COLLEGE STUDENT LEADER DEVELOPMENT: A STUDY OF PERCEPTIONS OF LEADERSHIP SKILLS AND ABILITIES OF SENIOR STUDENTS

A Dissertation

Presented to

The Faculty of the Curry School of Education

University of Virginia

In Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

By

Grant L. Azdell

B.A., Lynchburg College, 1989

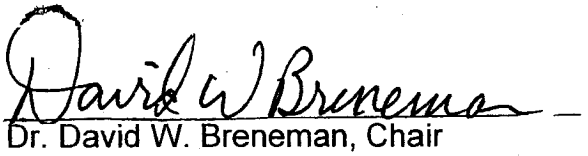
M.Div., Vanderbilt University, 1992

May 2010

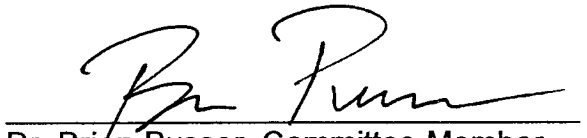
Higher Education
Curry School of Education
University of Virginia
Charlottesville, Virginia

APPROVAL OF THE DISSERTATION

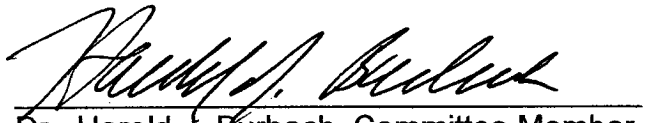
This dissertation, "College Student Leader Development: A Study of Perceptions of Leadership Skills and Abilities of Senior Students", has been approved by the Graduate Faculty of the Curry School of Education in partial fulfillment of the requirements for the degree of Doctor of Philosophy



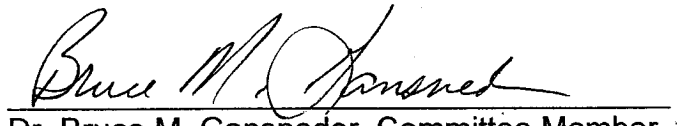
Dr. David W. Breneman, Chair



Dr. Brian Pusser, Committee Member



Dr. Harold J. Burbach, Committee Member



Dr. Bruce M. Gansneder, Committee Member

December 18, 2009 Date

ABSTRACT

COLLEGE STUDENT LEADER DEVELOPMENT: A STUDY OF PERCEPTIONS OF LEADERSHIP SKILLS AND ABILITIES OF SENIOR STUDENTS

Dissertation Directed by: David W. Breneman, PhD
Department of Leadership, Foundations & Policy

Almost every institution of higher education advertises its ability to "produce" or "train" leaders for the community and world. Indeed, most institutions, if asked, would freely report that leadership development is a large part of their overall mission of educating students.

The purpose of this research is to determine whether students who are in their senior year of college can perceive growth in their leadership skills or abilities and can directly attribute that growth to their college experience. To this end, students were asked to reflect on a series of leadership skills, as identified from the literature, and give some indication of their abilities in these various areas. They were also asked to answer a series of questions that were originally asked of them as incoming freshman, at the same institution, to determine changes in their perceptions over time. Secondly, students were asked to identify what specific areas of their college experience played a significant role in their overall leadership development. Variables like, background, previous leadership experiences, outside influence, peer influence and other factors were considered and various conclusions regarding outside influences were addressed.

DEDICATION

For Jane N. Azdell, Andrew G. Azdell, Caroline M. Azdell
and John L. & Ann S. Azdell

"Leadership is an observable, learnable set of practices. Leadership is not something mystical and ethereal that cannot be understood by ordinary people. Given the opportunity for feedback and practice, those with the desire and persistence to lead—to make a difference—can substantially improve their abilities to do so."
-*The Leadership Challenge* (Kouzes & Posner)

ACKNOWLEDGEMENTS

This dissertation would not have been possible without the support and encouragement of Dr. Kenneth Garren, President of Lynchburg College in Virginia. He has been a mentor and champion of my doctoral work from day one. I also owe a debt of thanks to my family, Jane, Andrew and Caroline, for allowing me to spend countless hours in class, doing research and writing. All of you have sacrificed for this degree program. Thank you also to colleagues Dr. Greg Nayor and Mari Normyle, the other members of the "Lynchburg College Ph.D. Gang", who helped me through this program and provided many distractions when necessary. Thank you also to Dr. Tom Scott and Dr. Howard Ramagli for your tireless support and talent and for helping me re-learn statistics.

To the faculty of the Curry School, I owe my thanks as well. Your instruction and wisdom challenged my assumptions, sparked my curiosity and took me to new levels of understanding. Special Thanks to Dr. Annette Gibbs, for her friendship and support, to Dr. Brian Pusser for his wisdom and advice, to Dr. Gansneder, for always asking "why" and "so what?", to Dr. Burbach for encouraging me to think differently about the topic of leadership and to Dr. Breneman for having the patience to guide me through the dissertation process.

I would like to thank my former colleagues at Lynchburg College and the Lynchburg Life Saving Crew for "taking care of business" while I was at UVA working on my projects or attending classes. Thank you, Anne Gibbons, Christie Rapp, John Eccles and Kristin Morgan. I would also like to thank my new

colleagues in student development at Randolph-Macon College, Carrie Noonan, Kathryn Hull and President Lindgren for supporting my efforts to complete my dissertation, while working in a new position.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

According to some estimates, there are well over 1000 leadership programs in place at many U.S. colleges and universities. All of these programs are aimed at developing the leadership skills of students. Leadership development among students has been well documented in higher education literature and has received increasing attention over the past 20 years (Rost, (1991). The development of leadership skills among students is a commonly articulated outcome of the college experience (Roberts, 1981; Lucas, 1994). In fact, "education for leadership has always been a direct or indirect purpose of education" (Clark & Clark, 1994). What is interesting about the literature, however, is that few persons have actually been able to measure leadership development in students by asking the students to evaluate their own sense of leadership ability and to evaluate the role that the institution played in that development.

The research and study of leadership in higher education settings is relatively recent, given the long history of education in this country. The literature review for this study will show that there has been a subtle progression and sharing of leadership theories and concepts between business models and those found in education.

Institutions of higher learning are turning to these studies more often in an attempt to quantify what they are doing in the area of leadership development. As these studies inform leadership programs, the programs in turn generate more research. In addition to identifying the different forms of leadership education, researchers must also consider the type of institution that is best suited for carrying out leadership programs on its campus.

Among all types of colleges and universities in the United States, those with a liberal arts core were founded with a particular mission of building students' leadership skills and abilities. Providing students with the ability to explore education in a way that enhances character, builds cognitive thinking skills, and the development of leadership for society has been long stated goals of the liberal arts experience (Brown, 1994; Marcy, 2002; Stancil, 2003). Higher education experts have long touted the ability of liberal arts colleges to produce a unique set of leadership abilities in students when compared to other types of higher education institutions (Astin, 1999; Hayek & Kuh, 1998; Pascarella, Wolniak, Cruce and Blaich, 2004). One author goes as far as to state, "With higher education's movement toward specialization, only the liberal arts background provides the broader educational experience essential to leadership" (Gardner, 1990). On many campuses leadership is seen as a form of service done in exchange for the privilege of living in a democratic nation. In this sense, leadership activities play a significant part in preparing students to assume a contributing role in society. As noted by the authors of a book on the subject of combining service and learning, "We are a nation founded upon active citizenship

and participation in community life (Honnet & Poulsen, 1989). It is how that responsibility is taught and how opportunities for leadership are presented that are the underlying forces behind this study.

Problem Statement

Almost every institution of higher education advertises its ability to "produce" or "train" leaders for the community and world. Indeed, most institutions, if asked, would freely report that leadership development is a large part of their overall mission of educating students (Clark, 1985; Roberts, 1997; Cress, 2001). In fact, the development of students as leaders has long served as a primary purpose for institutions of higher education. The number of curricular and co-curricular leadership programs has increased nationwide (Astin & Astin, 1996; Zimmerman-Oster & Burkhardt, 1999). Student affairs groups like NASPA & ACPA have included leadership development as a key outcome of a college education. Organizations like the Council for the Advancement of Standards in Higher Education (CAS) have compiled a set of standards for campus leadership programs. This is no surprise when one considers the literature on leadership programs and the trend towards greater expansion of current practices.

Leadership has been shown to help students establish better self-management skills (Cooper, Healy & Simpson, 1994), develop interpersonal skills (Bialek & Lloyd, 1998), develop better public speaking skills (Outcalt, 2001), and build on conflict resolution and problem solving skills (Komives, et.al., 2005). It is no wonder, therefore, that many colleges and universities have made the

study of leadership a key part of their curriculum and this field of study has been steadily increasing over the last ten years (Huey, 1994; Kezar & Moriarty, 2000, Roberts, 1981). Leadership programs can consist of a series of short workshops, offered through student development offices, classes taught by faculty, or entire majors or minors that revolve around the topic of leadership. The results of this programmatic approach is that implicit ideas about civic responsibility are replaced with more direct experiences aimed at enhancing leadership ability and developing appropriate skill sets. Few institutions, however, have found a reliable way to track and document leadership development in their students. A few institutions have relied on tracking students who have assumed leadership positions in organizations, but this approach is not adequate. The literature demonstrates that the leadership skills of students develop over time and are often influenced by interactions with peers, faculty and staff. Participation in campus activities and student organizations has also been shown to have a significant impact on a student's development (Astin, 1993, Pascarella and Terenzini, 1991). Several studies have attempted to track leadership development by examining students in active leadership roles. There is a significant problem with this approach as well. The literature demonstrates that leadership opportunities for students can arise in a variety of settings and therefore a large number of students are missed by using this method of study. Many instruments for assessing leadership styles exist, but they tend to focus on leadership behaviors of people occupying specific leadership positions (Clark & Clark, 1994). A good example of such an instrument is the Student Leadership

Practices Inventory developed by Kouzes & Posner (1998). It has been noted, however, that many traditional functions of leaders are often carried out by those who hold no formal office in an organization (Murray, 1994). Given that the literature has demonstrated this fact, it is important to find a tool that will allow all students to articulate their perceived leadership growth, regardless of their involvement in traditional leadership roles. Before anyone can proceed further in the study of leadership, however, another issue must be resolved. A definition of leadership must be established.

One of the problems with understanding leadership is the fact that it is difficult to find just one definition in education. In its most simplistic form, Merriam-Webster's Dictionary defines Leadership as: "*1: the office or position of a leader 2: capacity to lead 3: the act or an instance of leading 4: leaders <the party leadership>*" (Merriam-Webster, 2009). Leadership theorists, however, have struggled with the basic concept and definition of leadership for some time (Crawford, Brungardt, and Maughan, 2000). Leadership has been characterized by a confusing number of definitions, models and constructs, sometimes with conflicting ideas (Klenke, 1993). By one account, there are over 225 definitions of leadership found in the literature (Kouzes & Posner, 1995). Leadership can center on behavior, interactions with others, personality and how one reacts to situations (Bass, 1995).

For the purpose of this study, leadership will be defined as that quality or set of skills that allows a person to influence others and effect positive change. In the context of higher education, this study adopts the understanding that

"Leadership is an observable, learnable set of practices" (Kouzes & Posner, 1995).

Another challenge for promoting leadership development among students is the effort required to help them develop the ability to identify this growth. The preparation of future leaders requires institutions of higher education to work harder to ensure that their students will be prepared for the challenges that will face them in the world. Contemporary literature suggests that the ability to find new and more complex ways of thinking about leadership will be required for those who contribute to the leadership process (Allen and Cherry, 2000; Boal, 2000; Drath, 2001). New leadership models continue to evolve into new paradigms that are difficult to master and college students are not likely to understand this fact.

A common question that exists within the myriad of leadership models is: Can a typical college senior identify appreciable leadership growth within his own development and can he attribute that growth to the college experience? Harry Levinson and Stuart Rosenthal, both psychiatric experts, make this comment about the development of leaders: "Our point of view is that some people want to be leaders and see themselves as leaders. Others rise to the occasion. In either case they see what has to be done and do it. They provide stability and support while defining goals and providing reassurance. Sometimes they become leaders when they become angry about something, catch fire, and start to lead. . . . [People] become leaders when they learn to take a stand, to take risks, to anticipate, initiate, and innovate" (Kouzes & Posner, 1995). The influence of

peers, leadership opportunities provided through student groups and specific courses on leadership development all could potentially contribute to leadership growth. How well do students embrace those opportunities? How do students' perceptions of their leadership change over four years?

Purpose

This research has two purposes. The first purpose is to determine whether students at a small liberal arts college (Lynchburg College) are able to identify their own development of leadership skills over four years of college. The second purpose is to ascertain if the development of leadership skills can be directly attributed to the college experience. Part of this exploration will be looking at the types of influences that have contributed to perceived leadership growth among senior students. This study will therefore examine the claim made by many institutions of higher education, that the college experience does in fact create leaders for society.

Research Questions

In order to accomplish the purposes of this study, the following research questions are posed:

Research Question 1

How do seniors rate the degree to which leadership experiences at Lynchburg College improved their overall leadership ability over four years?

Research Question 2

How do they rate their overall proficiency on a series of identified leadership skill sets and do they think their college experience provided an opportunity for the development of that proficiency?

Research Question 3

Do they identify any specific college experience which they believe helped them to build or increase their leadership abilities or improve their skills?

Research Question 4

Is there a difference in perception of leadership growth among students who participate in "immediate feedback" leadership roles, versus those who participate in "delayed feedback" leadership roles?

Rationale

Why is identifying, cultivating and developing the leadership abilities of students important? Many educational professionals have been asked this question by faculty members who should arguably already see the value in this process. The fact of the matter, however, is that some people, even those who are engaged in teaching, don't believe that leadership can be taught. Part of the problem with challenging this perception is the relative lack of quality assessment tools to help identify and quantify leadership growth, when leadership programming and training is applied. Another problem with this assessment is establishing a reliable way for students to adequately reflect on, and assess, their individual leadership growth.

One of the primary benefits of being able to identify and quantify leadership development among students is self-edification. If a student can learn to reflect on his growth and development on a regular basis, this will likely produce a "journaling" effect. A student can spend more time directing his own development and focusing on those things that produce the most growth for him as an individual. Institutions can also benefit from being able to develop a tool for assessing the leadership development of their students. Instead of simply stating that they "develop student leaders", they can actually show proof of this through ongoing assessment, make regular adjustments in their programming and pedagogy and secure budgetary support for programs that actually work. Another good reason to study leadership on campuses is that it provides an opportunity to examine some of the experiences that are likely to contribute to leadership development during the college years. Through student self-reporting, university staff can see what types of experiences are most conducive to this kind of growth. Ideally the information provided through this type of research would be helpful to anyone who wanted to walk onto a college campus and locate the student leaders. Information this specific would also have the profound effect of helping student affairs professional staff know what experiences are worth funding and which ones may not have the desired growth potential for student leadership skills.

Despite the large number of studies into the impact of leadership development programs in business organizations and in community-based programs, far fewer studies focus on assessing development of college students'

leadership abilities or on strategies for determining the success of leadership development projects on college campuses (Cress, 2002). Those assessments that have been carried out have largely focused on the ways in which specific types of programs advance leadership skills among individual students. To confuse matters, some of these attempts have actually been inconclusive or have shown that there is little difference in the leadership abilities demonstrated by students who participate in programs and those who don't (Havlik, 2006). Despite the lack of reliable instruments for assessment, the study of leadership programs and leadership development has steadily increased at higher education institutions (Roberts, 1981; Huey, 1994; Kezar & Moriarty, 2000).

Previous research has shown that involvement in activities has had a positive effect on the leadership development of students (Astin, 1984; Schuh & Laverty, 1983). This is of particular interest in any study of leadership as it has long been observed that the most active students are also often the best leaders. There has also been some data to suggest that leadership is not solely found within those individuals who are the formal leaders of a group (Cooper, D.L., Healey, M.A., & Simpson, J., 1994). Once again, these data suggest that the members of an organization may also exercise leadership within the organization and often report leadership growth from participation in the organization. This survey tool seeks to compare the development of leadership skills for those individuals who are student members of the organization versus leaders of an organization. It is hoped that by asking the students to reflect on their own leadership development, they will be able to link any growth that may have

occurred to a particular experience on campus. One possibility is that students do not have to hold a formal role or office in order to be effective leaders within the organization or to develop leadership traits consistent with those identified in leaders elsewhere.

There is also some anecdotal evidence to suggest that students who receive some immediate feedback on their performance as a leader tend to be more aware of their own leadership skills (Cooper, D.L., Healey, M.A., & Simpson, J., 1994). Likewise, leadership roles that are not promptly assessed and do not necessarily result in direct feedback from participants might result in students who are less aware of their own leadership ability and therefore less likely to experience significant growth of their individual skills. The question of whether students actually see their participation in a group as contributing to their own development of leadership skills is one which needs further study. A survey was developed for this study in an attempt to test this assumption.

Limitations of Study

This study has the following limitations:

1. Only data from one group of seniors at one institution of higher education is examined.
2. One set of data was compared to a student data from a research one institution and would have been more useful had the institution been similar in size and program offerings to Lynchburg College.

3. While there is an attempt made to minimize the effect of outside influences on leadership development, it is impossible to filter out non-college related experiences which might contribute to leadership development of the individual.
4. The results of the study cannot be generalized to other populations that may differ in ability, motivation, class size, experiences, etc.
5. Students self-report their leadership ability on the College Student Inventory in their freshman year of college. There is no formal assessment of leadership ability done at this time.
6. Students also assess their own leadership development. They may over or under-estimate their skills and or development.
7. The factors, in the original version of the Student Leadership Outcomes Inventory (SLOI), were not firmly established via rigorous statistical analysis, but were chosen as a random "grouping" to allow for statistical analysis across evident groups of questions. This same approach had to be used in order to compare data against the previous results for the same survey questions.

Definition of Terms

Within this study, the following definitions are used:

Leadership – As noted in the literature, there are multiple definitions of leadership. For the purpose of this study, leadership will be defined as that quality or set of skills that allows a person to influence others and effect positive

change. In the context of higher education, this study adopts the understanding that "Leadership is an observable, learnable set of practices" (Kouzes & Posner).

Leadership Development – Leadership development refers to almost every form of growth or stage of development in the life cycle that promotes, encourages, and assists in one's leadership ability and potential (Brungardt, 1996). Leadership development "involves those activities designed to provide an inter-actionist environment which encourages development in an ordered hierarchical sequence of increasing complexity" (Roberts, 1981). Leadership development includes both formal and informal educational activities.

Leadership Education – includes those learning activities and educational environments that are intended to enhance and foster leadership abilities. Leadership Education is one of the components of leadership development and is often more formal and structured (Brungardt, 1996).

Leadership Training – this refers to learning activities for a specific leadership role or job. Leadership training activities are considered components of leadership education (Roberts, 1981, Brungardt, 1996).

Senior – This designation refers to any undergraduate student who has completed 3+ years of education at the same institution. Transfer students were

not included in the survey scoring, but those students with more than 90 course credits were included as long as they had matriculated as freshmen.

College Student Inventory – This is a survey tool developed by Noel-Levitz for use with incoming freshman students to ascertain a variety of areas of preparedness for college. One portion of the survey deals with leadership and a raw score is generated on the final report based upon answers to these questions. Permission was obtained from Noel-Levitz to ask these same eight leadership questions of participants in this study. The answers were then compared to the answers those same students gave to the questions when they were freshmen.

Student Development – The department within a college or university administration charged with working with students through a variety of programs and areas. Student development is typically the area where leadership programs at colleges and universities are housed. This term may also refer to the "development" that is experienced by a student during his tenure at college.

Student Leadership Outcomes Inventory – This survey was developed in 2004 by Melinda Vann and Dr. Belinda McFeeters at Virginia Tech. It was designed to evaluate leadership improvement among students and has been adapted (with permission) for this specific project. The results gathered from the Lynchburg

College cohort were compared to those from a group of students from Virginia Tech as a point of comparison.

While this list of definitions is far from exhaustive, these terms are the most prevalent in the study and the most likely to require additional explanation.

Population and Sample

The population for this study was 540 students who were classified as fourth year seniors at a four-year comprehensive college in the south, known as Lynchburg College. Every student who met these criteria was sent a notice asking that they complete a survey questionnaire. The initial completion rate was 35% (n= 190). Surveys were checked to make sure that all participants met the requirements of the study and incomplete surveys were not tallied. Survey's that did not contain the correct answer to the control question were also removed. The remaining survey's were considered valid and were included as part of the data analysis (N= 166). The sample (N=166) had a gender distribution of 70% females (n=116) and 30% male respondents (n=50). This gender distribution was similar to the 540 students in the population of the study which was 63% female and 37% male.

The ethnic background of the sample was also examined. The respondents self identified themselves through their responses to this demographic question. The ethnicity of those who responded to the survey was: 87% Caucasian (n=144), 9% African-American (n=13) and 1% Hispanic (n=3), Asian (n=2) or American Indian (n=1). Three students also classified themselves as "other minority". The percentages in this group were also representative of

the entire senior class, closely paralleling the ethnic diversity of the 540 students in that population.

A sub-group of participants was indentified for the purpose of addressing research questions one and two. These 118 individuals made up the group of students who would also have taken the College Student Inventory (CSI) as freshmen and whose scores were available for comparison by the researcher. Students within this cohort who transferred into the institution or did not begin as freshmen were not included in this sub group.

Instrument

The instrument used for this study was constructed from two independent surveys. The Student Leadership Outcomes Inventory (SLOI) (Vann & McFeeters, 2004) and a portion of the College Student Inventory (CSI) (Noel-Levitz) were combined into a hybrid survey for this study. A self-administered online survey instrument was developed. The survey questions were developed to assess leadership skills and abilities as well as overall satisfaction with leadership opportunities at the college. The hybrid survey was comprised of 61 questions that measured leadership skills (SLOI), 8 questions that rated leadership related activities (CSI), and 9 questions used to ascertain significant experiences, time spent on task and related demographic information.

