STUDENT LEADERS IN THE CLASSROOM:

A STUDY OF VIRGINIA TECH STUDENT LEADERS AND THEIR ACCOUNTS OF CURRICULAR AND CO-CURRICULAR LEADERSHIP

by

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ABSTRACT

The purpose of this study was to identify the leadership skills students believe they learned in co-curricular activities, to determine how those skills are used in the classroom, and to discover whether those skills enhance the academic experience for students. The results of this study provide information which can aid student affairs practitioners who are seeking ways to help students make the connection between the co-curricular and curricular leadership experiences.

This study used a combination of qualitative research techniques including document analysis and group interviews. The qualitative nature of this study was guided by the need to allow the subjects explore their own perceptions, beliefs, observations, and understanding about their behavior and learning. Thirty-one student leaders from programs and organizations sponsored by the Division of Student Affairs (DSA) at Virginia Polytechnic Institute and State University (Virginia Tech) were interviewed over a period of one semester. Two cadres of three groups participated in four rounds each A round consisted of an e-journal, sent and responded to individually by the participants, followed by a group interview. E-journals and interviews were analyzed using a conceptually clustered matrix. This process produced a series of matrices correlating the

various perspectives of the participants with either leadership practices, research questions, demographic data, or all three.

The results of the study reveal that training programs for these student leaders tended to focus on three primary leadership practices and that the student leaders exhibited these same practices in their curricular experience. Reflection both during and after the study had a profound impact on the students' perceptions of whether or not they perceived their own behavior as leadership either in or out of the classroom. Additional results showed that the physical design of a classroom could have an impact on how leadership practices occur during class. It was also shown that while all the participants in this study were in DSA sponsored programs, there was no central leadership theory or comprehensive approach to leadership development to guide Division programs.

Findings from this study provide evidence of the value of co-curricular leadership training and its impact on curricular experience. The study also adds to the body of research on student leadership, research on the impact of co-curricular activities on students, and the relationship between curricular and co-curricular learning, particularly as it relates to group assignments and the leadership of those projects.

To Lynn, my wife and soul mate, for her infinite patience,

Understanding, and care. May I one day be worthy of your love.

To Michael, Hana, and David, the joy and light of my life.

May you one day achieve all your dreams.

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To my father who has never pushed, never questioned, but always wanted me to succeed in my own time. And to my mother, may she rest in peace. My only regret is

that she will not watch from the audience while I walk across the stage. She will now get to walk beside me.

Finally, to all of us who study leadership and leaders, formally or informally. Real leaders, those who can master all that we ask of them and still make our world a better place, are rare indeed. In a time when leaders pop up and disappear like Instant Messaging, we need to look beyond the petty, self-centered, need to succeed on our own terms. We must fully begin to understand that real leaders arise when others call. They come from the same flawed lives as the rest of us. The only difference is that for a moment in time and space, they possess the unique qualities required to channel the will of the masses in such a way as to change the world in unfathomable ways. In this way, a carpenter became a savior, a herdsman became a prophet, a women-child faced invading armies and flames, a slave owner became a champion of freedom, a tired women refused to move but stood up to the system, a privileged socialite fought to end poverty and ignorance in the world, and a prisoner of apartheid became a leader of inclusion. Perfect leaders, like perfect people, do not exist. Exemplary leaders, like extraordinary people, surround us every day – if only we know where to look.

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Leadership is one of the most observed and least understood phenomena on the earth.

--James MacGregor Burns

CHAPTER 1

INTRODUCTION

Foundation for the Study

Student leadership development at colleges and universities has been a primary concern of student affairs practitioners for many years. From the first student societies such a Phi Beta Kappa to the recent expansion of special interest groups on campuses, student leadership has been an important part of college life (Horowitz, 1990). Leadership training programs, seminars, summer institutes, and even bachelor's degrees have been created as ways to enhance the leadership abilities of college students. Dozens of articles and countless conference presentations have examined and expounded on college student leadership - usually focused on the activities of a particular group of leaders. Chambers and Phelps (1993) found that the "literature [on college] student leadership has traditionally focused on students involved in such leadership roles as student government officers, residence hall officers, fraternity and sorority members, student paraprofessionals and members of various recognized student organizations" (p. 19). This should come as little surprise to most student affairs professionals, especially those in activities and residence life, who spend much of their time engaged with student leaders in these particular areas. Student affairs has long recognized the importance of leadership development.

Part of that importance is that the connection between successful student leadership and post-academic success. Students are routinely encouraged to become

active in student organizations, residence halls, community service, and organized athletics as a way to build leadership skills and enhance their marketability in a competitive world. There is some evidence to show that involvement in co-curricular activities can be correlated with undergraduate academic success (Astin, 1977; Astin 1985; Pascarella & Terenzini, 1991). One could extrapolate that leadership success in those collegiate activities might lead to leadership success in the "real world." Of course, these studies only looked at the extra-curricular activity and not necessarily at leadership.

Students maintain sophisticated systems for engaging in leadership outside of the classroom. Each year universities collectively train thousands of students through leadership classes, weekend and week-long in-service leadership programs, ongoing in-service training, and short presentations of their own creation, hoping to mold the next generation of student leaders (National Clearinghouse for Leadership Programs, 1999). Student organizations send officers to weeklong leadership "camps" sponsored by national associations such as the Association of College Unions International and the National Association of Campus Activities. All of this training and development is focused on improving the student's ability to lead in the co-curricular world and by extension someday in the world after college. Few if any of these programs focus on developing leadership abilities within the curricular world of the student. While students may be succeeding outside of the classroom and that may be helping their overall achievement in college (Astin, 1997; 1985), the evidence of whether leadership is actually exhibited in the classroom is minimal. The literature does not provide clear evidence that the specialized training, weekend programs, personal advising, and regional conferences that occurred as part of their co-curricular leadership experience has any

affect on what these student leaders do in the classroom. Do students use the behaviors and practices learned in their leadership roles when they are in the classroom? Are they leaders in class as well as in student government or the residence hall? No clear answer yet exists.

Perhaps a more fundamental issue is the relationship between the classroom and out-of-class experience. Both co-curricular and curricular experiences provide learning and development. The Astin studies (1977, 1985) clearly show that students with well developed co-curricular experiences seem to excel in many areas of academic life. Learning, at least as defined by academic achievement and graduation, seems to be related to involvement in certain aspects of the co-curriculum. Based in part on evidence from these and other studies, the Association of College Personnel Administrators (ACPA, 1994) released a document that called upon student affairs administrators and their faculty colleagues to "redefine the role of student affairs to intentionally promote student learning" (p. 1). The authors of the Student Learning Imperative (SLI) (ACPA, 1994) claim that student affairs practitioners need to join their faculty colleagues in the most important work of the institution: learning.

Seven years earlier, the National Association of Student Personnel Administrators (NASPA) published A Perspective on Student Affairs in 1987 on the 50th anniversary of the landmark American Council on Higher Education The Student Personnel Point of View (ACE, 1937 & 1949). A Perspective proclaims in the first of its "assumptions and beliefs" that "the academic mission of the university is preeminent" (NASPA, p. 9). By stating that the academic mission is preeminent, NASPA claims that learning is the most important aspect of higher education. In 5 of the 12 "assumptions and beliefs" defined by

the association, learning was a critical element (pp. 9-13). In the span of seven years, both major associations of student affairs practitioners and educators made claims that higher education is about learning. Given that both The Student Learning Imperative and A Perspective on Student Affairs focus on learning, professionals have been challenged to determine how the work of student affairs professionals contributes to the learning of college students when most practitioners work outside the traditional classroom.

Many faculty, and some increasingly consumer-minded constituencies, consider co-curricular activities to be at best frivolous and at worst detrimental to students. The desire of many educators is to ensure that these activities and experiences reflect the growing need for purposeful learning outcomes. As the call to improve the co-curricular learning environment is heard, it becomes especially important to understand how that learning is applied in the classroom. Researchers such as Tinto (1987) and Astin (1993, 1977) acknowledge that co-curricular activities provide opportunities that enhance and support the undergraduate experience. They do not, however, explore whether students use the skills learned in these experiences when they are performing similar functions in the classroom setting. This connection important in creating and understanding the seamless, holistic environment being championed.

This study was conducted at Virginia Polytechnic Institute and State University (Virginia Tech) a land grant school set in the Appalachian region of Virginia. In a survey conducted by Virginia Tech, corporate and educational employers identified leadership as one of the most important sets of skills being sought in recent Virginia Tech graduates (Virginia Tech, 1996). Employers and graduate schools are relying extensively on colleges to provide opportunities for students to develop leadership and management

skills prior to matriculation to the workplace or graduate study. In several departmental reports to the State Council of Higher Education in Virginia (SCHEV), the Virginia Tech Academic Assessment Program noted the desire of employing companies to have more graduates with skills in teamwork or cooperative group work (Muffo, 1996a & 1996b). For example, the Hospitality and Tourism Management department reported good graduate ratings in "cooperation" but expressed a need for more "group projects that require students to interact with each other" (Muffo, 1996a). The Department of Marketing in the R. B. Pamplin College of Business reported (Muffo, 1996b) that group decision making and effectiveness are critical skills needed for marketing graduates. Many of the skills listed by these colleges are leadership skills. The development of leaders at the undergraduate level is of critical importance to programs like these.

The increase in leadership courses, majors, and programs at universities around the nation shows that there is intense interest in leadership development as part of the curriculum. In essence, the need for leaders has become important enough to teach leadership in the classroom. Of course, leadership development has been a central theme of student affairs work for many years.

Student affairs professionals have been focused primarily on the out-of-class development of the student. Bloland, Stamatakos, and Rogers (1996) claim "the student development movement, rather than contribute to the reintegration of higher education, dichotomized it all the more by inadvertently defining the developmental concerns of student affairs as being somehow separate and distinct from the educational goals of the rest of the university or college" (p. 219). While Bloland et. al. are critical of the past, they state that "student affairs is particularly equipped to collaborate with academic

affairs to enhance learning outcomes" (p. 219). Educators and researchers have called for the development of efforts that blur the lines between the curricular and co-curricular experience for students (Kuh, 1996; Schroeder & Hurst, 1996). Kuh (1996) called for the creation of "seamless learning environments." In these environments, "students are asked to use their life experiences to make meaning of materials introduced in classes, laboratories and studios, and to apply what they are learning in class to their lives outside the classroom" (p. 152).

To create seamless environments, educators must learn how the developmental aspect of college outside of the classroom affects the educational experience inside the classroom. Terenzini, Pascarella, and Blimling (1996) claim that "a substantial body of literature exists on how students change and develop during the college years . . . . Substantially less is known about how students' out-of-class experiences influence their academic, intellectual or cognitive development" (p. 149). It is important and timely then to study how students involved in co-curricular activities such as leadership use that experience to shape their in-class work.

If leadership is such a critical element outside of the classroom in the co-curricular environment of student organizations and residence halls, it would stand to reason that the study of how leadership manifests itself in the classroom would be a critical area of inquiry. What would make this topic even more relevant would be the expansion of the concept of leadership within the classroom.

