each others strengths and weaknesses and then use that info to complete the project.

061 The main thing I remember about Eisenhower was that the projects undertaken by various groups were not equitable. Also, to me, Eisenhower was more a problem solving class, and AGED 340, which I later took, was a better class for learning leadership skills and theories.

021 My experience with the Eisenhower Program was the first time I had a really challenging project to complete with people from backgrounds significantly different from my own. My experience working with that group greatly helped me realize the personal strengths and weaknesses of team members and how to distribute work accordingly. I have been a team leader in multiple projects since Eisenhower, and was able to clearly set a course for the project, effectively distribute work, and also help instruct to improve needed skills. The Eisenhower program gave me a solid foundation for my ability to do this which has improved with each group project I have managed and been a part of.

015 I took this course in the Spring of 2001 so needless to say I am a little hazy on how the course affected me in some of these areas.

Overall I thought the course was a good idea, but could have used some finetuning. I am sure the course is completely different now from when I took it because they were planning some big changes last I heard. By the way, I was from the engineering side of things, and I think it's a great way for us to "get out" and get to interact with people from different disciplines, which as we all know will happen eventually anyway as we enter the "real world". It's best to have some preparation for it.

005 An another approach maybe to teach the psychology of a group, company, etc Body language classes

#### Mays College of Business

299 The best thing about ELDP was my team; we all still keep in contact and they are some of the best people I have met.

I hope that the 4 colleges (ENGR, AG/Liberal Arts, POLS, & BUAD) realize that this course is very useful – it teaches team building, cooperation, diversity, and leadership skills. All of these are becoming increasingly important in today's marketplace.

296 It was by far the best experience, opportunity I have ever received. I enjoyed every minute of it. It really gave [me] the knowledge and confidence that I needed to succeed. Since then, I have held two leadership positions in student organizations. I couldn't have done it without Eisenhower. Keep up the good work!

284 While I enjoyed my ELDP experience, I felt as though the projects were not at all that interesting. Also, so much of the project relied on what past classes had accomplished and probably on what future classes will accomplish. I feel as though that brings about a declining personal pride in the group's work, knowing that so much of the leg work was not their own. I understand the various timing issues, but perhaps more strongly focused projects could be accomplished in a semester's time.

I enjoyed the various speakers that came to class and also found the leadership seminars educational and beneficial.

In regards to projects, perhaps the students could suggest specific projects if given guidelines regarding them. Being required to do something is also more difficult and less rewarding than doing something that is interesting to you.

253 The thing I enjoyed about Eisenhower or that I liked the best was my group. I got along <u>so</u> well with all of them. And we all cared about our project! We had 7 girls and I have never been on a team who worked as well with NO personal problems at all. But I felt that class time was not beneficial at all. People worked crosswords or talked to each other or did other homework and so many of our speakers were BORING and not interactive with us at all. I hated the class and loved my group and our project. Plus a lot of the things being taught about leadership and group work I had already heard before.

And for this survey -I took the class over a year ago, so I tried as best I could to evaluate how I was before and after but I've done thins in the meantime that have

developed me and it's hard to judge if that happened after ELDP or other stuff. It might be better to give all class members the BEFORE and then say a few months after class evaluate again.

236 All in all I greatly enjoyed the Eisenhower program and gained some great experience from it. Positives definitely included having a challenging project which must be completed in a tight time frame – great team interaction as well. Learning to work with people who are dedicated and hardworking as well as encouraging those who didn't participate as much to do so, showed how to work with very dif personalities.

226 Nice survey. I apologize for penmanship ahead of comments. I loved the Eisenhower class because although it is not as technically applicable to my degree in electrical engineering, it teaches you, or more well-stated, the class exercises the principles and good methods of teamwork and goal planning into a real client situation. I am not sure what has changed with the program other than colleges' participation but I truly appreciated the focus on non-profit clients. My absolute motivation for the class was the service we were providing to the Boys' and Girls' Club of Bryan... and of course a good grade. Buy as the class progressed, I really began to learn much more about my role I play in teams and what I would like to expand into or detract from. I believe what really aided my experience over perhaps other individuals' was the dedication, encouragement, and independence given to our team by our advisor. We probably lucked out by getting Dr. Cummins, but I think it is essential to recruit faculty that will be legitimately concerned with students' projects and their team's work dynamics without being overbearing of course. Although some of the lectures were interesting, I think more personal interaction with advisors will yield more personal development. A retreat after being in your team/group for 4 weeks would be great where evaluative activities per individual and group could be directed by your advisors or something similar to this. In my experience at A&M, student government (Bobby Tucker, Dr Cummins knows him) has an outstanding method for selecting graduate students who serve as organizations' advisors that should be transcended to a program such as Eisenhower. There is one course in which electrical engineers work in teams toward a project (senior design), and I believe this is a gross oversight where as my contemporaries will be expected upon graduation to work cohesively and effectively on team projects. I really could speak volumes on my love for this class and its relevance to A&M students. Contact me further if you have further questions. Best of luck to you!