CHAPTER II

LITERATURE REVIEW

"Leadership is one of the most observed and least understood phenomena on earth" (Burns, 1978). This quote sums up the most frustrating part of trying to examine and understand the concept of leadership. Among the many definitions of leadership, there are several viewpoints about leadership development among students in higher education settings (Chambers, 1992; Cooper, Healy, & Simpson, 1994; Cox & Miranda, 2003; Cress, Astin, Zimmerman-Oster, & Burkhardt, 2001; Gardner, 1990; Graham & Cockriel, 1997; Romero-Aldaz, 2001; Skeat, 2000; Striffolino & Saunders, 1988; Turrentine, 2001). Most of these studies have been done over the past ten to fifteen years, which is fairly recent, given the long history of higher education. Realizing the importance of "teaching leadership", and perhaps hearing the call of the business community, colleges and universities have looked for ways to institutionalize leadership programs. The Center for Creative Leadership reported in 1994 that "almost every college and university has established some sort of leadership education program for students" (Freeman, 1994). It can be deduced that some of these programs are more formal than others, depending on the type of institution. The adoption of these programs would support the belief that leadership can be learned and enhanced through an educational process.

It is noted, however, that many of the leadership programs in place today are in fact adapted from programs from the business and managerial sectors (Clark, 1990). These programs were therefore based upon the production models of business and not on the college environment where natural four-year attrition and complete turnover is expected. Students also lead one another in an environment of volunteer social and service work versus the workplace. It has been pointed out by Kouzes and Posner, authors of *The Leadership Challenge* that; "Student organizations, which exist within a largely noncompetitive environment, do not typically have any 'profit' motives or, often, any objective or comparative effectiveness or performance measure". Scholars have noted that this is clearly not the same as the concepts of leadership expressed in business models (Kouzes & Posner, 1995). The literature demonstrates that educational leadership models owe their roots to business and managerial models that came before. It is clear, however, that the models have subtle differences in their approach to understanding leaders. Given these differences in approach, it has also been noted that prior to 1992 instruments that were specifically aimed at assessing college student development were rare (Brodsky, 1988; Posner, 1993).

Despite the large number of studies into the impact of leadership development programs in business organizations and in community-based programs, far fewer studies focus on assessing development of college students' leadership abilities or on strategies for determining the success of leadership development projects on college campuses (Cress, 2002). Those assessments

that have been carried out have largely focused on specific types of programs and their abilities to advance leadership skills among individual students. To confuse matters, some of these attempts have actually been inconclusive or have shown that there is little difference in students who participate in programs and those who don't (Havlik, 2006). Despite the lack of reliable instruments for assessment, the study of leadership programs and leadership development has steadily increased at higher education institutions (Roberts, 1981; Huey, 1994; Kezar & Moriarty, 2000).

Leadership Research

This study is grounded in the theoretical concepts offered by a number of leadership researchers. The literature review that follows will show that a significant amount of leadership theories have been developed and tested by researchers. A specific theory was not the starting point for this research; rather the concept of studying leadership gave way to a variety of previous studies that became the conceptual framework for the survey tool and this project. The research began with a cursory look at those authors who had studied leadership as power. Concepts such as "position power", social theories, and various taxonomies that attempt to classify power were examined (Yukl, 1989; French and Raven, 1959; Podsakoff and Schriesheim, 1985). These studies addressed issues of how power is derived in group settings, but did not specifically deal with leadership theories that are helpful to the examination of student leadership development. These examinations of hierarchical structure are helpful to some degree, but were not included in this study. Instead the focus of this literature

review was on material that specifically dealt with the study of students in leadership roles and leadership theories that undergird and support modern conceptions about leadership skills identification and college student assessment.

A discussion of college student assessment could not take place without giving credit to the significant research of Alexander Astin. Astin's 1984 research on student involvement and his later work entitled *What Matters in College (1993),* created a research foundation for student assessment in a variety of measures. Astin was the first to suggest publicly that student involvement could in fact lead to greater satisfaction. He also introduced the concept that involvement is the investment of energy in a particular experience. This energy can be either physical or psychological. He argued that physical energy manifests itself in actions while psychological energy manifests itself in thoughts and emotions. He also suggested that involvement has both quantitative and qualitative dimensions. Quantitative refers to the amount of time that is devoted to a particular experience while qualitative refers to productivity of the time invested in a set experience (Astin, 1984). A longitudinal study with almost 25,000 respondents makes his work a lasting contribution to higher education research and assessment.

Astin's involvement theory demonstrated that student behaviors and experiences facilitate learning outcomes. Involvement is characterized by the amount of effort, quantitative or qualitative, that a student might give to an activity or experience within the college or university environment that would be

associated with leadership development or other cognitive development (Astin, 1977, 1984). The idea that is derived from this understanding is that the more time a student spends in a particular activity or function, the greater his affinity for that activity. Likewise, the assumption is therefore made that the greater the level of affinity for the group, the greater the growth potential and cognitive development. This work by Astin was the driving factor for the time-on-task questions that were asked in this research study.

Astin was able to develop this involvement concept even further. In 1991 he published a new study which introduced the I-E-O (Input-Environment-Outcome) model which refined the involvement theory to suggest that a students' development could be seen in stages. Students' individual characteristics prior to entering college (input) when coupled with the involvement and experiences of college life (environment) had a direct impact on the resulting student development (outcome). The intent was to allow researchers to control for some of the input characteristics so that a more objective assessment of the influence of the environment, or college experience, could be seen. The environmental effect could come from a variety of factors. Peer relationships, student group involvement, leadership activities, classroom experiences and residential relationships could all be factors in the college experience (Astin, 1991). This work by Astin supported and influenced the portions of the survey that focus on student experiences.

George Kuh, director of the National Survey of Student Engagement (NSSE) for the Center for Postsecondary Research and Planning, has studied

student engagement for many years. In answering the question about why student engagement is important he says, "Social and political issues are increasingly complicated and will become more so as the pace of change escalates. Virtually every sector of the economy requires workers with skills and competencies beyond those most people acquire in high school. It's no surprise then that there is widespread interest in the quality of undergraduate education" (Kuh, 2001). At the heart of his argument that quality assessment is important, is the concept of student engagement. Kuh, and others, have argued that students perform better and learn better when they are engaged in the material and the learning process (Kuh, 1995; Chickering and Gamson, 1987; Astin, 1993). Research in this area has largely focused on learning within the classroom, but more recent work has focused on extra-curricular activities and involvement as well (Kuh, 2001; Coates, 2005

Another study on leadership by Schuh and Laverty was published in 1983. Taking a cue from Astin's work, the researchers studied the long-term effects of involvement by looking at student leaders from three institutions. The study found that students who held leadership positions in extracurricular activities such as student government, fraternities, sororities, and campus newspapers were found to be much more likely to participate in civic organizations and community activities, even after leaving those positions or the campus. In addition, the study showed that students viewed community involvement in a positive light and saw their involvement as directly affecting their leadership skills (Schuh & Laverty, 1983).

Studies have also been done on student involvement and extracurricular participation in college which reflect on leadership development. Longitudinal studies have shown that participation in college student organizations appears to provide students with a variety of opportunities to become better acquainted with the campus life within an institution (Pascarella & Terenzini, 1991). Pascarella and Terenzini found that college graduates reported that extracurricular involvements had a "substantial impact on the development of interpersonal and leadership skills important to general occupational success" (Pascarella & Terenzini, 1991). Students reported that their participation alone contributed to enhancing their interpersonal and leadership skills, allowing them to explore and realize their goals. This work was utilized to direct some of the survey questions that assessed student participation during their college years.

A significant longitudinal study in 2000 sought to assess whether student participation in leadership education and training programs has an impact on educational and personal development (Cress, 2000). The study found that even though programs were in place on many college and university campuses, the institutions were still only paying minimal attention to the actual leadership development of their students (Cress, 2000). Another study in 2004 sought to assess the actual leadership skills of leaders to find out what factors contributed to their experience (Arens, 2004). The study looked at leaders on the campuses of Christian colleges and universities and examined students' participation in various activities on campus. The results of this study showed that "there are personal descriptors, programmatic interventions, and leadership involvements

that make a significant contribution to the leadership skill development of students" (Arens, 2004). This work assumed that some intentional programming was put into place within college programs to increase the level of perceived leadership development among the students. The questions in the survey about significant leadership activities sought to evaluate this concept as well.

Leadership Theory Development

Leadership models have been interchanged between business models and educational settings for many years. The traditional hierarchical leadership models were largely based upon business and managerial theories. A review of the literature reveals a variety of leadership theories that have been suggested throughout history. In the words of one author, "...the study of leadership has witnessed theoretical explanations that have shifted from one model to another and then back again" (Brungardt, 1996). These theories range from the "Great Man" theory or "Trait" theory to "Transformational Leadership" theories. The natural progression of these theories has moved from the concept of focusing on the traits and attributes of leaders, to how they interact with their followers. The majority of leadership research from the past fifty years can be found in psychology, education, or leadership and management literature. Many of these concepts have found their way into contemporary thought and are the foundation of several college based leadership programs in the United States. These leadership theories have typically been grouped into a few main areas.

"Great Man" and Trait Theory

Attempts to identify what makes a good leader began with the "trait" approach to leadership. The concept of identifying the traits of a good leader has its origins in the "Great Man" theory. This concept was based on the principle that leaders are born and not made and that great leaders will arise when there is a great need (Stogdill, 1974). Early research on leadership was in fact based on the idea that people were already great leaders and that those with a gift for leadership were given this ability through their families of origin. Early theories attributed a leader's success to certain personality traits and extraordinary abilities (Brungardt, 1996). Early researchers pointed to "Great Men" throughout history to support the idea that in times of great need, a "Great Man" would rise up to face a particular challenge. This concept was often applied to fields such as the military, where individuals were identified and promoted based upon their leadership abilities. The thrust, therefore, of this early research was to identify the "traits" that made a man a great leader. The "Great Man" theory gave way to Trait theory.

By studying successful leaders, the hope was that the appropriate leadership traits could be discovered, which would lead to finding other individuals who also possessed these traits, and therefore would be great leaders. The study of "traits" based leadership quickly became overwhelming. With each study, new traits would be identified, which in turn caused great confusion about what traits could be counted upon to identify great leaders. Even as the number of identifiable traits grew, a few particular traits did seem to

rise to the surface. Researcher R.M. Stogdill identified some traits and skills that seemed to appear more often than others. These included administrative skill, application to task, charisma, group supportiveness, technical skill, emotional control, supportiveness, social skill and intelligence (Stogdill, 1974). A chart developed by Stogdill which demonstrates the most commonly occurring traits and skills follows:

Table 2.1 – Main Leadership Traits and Skills as identified by R.M. Stogdill (1974).

Traits	Skills
• Adaptable to situations • Alert to social environment • Ambitious and achievement-orientated • Assertive • Cooperative • Decisive • Dependable • Dominant (desire to influence others) • Energetic (high activity level) • Persistent • Self-confident • Tolerant of stress • Willing to assume responsibility	• Clever (intelligent) • Conceptually skilled • Creative • Diplomatic and tactful • Fluent in speaking • Knowledgeable about group task • Organized (administrative ability) • Persuasive • Socially skilled

Stogdill's work would later be expanded upon further by researchers who came up with some more detailed suggestions of what could help a leader succeed or fail. McCall and Lombardo (1983) researched both success and failure in leadership roles and identified four primary traits which could help a leader succeed or "derail". These traits were emotional stability and

composure, admitting error, good interpersonal skills, and intellectual breadth. Emotional stability and composure, they argued, was the ability to remain calm, confident and predictable particularly when under stress. Admitting error was the ability of a leader to own up to one's own mistakes, rather than putting energy into covering them up. Having good interpersonal skills was seen as the ability to communicate and persuade others without resorting to negative or coercive tactics. Finally, intellectual breadth was identified as the ability to understand a wide range of ideas and areas, rather than having a narrow area of expertise (McCall and Lombardo, 1983). Trait theory became one of the foundations for this study of senior students.

Behavioral Theory

Managerial researcher Douglass McGregor tackled one of the most frustrating problems with "Trait Theory" in his book *The Human Side of Enterprise* (1960). McGregor acknowledged the fact that traits were difficult to measure. Instead he focused on human relationships, output and performance. The main difference between trait theory and behavioral theory is that behavioral theory is based upon the idea that leadership can be learned and does not have to be inherited. Rather than trying to mimic certain leadership traits, potential leaders can instead adopt the practices of good leaders (McGregor, 1960). There are different sub-theories that extend from behavior theory.

Role theory is based upon the idea that people define roles for themselves and others based upon social learning. People form expectations about the roles that they and others will play and how they will act within those roles. Role theory suggests that people subtly encourage others to act according to their expectations. As a result of this subtle influence, leaders will generally conform to the leadership role that is put upon them by others (Pfeffer, and Salancik, 1975). Formal and informal information about what the leader's role should be, including values, culture, training and modeling of behavior, can regularly be exchanged within the organization. Role conflict can often occur when people have differing expectations of their leaders or when leaders have differing ideas about their specific role (Merton, 1957).

A second type of behavioral theory is referred to as the "Managerial Grid". First developed by Robert Blake and Jane Mouton, this concept focuses on task and employee relations aspects of leaders and is known in other studies as "task vs. person preference". Leaders may be concerned for their people and they also must also have some concern for the work to be done (Blake & Mouton, 1964). The question remains, how much attention do they pay to one or the other?

Table 2.2 – The Blake Mouton Managerial Grid (Blake & Mouton, 1964)

Concern for People	*High*	Country Club management		Team management
	Medium		Middle of the road management	
	Low	Impoverished management		Authority-compliance
		Low	*Medium*	*High*
		Concern for Production (Task)		
http://www.changingminds.org/disciplines/leadership/styles/managerial_grid.htm				

The Managerial Grid includes five key intersections. "Impoverished management" is characterized by a minimum effort on the part of the leader where the least possible amount of work is done. The "authority-compliance" intersection is characterized by a strong focus on task, but with very little concern for people. The focus here is on efficiency. The elimination of people is not seen as a problem. The third intersection is termed "country club management". In this intersection, great concern is expressed for the people and there is often a collegial and friendly environment. There is also a low focus on task, which may produce poor results. The forth intersection is characterized as "middle of the road management". As the name suggests, there is a weak balance of focus on both work and people. The boundaries of what may be possible are not pushed in this style. The fifth and final intersection is called "team management". In this balanced approach, the

people are committed to the task and the leader is committed to the people (Blake and Mouton, 1964).

Participative Leadership

Participative Leadership is not a new idea or concept. As early as 1939, Kurt Lewin and his colleagues did leadership experiments and identified three different styles of leadership in decision making. The three styles were identified as autocratic, democratic and laissez-faire. The autocratic style was identified as the style which would create the most level of discontent. In this instance, decisions were often made without any consultation from the group, subordinates or stakeholders. This style worked best when there was no real need for input beyond that of the leader. The democratic style involved a more participatory sense between the leader and the people who the decision would ultimately impact. The democratic decision-making style was usually appreciated by the participants, as long as the group could reach some sort of consensus on the issue. In the third style, Lewin identified what he called the laissez-faire style. This style of leadership worked best when people were capable of making their own decisions. In this style of leadership, the leader would usually have minimal involvement in the decision-making. As one might imagine, Lewin found that the democratic approach to decision-making was usually the most acceptable and most effective method (Lewin, 1939).

Rensis Likert built upon this earlier work by Lewin when he identified four main styles of leadership, in particular around decision-making and the degree

to which people are involved in the decision. He called these four styles, exploitive authoritative, benevolent authoritative, consultative and participative (Likert, 1967). This model was similar to the styles identified by Lewin, but was the first introduction of the notion of Participative Leadership which is the simple idea that there are levels at which people are involved in the decision-making process. The amount of input the group members have, however, is usually at the discretion of the leader. The theory is based upon the idea that people will generally be more committed to actions where they have been involved in the decision-making process. This would also suggest that there is a different level of commitment to the process, when constituents are consulted. Competition is reduced and collaboration is improved when this style of leadership is employed. Rather than taking autocratic decisions, a Participative Leader seeks to involve other people in the process. A spectrum exists in this model with non-participative leadership on one end, characterized by autocratic decision making, and highly participative leadership on the other end, characterized by full delegation of decision-making to the team. Naturally the middle of this spectrum encompasses the vast number of stages in between these two extreme examples of leadership (Likert, 1967).

Situational Leadership and Contingent Leadership

Situational Leadership is a concept which dates back in the literature to the 1950's. Criticism of the early Participative Leader models gave rise to an adapted version of earlier work. This new model suggested that the early polar opposites of Lewin's autocratic vs. laissez-faire models did not give a true

picture of the intricacies and subtleties of leadership. Situational Leadership is based on the simple notion that the best action of a leader, depends on a wide range of situational forces. The single leadership styles that were suggested in other models did not leave enough room for the variables of leadership in practice. It was argued that "forces" were often at work which would dictate how a leader might lead, a follower might follow and how a decision might be influenced by a particular situation (Tannenbaum and Schmidt, 1958). Tannenbaum and Schmidt also affirmed the continuum approach to leadership styles with four main points, termed Autocratic, Persuasive, Consultative and Democratic and coupled these styles with four "situations" that would dictate a different response in each instance. They used the terms Telling, Selling, Consulting and Joining to speak to the type of style that might be most appropriate for use with the four main points. Telling would be a direct style of leading which would simply announce a decision. Other researchers noted that leaders not only consider the likelihood of a follower accepting a suggestion, but also the overall importance of getting things done. Thus in critical situations, a leader is more likely to be directive in style simply because of the implications of failure (Maier, 1963). Selling, as it implies, would be a negotiation of sorts, where the leader may have all of the information, but may want to solicit buy-in from the followers. Consulting is a much more collaborative approach where the leader would actively solicit the input of his followers and consider that input before rendering a decision. Joining was the final style and would suggest that the leader would turn the process, in whole or

part, over to his subordinates. A decision would then emerge out of the process. The model suggests that certain situations would dictate different responses. Dynamics that might affect situational decisions include motivation and ability of followers, the connection between the followers and the leader and the situation itself. They also suggested that the kind of leadership that is represented by the democratic extreme of the continuum will rarely be seen at work in formal organizations (Tannenbaum and Schmidt, 1958).

Three additional researchers have had a more recent opportunity to adapt and build upon the Situational Leadership model. In 1977, the Hersey-Blanchard model of leadership was first developed. It was revised in a more recent edition of their book Management *of Organizational Behavior: Leading Human Resources*, published in 2007. Their theory is based upon the idea that the correct leadership style is best decided once the leader has determined the developmental levels of his subordinates. In this model, the abilities or maturity of the follower dictates the way that the leader must respond to them and the task (Hersey and Blanchard, 2007). G. A. Yukl sought to combine ideas from previous studies and came up with six variable approaches to leadership. The first approach, "subordinate effort" is based on the motivation and actual effort expended by the follower. "Subordinate ability and role clarity" concerns itself with how well the followers know how to do their jobs. "Organization of the work" is based on the structure of the work and how resources are adequately utilized. "Cooperation and cohesiveness" is a measure of how well the group works together with each other. "Resources and support" refers to the

availability of tools, people, materials and other tangible items that help the job get done. "External coordination", the last of his variables examined the need to collaborate with other groups (Yukl, 1989). These researchers confirmed much of the previous research in their own studies and built upon the base of Situational Leadership.

The Contingency Theory of leadership is not very different from Situational Leadership. It is based on the same idea that there is no one method to follow when it comes to leadership. Contrary to some "one-size fits all" leadership styles, the contingency model suggests that a leader who may be effective in one setting may be ineffective when he finds himself in a different situation or place. In this model, the ability of the leader to lead is contingent on situational factors, but is also contingent on the leaders preferred style and the capabilities and behaviors of followers. An example of the contingency model is found in the work of psychologist Fred Fiedler. Fiedler looked at three situations that could define the nature of a leadership task. "Leader/member relations" is concerned with how well the leader and the followers get along. "Task structure" is the second situation which concerns itself with how highly structured the task may be. Finally, "position power" asks how much authority the leader actually has within the framework (Fiedler, 1964).

Transactional Leadership

The transactional leadership style was first described by Max Weber in 1947 and refined further by Bernard M. Bass in 1981. The term transactional leadership was first coined by James MacGregor Burns, in 1978. Transactional

leadership is the polar opposite of transformational leadership and is based on the idea that people are basically motivated by reward and punishment and that social systems work best when a clear chain of command exists. Transactional leadership finds its roots in business models and assumes that the purpose of a subordinate is to do what their manager tells them to do. In this structure, the leader must create clear directions and expectations that the subordinates are expected to follow. The subordinates are completely aware that they will be rewarded for following orders and punished, through a formal process, for a failure to measure up. A leader can also use a "management by exception" principle in transactional leadership. In this sense, there can be little or no interaction between leader and subordinate, as long as everything is operating as expected (Bass, 1981).

Transformational Leadership

Transformational leadership has become widely accepted in business models and is applied in educational settings every day. An examination of Leadership literature shows that many authors and researchers have stated the virtues of transformational leadership (Tichy, 1997; Kotter, 1999; Jung, 2001; Einstein, 2001). Transformational leadership, unlike transactional leadership, is all about the relationships between leader and follower. Transformational leadership is therefore rooted in the charismatic attributes of the leader. The thought behind the style is that a well-liked leader is easy to follow and a leader with a vision can create enthusiasm and excitement with regard to the project at

hand. As with the study of transactional leadership, Bernard Bass (1985) again took the work of Max Weber (1947) and expanded on a concept that would challenge the notion of transactional leadership. Supported by years of research on contingency and situational models of leadership, Bass discovered a point where leaders were able to inspire their followers to "perform beyond expectations" (Bass, 1985). Bass maintains that a transformational leader can achieve this greater than expected performance by creating an increased awareness by subordinates about the importance of outcomes, by getting individuals to put the team ahead of their own self-interest and by altering the need levels of the subordinates on Maslow's hierarchy scale. In this sense, the leader is able to inspire the subordinates to tap into their own sense of esteem and self-actualization, allowing them to transcend personal self-interest for the sake of the group or organization (Bass, 1985, Yukl, 1989).