The academic experience is increasingly becoming team oriented. The use of collaborative teams, work groups, group assignments and projects is becoming the norm in many classrooms. "Collaborative learning has become the most successful

instructional intervention that higher education has seen in years" (Vermette & Erickson, 1996, p. 207). Significant in this change is that students are expected to operate with more responsibility for the management and operation of the work groups as part of their curricular experience (Singh-Gupta & Troutt-Ervin, 1996) similar to the work groups in the corporate labor force. Management and operation of work groups assumes that there will be some leadership process within the group to make sure all assignments are attempted - if not completed. Logic would suggest that if group work requires leadership, then the students in the group must have or develop leadership abilities. If leadership is critical to classroom functioning, it becomes important to examine how class team leaders function and therefore how leadership affects classroom management. One way to understand classroom student leadership would be to examine where students develop their leadership abilities and if they use them in the classroom setting. That is essentially the point of this study.

Statement of Problem

Team work and leadership skills are needed in the redefined classroom models used in many college classrooms. While leadership and teamwork are extensively taught and used in co-curricular settings, there is little documented evidence of purposeful training for leadership activity within the classroom. Additionally, there is little if any evidence that demonstrates the assumption that leadership skills learned in co-curricular activities will be meaningfully used in the classroom.

Purpose of the study

The purpose of this study is to identify the leadership skills students believe they learned in co-curricular activities, to determine how those skills are used in the

classroom, and to discover whether those skills enhance the academic experience for students. The results of this study will provide information which can aid student affairs practitioners who are seeking ways to help their students to make the connection between the co-curricular and curricular leadership experiences.

Research Questions

The present study seeks to determine the relationship between the student leader and the classroom. To examine that relationship, this study was guided by the following set of research questions:

1. Which of their leadership skills do student leaders attribute to specific out-of-class-based leadership development activities provided by the Division of Student Affairs at Virginia Tech?
2. Which of these skills do the selected student leaders report they use in classroom-based learning opportunities?
3. To what extent are the identified leadership skills used to enhance classroom-based learning of the selected student leaders?
4. What differences exist in self-reported frequency of leadership practices after students engage in reflection on previously identified skills?

Significance the Study

There is little evidence of previous scholarly inquiry into whether or not students identified as leaders in co-curricular activities use those leadership skills in classroom settings. This study will provide information about those issues for leaders at Virginia Tech. Since there is some evidence that team and group work enhances the learning

processes in certain classroom settings, information from this study could lead to guidelines for assisting faculty in structuring classroom experiences.

Findings from this study should aid student affairs and faculty in understanding how knowledge is translated from outside of the class to the classroom and the impact it has. This could generate new instructional partnerships between academic and student affairs as well as open up possible avenues of re-conceptualizing the structure of the university. If indeed it can be shown that students use or can be taught to use the knowledge and skills gained in co-curricular experiences to enhance curricular learning, the academy may need to redefine where "learning" takes place on a college campus.

The study presented here may help student affairs professionals and instructional faculty to understand the intense learning that occurs outside the classroom and whether it benefits learning in the classroom. This should pave the way for more research designed to explore the nature of the learning environment in which these students live.

Corporate and higher education employers report seeking college graduates with demonstrated abilities to lead teams in all aspects of business and operations. This study should provide information for academic and student affairs professionals who seek to develop educational models that will attract employers to graduates. This final result is extremely important as the corporate and educational world, into which traditional undergraduates enter, increasingly demands graduates who are skilled at working in cooperative groups.

Definition of Terms

Co-Curricular and Curricular.

Although they have already been in use throughout this first chapter, it would be helpful to define the terms co-curricular and curricular. According to the Merriam-Webster's Collegiate Dictionary (1993), curriculum or curricular refers to "courses offered by an educational institution" (p. 285). This refers to all experience and learning that takes place within the academic course work and related field experience. Conversely, co-curricular means all learning and experience that takes place out of the classroom and beyond the extended academic involvement of the student.

Most research uses the terms in-class or curricular to refer to learning that occurs within a course of study. Likewise, the terms out-of-class or co-curricular are used to refer to experience that happens beyond the prescribed academic course work. As is evident from the term, by using the word curricular to refer to the academic learning experience, one would have to include all experiences whether they took place in the formalized classroom, laboratory, or field setting as part of the curriculum. The term curricular implies that any conversation with an instructor about course work over lunch in a local eatery is part of the classroom experience. It is out-of-class experience that is related to the curriculum. Conversely, if a student wrote a term paper about the effects of systematic reorganization of a student organization for a class, that is a curricular activity that is directly tied to the co-curricular environment and is again related to the curriculum. The researcher specifically chose these terms to frame the experiences of students in a dichotomous way. This framing was designed to aid the students in

identifying what specific experiences they are using to guide their work in either field of experience.

Involvement. Astin (1985) states that "students learn by becoming involved" (p. 133). Astin present five basic points which constitute involvement:

1. investment of psychological and physical energy in "objects" of one sort or another;
2. different students will invest different amounts of energy in different topics;
3. there are qualitative and quantitative elements;
4. the amount of learning is directly proportional to the quality and quantity of involvement; and
5. the educational effectiveness of any policy or practice is related to its capacity induce involvement. (Astin, 1985, p. 135-136)

Leadership. Leadership is perhaps one of the most explored topics in education, business, and politics. For his text on leadership, Rost (1991) reviewed over 400 books, articles and written texts on the subject. Bass (1981, 1990) lists hundreds of resources and texts on leadership. Burns (1978) provides another comprehensive review.

For the purpose of this study, the researcher chose to use the definitions of Rost (1991) and Kouzes and Posner (1995). Rost defines leadership as "an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes" (p. 102). Kouzes and Posner "define leadership as the act of mobilizing others to want to struggle for shared aspirations" (p. 30). In both definitions, leadership is action that involves leaders cooperating with others to achieve common

goals. The student leaders selected for this study must have had some elements of this kind of leadership within their co-curricular life to be considered for the study.

Leadership Skills. Merriam-Webster's Collegiate Dictionary (1993) defines a skill as "the ability to use one's knowledge effectively and readily in execution or performance" (p. 1100). Leadership skills then are abilities, proficiencies, or expertise that leaders possess in order to make the act of leadership occur. Many authors on leadership identify specific skills that are useful or necessary for leadership. Kouzes and Posner (1995) identify five fundamental practices for leadership (p. 8-9). Farren and Kaye, career development specialists and leadership trainers, list five skills necessary for future leaders (1996, p. 179-180). Stephen Covey (1989), not addressing leadership per se, listed seven habits of highly effective, or proficient, people in his work. These habits are similar to many skills noted by leadership authors. Other authors on leadership (Bennis,1989; Depree, 1989; Senge, 1990) identify specific skills or practices of leaders. It was sufficient for this study to use the Kouzes and Posner (1995) list of leadership skills to create a conceptual framework for the skills the students perceived they were learning or developing.

Student Affairs Program. Because this research is focused on a particular set of programs, it is necessary to define those programs carefully. For the purpose of this study, a student affairs program is any activity which is wholly or partially funded or sponsored by the Division of Student Affairs at Virginia Tech and in which students were assigned significant responsibility for the leadership of the program or an area of the program. These programs may include but are not limited to residential life units, student organizations with direct relations to the university governance system, and peer

education groups. Programs in which student are participants but not central to the leadership of the program were not considered in this definition.

Research Design

The present research followed a form of interpretive social science using a qualitative design (Bryman, 1988; Silverman, 1985). The design reflects design characteristics similar to Alvesson (1996), Bryman (1988), and Hammersly (1990). Bryman (1988) presents six criteria for one type of qualitative research. In this case, the research path followed closely these six criteria for qualitative research (p. 61-69). Hammersly's (1990) approach is similar with its emphasis on use of everyday contexts rather than experimental conditions and unstructured data collection (p. 1-2) . An emphasis was placed on the elements of taking the subject's perspective (Bryman, 1988) unstructured research design (Bryman, 1988; Hammersly, 1990) avoiding concepts and theories at an early stage (Bryman, 1988) and the assumption that quantification plays a subordinate role (Hammersly, 1990). Alvesson (1996) discusses the subjective and reflexive nature of qualitative research on leadership. They encourage understanding that the researcher and subjects in such research may influence each other in ways that directly impact the information gathered.

Assumptions

The study was specifically designed to examine a great deal of information about a small population of students. Because of this narrow focus many assumptions were made in the design and conduct of the study. The following assumptions were made in conducting this research.

1. While all students in the study were identified as "student leaders," it was assumed that each student did not necessarily have knowledge of or receive training in all areas of leadership.
2. The training students received through their participation in specified student affairs sponsored programs was assumed to be the most extensive collegiate training they had received outside of the classroom.
3. Student grades may or may not reflect "true" learning in the classroom but they remain the best measure of classroom performance and therefore of academic achievement.
4. The process was reflexive and it was assumed that researcher and participants would mutually influence each other during the course of the study.

Limitations

The following limitations were made in conducting this research:

The population and sample population were limited to undergraduate students at Virginia Tech involved in specified programs sponsored by student affairs practitioners at the time of the research. It was necessary to limit the population because of the methodology. The process of e-journals and group interviews following those interviews required the researcher to have immediate and direct access to a small population of students.

The sample contains bias toward students who are already involved in activities that train them to use skills in all areas of their lives. Because students in Division of Student Affairs programs were assumed to have received at least some training, a bias may exist because these students may already act as leaders. The study does not include

students who might demonstrate leadership in the classroom but are not trained in Division of Student Affairs programs.

Because of the specificity of the sampling, the study may not lend itself to generalizations beyond the Virginia Tech population. Each institution has its own culture. The results of this study may only be found in the culture specific to Virginia Tech. The applicability of this research beyond this narrow population may be difficult. Only if this research were supported by similar research at other institutions could one make general conclusions about student leaders across institutions.

Summary

This study proposes to examine one part of the relationship between learning outside of the classroom and learning inside of the classroom. Evidence of the impact of outside activity is plentiful thanks to many researchers in higher education. What is sought here is evidence of the impact of co-curricular experience on curricular learning.

Making sure that the different experiences students have as president of a club or member of a team can and do apply in the classroom should be a primary goal of student affairs practitioners. Understanding if and how this occurs is the purpose of this study, for if student affairs as a profession can assist in the learning process of students, the call to make academics (actually learning) preeminent on our campuses will have been met.

CHAPTER 2

REVIEW OF RELATED LITERATURE

Leadership on college campuses has been the subject of numerous books, dozens of articles, and countless conference presentations. This chapter presents a review of related literature which provides an underlying framework for understanding leadership, as practiced by students, and for the educational environment in which they work. First, a review of the theoretical constructs surrounding leadership will be presented. This will include a brief history of leadership theory, a review of the definition of leadership used, the concepts of leadership practice, and a review of specific studies on college student leaders.

The next section will present relevant research on involvement theory. Involvement theory is crucial to understanding the relationships between the co-curricular aspects of higher education, where most of the leadership practices are exhibited, and the curricular domain where this study examined the practice of leadership. Following involvement theory will be a review of some aspects of learning theory that are relevant to the development of leadership practices. Finally, the research on environmental context of the classroom will be examined as it relates to the practice of leadership.