181 Eisenhower program gave me a great opportunity to practice in a work environment in which varying backgrounds and training converge on one problem.

169 I was in a group of all males. We were an example of what not have (sic) in teamwork. Not all members of this team were bad, but I believe our team changed the

way the program worked. I hope it deals with more realistic examples and gives a student an example of what they will face in the working world.

126 On the whole, I did not enjoy my time in the ELDP. It was a waste of time and energy. We had 9 people on my project; four of us did the whole thing. It was too demanding and was a free consulting job for our client. I discouraged friends of mine from participating in ELDP. However, the idea of ELDP is wonderful and I hope projects like your can turn it around.

121 The best thing about Eisenhower was working with student of different disciplines and experiencing the different points of view. Also, solving a REAL problem for a REAL client gave me important experience for the future... and a great thing to talk about during interviews!

Class time sometimes seemed a little long – the project took so much time that I feel that it would have been more beneficial to have more class time for working on the project.

078 It has been a while since I participated in the Eisenhower Program, but thinking back I remembered a few things that I thought would be of some benefit.

The readings I remember were not very beneficial. I can't remember specifically what the readings were, but I remember them not doing much for my personal leadership skills. It seemed difficult to relate the readings for the class to any of the skills I think are necessary to become an effective leader.

The group interaction did allow me and prepare me to perform well in a group environment composed of individuals with varying backgrounds, for the group and the personalities that I worked with during my Eisenhower experience definitely enabled me to work well in the real world.

I think the program has a great focus, but more organization is needed. It would be great if the program rose to the same level of recognition as other leader/academic programs such as the Business Fellows Program or the PPA Program. Granted these are academically focused, the status of these programs is not paralleled by the Eisenhower Program.

Good luck on the study.

063 My opinion of ELDP – outstanding. It fostered leadership and broadened my experience at A&M through interaction with students outside the business school. It encouraged communication and helped me get more comfortable speaking in public. I have a bachelors and masters degree from A&M and this class ranks at the top of my list when compared to all other classes I had. It is also excellent on a resume and has helped me recently get into the MBA program for Executives at Rice University.

044 The group assignments need more analysis. My group had 7 males 0 females and 4 of the guys were in the same fraternity. They were nearly impossible to deal with

and all gave up the week of the presentation – I don't know that the problem is systemic, but it was irritating.

Fort Worth Code Enforcement was hard to deal with. I suggest having participants that are actually interested in the project.

012 I had a wonderful experience being in the ELDP. I believe this experience had a tremendous impact in the way I deal with working in groups. I'm glad I had the opportunity to be a part of such a great program.

#### College of Liberal Arts

298 I'd like to day that in describing my experience in ELDP on my resume for law school – I was admitted to SMU with a letter saying they had been particularly interested in my Eisenhower participation. We did a real job though – nothing easy or blow off like some of the other group in my class bragged that they did.

And actually while in ELDP, you don't realize what you'll be taking away. Even filing out this survey, I'm thinking, "Wow, yeah, I do do that now" and "I DID learn that!" So the experience was invaluable to me.

I hated the classroom portion, because of the classroom itself and for the fact that the environment was totally laid back so people were VERY disrespectful and talked all of the time.

It's just such a deal because you get this task, with very little guidance and end up pulling something off you never thought you would.

217 I don't believe that the Eisenhower Program helped my leadership skills. In fact, I was punished by my team members BECAUSE I was so involved. However, I took the class a long time ago, so hopefully it has improved. I'm sorry if my answers are ambiguous, but I don't feel Eisenhower aided my leadership development. My extracurricular activities helped that.

208 The program was a good tool for exploring group dynamics. It introduces me to new ways of thinking about problems and developing their solutions, but it did not radically change the way I behave or think. Perhaps it is not realistic to expect such things.