Bass believes that leaders must get followers to adopt four interrelated components in order for the transformational style of leadership to be effective. The first component is "idealized influence". This is the idea that trust between leader and follower is imperative and that a moral and ethical grounding is required. The second component is "inspirational motivation". This component suggests that the leader helps the followers share in the goals and challenges them to do what is right as they move forward together. The third component of Bass' plan is called "intellectual stimulation". Intellectual stimulation is the idea that followers are free to create innovative solutions to problems so that the mission of the group can be reached. The fourth component of this plan is called

"individual consideration". Individual consideration provides growth opportunities for individuals through mentoring and coaching. At this point, followers are able to have a true sense of self-actualization and fulfillment. The leader is able to help the follower feel empowered and proud at having taken an active role in the project or work (Bass, 1985). These components make it necessary for the leader to constantly "sell" the vision and show the followers how important it is to complete the tasks at hand. Bass adds that personal integrity and trust are critical parts of this equation and both are necessary to create an atmosphere that supports the common goal and finds a way forward to the vision. Bass also states that it is important for the leader to stay visible in the process. . If the people do not believe that they can succeed, then their efforts will diminish. The transformational leader seeks to support their followers constantly, helping them to have a high level of commitment to the vision. They are first and foremost people-oriented and believe that success comes through deep and sustained commitment (Bass, 1985).

Servant Leadership

Another often referenced, and loosely explored, variation of the Transformational Leadership model is known as Servant Leadership. Servant leadership has become one model that some U.S. colleges and universities have utilized to develop leadership programs. Servant leadership stresses the service part of leadership. In this model, the leader is one who seeks to serve and that serving is a natural component of the leader (Greenleaf, 1977; Farling, Stone & Winston, 1999). This type of leadership puts a different perspective on the

organizational structures that have been previously discussed and one which is subject to further research (Patterson, 2003). The concept of servant leadership is based on a theory of altruism towards followers. Servant leadership is really about the focus that the leader has upon others and therefore is different from other theories that don't necessarily address the motivation of the leader. Like transformational leadership models, the servant leader empowers his followers and gives them the freedom to proceed toward their goals. Although many consider servant leadership to be a largely untested theoretical model, it has been adopted as a working model in some educational settings with the specific constructs of love, humility, altruism, vision, trust, empowerment and service (Patterson, 2003).

Social Change Leadership

Another common educational leadership model is rooted in the idea of creating social change as a leader. Moving away from the "command and control" concept of leadership, social change leadership concerns itself with collective action and shared power. Like servant leadership, effective social change agents are seen as empowering of others. Helen & Alexander Astin introduced much of this leadership model through work at the Higher Education Research Institution at UCLA in 1994. The model seeks to integrate other leadership development concepts by focusing on the kind of leader who wants to make a positive change for society. The model is based around the concept of "leadership as a process" (Astin & Astin, 1996). The goals of the model are to enhance student learning and development while facilitating positive social

change at the institution or in the community. The model examines leadership development from three different perspectives.

The first perspective is called "the individual". The model seeks to discover what types of personal qualities leaders are attempting to develop and nurture in students who participate in leadership programs. The second perspective is called "the group" and asks how a collaborative approach to leadership can be designed to not only facilitate the development of individual leadership qualities, but also create positive social change. The third perspective in the social change leadership model is called "the community and society". This perspective is concerned with the service activities that are part of the leadership model and how effective they are at energizing the group and developing personal qualities in the individual (Astin & Astin, 1996).

The social change model also incorporates seven values. Known as the "seven C's", these values are consciousness of self and others, congruency, commitment, collaboration, common purpose, and controversy with civility. Consciousness of self and others through self reflection is the first value. It is being aware of the values, emotions and attitudes, and beliefs that motivate one to take action, including how one understands others. Congruency means thinking, feeling and behaving with consistency, genuineness, authenticity and honesty towards others. Commitment implies focus, intensity and duration. It is based on the idea that significant investment of a person's self in the activity is necessary. Collaboration is the primary means of empowering others and self through trust. Group members must trust each other to be about serving the

common goals and searching to find creative solutions. Common purpose is sharing a common purpose or value. It requires that all members of a group participate actively in forming the purpose and goals of the leadership activity. Controversy with civility recognizes that groups will inevitably find themselves dealing with differences of opinion but must be willing to share these differences openly and with civility (Astin & Astin, 1996). A recent publication by Susan Komives & Wendy Wagner argues for an eighth "C" that is often forgotten when using the social change model. The eighth "C" is "change" and is presented as the central focus of the social change model of leadership development (Komives & Wagner, 2009).

The social change model of leadership has been incorporated into a vast number of leadership programs in educational settings. Because it adopts many of the principles of other leadership models, it is seen by many to be a good model for developing leadership in young adults. Like the service leadership model, however, there is still a vast amount of research that is left to be done to evaluate the effectiveness of these models. Some of this research is just emerging.

Summary

It is clear from the literature review that the study, practice and assessment of leadership programs in higher education settings is relatively recent when examined against the centuries old institution of higher education. It is also clear that much of the research with regard to education has its roots in business and managerial literature and studies. What makes a leader effective is

often due in large part to a variety of factors and not just the leader's abilities or skills. It is important to understand, however, that leaders must pay close attention to how they interact with their followers and the situational nature of their work. The transformational leadership model, which is sometimes embodied in social change and service leadership models, influences today's student leaders and those who would seek to lead from within the organization. It is also clear that students who present in leadership roles on campus do so because of a variety of reasons. These students are often chosen by their peers or volunteer to assume these leadership roles. Likewise, the motivations for these individuals to assume a leadership role, varies.

The conceptual framework for this study was based upon these historical leadership studies; however, one study influenced this project significantly. Doctoral student Melinda Vann and Dr. Belinda McFeeters created a survey in 2004, called the Student Leadership Outcomes Inventory. The survey was based on the work of Dr. Howard Gardner and his Theory of Multiple Intelligences (Gardner, 1983), but clearly incorporates the trait and transformational theories as well. The intent of the authors of the survey was to assess which leadership skills improved over time. The survey was also set up to see if students could identify and rate their leadership abilities. The researchers found that students, when asked, could categorize their abilities within a seven point scale. This survey was the best questionnaire available at the time of this research and provided a way to establish some benchmarks for measuring leadership development factors for this population, while giving an

adequate amount of attention to the concepts expressed in the leadership literature. The SLOI was adapted slightly, with the permission of the authors, to serve this particular population more directly.

Given the fact that the previous research on leadership, engagement and leader development are based in non-educational settings, it stands to reason that examining the actual student population of a college or university is appropriate. Given the information that is provided in the leadership literature, this study was undertaken with the following assumptions in mind:

1. Students are often elected to, and/or volunteer for leadership roles in campus groups.
2. There are certain "traits" that can be identified with regard to figuring out which students have the leadership skills to succeed or have developed these skills to a level that they may be considered a leader.
3. There are persons who are in leadership roles who may not possess these skills at first.
4. There are students within the organizational framework who do not necessarily hold a particular leadership role, but who do exercise some leadership abilities over the group.
5. Leadership, engagement and student satisfaction are often linked.
6. Time spent in a particular leadership experience can have a direct effect on the perceptions of leadership abilities as self-reported by students.

7. Successful student leaders often embody the same types of leadership "traits" that have traditionally been seen in business and educational settings.
8. Leadership can be learned and therefore taught.
9. When pressed, students can identify one particular type of activity or group that has been influential or helpful to their leadership growth over time.
10. A senior student should be able to determine how his leadership abilities have developed and improved over time.

The survey tool, and subsequent examination of the data obtained from that tool, is directly linked to these assumptions by the author as derived from the literature. The basic premise that leadership abilities can be articulated by the typical college senior, and therefore measured, is the foundation for this research.

CHAPTER III

METHODOLOGY

Introduction

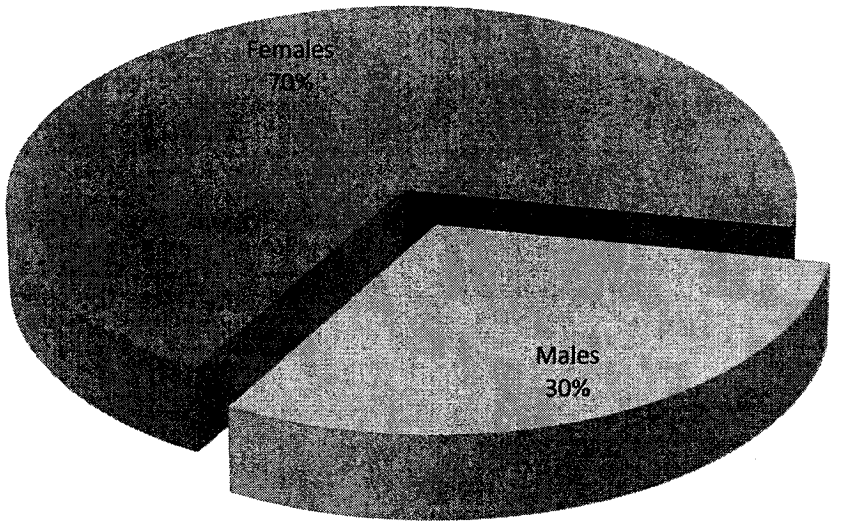
This study was designed to evaluate leadership development and address the research questions as presented. Students were advised that the topic of the research is to evaluate leadership; however, they were not informed about specific uses of the data so that collected information could be as pure as possible. As chapter two suggests, the literature on leadership and the various models of leadership were considered when reviewing the data that was collected. The basic premise that colleges can aid in and contribute to the leadership development of their students, is the reason this study was undertaken.

Population

The population for this study was 540 students who were classified as fourth year seniors at a small liberal arts college in the south. Every student who met these criteria was sent a notice asking that they complete a survey questionnaire. The initial completion rate was 35% (n= 190). Surveys were checked to make sure that all participants met the requirements of the study and incomplete surveys were not tallied. Survey's that did not contain the correct answer to the control question were also removed.

The remaining survey's were considered valid and were included as part of the data analysis (N= 166). Descriptive statistics were used to identify the characteristics of the sample breakdown and percentage of instruments completed by gender, ethnicity, and GPA. The sample (N=166) had a gender make up of 70% females (n=116) and 30% male respondents (n=50).

Figure 3.1 - Gender Distribution - N=166

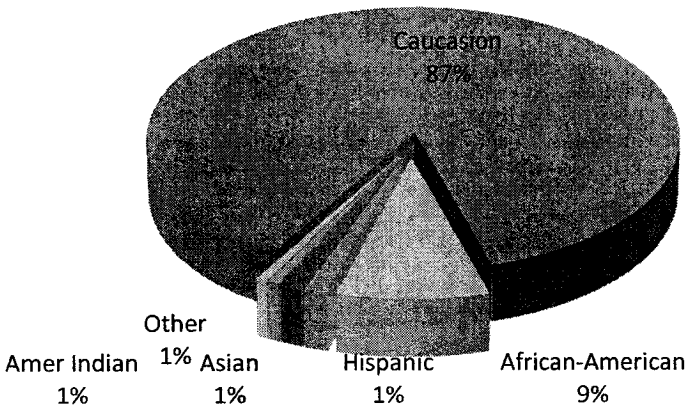


This gender distribution was similar to the 540 possible respondents in the pool of seniors which was 63% female and 37% male, $x^2(1) = 2.33$, $p > .05$. This group made up the core population for the study.

The ethnic background of the sample was also examined. The respondents self identified themselves through their responses to this demographic question. Descriptive statistics were once again used to determine the characteristics of the sample with regard to ethnicity. The population sample ethnicity was as follows: 87% Caucasian (n=144), 9% African-American (n=13)

and 1% Hispanic (n=3), Asian (n=2) or American Indian (n=1). Three students also classified themselves as "other minorities". The number of respondents from each of the five racial groups in the sample was similar to distribution within the total population of senior students, $x^2(4) = 4.358$, $p > .05$.

Figure 3.2 -Ethnic Background Distribution N=166



A sub-group of participants was indentified for the purpose of addressing research questions one and two. These 118 individuals made up the group of students who would also have taken the College Student Inventory (CSI) as a freshman and whose scores were available for comparison by the researcher. Students within this class who transferred into the institution or did not begin as freshmen were not included in this sub group. This sub group population will be addressed further in the Data Collection section.

Data Collection

The Student Leadership Outcomes Inventory (Vann & McFeeters, 2004), was utilized to evaluate the population. This survey was developed by a staff member and faculty member at Virginia Tech and was pre-tested for other research projects in the past. The original version was based upon Howard Gardner's theory of multiple intelligences. It was adapted slightly to cover the needs for information for this study and for this population. The survey looks at leadership skill sets in order to indentify leadership development. The skill set approach closely mirrored earlier studies in trait theory (Stogdill, 1974). In its adapted form, it also explores some of the possible influences on that leadership development.

The survey was distributed to all senior students with a cover letter and information on the study via e-mail and campus mail. The release letter explains issues of confidentiality and use of information and is included along with the full survey in the appendix of this study. Completed surveys were eligible for a drawing for two randomly selected prizes as encouragement to return the survey in a timely fashion. The survey material was provided online with a second method of completion available for those students who might have preferred to complete the survey in writing. Every student who completed the survey did so using the online version. The SLOI, in its adapted form, also included eight questions that were previously asked on the College Student Inventory (CSI). 118 of the students who completed this survey as seniors also completed the CSI when they were freshman. Data collected in a portion of this study was

compared to answers given on the original CSI when the students were freshmen. The remainder of the survey posed questions that sought to determine whether the college provided adequate opportunity for leadership growth and to identify what types of leadership experiences provided opportunities for that leadership growth.

In order to establish a stronger foundation for understanding the relationships between leadership opportunities and tangible skills that can be acquired by students, this study was designed to directly address how measures in established areas of research concerning leadership skills and opportunities relate to data collected from senior students at Lynchburg College. In summary, the data consists of: 1) questions adapted from the Student Leadership Outcomes Inventory (SLOI) concerning a set of identified leadership skills; 2) questions on leadership experiences from the College Student Inventory (CSI), which 118 students also completed as freshmen; 3) questions to determine the most significant leadership experiences during their college tenure and questions to evaluate time-on-task for those activities; and 4) one question to address the level of overall satisfaction with leadership opportunities, provided to them while students at the institution.

A self-administered online questionnaire was used to conduct the survey. The survey questions represent a hybrid of two existing surveys provided to assess leadership skills, abilities and overall satisfaction with leadership opportunities at the college. The hybrid survey, comprised of 61 questions which measured leadership skills (SLOI), 8 questions that rated leadership related

activities (CSI), and 9 questions used to ascertain significant experiences, time spent on task and related demographic information was sent via e-mail and regular mail to 540 students who were classified as seniors at Lynchburg College. Voicemail messages were also left to notify the potential participants of the survey. Of the approximately 540 people notified, 190 responded, 166 of which provided complete, usable surveys. 118 of the respondents had also previously completed the College Student Inventory (CSI) as freshman and had matched samples from the previous CSI tool administration. The data collected from those 118 individuals was used for that particular comparison, but the 166 completed surveys were included in other measurements within the study.

The questions on the SLOI portion of the survey were designed to give scores that would provide some basis for rating students' perception of their abilities with regard to a set of identified leadership skills. The respondents answered the questions using a six-point Likert scale. This was the same scale and question set that was used in previous versions of the Student Leadership Outcomes Inventory (SLOI) survey that was created by Dr. Belinda B. McFeeters and Melinda Vann and administered previously at Virginia Tech. The leadership questions were grouped into eight different factors that were identified through the literature and previous renditions of the survey use (Vann 2004 & McFeeters, 2004). The original factor set and corresponding questions used in this study's rendition of the SLOI survey are found in Appendix B. In order to confirm previous research and validate these factors, internal reliability tests were performed for the questions within each factor. The internal reliability test was

the computation of the commonly-used Cronbach's alpha (a measure of level of mean inter-correlation weighted by variances) for each set of questions for each skill measure.

Having established that the responses have properties necessary to provide a usable set of factors and a measure of leadership skill assessment, the factors were assessed by averaging the responses for each set of questions. Because a pre-test was not given to this group of individuals, a mean was established for each of the 61 questions in the SLOI section of the survey and compared to the average scores that were available from previous renditions of the same survey at Virginia Tech.

The eight questions that make up the CSI portion of the survey were designed by Noel-Levitz to give scores that would provide some basis for rating students' experience with leadership opportunities in high school. The respondents answered the questions using a seven-point Likert scale. 118 students had completed this assessment as freshman four years prior to the administration of this survey. The students' responses to these eight questions were compared to the earlier responses to the same questions. A paired-samples t-Test was conducted on the two sets of data to compare average scores and establish the significance of the results.

Several questions were also asked to evaluate leadership experiences and involvement. Students were asked to reflect on the most significant leadership experience while a student at the college and classify that experience into one of several "types" of leadership activities. The students were also asked to self-

report which leadership experiences they had participated in at any time during their tenure at LC. Finally, they were asked to estimate the time spent on all co-curricular activities.

The final portion of the survey utilized one question to measure students' overall satisfaction with the college's role in making leadership development opportunities available to students at Lynchburg College. This final portion consisted of one basic question, "Do you believe that Lynchburg College has provided an opportunity for you to experience overall growth in your leadership ability or skills?" Ninety-six percent of the students', who responded to this question, did so in the affirmative.

CHAPTER IV

FINDINGS OF THE STUDY

The SLOI survey was set up to query the student participants about their leadership traits, habits and participation during the four years of college. As previously explained, this was done based upon the research of Gardner, Stogdill, Brungardt, McFeeters, Vann, McCall & Lombardo. The survey asked students to think about their own personal experience as leaders on the campus and reflect upon their development. Several different approaches were utilized within the data collection tool to answer the research questions about leadership development, involvement and perceived growth over time.

Leadership Evaluation Questions and Time-on-Task Data

Students were asked to respond to a variety of questions aimed at establishing characteristics of individual leadership experiences while attending Lynchburg College. One of the assumptions listed at the beginning of this study suggested that, "When pressed, students can identify one particular type of activity or group that has been influential or helpful to their leadership growth". The first question in the survey tool asked students to indicate their most significant student leadership experience at Lynchburg College.

Students who chose fraternity or sorority member/officer and student organization member/officer represented about 40% of all respondents. Students who listed a clear leadership position (Captain, Officer, SGA Leader, supervisor or manager) represented 43% of all respondents and included some of the first group. A variety of leadership roles are represented in the sample group of students.

Question # 1 – Please indicate your most significant student leadership experience at Lynchburg College (Choose only one)

Figure 4.1: Question 1 - Most Significant Leadership Opportunity
N=166

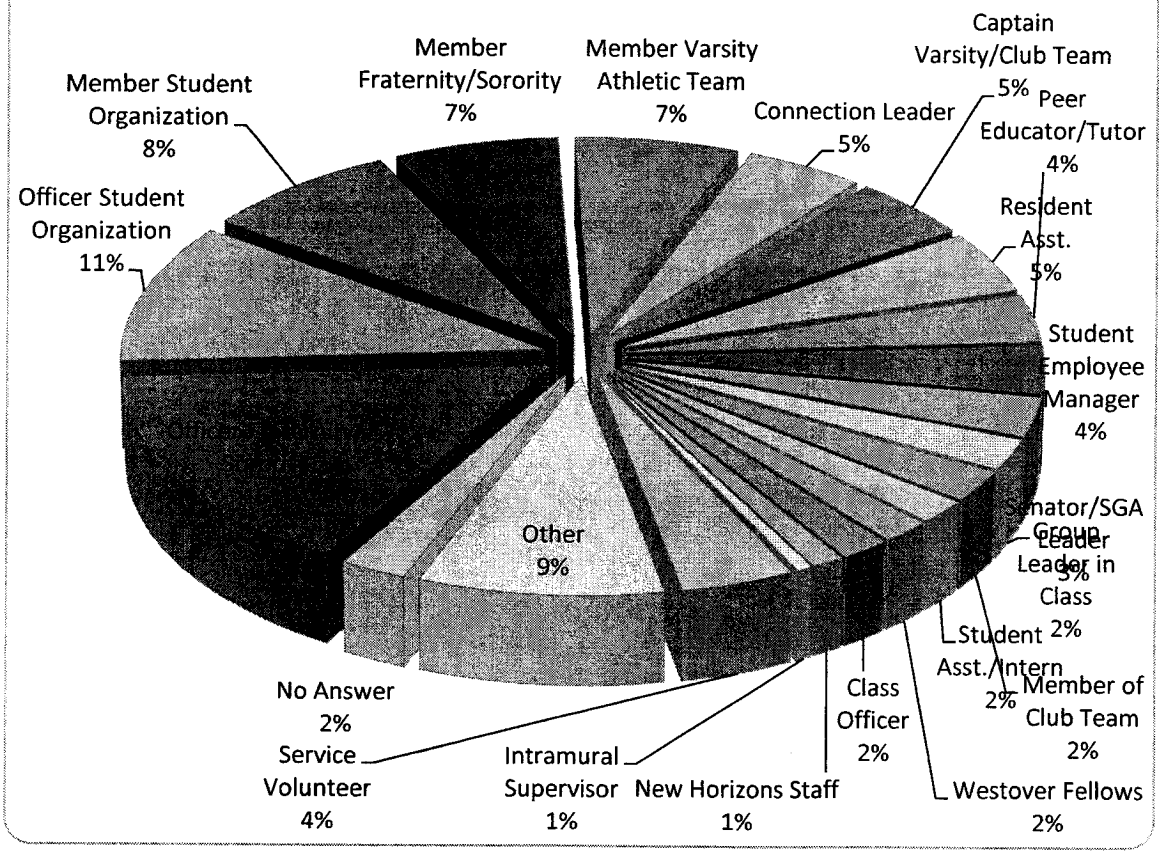


Table 4.1 – Question 1 – Most Significant Leadership Opportunity

Please indicate your MOST significant student leadership experience at Lynchburg College. (Choose one answer only)

Choice	Count	Percentage of Total Sample
Member of a student organization	13	7.8%
Officer in a student organization	18	10.8%
Member of a Fraternity/Sorority	11	6.6%
Officer in a Fraternity/Sorority	26	15.7%
Senator or Student Government Leader	5	3.0%
Member of a club athletic team	4	2.4%
Member of a varsity athletic team	11	6.6%
Captain of a varsity or club athletic team	8	4.8%
Volunteer in a community service organization	7	4.2%
Student Assistant/Intern for a campus department	3	1.8%
Resident Assistant	8	4.8%
Peer Educator or Pass Leader (Tutor)	6	3.6%
Connection Leader	8	4.8%
Westover Fellows	3	1.8%
Student Employee Manager	6	3.6%
Student Activities Board (SAB)	0	0.0%
Student Judicial Board (SJB)	0	0.0%
Group leader in academic class	4	2.4%
Committee chair in a student organization	1	0.6%
Class Officer	3	1.8%
New Horizons Staff Member	2	1.2%
Intramural Supervisor	1	0.6%
Other (please specify):	14	8.4%

Fourteen students selected "other". These written responses included: "discussion leader in a class", "office supervisor", "none", "writing center tutor", "senior nursing APC member", "Bonner leader", "teaching after school program", "leader of a gaming group", "editor of the school newspaper", "secretary of the education honor society", and "LCEMS Chaplain".