Leadership

Historical Perspective

The study and analysis of leadership currently occupies a significant body of literature. While the term leader has been around for much longer (Bass, 1981; Greenwood, 1993; Stogdill, 1973), leadership as a widely accepted social and political force did not really begin to grow until the 20th century. Burns (1978), Rost (1991), and

Komives, Lucas, and McMahon (1998) provide reviews of leadership theory. In his review of over 500 sources, Rost (1991) states he could only find one definition of the term leadership in the 19th century (p. 44). While his review of 221 definitions of leadership may be the most comprehensive to date, Rost (1991) was not satisfied that any of the previous definitions clearly defined leadership for the end of the 20th century. Komives, Lucas, and McMahon's (1998) review of leadership research ends with their description of the "but" phenomenon. They write:

> There are numerous theories on leadership, "but" we still know very little about if and how leaders make a difference and their effectiveness on the organization; leadership has been studied as a scientific discipline for several decades, "but" we still have made little progress; there are numerous research studies on leadership, "but" the results are often inconclusive and ambiguous. (pp. 62-63)

Most important in these reviews is the progression of leadership from a person-centered theory such as the "great man theory," early in the 20th century, to "process" or "relationship" theories involving the influence between leaders and those who follow (Komives et. al.; 1998, Rost, 1991). The post-industrial definitions of leadership focus on the relationship between the leader and the follower, usually in a non-linear manner. Burns (1978) may have been the first to introduce this concept with his "transformational leader" theory. The transformational leader is one who works with, by, and for followers to change the organization in a significant way that they will then accept (Burns, 1978, p. 420-421). Definitions by Gardner (1986), Kanter (1983), and Sergiovanni (1989), claim that leaders persuade followers to act according to the leader's desires. Rost (1991)

asserted that all these models were still relatively based on an industrial paradigm where leaders lead and followers follow. The post-industrial model presented by Rost (1991) posits that leadership is a relationship of persuasion and influence but between leaders and followers (p. 105). This new model extends beyond Burns' transformational leader and Gardner's (1990) revised leadership definition to claim leadership is a relationship that cannot exist without the mutual influences between the leaders and followers. It is each acting on the other that creates leadership. Recent authors of leadership research (Gill, Levine, & Pitt, 1998; Komives, et al., Lucas, & McMahon, 1998; Parry, 1998; Zullo, 1997) cite the new relationship or post-industrial theory as central to their work. The post-industrial, relationship theory of leadership has become the most widely accepted and is used in the design of this study. For the purposes of the study, the researcher chose Rost's version because of its application both to the classroom setting and to practice theories presented by other researchers.

A Post-Industrial Definition of Leadership

Rost (1991) states that none of the previous attempts to define leadership "integrates our understanding of leadership into a holistic framework" (p. 9). Rost may over-emphasize the point, but the search for holistic concepts is central to this study from both the leadership and learning perspectives. His theory claims that leadership must be viewed as a relationship between those who are empowered to lead and those who work with the leader. Rost defines leadership as "an influence relationship between leaders and collaborators who intend real change that reflects their mutual purposes" (p. 102). Rost's original definition used the term "followers" instead of "collaborators" (Rost, 1991). In his updated version (1993), Rost explains that in the true leadership process,

the persons working with the leader are actually collaborating with the leader, not truly following (p. 102). The critical point here is that leadership and leader are not synonymous. Traits and practices are characteristics of leaders and collaborators but leadership is the process which includes both (Rost, 1993, p. 104). The actions of people toward certain goals, values, and aspirations must be mutual. One person can not do leadership. It requires the mutual work of those who are leading and those who are collaborating with the leader.

This study is about the individuals given the title "student leader" by the university culture and therefore requires some method to define the actions or behaviors of those leaders as they interact either in the classroom or in the co-curricular world. Kouzes and Posner (1987, 1995) define behaviors and actions that can be attributed to leaders. Although Rost (1991) criticizes Kouzes and Posner as focusing on the practices of leaders and ignoring the process of leadership, their work encompasses the theoretical constructs of Rost. Kouzes and Posner (1995) state that "leadership is a reciprocal process between those who choose to lead and those who choose to follow" (p.19), which supports Rost's contention that leadership is "mutual." Many of the components of the Kouzes and Posner model align with Rost. The concepts of collaboration and mutuality are found in the terms "common vision," "foster collaboration," and "build commitment" (Kouzes & Posner, p. 18). It is apparent then that Kouzes and Posner's detailed practices support Rost's general theory of leadership and may be used to identify characteristics that leaders and collaborators need in order to develop leadership.

Practices of Leaders

Kouzes and Posner (1987) first proposed a set of 5 practices and 10 commitments which they found present in numbers of professionals, educators, and practitioners who were perceived to be leaders (p. 8). In the second edition of their text (Kouzes & Posner, 1995), they further defined their concepts. The 5 practices are each comprised of 2 commitments (see Table 1). The authors have tested their assumptions using the development and continued analysis of leaders through the Leadership Practices Inventory (Kouzes & Posner, 1987, 1995). Research has shown that the instrument used to test their concepts have both validity and reliability (Kouzes & Posner, 1995). Although this instrument is not used in this study, the research shows the strength of constructs being used to identify the practices of the leaders in this study.

Challenging the process. The first practice in the Kouzes and Posner model is Challenging the Process. Leaders engage in the process of leadership with others to generate change (Kouzes & Posner, 1995, p. 37). The connection of the Rost (1991) definition of leadership is obvious. To accomplish this change, Kouzes and Posner found that leaders "search for opportunities" and "experiment and take risks." Commitment 1, "search for opportunities," encompasses such actions as challenging the status quo; searching for problems; new ideas or new products; learning, personal and professional growth; and a general excitement about the work in which the leader in engaged (Kouzes & Posner, 1987). Leaders also take risks, experiment, make mistakes, and learn from those mistakes. This combination of searching and risk-taking emphasizes the leader's role as one who pushes those involved in the leadership relationship beyond the current

Table 1

Ten Commitments of Leadership Adapted from The Leadership Challenge (Kouzes & Posner, 1995)

Practice	Commitments	Critical Actions *
Challenging the Process "challenging"	1. *"Searching"* -- Search out opportunities to change, grow, innovate, improve	• conducts frequent and extensive research • questions status quo • looks for problems to solve • seek ideas from others • learns new skills
	2. *"Experimenting"* -- Experiment, take risks and learn from mistakes	• test assumptions and beliefs • foster experimentation/honor risk takers • prevents negativity and firehosing • encourages possibility thinking • models risk taking by allowing others opportunity for choice
Inspiring a Shared Vision "inspiring"	3. *"Envisioning"* -- Envision a positive future	• understands the history of the organization • determines what is wanted/needed • acts on intuition • tests assumptions • looks to the future
	4. *"Enlisting"* -- Enlist other in that common vision	• identifies the constituencies • finds common ground • develops interpersonal competence • speaks positively and from the heart
Enabling Other to Act "enabling"	5. *"Fostering"* -- Foster collaboration through cooperation and trust	• uses inclusive language and actions • maintains high level of interaction • forms planning and problem solving partnerships • audits and adjusts team collaboration
	6. *"Strengthening"* -- Strengthen others by delegating authority and assigning tasks	• enlarge people's sphere of influence • delegate relevant assigns/eliminate non relevant ones • provide training for increased competency • maintains strategic relationships • focuses on others achievements
Modeling the Way "modeling"	7. *"Exampling"* -- Set the example through consistent values/behavior	• know ones true self • develop personal leadership philosophy • make actions congruent with values • understand the others' roles
	8. *"Small wins"* -- Achieve Small Wins	• make plans and create models • take them personally • create smaller doable tasks • ask for volunteers
Encouraging the Heart "encouraging"	9. *"Recognizing"* – Recognize individual contributions to success	• give creative rewards and recognition • recognize others publicly • design participative reward system • set high standards of performance and reward when met
	10. *"Celebrating"* -- Celebrate team accomplishments	• schedule celebrations with all other planning • links group celebrations with achievement • support spontaneous celebrations • have fun - enjoy the job or change

existence. By challenging the process, leaders take the risks necessary to change the status quo but also accept the "inevitable disappointments [of mistakes and failure] as learning opportunities" (Kouzes & Posner, 1995, p. 318).

Inspiring a shared vision. Leaders "passionately believe they can make a difference" (Kouzes & Posner, 1995, p. 318). According to Kouzes and Posner, leaders dream of the future and find others to help them get there. The commitments in this practice are to "envision the future" and "enlist others in the common vision." The abilities to imagine an ideal, act on intuition, test assumptions, and determine goals are all part of envisioning a future (Kouzes & Posner, 1995, p.120). Other authors on leadership such as Bennis (1989) and Kanter (1983) also have cited the visionary nature of leaders. Enlisting others requires the leader to know the followers and find the common ground between leaders and followers. By stressing the commonality between the visions of the leader and the needs, desires, and visions of the followers, Kouzes and Posner assert that leader practices must reflect mutuality, thus tying their practices to Rost's concept of leadership.

Enabling others to act. The third practice of leaders is "enabling others to act." In this practice, the leader must commit to building collaborative teams and building support for those teams (Kouzes & Posner, 1995, p. 318). In this commitment, leaders use inclusive language in communication, use collective processes for planning and problem solving, and focus on the positive contributions of members (pp. 151-179).

Leaders must also share power. Rost (1991) states that "followers do leadership" (p. 112). For followers to be part of the leadership process, leaders must provide them with the necessary information, skills, responsibilities, and authority to work toward the

intended changes. Kouzes and Posner make it clear that the commitment of strengthening others involves all these concepts. Leaders give power away in order to develop followers (pp. 200-203).

Model the way. The leader has long been recognized as a role model. Covey (1996) states that the leaders are men and women of integrity who integrate themselves with principles. Kouzes and Posner (1995) claim in their fourth practice that leaders "set the example by behaving in ways that are consistent with shared values" (p. 241). Leaders must themselves know their organizations, know why they are doing what they are doing and, most importantly, make their actions mirror these beliefs (pp. 232-239). Rost supports the concept of integrity in this leadership relationship.

> Leadership does not require that individuals sacrifice some of their integrity to be in the relationship . . . . The very essence of multi-directional influence and mutuality requires that individual autonomy, value and integrity be maintained. The ethics of the leadership process requires that leaders and followers use influence in their interactions to achieve this mutuality. All other behaviors are unethical in a leadership process. (p. 161)

Leaders, and for Rost collaborators as well, serve as role models. Beyond being a role model, leaders are successful in keeping followers engaged in the process. Kouzes and Posner (1995) claim that leaders should achieve small wins by making plans, creating models, and finding ways to build commitment to the mutual vision (pp. 259-266). Leaders must provide followers with the ability to be victorious throughout the process of reaching for the intended changes. "We need those victories," the authors claim.

"Without them, the quest for the summit -- for peak performance in ourselves and our organizations - can seem dauntingly difficult" (p. 258). By illuminating the ever-present successes, leaders help keep followers focused on the vision.

Encouraging the heart. The last of five practices identified by Kouzes and Posner (1987) reveals the importance of both personal and collective recognition of those involved in the leadership process. According to Kouzes and Posner (1995), leaders expect superior performance and commitment from followers and recognize superior performance in many ways (pp. 273-275). They assert that "the creative use of rewards is another defining characteristic of leaders" (p. 278). Leaders are not dependent on formal reward systems but use praise, special assignments, and personal notes to recognize accomplishment. Equally important is the use of intrinsic rewards (p. 279). By delegating tasks which are important and valued by the follower, the leader recognizes the abilities and value of the follower (p. 279). Helping others improve themselves builds confidence in the follower which in and of itself is positive recognition (p. 284).

Leaders are also celebratory. The last of the Kouzes and Posner (1995) commitments is to "celebrate accomplishments" (pp. 306-311). Leaders, they argue, should be champions of collective and significant celebrations by those involved in the leadership process. From special annual programs to recognize achievement, retirement, or new team members, to spontaneous celebrations like birthdays, ends of projects, or goals reached, celebrations should involve the followers and leader, highlight the values of the group and be fun (pp. 306-331).