I think a class that encourages, or mandates, group work is valuable. It gives individuals the opportunity to learn to work together (with others) and to gain insight into the characteristics that make a team successful in accomplishing its goal.

180 The program was a great opportunity to solve real-life problems and work on a team. I especially enjoyed the opportunity to identify team member strengths and weaknesses and use the information for problem solving process. Dick Cummings is a fantastic advisor.

113 I had an excellent experience with the ELDP. I greatly enjoyed the problem solving that my team had to perform. I also learned a great deal in coordinating our work with that of the other teams working on our project (for the CSISD in Fall '01); that posed several challenges that were very satisfying to overcome. Furthermore, I felt that the huge amount of assistance given my team by our advisor, Dr. Richard Cummins was instrumental in our success – the poor man must've read 10 or 15 drafts of our paper and he met with us every week going down the home stretch. Finally, I credit my scholarship at SMU law school in large part to the ELDP – my acceptance letter to that school mentioned explicitly their interest in my ELDP participation.

On the other hand, I do feel that there is room for improvement. It seemed to me that some of the lectures were not tied as closely to leadership as they could've been, either because of no appreciable connection to begin with or because the connection was insufficiently emphasized. I think a recap or a guide or something ought to be discussed or given so as to reinforce the intended lesson. Also (and this may just be my personal bias), I think some sort of text on leadership could be beneficial. Specifically, I think The West Point Was of Leadership by Larry Donnithorne (I may've misspelled his last name) is an excellent text that has given me a much better appreciation of the types and levels of leadership that exist.

Thanks again to the ELDP and especially to Dick Cummins!

102 The most significant change in my behavior before and after the Eisenhower Program involves the way in which I approach team situations in general. Before I was much more aggressive and controlling in such a situation. Now, I appreciate the team atmosphere and I am able to work in a more calmed manner. I feel comfortable with not taking charge of a situation and allowing others to control certain activities. 101 I participated in ELDP as a Junior and I LOVED the program! Although it was the hardest class I took at A&M and I didn't ever think that semester would end, I learned so much from the class. As a senior every single employer that interviewed me asked about this program and was very impressed with it! I have told everyone that I know that is coming to A&M about the program and that it is a must for any Aggie who can get in the program. I use things that I learned through the program every day. I think the most valuable lesson I learned through the program was that I loved to be challenged. I honestly didn't think our group would be able to pull off an 'A' by the end of the semester, but we all pulled together and challenged ourselves even more and got an 'A' for the semester. I made some very good friends though the program and still talk to most of them. I will be going to law school this fall and I know that I would not have had the confidence to do something like that if it hadn't been for the Eisenhower Program. Thank you for being a part of this amazing program... it has definitely made a huge impact in my life and many others.

64 I was very disappointed in the final result of the program. I felt that, as a whole, we could have made a difference in our community – but didn't. My group composed a plan for bringing bilingual education to CSID. A grand total of two people showed

up to our final presentation from CSID. What a HUGE waste of time! That binder is probably collecting dust somewhere. A woman came to speak to us one day from Houston. She had started a meals on wheel for children. I can't tell you how much she influenced me that day. I was angry that we didn't try to help her bring her plan to College Station and Bryan. Overall, the class discussion was helpful in life, but lacked purpose or direction. I really hope the program can become more focused and filter the groups they choose to help better. I really did enjoy the people I met through the class. Thank you for the opportunity to put down my thoughts.

33 The program was a great experience. It taught me a lot about how to delegate, work with other people on numerous issues, and coordinate group and individual efforts and thoughts into one cohesive project. I'm not really sure that I would say that Eisenhower LDP changed the way I encounter routine problems – it changed more the way I work with groups of 7-8 people on bigger issues which I wouldn't consider routine. I did very much enjoy the program – being given a large problem, being put in a group of people I didn't know and having to come up with a comprehensive solution taught me more about how people in leadership positions at every level of our private and public sector are forced to deal with the problems that arise in their lives.

#### College of Architecture

143 Best class I ever took! Thanks to Dr. Cummins.

# VITA

Name:	Cindy Southard Blackwell
Permanent Address:	1201 Holleman Drive College Station, Texas 77840
Departmental Address:	College of Agriculture and Life Sciences Department of Agricultural Education 2116 TAMU College Station, Texas 77843-2116
Educational Background:	Bachelor of Journalism The University of Texas at Austin, 1992
	Master of Urban Planning Texas A&M University, 1998
	Doctor of Philosophy, Agricultural Education Texas A&M University, 2003