As previously noted, students were also asked to categorize their most significant leadership experience into one of the categories listed in question two. The following chart also contains the frequency with which students selected

each possible leadership experience. It was noted, that students grouped themselves, most often, into three types of experiences. They are, in order of frequency, Social Fraternity or Sorority leadership, Academic or Professional group, and Athletic Team participation.

Table 4.2 - Question #2 – Indicate the type of organization that best describes the group/club you chose in the first question.

Choice	Count	Percentage of Total Sample
Academic and Professional (Academic or leadership)	43	25.9%
Athletic Team (Varsity)	17	10.2%
Club and Recreational Sports	8	4.8%
Community Service Group	4	2.4%
Honors Society	5	3.0%
Multicultural (BSA, Intl. Student)	1	0.6%
Performing Arts (choral, music, art, drama)	7	4.2%
Political (College Democrats, College Republicans)	0	0.0%
Social Fraternity or Sorority	32	19.3%
Service Fraternity or Sorority	2	1.2%
Special interest (STAND, Anime, Energy Awareness etc)	3	1.8%
Lynchburg College Emergency Medical Services	6	3.6%
Spiritual or Religious group (DOC, BCM, Catholic Comm)	2	1.2%
SGA (Senate or Class Leader)	7	4.2%
SAB or SJB	0	0.0%
Student Media & Publications (Critograph, Argonaut, Current)	1	0.6%
Other (please specify):	23	13.9%

While this question was initially intended to determine which areas of leadership students seemed to gravitate toward, a high level subsequent analysis was performed on this data which helped identify an interesting trend.

A segmentation of the leadership categories, separated into positions that provide immediate feedback with regard to leadership skills (presentations to classes or professional organizations, performance on athletic teams in which the team is impacted, community service groups where leadership positions are inherited, etc.) from those that are primarily participatory and do not provide immediate feedback concerning leadership positions (member of a fraternity / sorority, special interest groups, honor society, etc.), shows that there is a difference in the way senior students perceived leadership growth. The primary distinction in these two groups was that the first group will tend to have more "real life" feedback concerning one's performance in a leadership role – or role where others are relying on their performance. Members who find themselves in the second group (less or no immediate feedback) appeared to show the opposite effect.

Table 4.3
Summary of Change in Perceived Leadership Ability by Group/Club Selection

	Group or Club	# Respondents in Independent Sample with ALL data	Change in Leadership Score (6 pt scale)
1	Academic and Professional	21	1.11
1	Athletic Team	15	0.63
1	Club and recreational Sports	5	1.00
1	Community Service Group	4	1.22
2	Honors Society	3	0.00
2	Multicultural	0	N/A
2	Performing Arts	5	0.03
2	Political	0	N/A
2	Social Fraternity or Sorority	28	0.35
2	Service Fraternity or Sorority	1	0.33
2	Special Interest	2	0.13
2	Lynchburg College EMS	5	0.10
2	Spiritual or Religious	1	0.63
1	SGA	7	0.38
2	SAB or SJB	0	N/A
1	Student Media and Publications	1	1.13
0	Other (unspecified)	15	0.46

0 Control Group - answers vary
1 Groups that provide immediate feedback on leadership performance or presentations
2 More social or participatory in nature

A paired T-test was run on these data to determine the change in means between the two groups. The data demonstrated that there was a statistically significant difference in all but one of these factors, between group one and group two activities. This would appear to verify the assumption that immediate feedback does help with leadership development recognition with regard to student participation as shown in the following table.

Table 4.4
Summary of Change in Perceived Leadership Ability by Group/Club TYPE

Group or Club Type	# Respondents in Matched Sample with ALL data	Change in Leadership Score (6 pt scale)
Average from Survey	113	0.57
Control Group - answers vary	15	0.46
Groups that allow immediate feedback on leadership performance-group 1	**53**	**0.88**
More social or participatory in nature – group 2	**45**	**0.24**

The difference in perceived improvement in leadership ability is significantly higher (at a 1% level of significance) in groups that provide immediate feedback on leadership performance than in those groups that are more participatory in nature.

There are some basic assumptions in place with regard to this analysis. First, the students involved in the sample analysis provided an assessment of their own leadership abilities as entering freshmen and again as graduating seniors, having been exposed to various leadership experiences through college. Second, the categories that were developed regarding immediate vs. delayed feedback of the various group or club affiliations are accurate. Third, there is no specific knowledge of the academic experience of each student involved in this study and therefore this was outside the scope of this analysis. It is also assumed that for the purpose of hypothesis testing, that there is no significant difference in the perceived improvement in leadership ability between those students becoming involved in groups that provide immediate feedback on

leadership performance or presentations and those becoming involved in groups or clubs that are more social or participatory in nature.

Although more research needs to be conducted, these data provide a preliminary indication that there may be a significant difference in a student's perception of improvement in his leadership abilities based on the type of leadership activity chosen. That is, the improvement in the perceived leadership ability is significantly higher ($P<.01$) for those students involved in activities that provide immediate feedback concerning leadership performance. The importance of immediate feedback is not a new concept (Maxwell, 2005; Popper & Lipshitz, 1992). Participants in this study clearly appeared to identify this perception in their responses. Further study would confirm or refute this theory and help educators evaluate the individual types of experiences that elicit the greatest growth potential for students.

In order to test the assumption that "time spent in a particular leadership experience can have a direct effect on the perceptions of leadership abilities as self-reported by students", students were asked to estimate the average number of hours they spent per week in their single most important student leadership experience. Based upon the work of researchers like Pascarella and Terenzini (1991) and their research on the topic of student involvement, this question was asked to determine "how involved" these leaders actually were in their most important leadership activity. The most frequent responses were, "more than 7 hours", "4 hours", and "3 hours".

Question #3 – Estimate the average number of hours you spent (spend) per week in your single most important student leadership experience.

Table 4.5
Avg. Hours Spent per Week on Single most Important Leadership Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Answer	5	3.0	3.0	3.0
	1 hour	17	10.2	10.2	13.3
	2 hours	9	5.4	5.4	18.7
	3 hours	19	11.4	11.4	30.1
	4 hours	25	15.1	15.1	45.2
	5 hours	11	6.6	6.6	51.8
	6 hours	9	5.4	5.4	57.2
	More than 7	71	42.8	42.8	100.0
	Total	166	100.0	100.0	

The Mean refers to the average time spent by all students per week in that one "most significant leadership experience". A descriptive analysis utilizing these means was also performed and the results of that investigation are shown in the following table.

Table 4.6
Avg. Hours spent per week on most significant leadership experience

Q – Most Significant leader experience	Mean	N	Std. Deviation
No answer	.00	4	.000
Member of a student organization	2.54	13	1.898
Officer in a student organization	4.39	18	1.685
Member of a Fraternity/Sorority	4.36	11	2.157
Officer in a Fraternity/Sorority	5.08	26	1.937
Senator or SGA Leader	5.60	5	1.949
Member of a club athletic team	3.75	4	1.258
Member of a varsity athletic team	6.73	11	.905
Captain of a varsity or club athletic team	7.00	8	.000
Volunteer in a community service organization	4.86	7	2.545
Student Asst./Intern for a campus dept.	6.67	3	.577
Resident Asst.	7.00	8	.000
Peer Educator or Tutor	6.00	6	1.549
Connection Leader	4.75	8	1.832
Westover Fellow	5.00	3	1.732
Student Employee Manager	6.67	6	.816
Group Leader in Academic Class	1.75	4	.957
Committee Chair/ Student Organization	3.00	1	.
Class Officer	4.00	3	2.646
New Horizons Staff Member	5.00	2	1.414
Intramural Supervisor	7.00	1	.
Other	3.93	14	2.947
Total	4.81	166	2.291

*Note: SAB & SJB had zero responses and were not included in the chart

The results of a one-way ANOVA on the question of time on task as it relates to the "most significant leadership activity" presented no significant difference $F(20,165) = 2.01$, $p = .236$. As no significant results were found subsequent post-hoc tests were not run on this data set.

Students were also asked to report the number of semesters that they had participated in their "most significant leadership experience at LC". These data were collected to establish the students' level of involvement with regard to the identified leadership experience. The question had five possible responses. The closer the average is to "5" (7-8 semesters), the closer the students' total

semester involvement was to four years. The lower the average score, the lower the amount of semesters of total involvement. 54% (n=90) of the respondents reported that they had been involved with their "most significant leadership experience" for an average of 2-3 years. Only 17% (n=29) said that they had been involved with that activity for all four years. Surprisingly, 6% (n=10) of the students who responded said that they had only been involved in this activity for one semester, suggesting that the length of time they participated in the activity did not have a significant influence on their perception that it was the "most significant leadership experience" in their college life.

Question #4 – Please estimate the number of semesters to date in your single most important leadership experience.

Figure 4.2 - Question 4 - Semesters in Most Significant Leadership Experience
N=166

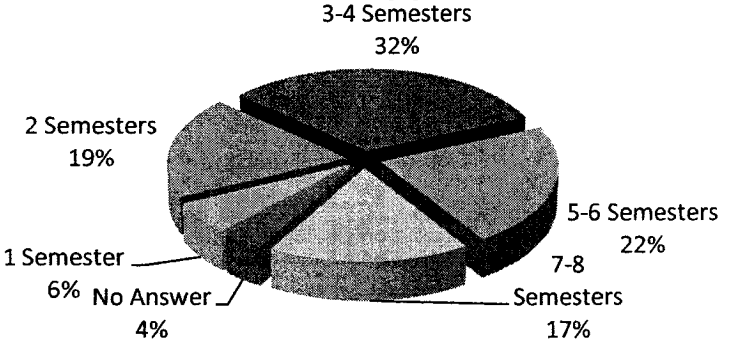


Table 4.7
Number of Semesters Spent in Single Most Important Leadership Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Did not answer	6	3.6	3.6	3.6
	1 semester	10	6.0	6.0	9.6
	2 semester	31	18.7	18.7	28.3
	3-4 Semesters	53	31.9	31.9	60.2
	5-6 semesters	37	22.3	22.3	82.5
	7-8 Semesters	29	17.5	17.5	100.0
	Total	166	100.0	100.0	

These data show that about a third of the particpants had been involved in their "single most important leadership experience" for about two years. Only about twenty-five percent of the students had only been involved less than one year. Twenty-nine students, or 17.5% of the respondents had been involved in that particular leadership experience for all four years of college. The results of a one-way ANOVA on the question of "semesters spent in most significant activity" as it relates to the "most significant leadership activity" presented no significant difference $F(4,165) = 1.88$, $p = .169$. As no significant results were found subsequent post-hoc tests were not run on this data set. Descriptive statistics for this same set of data did provide the mean scores for each individual leadership category showing how long students were involved in their individual "most significant" leadership experience. These data results are shown in the following chart.

Table 4.8
Avg. Semesters spent engaged in most significant leadership experience

Q – Most Significant leader experience	Mean	N	Std. Deviation
No answer	.00	4	.000
Member of a student organization	2.23	13	.927
Officer in a student organization	3.22	18	1.003
Member of a Fraternity/Sorority	3.55	11	1.440
Officer in a Fraternity/Sorority	3.08	26	1.055
Senator or SGA Leader	3.60	5	1.140
Member of a club athletic team	3.25	4	1.258
Member of a varsity athletic team	4.18	11	1.168
Captain of a varsity or club athletic team	4.00	8	.926
Volunteer in a community service organization	2.29	7	1.704
Student Asst./Intern for a campus dept.	3.67	3	1.155
Resident Asst.	3.50	8	.535
Peer Educator or Tutor	3.00	6	.632
Connection Leader	3.00	8	.926
Westover Fellow	4.33	3	.577
Student Employee Manager	4.50	6	.837
Group Leader in Academic Class	3.00	4	1.826
Committee Chair/ Student Organization	3.00	1	.
Class Officer	2.67	3	.577
New Horizons Staff Member	3.50	2	.707
Intramural Supervisor	4.00	1	.
Other	2.71	14	1.383
Total	3.16	166	1.288

*Note: SAB & SJB had zero responses and were not included in the chart

The scores in this descriptive data showed that students did in fact spend a considerable amount of time with their most important leadership experience opportunity, confirming much of the literature about time on task being a consistent trait of perceived leadership development. However, the results of a one-way ANOVA on the question of involvement as it relates to the "most significant leadership activity" presented no significant difference $F(20,165) = 1.01$, $p = .259$. As no significant results were found subsequent post-hoc tests were not run on this data set.

Students were also asked to think about all of the leadership activities that they had participated in during their tenure at the college. Students were permitted to choose more than one activity from the list of 22 items. The responses are shown in the following chart.

Question #5 – What other leadership experiences have you had at Lynchburg College.

Table 4.9 - Summary of All Leadership Experiences at LC

Experience	N
Member of a student organization	106
Officer in a student organization	62
Member of a fraternity/sorority	57
Officer of a fraternity/sorority	40
Senator or SGA leader	11
Member of a club athletic team	21
Member of a varsity athletic team	20
Captain of a varsity or club team	5
Volunteer in a community service group	57
Student Asst./intern for a campus dept.	35
Resident Assistant	12
Peer Educator or Pass Tutor	17
Connection Leader	8
Westover Fellow	22
Student Employee Manager	11
Student Activities Board	13
Student Judicial Board	4
Group leader in an academic class	53
Committee Chair in a student org.	24
Class Officer	9
New Horizons Staff	1
Intramural supervisor	3
Other	21

The twenty-one students who chose "other" indicated the following activities: "Soloist in choral union", "intramural official" (3), "none" (3), "Annual fund caller", "camp counselor", "newspaper staff", "honor society", "Mesa Hispana", and "Relay for Life". Descriptive statistical data was used to identify that most of the students were definitely involved in more than one type of leadership role while in college, a trend that has continued to emerge with students for many years (Cooper, 1994).

Questions 6-13 dealt with College Student Inventory responses and are examined in a special section of this study. The section of the survey which followed the CSI portion included the various SLOI "traits" as identified in previous research and included in previous renditions of the survey instrument.

Student Leadership Outcomes Inventory

The sixty-one questions on the SLOI portion of the survey were designed to produce scores that would provide some basis for rating students' perception of their abilities with regard to a set of identified leadership skills. One-hundred and sixty-six respondents answered the questions using a six-point Likert scale. Six respondents were omitted from this section because the control question was not correctly answered. The questions were adapted from the original SLOI (Vann & McFeeters, 2004). The questions were identified by the researchers as a series of "traits that are typically found in leaders. Raw data, and a scoring matrix, were available to the researcher from previous administrations of this survey at Virginia Tech (see Appendix B). The original researchers grouped

their questions into eight "factors". The factor groups include: Self Management (9 questions), Interpersonal Skills (14 questions), Problem Solving (4 questions), Cognitive Development & Critical Analysis (7 questions), Career Development (5 questions), Organization and Planning (14 questions), Self Confidence (5 questions), and Diversity Awareness (3 questions).

The first nine questions/traits were set up to determine the degree to which students recognized their own growth in the area of Self Management. All of the questions in this section prompted the respondent with the phrase "As a result of my leadership experiences at Lynchburg College, I improved my…:"

Trait 1 – Ability to perform under pressure (SM)

Strongly Agree	48	30.0%
Agree	**75**	**46.9%**
Somewhat Agree	31	19.4%
Somewhat Disagree	3	1.9%
Disagree	2	1.3%
Strongly Disagree	0	0%
Not Answered	1	0.6%

Trait 2 – Ability to learn from my mistakes (SM)

Strongly Agree	61	38.1%
Agree	**72**	**45.0%**
Somewhat Agree	21	13.1%
Somewhat Disagree	2	1.3%
Disagree	2	1.3%
Strongly Disagree	0	0%
Not Answered	2	1.3%

Trait 3 – Ability to manage stress (SM)

Strongly Agree	39	24.4%
Agree	**73**	**45.6%**
Somewhat Agree	37	23.1%
Somewhat Disagree	6	3.6%
Disagree	2	1.3%
Strongly Disagree	0	0%
Not Answered	3	1.9%

Trait 4 – Ability to balance personal, academic & professional life (SM)

Strongly Agree	61	38.1%
Agree	**67**	**41.9%**
Somewhat Agree	24	15.0%
Somewhat Disagree	4	2.5%
Disagree	3	1.9%
Strongly Disagree	0	0%
Not Answered	1	0.6%

Trait 5 – Ability to manage my time (SM)

Strongly Agree	54	33.8%
Agree	**67**	**41.9%**
Somewhat Agree	30	18.8%
Somewhat Disagree	4	2.5%
Disagree	3	1.9%
Strongly Disagree	1	0.6%
Not Answered	1	0.6%

Trait 6 – Ability to establish priorities (SM)

Strongly Agree	51	32.0%
Agree	**77**	**48.1%**
Somewhat Agree	25	15.6%
Somewhat Disagree	6	3.6%
Disagree	0	0.0%
Strongly Disagree	0	0.0%
Not Answered	1	0.6%

Trait 7 – Ability to identify personal strengths & weaknesses (SM)

Strongly Agree	50	31.3%
Agree	**71**	**44.4%**
Somewhat Agree	33	21.0%
Somewhat Disagree	3	1.9%
Disagree	1	0.6%
Strongly Disagree	1	0.6%
Not Answered	1	0.6%

Trait 8 – Ability to understand the consequences of my actions (SM)

Strongly Agree	39	24.4%
Agree	**78**	**48.8%**
Somewhat Agree	34	21.3%
Somewhat Disagree	5	3.1%
Disagree	2	1.3%
Strongly Disagree	1	0.6%
Not Answered	1	0.6%

Trait 9 – Ability to actively listen (SM)

Strongly Agree	38	23.8%
Agree	**74**	**46.3%**
Somewhat Agree	41	25.6%
Somewhat Disagree	3	1.9%
Disagree	2	1.3%
Strongly Disagree	0	0.0%
Not Answered	2	1.3%

The second set of questions/traits was set up to determine the degree to which students recognized their own growth in the area of Interpersonal Skills. All of the questions in this section prompted the respondent with the phrase "As a result of my leadership experiences at Lynchburg College, I improved my…:"

Trait 10 – Ability to give constructive criticism to others (IP)

Strongly Agree	33	20.6%
Agree	**68**	**42.5%**
Somewhat Agree	49	30.6%
Somewhat Disagree	7	4.4%
Disagree	1	0.6%
Strongly Disagree	0	0.0%
Not Answered	2	1.3%

Trait 11 – Ability to receive constructive criticism from others (IP)

Strongly Agree	37	23.1%
Agree	**73**	**45.6%**
Somewhat Agree	40	25.0%
Somewhat Disagree	5	3.1%
Disagree	3	1.9%
Strongly Disagree	0	0.0%
Not Answered	2	1.3%

Trait 12 – Ability to express disagreement tactfully (IP)

Strongly Agree	31	19.4%
Agree	**69**	**43.1%**
Somewhat Agree	51	31.9%
Somewhat Disagree	5	3.1%
Disagree	2	1.3%
Strongly Disagree	0	0.0%
Not Answered	2	1.3%

Trait 13 – Ability to understand what is important to others (IP)

Strongly Agree	30	18.8%
Agree	**92**	**57.5%**
Somewhat Agree	34	31.3%
Somewhat Disagree	1	0.6%
Disagree	2	1.3%
Strongly Disagree	0	0.0%
Not Answered	1	0.6%

Trait 14 – Ability to influence others (IP)

Strongly Agree	36	22.5%
Agree	**57**	**35.6%**
Somewhat Agree	56	35.0%
Somewhat Disagree	6	3.8%
Disagree	4	2.5%
Strongly Disagree	0	0.0%
Not Answered	1	0.6%

Trait 15 – Ability to motivate other people (IP)

Strongly Agree	47	29.4%
Agree	**64**	**40.1%**
Somewhat Agree	40	25.0%
Somewhat Disagree	5	3.1%
Disagree	2	1.3%
Strongly Disagree	1	0.0%
Not Answered	1	0.6%

Trait 16 – Supervisor skills (IP)