Leadership and Leaders

The definition of leadership used in this study contains the terms leader and follower. While Kouzes and Posner used five practices and ten commitments to define behaviors that are attributed to leaders, followers must be included for the relationship to work. Most of the behaviors in the Kouzes and Posner model assume the leader acting toward the followers. For the relationship to work as Rost claims, the leaders spend some time following their constituents. When the positional leader takes on the role of follower, the constituents take on the role of leader. In that sense, the practices and commitments can be attributed to both leaders and followers at either end of a continuum in the relationship. It is necessary to see that while leaders must model the way, for example, the followers must value the model and in turn accept it. Kouzes and Posner (1995) support this general concept.

> Without constituents to enlist, a prospective leader is all alone, taking no one anywhere. Without leaders, constituents have no energizer to ignite their passions, no exemplar to follow, no compass by which to be guided. Essential to the definition of leadership is an understand of this relationship. (p. 30)

Kouzes and Posner use the issue of trust to demonstrate the mutuality concept. In this way, leaders and followers are both acting and being acted upon, as Rost's definition of the leadership process requires.

> [Leaders] must demonstrate their trust in others before asking trust from others (emphasis theirs). Leaders go first, as the word implies . . . . That can be risky. But by demonstrating willing ness to take such risks, leaders

> encourage others to reciprocate. Once the leader takes the risk of being open, others are more likely to take a similar risk. (Kouzes & Posner, 1995, p. 167)

Student Leadership

The mission statement of Virginia Tech, as cited in the Undergraduate Course Catalog and Academic Policies (White, 1995), claims that "we will serve all humankind by providing a foundation of knowledge, expertise, and leadership to improve the quality of life" (p. 7). Virginia Tech, like many universities around the country, has made leadership development central to its mission. Roberts (1997) and Clark (1985) found leadership in a multitude of university mission statements. Schwartz, Axtman, and Freeman (1998) reported that nearly 800 colleges and universities promoted some form of leadership program. Despite this number, Zimmerman-Oster and Burkhardt (1999) report that "few studies have rigorously documented the student, institutional, and community outcomes of these programs" (p. 51). Binard and Brungardt (1997) state that "while scholarly work in leadership and organizational theory is plentiful, there is surprisingly scarce literature on what educational methods and approaches appear to be the most effective in developing leadership capabilities" (p. 129). Conger (1992), Price (1993), Hashem (1997), and Rossing (1998) assert that leadership can be taught and learned. The studies have shown that students engaged in leadership training and development programs on college campuses demonstrate leadership and civic skills (Badura, Millard, Peluso, & Ortman, 2000; Binard & Brungardt, 1997; Zimmerman-Oster & Burkhardt, 1999). These results, however important, do not lessen the fact that it

is difficult to determine exactly what constitutes a leadership development program for students in higher education.

For more than 20 years, educators have been proposing various models, criteria, or standards for leadership education (Bensimon & Neumann, 1993; Chambers, 1992; Clark, 1985; Klenke, 1993; Roberts, 1981; Roberts & Ullom, 1989; Rost & Barker, 2000). These standards vary and reveal as much about the perspectives of the authors as they do about leadership theory and practice. The Council for the Advancement for Standards in Higher Education (CAS) finally approved standards for leadership programs (Miller, 1997). While these standards are helpful, Zimmerman-Oster and Burkhardt (1999), criticize them for being heavy on administration and light on theory. The framework for comprehensive leadership development programs exists (Roberts, 1997), but there is little evidence that implementation and evaluation of programs are linked through this framework (Zimmerman-Oster & Burkhardt, 1999, p. 59).

Studies of student leaders and gender reveal that leadership programs may exhibit a bias which disenfranchises women, persons of color, and those from lower socioeconmic classes (Amey & Tombley, 1992; Bensimon & Neuman, 1993; Howard, 1978; Leonard & Sigal, 1989). Two recent studies on student leadership and gender confirm the concepts of Gilligan (1977), Belenky, Clinchy, Goldberger, & Tarule, (1986), and Baxter-Magolda (1992) that women student leaders develop leadership in different ways than men. Romano (1996) found that women student leaders learned from experience rather than instruction and that women tended to be non-hierarchical, interactive, and collaborative (p. 679). Kezar and Moriarty (2000) found that women developed their leadership self-perceptions through non-positional leadership

experiences. While these studies support the concept that women learn leadership differently than men, a study by Payne, Fuqua, and Canagemi (1997), shows that women leaders develop similar skills and practices to men when trained in similar programs. They suggest that "men and women do not differ in leadership style when they have been trained, but differ along stereotypical lines when untrained" (p. 58). It is interesting to note that the variety of leadership programs and the entrenchment of traditional roles and positions may result in a lack of coordinated training which may lead to significant differences in how both women and men students develop leadership skills.

Involvement Theory

Students were involved in activities outside of the regular curriculum before the beginning of the American collegiate system. Rudolph (1962) and Horowitz (1987) found that students in even the earliest American colleges found ways to expand their tightly controlled collegiate education by creating and joining literary societies, drinking clubs, and sports teams. Since that time, involvement in the extra-curriculum has been an integral part of the collegiate experience for most students.

Studies over the last three decades have shown that activity outside of the classroom is critical to the learning, development, and success of the student in the collegiate environment (Astin, 1977, 1985, 1993; Pascarella & Terenzini, 1991). Astin (1996) writes that "hundreds of studies of college undergraduates (Pascarella & Terenzini, 1991) have shown that the greater the student's degree of involvement, the greater the learning and personal development" (p. 124). The concept of involvement encompasses many parts of the student existence on a college campus. Astin formulated

these experiential concepts into what is the core of involvement theory. Astin's Involvement Theory (1985) holds the following:

1. investment of psychological and physical energy in "objects" of one sort or another;
2. different students will invest different amounts of energy in different topics;
3. there are qualitative and quantitative elements;
4. the amount of learning is directly proportional to the quality and quantity of involvement; and
5. the educational effectiveness of any policy or practice is related to its capacity to induce involvement. (Astin, 1985, p.135-136)

Certain measures of peer involvement used by Astin are particularly relevant to the study at hand. Involvement outside of the classroom or the traditional academic setting has a significant impact on students. Astin (1993) found involvement to be at least partially correlated with overall academic success (p. 229) and improvement or success in many other areas. Astin's studies measured the frequency with which students "worked on group projects for a class" and "tutored another student" (p. 74). Astin also measured the frequency of peer interaction by examining the how often students "worked on groups projects for a class, tutored another student, discussed course content with students outside of class" (p. 74). In these areas, students who scored higher in overall academic success had more positive interactions in both frequency of peer interaction and group work (p. 74). Astin (1996) states that "the three most potent forms of involvement turn out to be academic involvement, involvement with faculty and involvement with

peers" (p.126). He concludes that "perhaps the most important generalization to be derived from [these studies] is that the strongest single source of influence on cognitive and affective development is the student's peer group" (p. 126)

Astin is referring to the work of Pascarella and Terenzini (1991) who examined research over a 20-year period to determine what impact college has on students. The authors found evidence that involvement in activities in and out of the classroom both had a positive correlation on cognitive growth, educational attainment, and career choice. In the area of educational attainment, they claim that "the weight of evidence is quite clear that both the frequency and quality of students' interactions with peers and the participation in extra-curricular activities are positively associated with persistence" (p. 391). This would seem to agree with the research on cooperative learning presented in the next section. The more students work together, in or out of the classroom, the more likely they are to complete their academic work. Pascarella and Terenzini admit that the impact of the social involvement and extra curricular activity on educational attainment depend on the nature of the students and the interactions (p. 392). Positive social activities with peers and faculty are more likely to aid students' progress than negative social interactions. Interactions with faculty, especially when they extend beyond the classroom, enhance the student experience. The authors claim that "this is consistent with the notion that effective social learning of normative values and attitudes occurs in informal as well as formal settings" (p. 394).

It is important to note that Pascarella and Terenzini are describing years of research which concludes that students learn outside of the classroom many of the skills they will need to succeed in the classroom as well as the job market. The Astin studies

and the Pascarella and Terenzini synthesis of multiple studies show that students who are activity engaged in the collegiate environment – and especially those who are engaged in positive learning environments which help them make sense out of the experience – have a better chance of succeeding academically. Astin (1996) claims that " the results [of studies conducted by the Higher Education Research Institute for the past twenty years] strongly support the importance of involvement as a powerful means of enhancing almost all aspects of the undergraduates student's cognitive and affective development. The three most potent forms of involvement turn out to be academic involvement, involvement with faculty and involvement with student peers groups" (p. 126).

Kuh, Schuh, Whitt, and Associates (1991) studied select institutions to determine what impact the "culture" of the institution had on the student. In the opening to their text, they review research and perspectives on the importance of out-of-class experiences. They provide additional support for the positive impact that involvement in out-of class activities and experiences has on the student. They point out that there seems to have been little discussion of the importance of the impact out-of-class experiences have (p.8). In their conclusions, the authors make the case that institutions that actively seek the involvement of students in learning and campus life will create a culture in which students remain involved. They suggest that this involvement is a key to a successful learning environment for students (pp. 347-49). The authors also make the claim that learning is enhanced when members of the college community are involved with each other on all levels (p. 351). Finally, they call for additional research into ways in which colleges and universities may promote student learning through connections to the classroom and cooperative education opportunities (p. 366).

Astin (1993) revised his earlier work (1977) on the impact college has on students. Involvement was a critical element in his studies. In the latter study, he used five measures of peer involvement which are particularly relevant to the present study. Astin measured the frequency with which students: "worked on group projects for a class; tutored another student; participated in intramural sports; discussed racial or ethnic issues; socialized with someone of another racial or ethnic group" (Astin, 1993, p. 74). Astin also measured the frequency of peer interaction by examining the how often students "worked on groups projects for a class, tutored another student, discussed course content with students outside of class" (p. 74).

Astin found that involvement outside of the classroom or the traditional academic setting had a significant impact on students. It is clear that Astin found involvement to be at least partially correlated with overall academic success (p. 229) and improvement or success in many other areas.

Based on the works of scholars already mentioned, The Student Learning Imperative (SLI) was drafted to provide a single, synthesized document that expressed the desire of student affairs professionals to make learning the central focus of student affairs on college campuses. An entire issue of the Journal of College Student Development was devoted to the SLI. In this volume, Terenzini, Pascarella, and Blimling (1996) provide a comprehensive literature review of the research conducted on out-of-class learning. This review touches on the works of all the authors mentioned heretofore. The authors conclude that out-of-class experiences are critical to the learning environment of a college or university. They present six conclusions reached through their review. The first and third conclusions have the most relevance here.

Their first conclusion is that the out-of-class experience has more impact than seems generally acknowledged in the academy. Learning, as they found, is affected by a "wide variety of out-of-class experiences" (p. 157). Their third conclusion is that "student affairs programs may not be capitalizing on the potential of students' out-of-class experiences to enhance student learning" (p. 158). They claim that many student affairs programs, such as living-learning residence halls, do provide a programmatic support to the concept of holistic learning. However, it is clear that they believe that far more work should be done in this area. The review and conclusion of Terenzini et al. clearly reveal that involvement in out-of-class experiences is a central part of the learning environment on the college campus. Learning is not relegated to the classroom.

Although students have been involved in the extra-curriculum since the beginning of American education, it is now clear that positively directed involvement of students in all aspects of the collegiate experience benefits students. More importantly, by linking the involvement outside the classroom to involvement inside the classroom, universities can provide a powerful academic experience.

Experiential, Cooperative, and Collaborative Models of Learning

The general premise of this study is to discover what skills student leaders develop outside of the classroom and to determine how those skills are used in the classroom. That premise presumes that students learn outside of the classroom. Accepting the SLI concept that learning and development are interchangeable, experiential and cooperative learning theories become underlying theories for this study.

Experiential Learning

According to Cantor (1995) and Clements (1995) experiential learning refers to any learning environment in which instructors immerse students in developmental activity closely related to the core subject of the course. Experiential learning occurs in many different forms, from cooperative learning programs with businesses, to student run media, to historical role playing in class (Cantor, 1995).

According to Cantor (1995), "the genesis of experiential education as an educational process is often credited to John Dewey" (p. 6). Dewey (1938) wrote that in education there is an "organic connection between education and personal experience" (p. 11). He further stated that while genuine education comes from experience, experience might not lead to genuine education. Dewey believed that experiential learning environments had to be developed carefully and nurtured to produce the intended growth and development in the pupil. Dewey saw the classroom as a social process in which teachers were leaders and students are engaged in a leadership process to learn.

> The principle that development of experience comes through interaction means education is essentially a social process. This quality is realized to the degree in which individuals form a community group. It is absurd to exclude the teacher from membership in the group. [He/She] has a peculiar responsibility for the conduct of the interactions in and intercommunications which are the very life of the group as a community. . . . When education is based upon experience and educative experience is seen to be a social process . . . the teacher loses the position of external boss or dictator but takes on that of leader of group activities. (pp. 36-37)

Cooperative Learning

Cooperative learning was originally designed as a prescribed program with a single structural focus (Johnson & Johnson, 1987). Slavin (1983) defined cooperative learning as the use of cooperative tasks and incentive structures in programmed educational environment (p. 3).

The outcomes of cooperative learning designs support involvement theorists' claims that working with peers may enhance learning (Adams & Hamm, 1996; Johnson & Johnson, 1987; Johnson, Johnson, & Smith, 1991; Slavin, 1991, 1995a, 1995b). Cooperative learning theory asserts that learning best takes place in context with other individuals and in an interactive environment (Bruffee, 1993). "Cooperative learning began with the observation that competition among students sometimes impedes learning. . . . Cooperative learning makes sure in several ways that students do work associatively, that they learn a variety of social skills, that their work in groups stays on track and that every student contributes equitably to that work" (Bruffee, 1993). Cooperative learning theory asserts that the classroom environment needs to be structured to allow for a maximum level of interaction between students (Johnson, 1991). In this case, cooperative learning classrooms are highly structured environments in which students work closely together toward specified outcomes. Slavin (1995a) writes, "There is a strong theoretical basis for predicting that cooperative learning methods that use group goals and individual accountability will increase student achievement" (p. 19). Research appears to support the concept that cooperative methods are better at facilitating learning and cognition (Adams & Hamm, 1996; Anaya, 1990; Johnson & Johnson, 1987; Slavin, 1995). Cooperative learning also promotes the importance of the social context of

learning. Adams and Hamm (1996) found that "cooperative learning places the emphasis on social solidarity and joint responsibility for reaching group goals" (p. 11).

Collaborative Learning

Another experiential learning process is collaborative learning (Brufee, 1993). Although cooperative and collaborative learning concepts may seem interchangeable, researchers draw sharp distinctions as well as blur the lines (Bruffee, 1993; Slavin et. al., 1985) so that they must be viewed as different but closely linked. Collaborative learning is less structured and more student controlled than true cooperative learning classrooms. In his comparison of cooperative and collaborative classrooms, Bruffee (1993) identifies a number of areas in which collaborative and cooperative classrooms are different (p. 17), essentially arguing that collaborative classroom settings allow the students more control over content, correctness of answers, and quality of group experience. Conversely, cooperative classrooms still leave teachers as the central authority, with process and outcomes chiefly controlled by them (pp. 17-18). Bruffee (1984) argues that the challenge and negotiation required in collaborative learning is essential to the facilitation of student learning. While some interpret collaborative process to be too student centered, "Bruffee emphasizes that collaborative learning is more that just putting peers together without guidance from a teacher" (Baxter Magolda, 1992). Collaborative processes are central to the concept of students constructing knowledge (or learning) in the university setting (Baxter Magolda, 1992).

While cooperative and collaborative learning theorists may differentiate the program and process of the two models, Herrmann (as cited in Cantor, 1995) states that "college educators should guard against the notion that cooperative education is a single, non-

differentiated program within the central mission. . . . Cooperative education can be shaped and structured to fit particular missions" (pp. 72-73). Cantor (1995) quotes Herrmann to support the concept that cooperative and collaborative learning are generally experiential models which, when used in carefully developed curricula, enhance the learning experience of students. Cantor (1995) argues that a wide variety of experiences including internships, service learning, cooperative education, clinicals, externships, and practicums should be developmentally structured for the maximum experiential value for each student.

One key element to cooperative or collaborative learning is reflection (Johnson, 1991; Slavin, 1995). All models of cooperative or collaborative learning require a reflection component in order to allow the student participants a way to make sense of the learning experience.

Environment

The environment in which the students are placed is a critical element in the overall ability of the student to learn. In their study on the college classroom environment, Winston et al. (1994) reported that "considerable work has been done developing techniques for assessing classroom environments in primary and secondary schools; very little, however, has been done in higher education" (p. 11). Winston et. al provide a review of the various works related to the measurement of the college classroom environment.

Moos (1979) presented methods and models for evaluating college environments. Moos's dimension theory contains three domains, each with a set of dimensions related to educational settings. These domains (relationships, personal growth, and system

maintenance and change) occur in all social environments (pp. 13-21). The relationship domain "assesses the extent to which people are involved in the setting, the extent to which they help one another, and the extent to which they express themselves freely and openly" (p. 14). The personal growth domain is related to goal orientation and assesses the areas of "personal development and self-enhancement" (p. 16). Finally, the system maintenance and change domain measures the extent to which the environment is "orderly and clear in its expectations, maintains control, and responds to change" (p. 16).

More central to the understanding of the classroom is the "Model of the Determinants of Classroom Climate" (Moos, 1979, p. 161) because it serves as a baseline from which to understand the nature of the classrooms as experienced by students. The model contains five components which serve to influence the classroom climate. Moos makes it clear the relationship of these sets of characteristics is not linear but that they are interrelated across the classroom (p. 161). One limitation on this model is that it was developed using K-12 educational settings. Later researchers have shown the value of Moos' work in the collegiate setting. Fraser, Treagust, and Dennis (1986) developed the College and University Environment Inventory based on Moos' dimension theory. Others such as Winston et. al (1994), Hadley and Graham (1987), Fraser and Treagust (1987), and Fraser and Fisher (1982) have reported on various aspects of the classroom environment related to dimensions or scales established by Moos. Research in this area has shown that the psychosocial and physical environment of the university setting has a great impact on how the learning process occurs.

An interesting addition to the various models of classroom climate was proposed by Blocher (1978). This seven dimension model for assessing classroom climate has a

striking similarity to elements in the Kouzes and Posner (1995) leadership model (see Table 2). One could argue that Kouzes and Posner use their theory to establish a set of dimensions for creating an intentional environment where leadership can thrive. In their synthesis of Blocher, Schoeder and Hurst (1996) claim that "learning environments characterized by these seven conditions will be a leadership environment. Much of that environment requires those involvement in more effective in eliciting ever-higher levels of functioning in learners" (p.175). Because learning takes place within the context of environmental factors, the Blocher (1978) conditions must be understood as part of a larger set of theories on the learning environment.

Summary

The research cited in this review was chosen for its relevance to the subjects of leadership, learning, and the classroom environment. The leadership theory and definition presented revealed that leadership is a complex process that requires mutuality of purpose among leaders and followers with the leadership environment. The Kouzes and Posner model of leadership practices was presented as a schema for viewing the actions of the individuals involved in this study. The five practices and ten commitments provide behavioral benchmarks to which the participants in the study can be measured.

The research on student leadership revealed that while there has not been systematic research on the effectiveness of leadership programs, there is strong evidence that leadership is (a) evident on college campuses, (b) affects a variety of developmental factors, and (c) has not been directly connected to the classroom by research in any significant way.

Table 2

A Comparison of the Blocher Seven Conditions and Kouzes & Posner Leadership Practices

Seven Conditions Blocher (1978)	Leadership Practices Kouzes and Posner (1995)
Involvement Learning is active and must involve interaction of students. Student actively participates, takes risks, opens self to new experiences, and perceptions.	Practice 1 Practice 2 -- Leaders take risks and challenge themselves and the process. Accept failures and must be open to learn from mistakes
Challenge Intentional, moderate degree of discrepancy, intentionally stressful, progressively more difficult	Practice 1 -- Leaders search out challenges, innovate and expand ideals and actions, test limits
Support Environment must provide an appropriate balance of support, foster with empathy, caring and honesty	Practice 5 -- Leaders foster collaboration, build trust, actively seek out others to listen and understand Practice 9 – Leaders reward and care about others
Structure Presence of role models functioning in a specified area at a level more advanced than the novice learner	Practice 7 – Leaders set an example, create standard practices for measurement which aid with production and task learning
Feedback Information about performance must be prompt, concrete, detailed, and focused on modifiable behavior	Commitments 3 & 4 – All the practices in these two commitments focus on feedback, both personal and group, building trust, measuring actions and behavior for the purpose of improving the organization.
Application Use of living/learning environments to allow for the application of knowledge	Practice 6 – Leaders strengthen people by assigning tasks for best application, developing competence, giving choice and giving away power.
Integration Assimilating and reconciling past learning and experience	Practice 6 and 8 – Assigning of critical tasks

The research on learning theory revealed the nature of learning experienced by the student leaders participating in this study. The concepts of involvement theory and experiential education were presented as a means to show that learning takes place in many ways other than the traditional textbook-lecture classroom. Involvement theory provides the foundation for understanding that active participation in a variety of developmentally related activities enhances student learning. It was also shown that peer interactions are important in this learning pattern. That connection linked involvement theory closely to experiential learning theory. Experiential learning was presented as an essential element closely linked to involvement theory. The structured practices of cooperative and collaborative learning were discussed as specialized concepts that have relevance to the nature of the classrooms in which the participants in the study worked. While cooperative and collaborative learning theorists emphasize that these terms refer to specific programs or curriculum, it was shown that a broader interpretation of cooperative and collaborative learning is preferred to allow for maximum benefit to the student experience.

Finally, environmental theory was discussed to provide a context for social and physical environment in which the interactions of the student leaders take place. Because this study seeks to ascertain the connections between out-of-class leadership learning and in class leadership practice, understanding how the environment of the classroom can impact student behavior is critical to the study. Finally, it was shown that at least one environmental theory is closely aligned with leadership theory. This suggests a direct connection between the practices of leadership and the environmental context in which learning happens.

CHAPTER 3

RESEARCH PROCEDURES AND METHODOLOGY

The purpose of this study is to identify the leadership skills students believe they learned in co-curricular activities; to determine how those skills are used in the classroom; and to discover whether those skills enhance the academic experience for students. This chapter describes the study design, location, population, procedures for gathering data, and analysis method.