Strongly Agree	33	20.6%
Agree	**61**	**38.1%**
Somewhat Agree	52	32.5%
Somewhat Disagree	7	4.4%
Disagree	2	1.3%
Strongly Disagree	3	1.9%
Not Answered	2	1.3%

Trait 17 – Professional working relationships with the opposite gender (IP)

Strongly Agree	36	22.5%
Agree	**66**	**41.3%**
Somewhat Agree	41	25.6
Somewhat Disagree	7	4.4%
Disagree	6	3.8%
Strongly Disagree	2	1.3%
Not Answered	2	1.3%

Trait 18 – Public speaking skills (IP)

Strongly Agree	**55**	**34.4%**
Agree	49	30.6%
Somewhat Agree	43	26.9%
Somewhat Disagree	6	3.8%
Disagree	3	1.9%
Strongly Disagree	2	1.3%
Not Answered	2	1.3%

Trait 19 – Written communications (IP)

Strongly Agree	39	24.4%
Agree	**55**	**34.4%**
Somewhat Agree	47	29.4%
Somewhat Disagree	11	6.9%
Disagree	4	2.5%
Strongly Disagree	1	0.6%
Not Answered	3	1.9%

Trait 20 – Ability to work as part of a group (IP)

Strongly Agree	50	31.3%
Agree	**71**	**44.4%**
Somewhat Agree	29	18.1%
Somewhat Disagree	3	1.9%
Disagree	2	1.3%
Strongly Disagree	1	0.6%
Not Answered	2	1.3%

Trait 21 – Ability to identify strengths and weaknesses of others (IP)

Strongly Agree	30	18.8%
Agree	**84**	**52.5%**
Somewhat Agree	36	22.5%
Somewhat Disagree	5	3.1%
Disagree	2	1.3%
Strongly Disagree	1	0.6%
Not Answered	2	1.3%

Trait 22 – Ability to make formal presentations (IP)

Strongly Agree	49	30.6%
Agree	**67**	**41.9%**
Somewhat Agree	29	18.1%
Somewhat Disagree	10	6.3%
Disagree	1	0.6%
Strongly Disagree	1	0.6%
Not Answered	3	1.9%

Trait 23 – Ability to speak extemporaneously (IP)

Strongly Agree	28	17.5%
Agree	**63**	**39.4%**
Somewhat Agree	45	28.1%
Somewhat Disagree	12	7.5%
Disagree	8	5.0%
Strongly Disagree	1	0.6%
Not Answered	3	1.9%

The third set of questions/traits was established to determine the degree to which students recognized their own growth in the area of Problem Solving. All of the questions in this section prompted the respondent with the phrase "As a result of my leadership experiences at Lynchburg College, I improved my…:"

Trait 24 – Ability to diplomatically resolve conflict (PS)

Strongly Agree	31	19.4%
Agree	**60**	**37.5%**
Somewhat Agree	53	33.1%
Somewhat Disagree	6	3.8%
Disagree	5	3.1%
Strongly Disagree	2	1.3%
Not Answered	3	1.9%

Trait 25 – Ability to negotiate for a desired outcome (PS)

Strongly Agree	30	18.8%
Agree	**66**	**41.3%**
Somewhat Agree	51	31.3%
Somewhat Disagree	6	3.8%
Disagree	3	1.9%
Strongly Disagree	0	0.0%
Not Answered	4	2.5%

Trait 26 – Ability to creatively problem solve (PS)

Strongly Agree	30	18.8%
Agree	**66**	**41.3%**
Somewhat Agree	51	31.3%
Somewhat Disagree	6	3.8%
Disagree	3	1.9%
Strongly Disagree	0	0.0%
Not Answered	4	2.5%

Trait 27 – Ability to make ethical decisions (PS)

Strongly Agree	43	26.9%
Agree	**79**	**49.4%**
Somewhat Agree	32	20.0%
Somewhat Disagree	1	0.6%
Disagree	2	1.3%
Strongly Disagree	0	0.0%
Not Answered	3	1.9%

The next set of questions/traits was set up to determine the degree to which students recognized their own growth in the area of Cognitive Development & Critical Analysis. All of the questions in this section prompted the respondent with the phrase "As a result of my leadership experiences at Lynchburg College, I improved my…:"

Trait 28 – Development of good judgment (COG)

Strongly Agree	38	23.8%
Agree	**82**	**51.3%**
Somewhat Agree	33	20.6
Somewhat Disagree	1	0.6%
Disagree	3	1.9%
Strongly Disagree	0	0.0%
Not Answered	3	1.9%

Trait 29 – Calculated risk taking (COG)

Strongly Agree	24	15.0%
Agree	**70**	**43.8%**
Somewhat Agree	49	30.6%
Somewhat Disagree	10	6.3%
Disagree	4	2.5%
Strongly Disagree	0	0.0%
Not Answered	3	1.9%

Trait 30 – Ability to critically examine my mistakes (COG)

Strongly Agree	23	14.4%
Agree	**87**	**54.4%**
Somewhat Agree	43	26.9%
Somewhat Disagree	4	2.5%
Disagree	0	0.0%
Strongly Disagree	1	0.6%
Not Answered	2	1.3%

Trait 31 – Ability to practically apply knowledge/information (COG)

Strongly Agree	34	21.3%
Agree	**84**	**52.5%**
Somewhat Agree	37	23.1%
Somewhat Disagree	3	1.9%
Disagree	1	0.6%
Strongly Disagree	0	0.0%
Not Answered	1	0.6%

Trait 32 – Ability to develop compromises (COG)

Strongly Agree	32	20.0%
Agree	**74**	**46.3%**
Somewhat Agree	43	26.9%
Somewhat Disagree	8	5.0%
Disagree	3	1.9%
Strongly Disagree	0	0.0%
Not Answered	0	0.0%

Trait 33 – Ability to assess the politics associated with issues (COG)

Strongly Agree	24	15.0%
Agree	**54**	**33.8%**
Somewhat Agree	49	30.6%
Somewhat Disagree	17	10.6%
Disagree	10	6.3%
Strongly Disagree	3	1.9%
Not Answered	3	1.9%

Trait 34 – Critical thinking skills (COG)

Strongly Agree	35	21.9%
Agree	**89**	**55.6%**
Somewhat Agree	29	18.1%
Somewhat Disagree	2	1.3%
Disagree	2	1.3%
Strongly Disagree	2	1.3%
Not Answered	1	0.6%

The next set of questions/traits was set up to determine the degree to which students recognized their own growth in the area of Career Development. All of the questions in this section prompted the respondent with the phrase "As a result of my leadership experiences at Lynchburg College, I improved my…:"

Trait 35 – Ability to perform well in my future career (CAR)

Strongly Agree	61	38.1%
Agree	**73**	**45.6%**
Somewhat Agree	17	10.6%
Somewhat Disagree	4	2.5%
Disagree	1	0.6%
Strongly Disagree	4	2.5%
Not Answered	0	0.0%

Trait 36 – Development of transferable career skills (CAR)

Strongly Agree	46	28.8%
Agree	**75**	**46.9%**
Somewhat Agree	29	18.1%
Somewhat Disagree	6	3.8%
Disagree	1	0.6%
Strongly Disagree	2	1.3%
Not Answered	1	0.6%

Trait 37 – Skill development that will help me advance my career (CAR)

Strongly Agree	45	28.1%
Agree	**78**	**48.8%**
Somewhat Agree	31	19.4%
Somewhat Disagree	2	1.3%
Disagree	3	1.9%
Strongly Disagree	1	0.6%
Not Answered	0	0.0%

Trait 38 – Overall learning experience (CAR)

Strongly Agree	**72**	**45.0%**
Agree	66	41.3%
Somewhat Agree	17	10.6%
Somewhat Disagree	2	1.3%
Disagree	1	0.6%
Strongly Disagree	2	1.3%
Not Answered	0	0.0%

Trait 39 – Preparation for postgraduate leadership opportunities (CAR)

Strongly Agree	46	28.8%
Agree	**55**	**34.4%**
Somewhat Agree	44	27.5%
Somewhat Disagree	7	4.4%
Disagree	4	2.5%
Strongly Disagree	2	1.3%
Not Answered	2	1.3%

The sixth set of questions/traits was set up to determine the degree to which students recognized their own growth in the area of Organization and Planning. All of the questions in this section prompted the respondent with the phrase "As a result of my leadership experiences at Lynchburg College, I improved my…:"

Trait 40 – Ability to build consensus within a group (OP)

Strongly Agree	20	12.5%
Agree	**74**	**46.3%**
Somewhat Agree	53	33.1%
Somewhat Disagree	6	3.8%
Disagree	4	2.5%
Strongly Disagree	2	1.3%
Not Answered	1	0.6%

Trait 41 – Ability to delegate tasks to others (OP)

Strongly Agree	31	19.4%
Agree	**73**	**45.6%**
Somewhat Agree	40	25.0%
Somewhat Disagree	10	6.3%
Disagree	4	2.5%
Strongly Disagree	2	1.3%
Not Answered	0	0.0%

Trait 42 – Ability to promote/market events (OP)

Strongly Agree	20	12.5%
Agree	**52**	**32.5%**
Somewhat Agree	51	31.3%
Somewhat Disagree	20	12.5%
Disagree	13	8.1%
Strongly Disagree	2	1.3%
Not Answered	2	1.3%

Trait 43 – Ability to develop organizational agendas (OP)

Strongly Agree	42	26.3%
Agree	**51**	**31.3%**
Somewhat Agree	44	27.5%
Somewhat Disagree	10	6.3%
Disagree	7	4.4%
Strongly Disagree	3	1.9%
Not Answered	3	1.9%

Trait 44 – Ability to set deadlines (OP)

Strongly Agree	38	24.4%
Agree	**74**	**46.3%**
Somewhat Agree	34	21.3%
Somewhat Disagree	6	3.8%
Disagree	4	2.5%
Strongly Disagree	1	0.6%
Not Answered	3	1.9%

Trait 45 – Ability to run effective meetings (OP)

Strongly Agree	37	23.1%
Agree	**64**	**40.0%**
Somewhat Agree	39	24.4%
Somewhat Disagree	9	5.6%
Disagree	6	3.8%
Strongly Disagree	1	0.6%
Not Answered	4	2.5%

Trait 46 – Ability to manage organization finances (OP)

Strongly Agree	15	9.4%
Agree	39	24.4%
Somewhat Agree	**52**	**32.5%**
Somewhat Disagree	23	14.4%
Disagree	17	10.6%
Strongly Disagree	9	5.6%
Not Answered	5	3.1%

Trait 47 – Ability to manage multiple tasks (OP)

Strongly Agree	51	31.3%
Agree	**74**	**46.3%**
Somewhat Agree	23	14.4%
Somewhat Disagree	8	5.0%
Disagree	2	1.3%
Strongly Disagree	0	0.0%
Not Answered	2	1.3%

Trait 48 – Ability to form a team to accomplish a goal (OP)

Strongly Agree	40	25.0%
Agree	**73**	**45.6%**
Somewhat Agree	31	19.4%
Somewhat Disagree	7	4.4%
Disagree	6	3.8%
Strongly Disagree	1	0.6%
Not Answered	2	1.3%

Trait 49 – Ability to lead a group of people (OP)

Strongly Agree	53	33.1%
Agree	**69**	**43.1%**
Somewhat Agree	26	16.3%
Somewhat Disagree	4	2.5%
Disagree	3	1.9%
Strongly Disagree	2	1.3%
Not Answered	3	1.9%

Trait 50 – Ability to organize tasks (OP)

Strongly Agree	45	28.1%
Agree	**82**	**51.3%**
Somewhat Agree	24	15.0%
Somewhat Disagree	5	3.1%
Disagree	1	0.6%
Strongly Disagree	0	0.0%
Not Answered	3	1.9%

Trait 51 – Ability to set long term goals (OP)

Strongly Agree	49	30.6%
Agree	**68**	**42.5%**
Somewhat Agree	29	18.1%
Somewhat Disagree	9	5.6%
Disagree	2	1.3%
Strongly Disagree	0	0.0%
Not Answered	3	1.9%

Trait 52 – Ability to meet deadlines (OP)

Strongly Agree	59	36.9%
Agree	**62**	**38.8%**
Somewhat Agree	29	18.1%
Somewhat Disagree	7	4.4%
Disagree	2	1.3%
Strongly Disagree	0	0.0%
Not Answered	1	0.6%

Trait 53 – Understanding of organizational politics (OP)

Strongly Agree	27	16.9%
Agree	**63**	**39.4%**
Somewhat Agree	44	27.5%
Somewhat Disagree	15	9.4%
Disagree	6	3.8%
Strongly Disagree	2	1.3%
Not Answered	3	1.9%

The seventh set of questions/traits was set up to determine the degree to which students recognized their own growth in the area of Self Confidence. All of

the questions in this section prompted the respondent with the phrase "As a result of my leadership experiences at Lynchburg College, I improved my…:"

Trait 54 – Self-confidence in my skills (SC)

Strongly Agree	41	25.6%
Agree	**79**	**49.4%**
Somewhat Agree	28	17.5%
Somewhat Disagree	7	4.4%
Disagree	3	1.9%
Strongly Disagree	0	0.6%
Not Answered	2	1.3%

Trait 55 – Self-confidence in my abilities (SC)

Strongly Agree	52	32.5%
Agree	**72**	**45.0%**
Somewhat Agree	26	16.3%
Somewhat Disagree	5	3.1%
Disagree	3	1.9%
Strongly Disagree	0	0.0%
Not Answered	2	1.3%

Trait 56 – Assertiveness in my interactions with others (SC)

Strongly Agree	41	25.6%
Agree	**77**	**48.1%**
Somewhat Agree	27	16.9%
Somewhat Disagree	8	5.0%
Disagree	3	1.9%
Strongly Disagree	1	0.6%
Not Answered	3	1.9%

Trait 57 – Ability to clarify my personal values (SC)

Strongly Agree	45	28.1%
Agree	**78**	**48.8%**
Somewhat Agree	28	17.5%
Somewhat Disagree	4	2.5%
Disagree	2	1.3%
Strongly Disagree	1	0.6%
Not Answered	2	1.3%

The last four questions in this section were mixed. One question was part of the Self Confidence factor and three questions were part of the Diversity Awareness factor. All four questions in this section prompted the respondent with the following: "My leadership experiences at Lynchburg College have allowed me to...:"

Trait 58 – Establish my personal code of ethics (SC)

Strongly Agree	39	24.4%
Agree	**70**	**43.8%**
Somewhat Agree	39	24.4%
Somewhat Disagree	5	3.1%
Disagree	6	3.8%
Strongly Disagree	0	0.0%
Not Answered	1	0.6%

Trait 59 – Have sensitivity toward people who are different from me (DA)

Strongly Agree	52	32.5%
Agree	**70**	**43.8%**
Somewhat Agree	28	17.5%
Somewhat Disagree	6	3.8%
Disagree	1	0.6%
Strongly Disagree	1	0.6%
Not Answered	2	1.3%

Trait 60 – Have respect for the rights of others (DA)

Strongly Agree	57	35.6%
Agree	**80**	**50.0%**
Somewhat Agree	18	11.3%
Somewhat Disagree	1	0.6%
Disagree	2	1.3%
Strongly Disagree	1	0.6%
Not Answered	1	0.6%

Trait 61 – Have the ability to appreciate different perspectives (DA)

Strongly Agree	53	33.1%
Agree	**79**	**49.4%**
Somewhat Agree	22	13.8%
Somewhat Disagree	4	2.5%
Disagree	1	0.6%
Strongly Disagree	0	0.0%
Not Answered	1	0.6%

Three traits were of particular interest because their scores were lower or higher than the other responses. The traits dealing with "public speaking" and "overall learning experiences" were the only items where the greatest number of responses were concentrated in the "strongly agree" category. The trait dealing with "ability to manage organizational finances" was the only item where students answered "somewhat agree" most often.

Each of the responses from the Lynchburg College cohort were grouped into one of the eight predetermined factors. In order to confirm previous research and validate these factors, internal reliability tests were performed for the questions within each factor. The internal reliability test was the computation of Cronbach's alpha (a measure of level of mean inter-correlation weighted by variances) for each set of questions for each skill measure. While the widely-accepted social sciences cut off for significance is alpha greater than or equal to .7, some believe that alpha should be at least .75 or .80, while other applications, especially in the case of theory-driven validation, have been as lenient as .6. The theory-driven factors contained in this study (self management, interpersonal skills, problem solving, cognitive development / critical analysis, career development, organization and planning, self confidence and diversity

awareness) all resulted in alphas of greater than .76. It has been concluded, therefore, that these factors accurately depict the intended measure. The summarized results of the internal reliability measures are listed in the following chart.

Table 4.10 – Internal Reliability Measures for Factors

INDEPENDENT FACTOR	QUESTIONS	CRONBACH'S ALPHA
SELF MANAGEMENT	9	0.824
INTERPERSONAL SKILLS	14	0.875
PROBLEM SOLVING	4	0.762
COGNITIVE DEV / CRIT ANALYSIS	7	0.796
CAREER DEVELOPMENT	5	0.858
ORGANIZATION AND PLANNING	16	0.920
SELF CONFIDENCE	5	0.823
DIVERSITY AWARENESS	3	0.837

Once reliability had been established within the factors, the means were computed for each factor based upon responses by the students using the six-point Likert scale. The results are shown, along with mean information from previous administrations of the survey at Virginia Tech, on the following page. As no pre-test was available for this set of eight factors at Lynchburg College, the means were compared to the means from earlier administrations of the survey at Virginia Tech. Virginia Tech was seen as a viable comparison in this study for a variety of reasons. Virginia Tech is the school where the SLOI was developed

and data from previous administrations of the survey was available for use. Despite the differences in the sizes of the two schools, the students and the core curriculum are not that different. Both schools offer a general education core that resembles a liberal arts offering. Students are exposed to the same types of leadership opportunities in clubs and sports. According to the individual websites, both schools also articulate leadership development as a key part of their academic mission. An ideal examination of the data would have included pre-test data from the same group of students, but this was not available at the time of the study.

Table 4.11
AVERAGES ACROSS EIGHT FACTORS OF LEADERSHIP

	Self-Management	Inter-personal	Problem Solving	Cognitive Development	Career Development	Organization & Planning	Self Confidence	Diversity
Avg Score SLOI -LC	5.02	4.82	4.82	4.78	5.02	4.74	4.94	5.11
Previous Avg. VT	4.89	4.74	4.64	4.60	4.89	4.79	4.83	4.73
Effect Size Cohen's *d*	1.29 c	.6 b	1.28 c	.8 c	.7 c	-.1 a	1.37 c	.9 c
t	11.84***	5.58***	11.05***	48.95***	6.31***	-1.39	11.97***	7.33***

Effect size – a=small b=medium c=large *p<.05 **p < .01 ***p<.001

At first glance, the data from the Lynchburg College cohort did not appear to show an overwhelming positive response with regard to their leadership skills. A positive response would likely indicate some level of leadership confidence. The comparisons shown in table 4.11 do show that the differences between means are statistically significant across the two populations. The effect sizes (using Cohen's d) of seven of the eight factors are medium to large and the t values for seven of the eight factors show statistical significance to the .001 level. Although the Lynchburg College mean scores did not appear to be overwhelmingly robust in any of the individual factors, when compared with the means that were available from previous administrations of the same questions to a similar population at Virginia Tech (N=744), the mean scores for the Lynchburg College group (N=166) were higher within seven of the eight factors.

The survey also examined a set of questions to help frame the responses from students. One question asked students to estimate the total hours per week that they spent on all Extra-Curricular Activities (Clubs, organizations etc...) this year. Questions about time spent in different activities were important to access in this study because other studies have shown that time on task has been a good indicator of how invested a student may be with regard to a particular activity (Cooper, 1994; Pascarella & Terenzini, 1991).

The most frequent responses were, 1-5 hours, 11-15 hours and 6-10 hours, in that order.

Table 4.12
Estimate of Total Hours per Week Spent on Extra-Curricular Activities this Year

HOURS per Week		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1	.6	.6	.6
	1-5	51	30.7	31.9	32.5
	6-10	28	16.9	17.5	50.0
	11-15	30	18.1	18.8	68.8
	16-20	16	9.6	10.0	78.8
	21-25	14	8.4	8.8	87.5
	>25	20	12.0	12.5	100.0
	Total	160	96.4	100.0	
Missing	System	6	3.6		
Total		166	100.0		

The results suggest that the students also appear to spend a great amount of time involved in extra-curricular activities each week, which may suggest that they are also very involved on campus. The one outlier in this chart is a commuter student who later reflected that she did not have the time to be involved in extra-curricular events. A one-way analysis of variance (ANOVA) was conducted between the independent variable (hours spent per week in extra-curricular activities) and the dependent variable (most significant leadership activity), $F(5,165) = 2.11$, $p = .15$. Since results of the ANOVA were not significant, post hoc tests were not conducted.

A survey on leadership development would be incomplete without giving some attention to training opportunities for students. To address this question, students were also asked to indicate the types of training that they had participated in at Lynchburg College. Students were permitted to choose more than one activity. Only three students indicated that they had participated in no formal training while they were a student at Lynchburg College. Many students

selected more than one training opportunity. Sixty-four percent of the students surveyed (n=106) indicated that they had participated in at least one of the college's advanced leadership programs at some time during their tenure.