To examine the depth of the experiences of the students involved in this study, the researcher chose a qualitative design which employed both document analysis and group interviews. In recent years, the importance and value of qualitative research has been emphasized by social scientists and educators as a tool which allows researchers to explore questions of significance (Bannister, 1994; Best & Kahn, 1989; Brannen, 1982; Bryman, 1988; Patton, 1980). The qualitative nature of this study was guided by the need to allow the subjects explore their own perceptions, beliefs, observations, and understanding about their behavior and learning. Understanding forms the core purpose of a qualitative study (Denzim & Lincoln, 1996; Lincoln & Guba; 1985). The meaning of the experiences as well as the nature of the context in which those experiences occur was fundamental to this study. Therefore, a multi-layered qualitative approach was the most appropriate for this study. The sequential steps of the study are presented in Appendix A.

Population and Participant Selection

Location

This study was conducted at Virginia Polytechnic Institute and State University (Virginia Tech), a land grant, comprehensive university located in southwestern Virginia.

At the time of this study, the undergraduate population was approximately 24,000 students enrolled in eight academic colleges. The student body hails mainly from Virginia and surrounding states (Virginia Tech, 1997).

Organizational Criteria

Because the study sought to determine if skills ascribed to co-curricular experiences were used in the classroom, the general population from which the participant sample was chosen were students in leadership positions in programs directly sponsored and supported by the Division of Student Affairs (DSA) at Virginia Tech. Kruger (1994), Miles and Huberman (1994), and Morse (1989) support the method of selective or purposive sampling. The student leaders received training and advising through a variety of programs supported by the DSA. Students in these leadership opportunities received varying amounts of training and experiential advising dependent on many factors. The researcher used the Catalog of Leadership Opportunities (1996) as the primary resource for Division of Student Affairs student leadership programs.

The Catalog contained descriptions of many programs and organizations. Because the researcher was seeking students who had participated in programs that had direct oversight by staff in the DSA, only programs which had the components of "Leadership Development" and "Leadership in Action" were chosen. "Leadership Development includes courses, seminars, workshops, retreats, and recognition programs that allow students to learn leadership in interactive and instructional settings. Leadership in Action includes program and service areas where students can participate in practical leadership" (LSOP, 1996, p. 1).

The division programs selected for inclusion in this study must have both "Leadership Development" and "Leadership in Action" components. Five of the categories established by the Catalog had a number of programs which met both criteria: Advisory Groups, Peer Education Programs, Governance Organizations, Program Planning, and Seminars and Workshops. Each had at least three programs in which members ideally would receive both leadership development and leadership in action opportunities directed by DSA staff. The researcher established this list of programs to receive a more detailed review about the level of development and action in each. The students in these programs would be the population from which the sample would be drawn. Three levels of training were evident from the review of these programs.

Program Levels

Level 1. Level 1 programs provided extensive training which usually involved a one semester classroom course for which the student received academic credit. Student orientation leaders, head resident advisors, resident advisors, and Greek peer educators were the four groups that received the classroom experience prior to their assumption of leadership duties. Added to this category was a group of student leaders who participated in a 10 week non-credit, summer leadership course. The structure and syllabus for this seminar was similar to the other groups and was considered to be extensive leadership training.

Level 2. Level 2 groups were those that received weekend or extended leadership and personal training. These groups typically participated in a highly interactive weekend retreat prior to assuming duties and also participated in ongoing training

opportunities offered by the DSA. Groups in this level included most of the governance organizations, judicial officers, and various peer education groups.

Level 3. Level 3 included groups which received only general training during extended meetings and occasional additional training programs offered by the group's advisor or officers. These groups included the remainder of the governance organizations and some peer education groups.

The researcher identified 27 programs which met the stated criteria in the five categories of the Catalog: Advisory Groups, Peer Education Programs, Governance Organizations, Program Planning, and Seminars and Workshops. The researcher then audited the programs to determine if each actually provided the leadership training implied in the Catalog. After interviews with staff, advisers, and students involved in various programs, it was determined that nine of the programs did not provide sufficient leadership training or organizational cohesion to allow for appropriate inclusion in the study.

The category of Advisory Groups was completely eliminated, removing four programs because, while the program materials stated that students would receive leadership training, further investigation revealed that these students received no training, were not required to participate, and rarely participated for more than one academic year. Two of the Governance Organizations were removed from consideration because they were not advised directly by the DSA. Three of the Peer Education Programs were not fully operational at the time of the study and therefore did not provide either training or supervision to their members.

One additional program which was purposefully excluded from the study was the Virginia Tech Corps of Cadets. The Corps of Cadets is a military leadership lifestyle program offered by the Division of Student Affairs. A vast majority of the members of the Corps are enrolled in the leadership minor offered to Corps members. Because the focus of this study was to determine if and how students use leadership experiences in class, including the Corps would create a problem for the analysis of data. Since the Corps members are directly involved in leadership classes and those classes require the use of skills learned in military, non-class training, those students would already recognize the skills and use them in the classroom. This researcher chose not to include that anomalous population in this study. There were, however, some student leaders who held positions in one of the other leadership opportunities who had also served in the Corps at some point. These students were allowed to participate but placed in a special group of Corps-experienced members to allow for the possibility of separate consideration of their responses. The groups remaining included the 10 Governance Organizations, 2 Program Planning groups, 5 Peer Education Programs, and 1 Seminar program.

Individual Criteria

Students selected for final inclusion in the study were members of one of these programs for at least one full calendar year. This criterion was established to assure that students had received the full range of formal training and experiential interaction available in that group. The researcher made one exception for student orientation leaders. For this group only, any student who had completed the training sequence and served as a summer leader was allowed to participate. While having served for less than

a full year, those students had essentially had the full experience of serving as an orientation leader.

Population and Sample Master Lists

The researcher contacted the 18 remaining groups of interest and requested a list of members who would qualify for the study. Fourteen programs responded. The researcher compiled these lists into one master list using Microsoft Excel. Each line in the spreadsheet corresponded to an established "position" within the organization for which a student must be selected to serve by the members of that organization. For example, the editor of the student newspaper was one position and the business manager was another position with that organization. Using simple sorting techniques, the researcher established that the total number of "positions" possible was approximately 316. This count was not exact because some organizations had fluctuating organizational structures or differing numbers of persons in various roles.

The researcher then sorted this list by individual names. Ideally, this sorting process should have revealed one individual student for each position for a possible pool of 316 students. However, several students held multiple positions between organizations. The multiplicity of roles reduced the total number of unique students to 292. These 292 students served as the final population for the study. The researcher chose to sample 10% of the available population (Miles & Huberman, 1994). The final sample size which would allow for some confidence in the findings was determined to be a minimum of 30 students.

Participant Group Selection

After the initial list of potential students was established, students were contacted and solicited to volunteer. The researcher contacted the students by means of standard and electronic mail. Students each received one formal letter delivered through campus or local postal services (see Appendix B). Because nearly all of the students in the population have electronic mail (e-mail) addresses, the chief form of communication with students became e-mail. A second appeal was made to student leaders via email (see Appendix B). In cases where students did not have e-mail or where students requested more information, telephone contacts were made.

Preparation Meeting

When contacted students agreed in principle to participate, they were requested to attend a preparation meeting. Several meetings were arranged to allow for student schedules. The researcher also allowed for individual meetings when a participant could not attend any of the scheduled meeting times.

The preparation meeting provided participants with information about the nature of the study and necessary procedures involved. A brief outline of the study, some of the general purposes of the study, and a timetable for the study were distributed and explained to all participants (See Appendix A). During the last part of the meeting, the researcher discussed the format and process for submitting electronic journals. The researcher also explained the format of journal submissions and focus group interview protocols. An incentive of $25.00 would be provided if they complete all e-journals and interviews. As an additional incentive, participants would be provided dinner (usually pizza, vegetable trays, dessert, and drinks) for each interview session.

Each student signed a human subjects consent form (see Appendix C). The researcher explained that the Virginia Polytechnic Institute and State University Human Subjects Review Board approved the study (see Appendix D) and completed a personal data and class schedule form (Appendix E).

Assignment of Groups

When considering the focus group portion of the study, the researcher initially sought to create balance between the diversity of students in each group along ethnic, race, and gender lines and the need for homogeneity as discussed by Krueger (1994). Students were assigned to groups based on availability with students' personal schedules. Where possible, the researcher attempted to structure groups with a balance of homogeneity of training and diverse personal characteristics. The result was the creation of six groups ranging in size from four to eight participants. All groups were balanced by gender with no groups having more than 60% of one gender.

Cadres

The groups were divided into sub-groups referred to as cadres. Groups 1-3 were assigned to Cadre 1. Cadre 1 participated in the data gathering process from January to March, 1997. Groups 4-6 formed Cadre 2 and participated in the study from March to April, 1997. Cadres were necessary because of participant schedules and researcher time constraints. The participants were informed via e-mail of their assignment group. The final assignment was established after the first round when two students requested, and were granted, reassignment based on personal schedule changes. Appendix G shows the final group and cadre assignment.

Data Collection

Rounds. The researcher used a two-step process for data gathering. The first step was the submission of an electronic journal delivered to and returned from the participant via e-mail. The second part was a group interview held after the e-journal had been received by the researcher. Cadre 1 used a two-week process with e-journal one-week and interview the next, in an eight-week sequence. Cadre 2 used a four-week sequence with e-journals and interviews only a few days apart, depending on the meeting schedule. The shorter sequence for Cadre 2 was necessary to complete all interviews during the same semester prior to examination periods. This sequence allowed all participants to submit four e-journals and participate in four group interviews during the study period.

Each set of related e-journals and interviews was called a round. Round 1 began with inquiry into the general classroom environmental experience of the participants. Round 2 explored the nature of the participants' group work in the classroom. In Round 3, the participants described their training and experience in co-curricular activities. Round 4 allowed the participants to draw connections between their classroom and co-curricular experience and also asked them to reflect upon their own learning about their leadership skills revealed during the study. The e-journals and interview questions were specifically not designed to mirror research questions in a particular order. The researcher purposefully used each e-journal and interview to draw broad information which could be applied to any of the research questions during the analysis of the data gathered. This process was designed to produce approximately 124 e-journal submissions and 24 group interviews.

The e-journals and interview questions were specifically not designed to mirror research questions in a particular order. The researcher purposefully used each e-journal and interview to draw broad information which could be applied to any of the research questions during the analysis of the data gathered.

Electronic journal (e-journal) process. Each participant involved in the study was asked to submit four e-journals over the period of study. For each e-journal entry, the researcher provided a set of stimulus questions. The researcher established a series of electronic sub-files called "nicknames" which contained the e-mail addresses of the members of a group. The researcher then sent the e-journal directly to each individual via the nickname file. This ensured that only the study participants would receive the e-mail submission. The researcher chose not to use other electronic methods such as chat rooms or listservs to protect the individuality and confidentiality of each submission. To ensure that only the researcher would review each submission, the e-journals were returned to the researcher via his personal e-mail address thus adding a final step in the confidentiality of the submissions.

Each e-journal contained five open-ended statements to which participants were asked to respond in detail. E-journals were analyzed upon submission for general themes and concepts. The first e-journal stimulus statements were established in advance of submission to participants to establish a base of inquiry. Subsequent e-journal submission forms were created after review of previous e-journals and intervening group interviews during Cadre 1 rounds. Cadre 2 used the same e-journal stimulus statements as Cadre 1. The researcher and dissertation director developed stimulus statements.