Table 4.13 All Types of Training	
Activity	Total # of Students Indicating that they had participated
Advance Leadership Program or Experience	106
Anderson Leadership Event	62
Culture/Diversity Program	57
Emerging Leaders Program	40
For-credit leadership course	11
Leadership Certificate Series	21
Non-credit Leadership Development	20
On the Job Training	5
New Horizons	57
Conference/Symposium Off-grounds	35
Ropes Course	12
Workshops	17
Sessions held in organization meeting	8
Student Organization specific training	22
Weekend leadership retreats	11
One-on-One time with Mentor/Advisor	13
One-on-One time with a Peer	4
Resident Assistant Training	53
Connections Leader Training	24
Emergency Medical Training	9
Other	1
Have not Participated in Training	3

One of the surprising results of this question was the lack of respondents who said that "on the job training" was one of the key ways that they learned about leadership. If true, this point would challenge the literature on leadership development in the workplace (Clark, 1985). There was no opportunity for follow up with the respondents to explore this finding further, but subsequent studies would be well served to explore this idea further. It is also interesting to note, and in keeping with the literature on leadership, that students did seem to suggest that both formal and informal training opportunities played a role in their leadership development at the college (Chambers, 1992), (Komives, Wagner &

Associates, 2009) . The data on training was compared with questions from the SLOI assessment to see if significant differences were detected. The results of an ANOVA test of the data revealed no statistical significance between the factors $F(25,165) = 1.85$, $p = .21$. No post-hoc tests were run on these data as a result of this finding.

One open ended question (Question # 16) was also asked of the respondents. The question was "Please describe the most helpful leadership experience at Lynchburg College. 104 of the participants answered this question. Students took this opportunity to reflect on their most important leadership experience or clarify thoughts on overall leadership participation. The open ended responses provided some useful information for the school but did not provide significant new information for the study. Verbatim responses to Question 16 are found in Appendix E.

Finally, students were asked "Do you believe that Lynchburg College has provided an opportunity for you to experience overall growth in your leadership abilities and skills?" 146 students answered this question out of the 166 who started the survey. 140 of the 146 students or 96% answered this question in the affirmative. 1 student (<1%) answered negatively and 5 (3%) students said they were "not sure". The vast majority of the students who answered this question clearly felt that they had been given sufficient opportunity to expand their leadership abilities while attending Lynchburg College. This type of response is exactly what a college or university wants to see from their graduating class. Clearly, however, providing the "opportunity" is only part of the equation for

leadership development in college. The students in this study were clearly able to reflect on their individual experiences and share information about their personal journey in leadership and that should lend itself to further research.

College Student Inventory Section

As indicated in the Methodology section of this study, a sub-group of students also had some longitudinal data available that could be used to track their leadership development perceptions over the four years of their college experience. The College Student Inventory (Noel-Levitz) is administered to freshmen students at several schools across the United States. 118 students, who answered eight leadership questions from the College Student Inventory as freshmen, also participated in this study. The scores from the earlier version were treated as pre-test scores and the responses from this study were treated as post-test scores. The eight questions in this section were taken verbatim from the College Student Inventory. Students were asked to agree or disagree with a particular statement using a 7-point Likert scale which ranged from "Not at All True" (1) to "Completely True" (7). For the first four questions (Pair 1-4) were positively phrased questions that should have, and did, yield higher numbers, indicating a positive leadership "confidence". The second set of four questions (pair 5-8) were negatively phrased questions that should have, and did, yield lower numbers, also indicating a positive leadership "confidence". When the pairs were compared, this yielded a mean score which could then be evaluated based upon previous and current answers to the same questions.

A paired t-Test was used to compare responses from these students, producing a mean score for each question (pre and post). The results showed that the students in this study had mean scores that increased for positively phrased questions (37, 79, 117 & 143) and decreased for negatively phrased questions (52, 96, 127 & 163) over the four years that they were students at Lynchburg College.

Table 4.14 - Reflecting on Leadership (CSI)

Topic	1 - Not at all true	2	3	4	5	6	7 - Completely True
Most people have a lot of trust in my judgment and respect my opinion	1	0	2	3	45	74	41
Over the years, I have frequently been selected as a spokesperson or group leader	9	8	11	27	42	36	32
Many people consider me an effective leader and they look to me for direction	2	5	5	29	45	60	19
When I'm doing something with a group of people, they often turn to me as the group's natural leader	4	9	13	40	47	37	15
Other people don't think of me as a leader	49	52	40	15	6	1	3
Most people either avoid me or take me for granted	81	43	21	10	7	2	2
On those occasions when I've tried to lead other people, the outcomes have been disappointing	69	69	14	8	2	3	1
People show little regard for my views, and they hardly ever seek my advice	104	36	13	7	5	1	0

The average Mean for the students' freshman CSI factor was 5.17 (on a 7-point Likert scale). The average mean for the students' senior CSI factor was 5.74 (on the same 7-point scale). This resulted in an overall gain of .57 ($P<.01$), which was a significant change from freshman to senior year for these 118 students. The following tables provide more information on these questions and show the paired samples tests.

Table 4.15 Means for pre/post test on CSI questions					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	QuestionNumber37	5.57	118	1.151	.106
	QReflect_37	5.96	118	.841	.077
Pair 2	QuestionNumber79	4.40	118	1.784	.164
	QReflect_79	5.10	118	1.593	.147
Pair 3	QuestionNumber117	4.71	118	1.433	.132
	QReflect_117	5.36	118	1.224	.113
Pair 4	QuestionNumber143	4.36	118	1.516	.140
	QReflect_143	4.81	118	1.440	.133
Pair 5	QuestionNumber52	2.92	118	1.488	.137
	QReflect_52	2.19	118	1.179	.108
Pair 6	QuestionNumber96	2.36	118	1.291	.119
	QReflect_96	2.01	118	1.343	.124
Pair 7	QuestionNumber127	2.42	118	1.243	.114
	QReflect_127	1.78	118	.980	.090
Pair 8	QuestionNumber163	2.25	118	1.171	.108
	QReflect_163	1.57	118	1.050	.097

Table 4.16 - Paired Samples Test for Table 4.15			
CSI Questions	*df*	*t*	Sig. (2-tailed)
Pair 1	117	-3.238	.002
Pair 2	117	-4.377	.001
Pair 3	117	-4.785	.001
Pair 4	117	-3.193	.002
Pair 5	117	4.413	.001
Pair 6	117	2.419	.017
Pair 7	117	4.768	.001
Pair 8	117	5.496	.001

These data clearly demonstrate that students' perception of their own leadership abilities increased over time, showing greater confidence in their ability to lead, a greater willingness for others to see them as leaders, and better results when leadership opportunities were presented in situations. In each of the pairs listed in Table 4.15, students showed a marked increase (positively phrased pairs 1-4) or decrease (negatively phrased pairs 5-8) from the initial mean score (indicated as "Question Number x), and the senior mean score for each question (indicated as "Q Reflect x). The statistical significance of the difference between the mean for freshman year and senior year, of each pair, is shown in Table 4.16. The individual pair differences were statistically significant to .01 in all but one of the pairs which was .02. It is unclear whether the growth in perceived leadership abilities can be traced back to the Lynchburg College experience; however, students' responses in other sections of the survey do seem to support this idea.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

The literature has clearly established that the study, practice and assessment of leadership in higher education settings will continue to be a priority. Although most of the studies are recent, there has been a steady movement to discover exactly what makes a leader. Although much of the research has its roots in business and managerial circles, higher education administrators have benefited from this information and learned to adapt the broad concepts to their pedagogies and assessment models. The literature suggests that what makes a leader effective is often due to the individual's talents, abilities and skills. The research also suggests that leaders need to pay close attention to how they interact with followers and the nature of their task as well. As student leaders seek to lead from within an organization, they would do well to be aware of the types of traits and skills that are important to their own individual leadership development. Likewise, as higher education administrators seek to "make leaders for the world"; they should pay close attention to using the most effective methods to instruct their students in leadership. This study demonstrates that this may be best indicated by the types of "experiences" that the students self-report have had the greatest effect on their own leadership development during college.

In setting out to complete this study, four research questions were presented. The first question asked "How do seniors rate the degree to which leadership experiences at Lynchburg College have improved their overall leadership abilities over four years?" The College Student Inventory (CSI) data was the most helpful tool at addressing this particular question. The seniors who answered those questions clearly perceived an overall improvement in their leadership abilities over four years. This assessment was self-reported; however, a comparison was able to be made back to the averages from their freshmen year results, and their answers to the same profile questions. Substantial amounts of the data suggest that their assessment of their own perceived leadership growth was significant. These eight questions sought to figure out how important leadership was to the students and how they perceived their own leadership abilities and how they thought others perceived those same abilities. When compared to the earlier means for the same questions, the new answers were all statistically and substantially improved. In short, the seniors scored much higher on this scale as a fourth-year student than they had as an incoming freshman student. The College Student Inventory, therefore, performed as a reliable, if not ideal, tool for measuring student perceptions of overall leadership growth.

The second research question asked "How do they rate their overall proficiency on a series of indentified leadership skill sets and do they think their college experience provided an opportunity for that improvement?". The Student Leadership Outcomes Inventory (SLOI) in its adapted form, helped frame this

question for the respondents and evaluate their perceptions based upon a set of identified leadership skills. The students overwhelmingly indicated that they believed that Lynchburg College and the experience they had while they were students, had a profound effect on their individual leadership growth. As they were asked to move through the different traits and think about their own personal growth, the students also appeared to actually understand more about everything they had been exposed to and learned during their four years. This finding became clear when looking at some of the open ended responses from the last survey question. Students went back to list several of the traits from the SLOI list. The "traits", which were compiled and identified in previous research by Stodgill, McCall, Lomardo and others, kept coming up in the more qualitative responses by the students in this study. These data demonstrate that students could not only identify leadership growth, but could quantify that growth when asked to do so. Some of the trait questions in the SLOI received responses that showed that students were less inclined to "strongly agree" or "agree" with those particular statements, which could indicate areas of focus for future cohorts of students. It could also indicate a deficiency in the ability of a particular experience to strengthen those particular skills. A good example is found in the questions that address some "experiential learning" opportunities like working in a college department or office. The literature suggests that "experiential" activities are often associated with building leadership skills in students. The respondents to this survey did not indicate the same level of agreement when asked to evaluate their own growth in this area. Further research into this and

other questions might yield some ways that these types of experiences might be more helpful in the development of leadership skills in students.

Research question number three asked "Do they (senior students) identify any specific Lynchburg College experience which they believe helped them to build or increase their leadership abilities or improve their skills?" Clearly, students gave this some consideration from the very first survey question. Almost all of the respondents were able to articulate and name their most important leadership experience at the college. In addition, the students identified many other opportunities that had contributed to their overall growth on follow up questions and in the section for "open ended" responses (Appendix E). The bulk of the survey then asked them to reflect on this and other leadership experiences during their tenure. Students were able to report the amount of time they spent in their most significant leadership experience and were able to adequately express how much time they spent in "other" extra-curricular activities. This time on task data produced similar results to those found in the literature. In general, students spent a good deal of their time working in the specific areas that they found to be the most productive. By categorizing the SLOI responses into the eight factors of "self-management", "interpersonal skills", "problem solving", "critical analysis and cognitive development", "career development", "organization and planning", "self confidence" and "diversity", it became much easier to see which areas were stronger than others. Students scored a higher average score in the areas of "self-management", "career development", "self-confidence" and "diversity". The students' raw scores and

average scores were also all higher than those previously reported by a similar population of students at Virginia Tech who had taken earlier versions of the SLOI. While not definitive, this increase in mean between the two groups was suggestive of positive leadership experiences for the students who attended Lynchburg College. Students were also asked to describe the most helpful training experience at Lynchburg College. This open ended response was also helpful to answer this research question.

Research question four asked "Is there a difference in perception of leadership growth among students who participate in "immediate feedback" leadership roles, versus those who participate in "delayed feedback" leadership roles?". The analysis that was performed and presented as the "Summary of change in perceived leadership ability by group/club type", clearly demonstrated that there was measurable and significant differences in the way that students answered these questions, based upon the type of activity in which they participated. Data suggest that students who received "immediate feedback" also perceived greater leadership growth from that experience than those students who did not receive "immediate feedback", linked to their leadership performance. This kind of data, while clearly important and easy to assume, has had very little research associated with it in the past. Further research into the aspect of "immediate feedback" is clearly indicated. If these results are to be believed, students could benefit greatly from immediate feedback on each leadership experience.

This study has shown that further research into this area will likely confirm that students are quite capable of evaluating their own leadership development over time. Through self-evaluation, and evaluation by peers, students are capable of developing and sharpening critical skills that make them more effective leaders. This assessment loop will likely also build a better support system for student leaders and encourage them to help each other with developing important skills. As this study has demonstrated, research shows that student involvement builds affinity and contributes to the overall development of student leaders (Pascarella & Terenzini, 1991), (Astin, 1991). The basic prescription for leadership success appears to be that a student should be as involved as possible in his own leadership assessment and personally invested in a particular leadership opportunity. One might also look at these results and argue that college administrators should be working to develop the types of leadership development programs that encourage students to explore and develop these skills more fully, while seeking feedback from others with whom they serve. This kind of attention could also boost retention numbers for these students as they become more involved in the daily life of the community and take on more leadership opportunities in the school. It is also clear that students who present in leadership roles on campus do so because of a variety of reasons. These students are often chosen by their peers or volunteer to assume these leadership roles. Likewise, the motivations for these individuals to assume a leadership role, varies.

These data appear to suggest that students who attended Lynchburg College from the fall of 2004 to the spring of 2008 had the opportunity to participate in a variety of experiences that positively contributed to their overall perceived leadership skills development and assessment. The perceptions of these students were that they benefited from being part of one or more leadership building groups or activities and they could attribute a clear sense of their own leadership skill development over time. The College Student Inventory scores demonstrated that the students did in fact experience significantly measurable growth in their perceptions of their own leadership abilities. Ultimately, it would appear that this group of students would support the claim that Lynchburg College does in fact help "develop leaders for the society and the world."

At the beginning of this study, some basic assumptions were made regarding leadership development among students. Research has already suggested that students who are involved in activities, engaged as leaders and even those who simply participate in college organizations are more likely to have a substantial impact on the development of their interpersonal and leadership skills (Pascarella & Terenzini, 1991; Cress, 2000). The survey tool in this study substantiated this previous research and demonstrated that these particular students also reported these trends. The seniors in this study generally reported that their overall leadership development, rated by their own skills assessment, had increased over time. These same individuals also

acknowledged that the interactions and training that they undertook at Lynchburg College helped them to develop their leadership skills more fully.

During the course of the study, information was obtained that suggested that the type of feedback one receives with regard to leadership activities was important. This concept makes sense; however, it has not been fully explored through research. Further study would confirm or refute this theory and help educators to evaluate the individual types of experiences that elicit the greatest growth potential for students. This finding would also suggest new pedagogies for teaching leadership in internship or other leadership settings. The suggestion that an active form of feedback loop in leadership processes may in fact provide some much needed support for these types of programs and mechanisms within higher education circles.

Many of the assumptions that were established at the start of this study were tested by the survey tool. The responses from the students in this study seemed to suggest that the college had done what it had promised to do, "make leaders for society". Although it is virtually impossible to isolate the other variables that influence leadership development among these students, it appears that the college experience played a significant role in perceived individual leadership growth with these students. The open ended responses that are found in Appendix E are also helpful in identifying key leadership opportunities during the college tenure for these students. Students shared that they also learned from others/mentors, despite fewer responses to this question within the survey itself (table 4.13). These students also said that they

considered much of their participation in activities to be helpful to their growth in the area of leadership development. This finding helps support the idea that participation is linked to perceived leadership growth, regardless of the formal leadership role one may or may not hold.

Formal training programs such as Resident Assistant and Connection Leader training also played a significant role in leadership experiences for these students. These types of activities also incorporate a significant peer to peer relationship. It was also interesting to note in the open ended questions that students believed that less formal training activities like the ropes course, PACE, EMT training and PASS leader training were helpful to them and that they considered them to be formal leadership training activities. The open ended questions also provided some interesting information that is characteristic of a small college setting. Students actually identified particular staff members who had aided them in their leadership development. This kind of feedback may not be received using standardized program evaluation forms and may never reach the staff and faculty members who lead these programs. Presumably this type of direct feedback would also be helpful to these program leaders, in the same way that feedback was shown to be helpful to the student leaders.

Using an open ended question also allowed students to indicate that they had developed particular skills as a result of their training. Some of these skills were articulated as group leadership, paperwork, time management, conflict management and several other "traits" that were identified in the literature and were examined in the SLOI portion of the survey tool. Some students even

made the observation that they had taken the specific skills that they had learned in other areas and applied them to other activities on the college campus. While these factors alone, do not speak to their leadership ability directly, they clearly indirectly associated these factors with their perceived leadership growth in college.

With regard to the Student Leadership Outcomes Inventory, the only way to know if this apparent overall improvement was true for this population would be to pre-test this group as freshman and post-test them as seniors. Colleges and universities may also benefit by adopting this type of survey as a pre-test/post-test option for evaluating leadership programs and the basic leadership growth of all students. If the results of this survey administration demonstrated a marked growth in Senior's leadership development and their understanding of that growth, the school could utilize these data for support of the various individual programs or to promote ongoing assessment of best practices in the field. If the survey results did not indicate a marked leadership improvement among these seniors, the school could work to improve or implement new programs that may facilitate greater leadership growth among the students.

One item that was not explored in this study and is not widely explored in the literature is the concept of "burn-out". Campus administrators are discovering that the 90/10 rule of leadership is alive and well on their campuses. That rule says that 90% of the work is done by 10% of the students. This is especially true in a small college, like Lynchburg College. Student leaders seem to be taking on more leadership roles in several groups at one time. This can result in poor

results for the organization, unrealized gains for the student and a real chance of "burn-out" in those students who try to do too much on campus. This cause for concern is clearly an area that needs further exploration and research.

Another area for consideration is the concept of developing the SLOI or a similar type of survey into a pre-test and post-test longitudinal study which would have an "experimental' component included within the study. An emerging leaders program or leadership minor or major may provide the necessary "treatment" to realize even greater leadership skills development in students than they currently experience, without a formal program and substantiate further the exact prescription for leadership growth. Another concept for future research would be to investigate this pre-test/post-test model at more institutions of higher learning, rather than to attempt to generalize the findings across a population. It would be interesting to see how these findings change between institutions of varying size and degree offering and how students respond to different leadership programs.

Research Currently in Progress

At the time of the writing of this dissertation, some promising new research is compiling data. The Multi-Institutional Study of Leadership (MSL) survey, based upon the social leadership model, is in its first year of data analysis. A program partnership with the National Clearinghouse for Leadership Programs, this new survey tool is based on the Socially Responsible Leadership Scale (SLRS) that was referenced in the literature review section (Tyree, 1998). According to information provided on their website, the purpose of the MSL is to

contribute to the understanding of college student leadership development with special attention to the role of higher education in fostering leadership capacities. The study addresses individual institutional considerations while contributing to a national understanding of: Student needs and outcomes, effective institutional practices, and the extent of environmental influence in leadership development (www.leadershipstudy.net). One-hundred and eight schools participated in the recent process and the data are under review by the research team. According to one of the researchers, information on benchmarks and leadership program effectiveness should be available by the end of the year. Although this research is based only on the social change model of leadership development, it is another promising tool to help create benchmarks for the study of leadership development within student populations and across different types of colleges and universities.

APPENDIX A

Student Leadership Outcomes Inventory

Adapted by Grant Azdell with permission.
Original Survey - © Melinda Vann & Belinda McFeeters

Student Leadership Outcomes Inventory

Perceptions of College Student Leader Development: Assessing Institutional Goals and Expectations

Informed Consent Agreement

Please read this consent agreement carefully before you decide to participate in the study.

Purpose of the research study: The purpose of the study is to examine Leadership Development in Students.

What you will do in the study: You will be asked to complete a short online survey regarding your leadership experiences during your time as a college at Lynchburg College. You may skip any question that makes you uncomfortable and you can stop taking the survey at any time.

Time required: The survey should take less than 15 minutes to complete.

Risks: There are no anticipated risks in this study.

Benefits: There are no direct benefits to you for participating in the study, unless you are one of the students who are randomly selected to receive a "gift" for your participation.

Confidentiality: The information that you give in the study will be handled confidentially. Your information will be assigned a code number. The list connecting your name to this code will be kept in a locked file. When the study is completed and the data have been analyzed, this list will be destroyed. Your name will not be used in any report.

Voluntary participation: Your participation in the study is completely voluntary.

Right to withdraw from the study: You have the right to withdraw from the study at any time. You will not be eligible for the random drawing if you withdraw your consent.

How to withdraw from the study: If you wish to withdraw from the study while filling out the survey, simply close the survey window and do not complete any more questions. If you do not want your information to be used after you have completed the survey, please contact the survey administrator, Grant Azdell at 544-8355 and ask that your survey not be used in the study. There is no penalty for withdrawing from the survey, other than ineligibility for the random drawing.

Payment: You will receive no payment for participating in the study. By returning a "valid survey" you will be entered into a drawing for one of two prizes (an IPOD or a $50 gift certificate to the Lynchburg College bookstore). Total odds of winning a prize are based upon the total number of surveys returned, but are approximately 1 in 150. Multiple entries will void your surveys and remove your name from the drawing.

If you have questions about the study, contact:
Researcher's : Grant L. Azdell, Ph.D. Candidate, Center for the Study of Higher Education, 405 Emmet Street South, P.O. Box 400265, Charlottesville, VA 22904-4265. Telephone (434) 544-

8355. E-mail: gla7b@virginia.edu

Faculty Advisor: Dr. David Breneman, Professor, Center for the Study of Higher Education, 405 Emmet Street South, P.O. Box 400265, Charlottesville, VA 22904-4265. Telephone: (434) 924-3332

If you have questions about your rights in the study, contact:
Tonya R. Moon, Ph.D.,
Chair, Institutional Review Board for the Social and Behavioral Sciences
One Morton Dr Suite 500
University of Virginia, P.O. Box 800392
Charlottesville, VA 22908-0392
Telephone: (434) 924-5999
Email: irbsbshelp@virginia.edu
Website: www.virginia.edu/vprgs/i

Agreement:

- ○ I agree to participate in the research study described above.
- ○ I do not agree to participate in the research study described above.

By entering your student ID number, your ID # serves as your signature for the agreement statement above.

Student ID #: _____

Please enter today's Date: _____

You will receive a copy of this form for your records.

Next

Thinking about your leadership experience

When answering the following questions, please think about your experience at Lynchburg College.

Please indicate your MOST significant student leadership experience at Lynchburg College. (Choose one answer only)

- ○ Member of a student organization
- ○ Officer in a student organization
- ○ Member of a Fraternity/Sorority
- ○ Officer in a Fraternity/Sorority
- ○ Senator or Student Government Leader
- ○ Member of a club athletic team
- ○ Member of a varsity athletic team
- ○ Captain of a varsity or club athletic team
- ○ Volunteer in a community service organization
- ○ Student Assistant/Intern for a campus department
- ○ Resident Assistant
- ○ Peer Educator or Pass Leader (Tutor)
- ○ Connection Leader
- ○ Westover Fellows
- ○ Student Employee Manager
- ○ Student Activities Board (SAB)
- ○ Student Judicial Board (SJB)
- ○ Group leader in academic class
- ○ Committee chair in a student organization
- ○ Class Officer
- ○ New Horizons Staff Member
- ○ Intramural Supervisor
- ○ Other (please specify): _____

Indicate the type of organization that best describes the group/club you chose in the first question.

- ○ Academic and Professional (Academic or leadership)
- ○ Athletic Team (Varsity)
- ○ Club and Recreational Sports
- ○ Community Service Group
- ○ Honors Society
- ○ Multicultural (BSA, Intl. Student Assoc.)
- ○ Performing Arts (choral, music, art, drama)
- ○ Political (College Democrats, College Republicans)

- ○ Social Fraternity or Sorority
- ○ Service Fraternity or Sorority
- ○ Special interest (STAND, Anime, Energy Awareness etc)
- ○ Lynchburg College Emergency Medical Services
- ○ Spiritual or Religious group (DOC, BCM, Catholic Comm, etc)
- ○ SGA (Senate or Class Leader)
- ○ SAB or SJB
- ○ Student Media & Publications (Critograph, Argonaut, Current)
- ○ Other (please specify): [ ]

Estimate the average number of hours you spend(spent) per week in your single most important student leadership experience.

[ ]

Please estimate the number of semesters to date in your single most important leadership experience.

[(Click here to choose)]

Next

Other Leadership Experiences

Please think about all leadership experiences you have had at Lynchburg College.

What other student leadership experiences have you had at Lynchburg College? (Check all that apply)

- ☐ Member of a student organization
- ☐ Officer in a student organization
- ☐ Member of a Fraternity/Sorority
- ☐ Officer of a Fraternity/Sorority
- ☐ Senator or Student Government Leader
- ☐ Member of a club athletic team
- ☐ Member of a varsity athletic team
- ☐ Captain of a varsity or club athletic team
- ☐ Volunteer in a community service organization
- ☐ Student Asst./intern for a campus department
- ☐ Resident Assistant
- ☐ Peer Educator or Pass leader (Tutor)
- ☐ Connection Leader
- ☐ Westover Fellows
- ☐ Student Employee Manager
- ☐ Student Activities Board (SAB)
- ☐ Student Judicial Board (SJB)
- ☐ Group leader in an academic class
- ☐ Committee Chair in a student organization
- ☐ Class Officer
- ☐ New Horizons Staff Member
- ☐ Intramural Supervisor
- ☐ Other (please specify) _____

Next

Reflecting on Leadership

For this next set of questions, consider your time at Lynchburg College. Rate the following statements on a scale of 1-7 with 1 being "not at all true" and 7 being "completely true".

Most people have a lot of trust in my judgment and respect my opinion	(Click here to choose)
Over the years, I have frequently been selected as a spokesperson or group leader	(Click here to choose)
Many people consider me an effective leader and they look to me for direction	(Click here to choose)
When I'm doing something with a group of people, they often turn to me as the group's natural leader	(Click here to choose)
Other people don't think of me as a leader	(Click here to choose)
Most people either avoid me or take me for granted	(Click here to choose)
On those occasions when I've tried to lead other people, the outcomes have been disappointing	(Click here to choose)
People show little regard for my views, and they hardly ever seek my advice	(Click here to choose)

Next

Skills and Attributes

For the next set of questions, please think about the skills and attributes you improved upon as a result of your leadership experiences at Lynchburg College. Respond to each item by indicating your level of agreement.

As a result of my leadership experiences at Lynchburg College, I improved my:

Ability to perform under pressure	(Click here to choose)
Ability to learn from my mistakes	(Click here to choose)
Ability to manage stress	(Click here to choose)
Ability to balance personal, academic and professional life	(Click here to choose)
Ability to manage my time	(Click here to choose)
Ability to establish priorities	(Click here to choose)
Ability to identify personal strengths and weaknesses	(Click here to choose)
Ability to understand the consequences of my actions	(Click here to choose)
Ability to actively listen	(Click here to choose)
Ability to give constructive criticism to others	(Click here to choose)
Ability to receive constructive criticism from others	(Click here to choose)
Ability to express disagreement tactfully	(Click here to choose)
Ability to understand what is important to others	(Click here to choose)
Ability to influence others	(Click here to choose)
Ability to motivate other people	(Click here to choose)

As a result of my leadership experiences at Lynchburg College, I improved my

Supervisory Skills	(Click here to choose)
Professional working relationships with the opposite gender	(Click here to choose)
Public speaking skills	(Click here to choose)
Written communications	(Click here to choose)
Ability to work as part of a group	(Click here to choose)
Ability to identify strengths and weaknesses of others	(Click here to choose)
Ability to make formal presentations	(Click here to choose)
Ability to speak extemporaneously (unrehearsed)	(Click here to choose)
Ability to diplomatically resolve conflict	(Click here to choose)

Ability to negotiate for a desired outcome	(Click here to choose)
Ability to creatively problem solve	(Click here to choose)
Ability to make ethical decisions	(Click here to choose)
Development of good, judgment	(Click here to choose)
Calculated risk taking	(Click here to choose)

As a result of my leadership experiences at Lynchburg College, I improved my:

Ability to critically examine my mistakes	(Click here to choose)
Ability to practically apply knowledge/information	(Click here to choose)
Ability to develop compromises	(Click here to choose)
Ability to assess the politics associated with issues	(Click here to choose)
Critical thinking skills	(Click here to choose)
Ability to perform well in my future career	(Click here to choose)
Development of transferable career skills	(Click here to choose)
Skill development that will help me advance in my career	(Click here to choose)
Overall learning experience	(Click here to choose)
Preparation for postgraduate leadership opportunities	(Click here to choose)
Ability to build consensus within a group	(Click here to choose)
Ability to delegate tasks to others	(Click here to choose)
Ability to promote/market events	(Click here to choose)
Ability to develop organizational agendas	(Click here to choose)

As a result of my leadership experiences at Lynchburg College, I improved my:

Ability to set deadlines	(Click here to choose)
Ability to run effective meetings	(Click here to choose)
Ability to manage organization finances	(Click here to choose)
Ability to manage multiple tasks	(Click here to choose)
Ability to form a team to accomplish a goal	(Click here to choose)
Ability to lead a group of people	(Click here to choose)
Ability to organize tasks	(Click here to choose)
Ability to set long term goals	(Click here to choose)
Ability to meet deadlines	(Click here to choose)
Understanding of organizational politics	(Click here to choose)
Self-confidence in my social skills	(Click here to choose)

Self-confidence in my abilities	(Click here to choose)
Assertiveness in my interactions with others	(Click here to choose)
Ability to clarify my personal values	(Click here to choose)

My leadership experiences at Lynchburg College have allowed me to:

Establish my personal code of ethics	(Click here to choose)
Have sensitivity toward people who are different from me	(Click here to choose)
Have respect for the rights of others	(Click here to choose)
Have the ability to appreciate different perspectives	(Click here to choose)

The Average number of hours per week spent on ALL college affiliated co-curricular activities this year (student organizations, band, community service, campus ministry etc)

(Click here to choose)

The number of hours per week you spent engaged in class work outside of class.

(Click here to choose)

Next

Training

We are almost done!
Please indicate the types of training in which you participated. (Check all that apply)

- ☐ Advanced Leadership program/experience
- ☐ Anderson leadership event
- ☐ Culture/Diversity enhancement programs
- ☐ Emerging Leaders program
- ☐ For-credit leadership development course
- ☐ Leadership Certificate Series (series of seminars)
- ☐ Non-credit Leadership development seminars
- ☐ On the job training
- ☐ New Horizons
- ☐ Conference/Symposium (off grounds)
- ☐ Ropes Course
- ☐ Workshops
- ☐ Sessions held during organizational meetings
- ☐ Student organization specific officer training
- ☐ Weekend leadership development retreats
- ☐ One-on-One interactions with an Advisor or Mentor
- ☐ One on One interactions with a Peer (student)
- ☐ Resident Assistant Training
- ☐ Connections Leader Training
- ☐ Emergency Medical Training
- ☐ Other (please specify): _____
- ☐ Have not participated in any leadership activities

Next

Please describe the most helpful leadership training experience at Lynchburg College. (Type of experience and what you learned during the activity)

Next

Do you believe that Lynchburg College has provided an opportunity for you to experience overall growth in your leadership abilities and or skills?

(Click here to choose)

Contact Information - Give-Away
Please give us your contact information so that we may enter you into the prize drawing. We will contact you if you are the winner of the gift certificate or Ipod.

Name:

Email Address:

Address:

Phone Number:

Thank you for participating in this survey! You may be contacted for some follow up questions.

REMINDER: Any attempt to fill out an additional survey will result in the removal of all of your entries.

Submit Evaluation

Thank you for completing this survey. You will be notified via e-mail or campus mail if you are the winner of one of the random prizes.

APPENDIX B
Student Leadership Outcomes Inventory (SLOI) Factors

Self-Management

1. ability to perform under pressure
2. ability to learn from my mistakes
3. personal stress management
4. ability to balance personal, academic and professional life
5. personal time management
6. establishing priorities
7. identification of personal strengths and weaknesses
8. understanding the consequences of my actions
9. active listening (understanding feeling and content of conversation)

Interpersonal Skills

10. giving constructive criticism to others
11. receiving constructive criticism from others
12. expressing disagreement tactfully
13. understanding what is important to others
14. motivating other people
15. influencing others
16. supervisory skills
17. professional working relationships with the opposite gender
18. public speaking skills
19. written communications
20. ability to work as part of a group
21. ability to identify strengths and weaknesses of others
22. making formal presentations
23. speaking extemporaneously (unrehearsed)

Problem-Solving/Decision Making

24. diplomatic conflict resolution
25. negotiating for a desired outcome
26. creative problem-solving
27. development of good judgment

Cognitive Development/Critical Analysis

28. calculated risk taking
29. critical examination of my mistakes
30. ethical decision making
31. practical application of knowledge/information
32. developing compromises
33. assessing the politics associated with issues
34. critical thinking skills

Career Development

35. contributed to my ability to perform well in my career
36. contributed to the development of transferable career skills
37. contributed to skill development that will help me advance in my career
38. positively impact my overall learning experience
39. prepared me for post-graduate leadership opportunities

Organization and Planning

40. building consensus within a group
41. delegation of tasks to others
42. promoting/marketing events
43. developing organization agendas
44. setting deadlines
45. ability to run effective meetings
46. managing organization finances
47. managing multiple tasks
48. ability to form a team to accomplish a goal
49. leading a group of people
50. organizing tasks
51. long term goal setting
52. meeting deadlines
53. understanding of organizational politics

Self-Confidence

54. self-confidence in my social skills
55. self-confidence in my abilities
56. assertiveness in my interactions with others
57. clarification of my personal values
58. establishment of my personal code of ethics

Diversity Awareness

59. sensitivity toward people who are different from me
60. respect for the rights of others
61. appreciation for different perspectives

APPENDIX C

Informed Consent Agreement

Please read this consent agreement carefully before you decide to participate in the study.

Purpose of the research study: The purpose of the study is to examine Leadership Development in Students.

What you will do in the study: You will be asked to complete a short online survey regarding your leadership experiences during your time as a college at Lynchburg College. You may skip any question that makes you uncomfortable and you can stop taking the survey at any time.

Time required: The survey should take less than 15 minutes to complete.

Risks: There are no anticipated risks in this study.

Benefits: There are no direct benefits to you for participating in the study.

Confidentiality: The information that you give in the study will be handled confidentially. Your information will be assigned a code number. The list connecting your name to this code will be kept in a locked file. When the study is completed and the data have been analyzed, this list will be destroyed. Your name will not be used in any report.

Voluntary participation: Your participation in the study is completely voluntary.

Right to withdraw from the study: You have the right to withdraw from the study at any time. You will not be eligible for the random drawing if you withdraw your consent.

How to withdraw from the study: If you wish to withdraw from the study while filling out the survey, simply close the survey window and do not complete any more questions. If you do not want your information to be used after you have completed the survey, please contact the survey administrator, Grant Azdell at 544-8355 and ask that your survey not be used in the study. There is no penalty for withdrawing from the survey, other than ineligibility for the random drawing.

Revision Date: 09/01/07

IRB-SBS Office Use Only		
Protocol #	2008-0078	
Approved	from: 3/25/08	to: 3/24/09
SBS Staff		

Payment: You will receive no payment for participating in the study. By returning a "valid survey" you will be entered into a drawing for one of two prizes (an iPod Classic or a $50 gift certificate to the Lynchburg College bookstore). Total odds of winning a prize are based upon the total number of surveys returned, but are approximately 1 in 150. Multiple entries will void your surveys and remove your name from the drawing.

If you have questions about the study, contact:
Grant L. Azdell, Ph.D. Candidate,
Center for the Study of Higher Education
405 Emmet Street South, P.O. Box 400265,
Charlottesville, VA 22904-4265.
Telephone (434) 544-8355. E-mail: gla7b@virginia.edu

Faculty Advisor:
Dr. David Breneman, Professor,
Center for the Study of Higher Education,
405 Emmet Street South, P.O. Box 400265,
Charlottesville, VA 22904-4265.
Telephone: (434) 924-3332

If you have questions about your rights in the study, contact:
Tonya R. Moon, Ph.D.,
Chair, Institutional Review Board for the Social and Behavioral Sciences
One Morton Dr Suite 500
University of Virginia, P.O. Box 800392
Charlottesville, VA 22908-0392
Telephone: (434) 924-5999
Email: irbsbshelp@virginia.edu
Website: www.virginia.edu/vprgs/irb

Agreement:
I agree to participate in the research study described above.

Signature: _____ **Date:** _____
You will receive a copy of this form for your records.

Revision Date: 09/01/07

IRB-SBS Office Use Only		
Protocol #	2008-0078	
Approved	from: 3/25/08	to: 3/24/09
SBS Staff		

APPENDIX D

E-Mail & Campus Mail Notifications

EXAMPLE OF FIRST E-MAIL & CAMPUS MAIL NOTICE

Subject: Fill out LC Survey for Chance to win IPOD Nano or Gift Certificate to LC Bookstore

Attention seniors: I am working on a special research project. I would like to ask every senior to complete this survey as soon as possible. Your answers to this survey will help me and Lynchburg College evaluate our programs and your experience as a student. In consideration for your participation, two prizes will be randomly awarded to two seniors who complete the survey. Your odds of winning are approximately 1 in 250. This survey will only be available for a short amount of time, so please log in and complete the survey for your chance to win.

Please follow this link to the survey: http://www4.lynchburg.edu/leadership.htm

If you prefer, you can also request a paper copy of the survey by contacting me via e-mail or campus mail.

You will be able to log-in to the survey using your student ID. The survey will take you about 15 minutes to complete. If you are unable to complete it in one setting, you can log out and log in again at a later time. Once you log-in to the survey, you will have the ability to agree or disagree to the terms of the Consent Agreement. You may opt-out of the survey at any time.

Once again, thank you in advance for taking a short amount of time to help me with this project.

Thanks

Grant Azdell

EXAMPLE OF SECOND E-MAIL & CAMPUS MAIL NOTICE

Subject: Fill out LC Survey for Chance to win IPOD Nano or Gift Certificate to LC Bookstore

This is a reminder. If you have already taken the time to fill out this survey, thank you! If not, please take a moment to read on. The Survey will be closed on Wednesday of this week, so don't wait to complete it!

Attention seniors: I am working on a special research project. I would like to ask every senior to complete this survey as soon as possible. Your answers to this survey will help me and Lynchburg College evaluate our programs and your experience as a student. In consideration for your participation, two prizes will be randomly awarded to two seniors who complete the survey. Your odds of winning are approximately 1 in 250. This survey will only be available for a short amount of time, so please log in and complete the survey for your chance to win.

Please follow this link to the survey: http://www4.lynchburg.edu/leadership.htm

If you prefer, you can also request a paper copy of the survey by contacting me via e-mail or campus mail.

You will be able to log-in to the survey using your student ID. The survey will take you about 15 minutes to complete. If you are unable to complete it in one setting, you can log out and log in again at a later time. Once you log-in to the survey, you will have the ability to agree or disagree to the terms of the Consent Agreement. You may opt-out of the survey at any time.

Once again, thank you in advance for taking a short amount of time to help me with this project.

Thanks

Grant Azdell

APPENDIX E

Open Ended Responses to Question #16 "Please describe the most helpful leadership experience at Lynchburg College."

1. The most helpful leadership training I experienced at Lynchburg College was on the track team. From seniors before me I watched how they acted and I followed their ways. Some more than others. Really I picked out the good qualities that I like and used them to help further my leadership ability here at the college.

2. The most helpful leadership training I have had at Lynchburg College was with the Connection Leaders. We learned how to lead a group of our peers with the incoming freshmen as well as lead each other. We also learned that we need to follow as well as lead.

3. The most helpful leadership training that I have received would be Resident Assistant training. This training helped me with dealing with situations related to students, peers, staff, residents, etc. Besides that, it also helps with future jobs and having to be a leader/role model.

4. The most helpful leadership training experience I have had has been the RA fall training sessions over the last three years. We learn much; however, the most important sessions I have had have been ones, which deal with mediation skills, as well as ones which deal with time management.

5. The most important leadership I got in my leadership training came from Herbert Bruce and the FISH philosophy. Play, make their day, have fun, and choose your attitude have greatly influenced the demeanor in my life, and it has proven to be successful even outside of the connection leader field. I must also thank Bruce for teaching me that every person has an obstacle they face along the way, and with the right help, the obstacle can be alleviated.

6. The Peer Tutoring seminar course was very helpful.

7. The RA training was most useful. It taught me how to handle certain situations and how to diffuse them. It taught me how to handle group meetings, handle a budget, and complete weekly paperwork. It also taught me about time management and settings/meeting deadlines.

8. The ropes course that myself and my peers attended for the PACE leadership training retreat was amazing. It provided clear understanding of innate leadership skills as well as those developed. Ropes courses allow one to see exactly who the leaders are by their initiative to get out there and start to solve the problem, as well as their leadership methodologies which are equally as important. Being able to see other leaders and their methods of leadership in action was an amazing tool for helping us learn how to cope with diverse methods of leadership.

9. The sorority had a sisterhood retreat in which we discussed our goals for the sorority and the goals for ourselves and how to use the group dynamic to realize these goals. I learned a lot about my sisters expectations of me and about my expectations for them and how to meet those expectations and be a better sister.

10. The training I received for being an STP leader.

11. The training as a Connection Leader for the First Year Connections Program has, by far, been some of the most beneficial leadership training that I have ever experienced. The published references that we have studied combined with the hands-on experience helps one both highlight their own leadership traits while at the same time; recognize those traits that need improvement. The best part about the training, however, is that everything learned can be applied to other leadership positions and experiences.

12. Tutor – helped me establish great communication and social skills

13. Tutoring at MLRC (Spanish) helping student learn, reading and writing. Also help develop their skills by conversing in Spanish.

14. Working as a Bonner Leader was the most effective way to build my leadership ability.

15. Working as an officer on the SAB helped me develop the most since I had a group of my peers under me taking directions from me and I was able to learn how to act and interact professionally with real world companies.

16. Working together on LCEMS with lots of different people.

17. Working with students, getting hands on experience is the most important to me. Every year I learn more and get better at my job. Working as a tutor allows me to interact with every type of student, and constantly forces me to think of new ways to approach the same problems.

18. The business fraternity helped me figure out how to engage and lead a group of very diverse people with very different views. It also helped me with peer mediation skills.

19. The Connection Leader program has the most intense, diversified and fun training of all the programs I've been associated with. It is specific as well as modern views on the topic of peer leadership. This program also covers so many different types of leadership and is constantly stretched and repeatedly proven to be one of the top leadership programs on campus and around colleges in the nation.

20. The EMT class that I took helped me learn to lead.

21. The CL program contained the best training that I have ever participated in. On the surface, the information produced seemed clear, but there is more that can be learned.

22. The enrollment student association training was the most helpful to me. The training session provided me with all the info I needed to succeed in the organization and gave me the confidence I needed to make phone calls to prospective students and lead tour groups to students as well.

23. The main leadership training that I completed was the ropes course which was helpful especially within athletics because of the needed communication amongst teammates.

24. The mass casualty ICS training has prepared me for the worst while hoping not to have to use this training on campus.

25. The most helpful leadership training experience came from all the different types of peer tutoring.

26. The most helpful leadership training experience I had was participating in the Connections Program. The role-play situations used to develop management skills were very helpful.

27. The most helpful leadership training experience I have received has been from my courses. My business and management classes were very rewarding.

28. My RA training was the most significant and most helpful training for me. Learning how to resolve conflicts was key.

29. Being a Captain of my sports team helped me be a better leader. I had to learn to stand behind my decisions and be assertive.

30. The most helpful leadership experience was not for my previous organization at all, it was during welcome week with my CL group and we participated in the ropes course. It brought us together as a group.

31. One on One with my advisor

32. PACE training sessions that taught us about how to educate the campus from their point of view.

33. PASS leader training helped me to gain organizational skills, develop myself, hold weekly meetings and run them, gain educational experience and oral communication skills.