Group interviews. Participants were instructed to attend group interviews in their assigned groups. Each group participated in four interviews. The researcher served as the interviewer and audiotaped all sessions. Group interviews followed a modified focus group interview process (Krueger, 1994: Levy, 1979; Morgan, 1988). Each session was scheduled for 90 minutes. The researcher established a specific format and a set of open-ended statements designed to generate discussions for each interview. As the interviews progressed, the format was adapted to allow participants to explore their own impressions, thoughts, feelings, and analysis of their experience. The researcher followed the recommendations of Krueger (1994, p. 60) and planned each session to begin with uncued questions and allowed for cued prompts to be used to maintain focus upon the particular area of interest to the researcher in that group. Cued items were developed from the e-journal submissions of all members of that cadre. The researcher also allowed for group interaction to lead some of the discussion.

Follow-up e-journal. A follow-up e-journal was constructed and sent to participants in September 1997. The participant checking was conducted to test the accuracy of this preliminary analysis. The researcher obtained the e-mail addresses of all participants and sent a request for volunteers to receive the follow-up e-journal. Eight participants (39%) completed the follow-up e-journal. These responses were added to the existing data and used in the data analysis.

Method of Analysis

Transcription and coding. The researcher transcribed the interview tapes. Transcripts of interviews were created using tape-based analysis, a technique described by Krueger (1994) which involved "careful listening to the tape and the preparation of an

abridged transcript" (p. 143). Each transcript was printed for manual analysis and also loaded into computer software for computer sorting.

Clustered matrix. All e-journals and transcripts of interviews were coded using HyperQualII software to establish general themes. HyperQualII is a qualitative data stacking and sorting software. The researcher developed a conceptually clustered matrix (Miles & Huberman, 1994) in the data of each of the rounds (see Appendices G & H). For the purpose of the general clustering each round was considered wholly and the cadres were reviewed together. As the analysis continued, the researcher began to divide out the clusters based on the research questions grouped by cadre. This process produced a series of matrices correlating the various perspectives of the participants with either leadership practices (Kouzes & Posner, 1995), demographic data, or both.

After the final set of matrices was developed, the researcher reviewed transcripts, and in some cases individual tapes or e-journals, to compare the inflection, tone, and manner of the participant as she or he was making a statement. This was necessary to separate statements of direct opinion or perceived fact from use of sarcasm, wit, or irony by the participants. It was also necessary to understand the depth of feeling generated by certain topics raised during interviews.

Summary

This section provided information about the procedures and methodology of the study. The study was purposefully designed to allow a significant amount of flexibility in determining how the process would be conducted once the study began. The detailed plans were revised as needed to capture the most valuable information from the participants. Similarly, the analysis of the data necessarily followed the paths taken by

the participants in their own exploration of the subject matter. The results of the analysis are presented in the next chapter.

CHAPTER 4

RESULTS

The purpose of this study is to identify the leadership skills students believe they learned in co-curricular activities; to determine how those skills are used in the classroom; and, to discover whether those skills enhance the academic experience for students. This chapter presents the results of the study in four sections: descriptive findings, data collection and analysis, the findings as they relate to each research question, and additional findings not anticipated in the original design.

In many parts of this chapter, the researcher includes actual statements from the participants' e-journals and interviews to illustrate significant themes or connections. The researcher assigned aliases and modified some organizational affiliations to protect the confidentiality of respondents. Many quotes are answers to questions cut from e-journal responses or interviews and treated as discreet responses. In some cases, the text includes a conversation between students in a group to illustrate how the interview process itself generated responses that may not have occurred in another setting. As in most qualitative studies, the richest information emerged between the research questions rather than in direct response to them. Therefore, the researcher uses some quotes in more than one place to illustrate different points. The researcher provides additional findings beyond the actual research questions as a way of showing how the questions served as a starting point in the study, not necessarily an ending point.

Descriptive Findings

The general population for this study was student leaders involved in particular programs and organizations sponsored by the Virginia Polytechnic Institute and State

University (Virginia Tech) Division of Student Affairs (DSA). From an original population of 292 student leaders, 31 agreed to participate in the study. Participants were divided into two cadres with three groups in each. Students were assigned to groups based on availability with students' personal schedules. Where possible, the researcher attempted to structure groups with a balance of homogeneity of training and diverse personal characteristics. The result was the creation of six groups ranging in size from four to eight participants. All groups were balanced by gender with no groups having more than 60% of one gender. The researcher controlled for Corps of Cadets membership keeping all current or recently resigned members of the Corps within the same group.

The participant population consisted of 52% males and 48% females. The racial and ethnic characteristics of the participant group were as follows: 94% White, 3% African American, and 3% Asian American. The participant group contained at least one student from each of the undergraduate colleges on campus with Arts and Sciences, Engineering, and Business representing the greatest proportion of majors respectively and equivalent to the general Virginia Tech population (University Fact Book, 1999). Table 3 shows the comparison of demographic characteristics between the sample and the undergraduate student body. A chi-square analysis of the demographic variables revealed no significant differences from the general population with the exception of class. Seniors were over represented when compared with the general undergraduate student body (64.52%) (χ^2 (3, n = 31) = 27.91, p<.001).

Table 3

Selected Demographic Characteristics of Participants and All Undergraduate Students at Virginia Tech

Variable		Participants (n=31) Number (%)	Virginia Tech (n=19251) Number (%)
Gender			
	Male	16 (51.61)	11259 (0.58)
	Female	15 (48.39)	7992 (0.42)
Race			
	White	29 (93.55)	16501 (0.86)
	African American	1 (3.23)	819 (0.04)
	International	0 (0.00)	269 (0.01)
	Other	1 (3.23)	1662 (0.09)
Class*			
	Senior	20 (64.52)	5166 (0.27)
	Junior	8 (25.81)	4139 (0.22)
	Sophomore	3 (9.68)	4571 (0.24)
	Freshman	0 (0.00)	5032 (0.26)
	Other	0 (0.00)	343 (0.02)
College			
	Arts & Sciences	15 (48.39)	5814 (0.30)
	Engineering	6 (19.35)	4542 (0.24)
	Business	4 (12.90)	2796 (0.15)
	Agriculture	2 (6.45)	1411 (0.07)
	Human Resources & Ed.	2 (6.45)	1806 (0.09)
	Architecture	1 (3.23)	881 (0.05)
	Forestry/Wildlife	1 (3.23)	644 (0.03)
	Intercollege	0 (0.00)	1357 (0.07)

Note. Seniors disproportionately populated the participant groups when compared with the general campus population and although the class of all possible leaders was not obtained, conversations with advisers to DSA groups generally confirm that less than one-half of leaders are seniors. χ^2 (3, n = 31) = 27.91, *p < .01

The data about training levels are shown in Table 4. Level 1 included training through courses or extended seminars over the period of semester or summer session. Of the 31 participants, 26 (84%) received Level 1 training. Students trained at Level 2 (n = 4, 13%) participated in highly interactive weekend retreats and received ongoing training while holding their positions. One participant (n = 1, 3%) received only Level 3 training which included occasional training and advising sessions as part of the position.

Some participants held multiple positions (e.g. resident advisor and orientation leader) and that was considered in the analysis. Each position available to any specific participant was counted as a "training unit." If a participant was both a resident advisor and a peer educator, the researcher recorded two training units for that participant. For 292 possible participants in the population, there were 316 training units. Table 5 shows a comparison of the training between the population and the study participants. The 31 participants received 48 training units. Each participant accounted for approximately 1.5 training units. No significant difference was found in the number of training units between the general leader population and the study participants (χ^2 (4, n = 48) = 3.83, $\underline{p}$ < .05). An examination of combined training level and training units revealed that all head residents, resident advisors, and orientation leaders received Level 1 training (students n = 23 ; training units n = 33). Of the four organization officers who had Level 1 training, two of these participants completed one semester courses in leadership and one had completed a residence advisor class but was not selected as an resident advisor. Fifteen participants received leadership training through at least two different DSA programs and four received training through at least three different

Table 4

Frequency and Percentage of Highest Training Level Among Individual Participants

Training Level	Frequency	%
1	26	84%
2	4	13%
3	1	3%
Total	31	100%

Table 5

Frequency and Percentage of Training Units among Participants and General Leader Population

	Participants (n=31)		Leader Population (n=292)	
Organizational Class	Training Units	%	Training Units	%
Resident Advisor	19	0.40	165	0.52
Organization Officer	13	0.27	76	0.24
Orientation Leader	10	0.21	50	0.16
Head Resident	4	0.08	18	0.06
Peer Educator	2	0.04	7	0.02
Total Training Units	48		316	100%

Note. A training unit is any individual leadership position for which a student can be trained. Participants in this study individually held as many as four positions, thus holding four training units. χ^2 (4, N = 48) = .43, $p < .05$

DSA programs at Level 1 or 2. All participants reported receiving at least Level 3 training from other student organizations, community organizations, or academic classes with only the one participant reporting Level 3 as the exclusive level of training achieved. Four participants had Corps of Cadets (Level 1) training. Three of these also received Level 1 training through another DSA program, while one Corps member, an officer of an organization, had only received Level 2 training beyond the Corps experience.

Data Collection and Analysis

The participants collectively submitted 104 e-journal responses and participated in 24 group interviews over a four-month period during the spring of 1997. The follow-up e-journal conducted with a cross section of participants from all six groups provided additional data to help determine the salience of the information gathered. All e-journals were imported as written into a HyperQual II data stack. All interviews were transcribed and text was imported into the HyperQual II program while maintaining each e-journal and group interview in a separate data stack.

A conceptually clustered matrix (Miles & Huberman, 1994) was developed to analyze the data. The horizontal line of the matrix refered to the research questions. The adapted 10 leadership commitments (Kouzes & Posner, 1995) were listed along the vertical axis of the matrix (see Appendix G). Using this matrix, it was possible to identify connections between the "critical actions" inherent in the leadership commitments and research question and the reported actions of the participants. The researcher identified critical actions as behaviors or activities in the course of student leadership. In this way, the researcher could identify actions reported by the participants and assign each to a specific cell within the clustered matrix. The researcher examined

each e-journal and interview for evidence of these critical actions. As each critical action was identified, it was placed in the matrix according to the leadership practice and the research question to which it applied. The cells in the matrix are representative of the intersection between the leadership commitments and the research questions. As the analysis proceeded, additional themes or patterns emerged which were added to the matrix.

The clustering process included logging and categorizing responses, which provided not just an example of these behaviors, but also the intensity with which a behavior was mentioned. In some cases, comments about a behavior may not have been lengthy but were strongly stated, receiving support from other participants. In this way, the researcher was able to construct a sense of which behaviors were discussed and the level to which they were perceived to be important to the participants.

The analysis of the data revealed that the practices outlined by the Kouzes & Posner (1995) were not equally represented in the reports of the participants. Table 1 is a presentation of the five practices and 10 commitments of the Kouzes and Posner model. Figure 1 shows the extent to which each practice was explicitly or implicitly described by participants in the study. As Figure 1 shows, less evidence of Practice 1 (Challenging the Process) and Practice 5 (Encouraging the Heart) arose from the analysis than of the other three practices (Inspiring a Shared Vision, Enabling Others to Act, Modeling the Way).