34. PASS leader training. We got a crash course in how to deal with students from the perspective of an instructor. After initial meetings, we learned in the classroom and through meetings with our instructor.

35. Peer education training because I learned about myself and also how to help other students on campus.

36. Practicum Hours

37. Presenting a topic at a national student workshop made me more confident.

38. Probably the most helpful experiences for me were the face-to-face communication meetings myself and my professors and advisor.

39. Res Life training. It does a good job of preparing RA's for upcoming challenges.

40. Safe Space training with PACE. I learned about the LGBT community and what it means to be an ALLY to their community.

41. Since I am a commuter with family, academic settings were my only source of leadership classes. Nursing classes helped me be a better leader.

42. Student Judicial Board work and training was very helpful and helped me get organized.

43. SOAR

44. Student organization. Working well with other people

45. Student Supervisor Training
46. Taking Research methods and being part of a research group where we had to meet outside of class without the professor.

47. The Anderson Leadership Conference

48. Anderson Leadership

49. Workshops at the Anderson Leadership Conference

50. The most helpful experience for me was being a VP for Communications for my fraternity. Being an officer helped me be a better leader.

51. I was not really trained for the job of being soccer club president, but having to read the handbook and come up with the constitution was one in itself.

52. I would have to say the connection group freshmen year that helped prepare and ease my way into Lynchburg College.

53. In my graphic design courses, projects and leading discussions to gain feedback helped me.

54. Just being a Connection Leader has helped me be a better leader.

55. Working with groups during management classes that involved each of us in leadership activities.

56. LCEMS helped with developing good personal skills and allowed for growth in the college community.

57. Leading my group in management class to complete a company profile.

58. Learning about the college to be a student ambassador.

59. Learning to train others in a way that they can understand.

60. Effective meetings with SGA training taught me how to lead.

61. My best leadership experience was at my internship. It had a large element in office relations and how management works with the various employees and problems.

62. My most helpful training experience was the several sessions of RA training. Having a mentor challenged me.

63. My sophomore year, the softball team engaged in the ropes course. We learned leadership skills to get the entire team to do the things we are trying to accomplish.

64. My training to become the Modern Language Resource Center team leader was the most helpful. My boss allowed me to put my own personal input in about situations to make the lab a better place for students.

65. My training with new horizons was excellent. I co-led a rock climbing trip. It was very empowering

66. On the job training with LCEMS

67. Acting as a member and officer in Gamma Sigma Sigma service sorority helped me build skills and grow as an individual.

68. All sorority workshops that are only an hour or so long, not the whole night.

69. Anderson Leadership Conference

70. As a member and officer of LCEMS we have multiple training opportunities available to us all the time that I have always taken advantage of.

71. As VP of SGA, I was able to develop a number of skills and abilities. I was able to work with others, organize people, speak publically and manage finances.

72. ASA retreats – communication with sisters, officer training

73. Becoming a certified peer educator to give me the skills to effectively communicate with peers.

74. Being an older nursing student, I had to develop my own goals and ethics.

75. Being part of the men's lacrosse team and the support that the team gets from the community is one of the best feelings ever. Being a student athlete helped me be a better leader.

76. Being President and VP of membership development of Sigma Phi Epsilon

77. Being President of Kappa Delta

78. Being the president of a club and helping teach myself as well as work with the OSA office to learn how to run a club well.

79. Being an intramural supervisor I have basically had to be in charge of several other people.

80. Bonner Leadership has been the most helpful leadership training and experience I have had at LC. I was able to work out in the community and learn leadership skills.

81. College Media Advisors Conference in New York City was the best experience.

82. Crisis management training during RA training helped me maintain control, calmness and communicate effectively to residents during a college lockdown.

83. I don't think that any one experience had an impact on me.

84. I feel that I have learned the most through group projects in class which made me step up and take a leadership role.

85. I have been working with LCEMS since my freshmen year. I have seen myself grow from a quiet reserved person within the squad to a three year officer. I have been able to not only motivate others on the squad but set an example for those around campus.

86. I never had a technical training experience, but I have learned how to interact with others by working one on one with others.

87. I participated in LC LEADS my freshman year. It was a good experience.

88. I really believe the day to day interaction with multiple people and the insight that I gained from that was the best teacher. Life experience in college was the biggest teacher.

89. I really liked the MACS diversity training because it was able to show how we are all alike in some ways and all leaders in some way.

90. I think the rope course is good

91. I was able to attend a Westover Honors Retreat as a senior and help freshmen students begin their college experience.

92. I was secretary and then president of the student nursing association.

93. I was the community service leader of Delta Sigma Pi for two years and learned that I have the ability to organize important events for organizations.

94. Delta Sigma Pi is a co-ed professional business fraternity. I have held several different leadership experiences over three years. Running a business in this fraternity gave me a valuable experience.

95. Fall training for RA's has been the most important training.

96. RA training has really helped me be a better leader.

97. I consider my job at the annual fund phone-a-thon a student leadership position. The training I received was very helpful.

98. I have been in a leadership position in the theatre work study program since my sophomore year. This has helped me develop my skills.

99. Working with students and getting hands on experience is the most important experience to me. Working as a tutor helps me to interact with every type of student and constantly forces me to think of new ways to approach the same problems.

100. As an officer in SAB, I was able to learn how to act and interact professionally with real work companies.

101. LCEMS with lots of different people working together helped me be a better leader.

102. Tutoring at MLRC in Spanish helped me be a better leader.

103. Tutor – helped me establish great communication and social skills.

104. I never held a leadership position in any organization in high school. Lynchburg College has helped me to be a better leader and I have been able to lead within groups without holding an office.

REFERENCES

American College Personnel Association (ACPA). (1994). The student learning imperative: Implications for student affairs. In E.J. Whitt (Ed.), *College student affairs administration, ASHE Reader Series*, (pp. 36-40). Needham Heights, MA: Simon and Schuster.

American Council on Education (1949). *The Student personnel point of view.* Washington, D.C.: Author.

Arens, T.E., (1994). *Assessing leadership skills of college student leaders: What do we learn from their experience?* Ed. D. Dissertation, Azusa Pacific University

Arminio, J. L., Carter, S., Jones, S. E., Kruger, K., Lucas, N., Washington, J., Young, M., & Scott, A. (2000). Leadership experiences of students of color. *NASPA Journal*, *37*(3), 496-510.

Astin, A. W. (1977). *Four critical years*. San Francisco: Jossey-Bass.

Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, *25*(4), 297-308.

Astin, A. W. (1985). *Achieving educational excellence: A critical assessment of priorities and practices in higher education*. San Francisco: Jossey-Bass.

Astin, A. W. (1991). *Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education*. New York: American Council on Education.

Astin, A. W. (1993). *What matters in college: Four critical years revisited.* San Francisco: Jossey-Bass.

Astin, H.S. & Astin, A.W. (1996). *A social change model of leadership development guidebook, version 3.* The National clearinghouse of leadership programs.

Astin, H. S., & Leland, C. (1991). *Women of influence, women of vision: A cross -generational study of leaders and social change*. San Francisco: Jossey-Bass.

Bass, B. M. (1990). *Bass & Stogdill's Handbook of Leadership.* New York: Free Press.

Bass, B. M. (1985). *Leadership and performance beyond expectation.* New York: Free Press.

Bass, B.M. (1995) The meaning of leadership. In J.T. Wren (Ed.), *The Leadership Companion*, New York: The Free Press.

Bass, B. M. (1990). *From transactional to transformational leadership: Learning to share the vision.* Organizational Dynamics, (Winter): 19-31.

Baxter Magolda, M.B. (1992). Cocurricular influences on college students' intellectual development. *Journal of College Student Development*, 33(3), 203-213.

Bennis, W. (1989). *On becoming a leader.* New York: Addison-Wesley.

Bialek, S.C., & Lloyd, A.G. (1998). *Post graduation impact of student leadership.* Unpublished manuscript, University of Wisconsin-Madison.

Blake, R. R. and Mouton, J.S. (1961). *Group Dynamics – Key to decision making*, Houston: Gulf Publishing Co.

Blake, R.R. and Mouton, J.S. (1964). *The Managerial Grid.* Houston TX: Gulf.

Blimling, G. S., Whitt, E. J., & Associates. (1999). *Good practice in student affairs: Principles to foster student learning.* San Francisco: Jossey-Bass.

Bolden, R., Gosling, J., Martuarano, A. and Dennison, P. (2003). *A Review of Leadership Theory and Competency Frameworks.* Exeter, UK: Centre for Leadership Studies.

Bolton, E. B. (1991). Developing local leaders: Results of a structured learning experience. *Journal of the Community Development Society, 22*(1), 119-143. 26 *Journal of College Student Development*

Brock, W. (1993). *An American imperative: Higher expectations for higher education.* The Johnson Foundation at Wingspread.

Brodsky, B. (1988). *Development of a modified version of the Leadership Practices Inventory for use with college students.* Unpublished masters thesis, p.23. School of Education, San Jose State University.

Brown, P.C. (1994). Liberal education for leadership. *Liberal Education*, 80(2), 1-3.

Brungardt, C. (1996). The making of leaders: A review of the research in leadership development and education. The Journal of Leadership Studies, 3(3) 81-95.

Burns, J.M. (1978). *Leadership.* New York: Harper and Row.

Burbach, H. (2004). Lecture notes, *The Leader Within.* EDLF 858, Management and Planning in Higher Education. University of Virginia; Charlottesville, VA.

Chambers, T., (1992). The development of criteria to evaluate college student leadership programs: A Delphi approach. *Journal of College Student Development*, 33(4) 339-347.

Chickering, Arthur W., and Zelda F. Gamson. (1987). Seven Principles for Good Practice. *AAHE Bulletin*, 39: 3-7.

Clark, K. E. (1985) Teaching undergraduates to be leaders. *AAHE Bulletin*, *37*(7), 11-14.

Clark, K.E. & Clark, M.B. (1994). *Choosing to lead.* Greensboro, NC: Leadership Press Ltd.

Clark, M. B., & Freeman, F. H. (1990). *Leadership education 1990: A sourcebook.* West Orange, NJ: Leadership Library of America.

Coates, Hamish, The value of student engagement for higher quality assurance. *Quality in Higher Education*, 11.1, 25-36.

Cooper, D.L., Healey, M.A., & Simpson, J. (1994). Student Development through involvement: Specific changes over time. *Journal of College Student Development*, 35, 98-102.

Covey, S. (1992). *Principle-Centered Leadership.* Simon and Schuster.

Cress, Astin, Zimmerman-Oster, & Burkhardt Chambers, T. (1992). The development of criteria to evaluate college student leadership programs: A Delphi approach. *Journal of College Student Development*, *33*(4), 339-347.

Daugherty, R. A., & Williams, S. E. (1997). The long-term impacts of leadership development: An assessment of a statewide program. *Journal of Leadership Studies*, *4*(2), 101-115.

Einstein, Walter O. and John H. Humphreys. "Transforming Leadership: Matching Diagnostics to Leader Behaviors." *The Journal of Leadership Studies* 8, no. 1 (2001): 48-60.

Farling, M.L., Stone, A. G., & Winston, B. E. (1999). Servant leadership: Setting the state for empirical research. *The Journal of Leadership Studies*, 6, 49-72.

Fiedler, F. E. (1964). A Contingency Model of Leadership Effectiveness. Advances in Experimental Social Psychology (Vol.1). 149-190. New York: Academic Press.

Freeman, F. H., Knott, K. B., & Schwartz, M. K. (1994). *Leadership education 1994–1995: A source book*. Greensboro, NC: Center for Creative Leadership.

French, J.R.P., & Raven, B. (1959). *The bases of social power*. Studies in Social Power. Ann Arbor, MI: Institution for Social Research.

Gardner, Howard, Frames of Mind: The Theory of Multiple Intelligences, NewYork: Basic, 1983.

Gardner, J. (1990). *On leadership*. New York: The Free Press

Greenleaf, R. K. (1977). *Servant leadership: A journey into the nature of legitimate power and greatness*. New York: Paulist Press.

Greenleaf, R. K. (2002). *Servant leadership: A journey into the nature of legitimate power and greatness*. New York: Paulist Press.

Halpin, A.W. and Winer, B.J. (1957). A factorial study of the leader behavior descriptions. In R.M. Stogdill and A.E. Coons (eds), *Leader behavior: Its description and measurement*. Columbus, OH: Bureau of Business Research, Ohio State University

Havlik, M.K. (2006). *An assessment of a first-year leadership program*. Masters Thesis, Blacksburg, VA: Virginia Polytechnic Institute

Hersey, P., Blanchard, K.H, and Johnson, D.E., *Management of Organizational Behavior: Leading Human Resources*, Prentice Hall, 2007

Honnet, E.P., and Poulsen, S.J. (1989). *Principles of Good Practice for Combining Service and Learning*. Racine, WI: Johnson Foundation.

Huey, J. (February 21, 1994). The leadership industry. *Fortune*, *129*(4), 54-56.

Jung, Dong I. and Francis J. Yammarino. "Perceptions of Transformational Leadership Among Asian Americans and Caucasian Americans: A Level of Analysis Perspective." *The Journal of Leadership Studies* 8, no. 1 (2001): 3-21.

Kezar, A., & Moriarty, D. (2000). Expanding our understanding of student leadership development: A study of gender and ethnic identity. *Journal of College Student Development*, *41*(1), 55-69.

Komives, S. R., McMahon, T.R., Lucas, N. (1998). *Exploring leadership for college students who want to make a difference.* San Francisco: Jossey Bass.

Komives, S.R., Owen, J.E., Longerbeam, S.D., Mainella, F.C., & Osteen, L. (2005). Developing a leadership identity: A grounded theory. *Journal of College Student Development*, 46, 593-611.

Komives, S., Dugan, J., Owen, J., Slack, C., Wagner, W. (eds). (2006). *Handbook for Student Leadership Programs.* University of Maryland: Clearinghouse for Leadership Programs.

Komives, S., Wagner, W., & Associates. (2009). *Leadership for a better world: Understanding the social change model.* San Francisco: Jossey-Bass).

Kotter, John P. *John P. Kotter on What Leaders Really Do.* Boston, MA: Harvard Business School Press, 1999.

Kouzes, J.M. & Posner, B.Z. (1995). *The Leadership Challenge.* San Francisco: Jossey-Bass.

Kuh, G.D. (1995). The other Curriculum: Out-of-class experiences associated with student learning and personal development. *Journal of Higher Education*, 66(2), 123-155.

Kuh, G.D. (2001). *Assessing what really matters to student learning: Inside the national survey of student engagement.* Philadelphia, PA: Heldref Publications.

Lewin, K., Lippit, R. and White, R.K. (1939). Patterns of aggressive behavior in experimentally created social climates. *Journal of Social Psychology, 10,* 271-301.

Likert, R. (1967). The human organization: Its management and value, New York: McGraw-Hill

Lipman-Blumen, J. (1996). *The connective edge: Leading in an interdependent*

world. San Francisco: Jossey-Bass.

Lombardo, M. M., & McCall, M. W., Jr. (1981). *Leaders on line: Observations from a simulation of managerial work.* Greensboro, NC: Center for Creative Leadership.

Lucas, C.J. (1994). *American higher education: A history.* New York: St. Martin's Griffin.

Maier, N.R.F. (1963). Problem-solving discussions and conferences: Leadership methods and skills. New York: McGraw-Hill

Marcy, M. (2002). Democracy, leadership and the role of liberal education. *Liberal Education*, 6-11.

Maxwell, J.C. (2005) *Developing the Leaders around you.* Nashville, TN: Thomas Nelson.

McCall, M.W. Jr. and Lombardo, M.M. (1983). *Off the track: Why and how successful executives get derailed.* Greensboro, NC: Center for Creative Leadership

McCauley, C. D., & Hughes-James, M. W. (1994). *An evaluation of the outcomes of a leadership development program.* Greensboro, NC: Center for Creative Leadership.

McFeeters, Belinda B., (2004). *Student Leadership Outcomes Inventory*, Virginia Tech, Blacksburg, VA.

Merton, R.K. (1957). *Social theory and social structure*, NY: Free Press

Murray, Joseph L. (1994). *Training for Student Leaders.* Dubuque, Iowa: Kendall/Hunt Publishing.

Ortiz, A., Ah-Nee Benham, M., Cress, C. M., Langdon, E.,& Yamasaki, E. (1999, November). *Challenging old models, creating new ones: Ethnically relevant leadership studies.* Symposium conducted at the annual conference of the Association for the Study of Higher Education National Conference, San Antonio, TX.

Outcalt, C.L., ed., Faris, S. and McMahon, K., (2001). *Developing non-hierarchical leadership on campus: case studies and best practices in higher education.* Westport, CT: Greenwood Press.

Pace, C. (1984). *Measuring the quality of college student experiences.* Los Angeles: University of California, Higher Education Research Institute.

Pace, C. (1987). *Good things go together.* Los Angeles: University of California, Center for the Study of Evaluation.

Pace, C. (1990). *The undergraduates: A report of their activities and progress in college in the 1980s.* Los Angeles: University of California, Center for the Study of Evaluation.

Pascarella, E. & Terezini, P.T. (1991). *How college affects students.* San Francisco: Jossey-Bass.

Patterson, K.A. (2003). Servant Leadership: A theoretical model. Doctoral Dissertation, Regent University. AAT 3082719.

Pfeffer, J. and Salancik, G.R. (1975). Determinants of supervisory behavior: A role set analysis. Human Relations, 28.

Phillips, J. J. (1996). Meeting the ROI challenge: A practical approach to measuring the return on investment in training and development. *European Forum for Management Development*, *96*(3), 24-28.

Podsakoff, P. M., & Schriesheim, C. A. (1985). Field studies of French and Raven's bases of power: Critique, reanalysis, and suggestions for future research. Psychological Bulletin, 97, 387-411.

Pooper, M. & Lipshitz, R. (1992). Coaching on leadership. *Leadership & Organizational Development Journal.* 13(7), 15-18.

Posner, B. Z., & Brodsky, B. (1992). A leadership development instrument for college students. *Journal of College Student Development*, *33*(3), 231-237.

Posner, B. Z., & Kouzes, J. M. (1993). Psychometric properties of the leadership practices inventory—updated. *Educational and Psychological Measurement, 53,* 191–199.

Roberts, D. C. (1997). The changing look of leadership programs. *Concepts & Connections: A newsletter of leadership educators, 5*(2), 1,3,4,11-14.

Roberts, D. C. (1981). *Student leadership programs in higher education.* Washington, DC: ACPA.

Rohs, F. R., & Langone, C. A. (1997). Increased accuracy in measuring leadership impacts. *Journal of Leadership Studies*, *4*(1), 150-158.

Rost, J. (1991). *Leadership for the twenty-first century.* New York: Praeger.

Ryan, L. (1994). The case for national student leadership on community college issues. *Leadership Abstracts*, *7*(6).

Schuh, J.H., and Laverty, M. (1983). The perceived long-term influence of holding a significant student leadership position. *Journal of College Student Personnel*. 28-32.

Schwartz, M. K., Axtman, K. M., & Freeman, F. H. (1998). *Leadership Education Source Book* (7th ed.), Greensboro, NC: Center for Creative Leadership.

Seely, J. A. (1981). *Development of a model network of university/community team leadership final report*. Akron, OH: Akron University.

Seitz, S., & Pepitone, S. (1996). Servant leadership: A model for developing college students. *Metropolitan Universities: An International Forum*, *6*(4), 113-122.

Smith, A. (1993). Management development evaluation and effectiveness. *Journal of Management Development*,*12*(1), 20-32.

Stancil, W.T. (Ed.). (2003). *A student's guide to the liberal arts*. Kansas City: Rockhurst University Press.

Stogdill, R.M. (1974). Handbook of leadership: A survey of the literature, New York: Free Press

Tannenbaum, A.S. and Schmitt, W.H. (1958). How to choose a leadership pattern. *Harvard Business Review, 36,* March-April, 95-101

Tharenou, P., & Lundon, J. T. (1990). The effect of a supervisory development program on leadership style. *Journal of Business and Psychology*, *4*(3), 365-373.

Tyree, Tracy (1998). *Socially Responsible Leadership Scale (SRLS)*. Adapted form used in the multi-institutional study of leadership survey. Ann Arbor, Michigan.

Vann, Melinda (2004). *Student Leadership Outcomes Inventory (SLOI)*. Maryland Higher Education Commission, Annapolis, MD

Verrier, Gisele (2001). *Creating opportunities for the leadership development of all students*. Master's Thesis, Royal Roads University.

Weber, Max. (1947). *The Theory of Social and Economic Organization*, translated by A M Henderson and Talcott Parsons. New York: The Free Press and the Falcon's Bring Press.

Whent, L. S., & Leising, J. G. (1992). A 20-year evaluation of the California Agricultural Leadership Program. *Journal of Agricultural Education*, *33*(3), 32-39.

Whitt, E. J. (1996, September/October). Some propositions worth debating. *About Campus*, *1*, 31-32.

Wielkiewicz, R. M. (2000). The leadership attitudes and beliefs scale: An instrument for evaluating college students' thinking about leadership and organizations. *Journal of College Student Development*, *41*(3). 335-347.

Williams, A. S. (1981). Training rural citizens: An evaluation of a leadership training program. *Journal of the Community Development Society*, *12*(1), 63-82.

Young, D. P., & Dixon, N. M. (1996). *Helping leaders take effective action: A program evaluation.* Greensboro, NC: Center for Creative Leadership.

Yukl, G. A. (1989). *Leadership in Organizations*. Englewood Cliffs, NJ: Prentice Hall.

Zimmerman-Oster, K., & Burkhardt, J. (1999). *Leadership in the making: Impact and insights from leadership development programs in U.S. colleges and universities*. Battle Creek, MI: W. K. Kellogg Foundation.