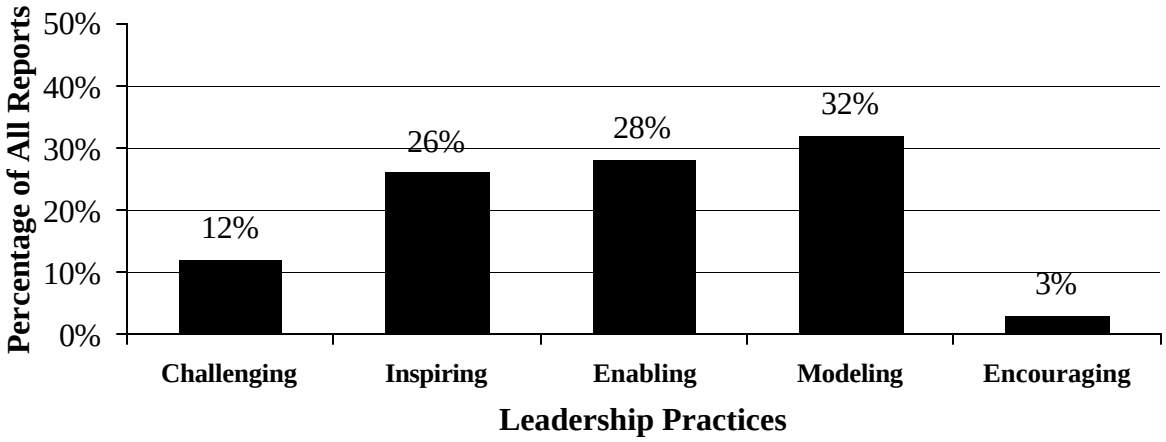

Figure 1. The frequency of specific leadership practices as percentage of all reported practices.

Summary of Findings Related to Each Research Question

This section provides detailed results of the findings as related to each research question. The individual question is restated and the evidence of findings presented.

Question 1: Which of Their Leadership Skills do Student Leaders Attribute to Specific Out-of-Class-Based Leadership Development Activities Provided by the Division of Student Affairs at Virginia Tech?

The results show that certain practices of the Kouzes and Posner model are stressed more than others during training for DSA programs. The central practices of "Inspiring a Shared Vision," "Enabling Others to Act," and "Modeling the Way" were more frequently discussed than the practices of "Challenging the Process" or "Encouraging the Heart."

Practice 1: Challenging the process. The first practice in the Kouzes and Posner model is "Challenging the Process" (Kouzes & Posner, 1995, p. 9 -10). Kouzes and Posner stress the need for challenge, innovation, risk, and change in this practice (p. 9 - 10). The commitments associated with challenging the process are "searching" and "experimenting." The data suggest the participants received little training in these areas. The training they did receive, in the form of ropes courses and confrontational experiences, appear to have been designed principally for personal benefit and not as a means to impart the ability to exhibit "challenging" behaviors.

In discussing their programs, the participants did not describe situations in which they were encouraged to search for different ways to do things, or search for opportunities or new challenges. The most extensive example of a "challenging" behavior being taught is the ropes course described by orientation leaders. Resident

advisors and organizational leaders were challenged during training in other ways. The analysis, however, showed little evidence of "challenging" behavior beyond the training program. The participants revealed only a few more similar responses in all e-journals and interviews. The minimal existence of "challenging" training appears to be equal to the minimal use of "challenging: behaviors in their student leader positions.

One participant expressed directly the concept of "challenging" in a way similar to the Kouzes and Posner model. David refers to both risk and communication which Kouzes and Posner claim aid the "challenging" behaviors (1996, p. 47 & 66).

> DAVID: I think that leaders are the ones who are the risk takers. As risk takers, you need to understand the communication process, you need to be the one who will look at the long term plans of whatever organization you're in. You must be able to interpret what other people are trying to tell us, and what they want out of it, collaborate everything together forming these long term plans. We must take the risk and be responsible for taking the risk in reaching these goals.

David's comments show an acute understanding of this leadership practice, but this was the only example of this connection found.

Practice 2: Inspiring a shared vision. "Every organization, every social movement, begins with a dream" (Kouzes & Posner, p 10). "Inspiring a Shared Vision" ("inspiring") requires leaders to have dreams and visions of the future and find ways to attain those. Within this practice are the commitments of "envision the future" ("envisioning") and "enlist others" ("enlisting"). The analysis of the data show that most of the training programs only marginally dealt with practices that could fit under the

"inspiring" practice. The participants described how some programs attempted to get students to look to the future while others focused on the more practical goals and objectives of the organization. Typical comments were:

> HAL: I think that's most of it. We talked about the need for a vision and motivation based on that vision and how to delegate.
>
> WILL: One major issue brought up in the first retreat was the future of [our organizations] on this campus, which is an issue I'm fully involved with now. We discussed what the future held for us, and I wish I could remember what went on in those discussions, because it would be interesting to see which ones are holding true.
>
> DAVID: We also had an exercise which helped us to first distinguish between goals and objectives, and then set goals. A model called the Seven Habits Paradigm [from Covey] was given to us on a ditto, which gave us a seven step process in creating realistic and achievable goals for myself and my organization. In following this process, we were able to create both personal and organizational goals that were the realistic projections of what we believed we could accomplish.

Of the participants, only those involved in student organization leadership discussed goals, vision, or the need to look to the future. The one resident advisor who mentioned the concept of vision was speaking about his experience in his fraternity and clearly distinguished that experience from being a resident advisor. Some resident advisors and orientation leaders mentioned the need for personal goals but did not tie those goals to the program, organization, or their role as a leader.

One of the critical elements of "enlisting" behavior is effective communication. The use of powerful and rich language is emphasized by Kouzes and Posner (1996, p. 134). Participants described many examples of how effective communication was stressed in training programs throughout the Division. Resident advisors had specific communication effectiveness seminars which were well received by the participants. For the participants, communication was a central part of their roles and the training reflected that.

> RON: The most important thing I've learned, is everyone knows that communication is an essential thing in being a leader. But exactly how you communicate well, that's one of the most important things I've learned. That not only carries the way in how I lead but also how I live my daily life around individuals. How do you communicate, simple examples that we learned in resident advisor training. Don't put your hands in your pockets when you're talking. Don't cross your arms. When you're talking to someone, be sure you give them all of your attention, don't become distracted and ask open-ended questions and things like that.
>
> ALAN: . . .the goal of this communication lesson they taught us was look for the real problem and deal with the superficial crap later. So I think that was [important] . . .

Participants also described another "enlisting" behavior: getting and keeping members of groups involved in the process, whether it was a residence hall floor or organizational meeting. The skills of listening, facilitating dialogue, and maintaining convictions were identified as significant parts of the training process.

DAVID: Presentation is also important, which is another form of communication – nonverbally. People analyze your actions, words used, emotions used, and appearance in creating an opinion of you, but more importantly in participating in the communication process. Every aspect of how you present yourself is used in interpreting the message you are trying to send.

ALAN: We learned in this section how to carry on a dialogue without really saying anything, which is a valuable task when listening is the most important thing. We learned to empathize using the technique called something like reflective listening. The deal is that the listener basically repeats what the talker is saying so that he or she feels understood and feels more comfortable revealing more. I've used this technique and was shocked to see that it actually works. The quickest way to get somebody to freeze up in my experience is to judge or give advice before the talker feels completely understood and is ready to accept it.

JACK: In the RA class the listening skills and getting people to follow you were the only things we learned. The following part was much more indirect as opposed to the listening part. In Orientation we analyzed our leadership styles, and discussed strengths and weaknesses of each style. This made you more alert of what was effective for you and what was not, however I don't really think that we spent too much time on leadership skills.

The participants reported communication skills to be critical elements of the training process while visioning activities were limited. Inspiring a shared vision behaviors were split in this case with more emphasis being placed on "enlisting" behaviors than on "envision the future" behaviors.

Practice 3: Enabling others to act. Kouzes and Posner (1995) describe "Enabling Others to Act" ("enabling") as the combination of fostering collaboration ("fostering") and strengthening others ("strengthening") (pp. 5 & 6). Within these commitments is the ability to use cooperative goal strategies, building trusting relationships, seeking ways to increase individual choice and delegating authority. All of these behaviors were evident in a significant portion of the training programs of the participants. While their descriptions use a variety of terms and concepts, the idea that their training programs stressed teamwork, collaboration, and delegation was evident. The data do not reveal, however, evidence of specific training in this area. While the participants gave short answers like "teamwork" or "work with others" when asked about what training they received, they did not provide details about how or when these concepts were discussed.

The data suggest a blending of "fostering" and "strengthening" in the training activities. The participants speak interchangeably about team building, fostering team spirit, building trust, and developing individual interests. The combined evidence shows that "enabling" behaviors were the most often reported within training. All participants in the study at some point reported training in "fostering" and "strengthening." In a few cases, a participant reported "enabling" training only in the informal process. The majority of the participants reported "enabling" training in both formal training and experiential learning setting. This is the only practice in which the leadership behaviors

appeared equally in all different programs and training levels. The comments of the participants below are typical of their reflection on the training process.

> WALT: [We had] outright staff development for student activities putting staff heads together . . . having a developed staff, like building a team was very important to us.
>
> TASHA: I just remember it being a lot more of "if you find out about yourself" and the people you're working with, you'll work better with other people and you'll work better as a team. Which I thought was great.
>
> GAIL: The week that we came back for training before everyone showed up we did a ropes course up in Harrisonburg and it's supposed to build unity, team work and all that stuff, and also trust. We did trust falls and everything and there was a vertical wall out in the middle of the woods and you had your team
>
> DAVID: [The role play activity] really taught us a lot of team work and sitting down and listening to other people and taking into consideration what everybody else was saying, learning how to work with each other, learning how to come to a consensus decision where everybody was happy with the outcome. Just that in itself was a good team building activity. Afterwards, there was some advisers in the group and they just listened to what was going on, but the advisers ended up evaluating how each person acted during that whole discussion process.
>
> RHONDA: Most of the training you work within your groups, team work, you work with your staffs, and other staffs throughout the community.

The situation you explained with the house, fined the correct one. We did a lot of things like that. You're searching as a team to get the best answer, the one that will facilitate the most needs.

The participants reported that they were trained to use delegation and inclusion behaviors in their positions. Betty described in detail about how she learned about inclusion of the leader in the task assignment (Kouzes & Posner, 1995, p. 202).

BETTY: I've learned that it is really important that if you're leading, you also have a function, too, and you're not just delegating jobs. You have your own job to do. That is [inaudible] to the people you are meeting. If you're asking them to do different tasks, you need to have your own tasks and they can see what you're doing so that they can feel that everybody is a part of the group. But they don't necessarily feel like you're in charge or you're telling them what to do. It works best if they think - if everybody realizes that they have an opinion and they have an option on what they can do everybody's working together, never force them...

PENNY and NORM describe the concepts of learning from your members and to accept and use the differences within the group (Kouzes & Posner, p. 185).

PENNY: Concepts to a good leader: be yourself, take ideas from your members, make every member feel important

NORM: The idea of team work and what elements are essential to team work. The whole point of this session was to show us good and precise communication is essential to working as a team. I personally learned an

> additional point; that certain people in a team are good at some things and bad in others so you need to try to draw off each person strong points

Thomas provides an excellent example of how leaders must be willing to listen and believe in what others say to advance the cause of the group (Kouzes & Posner, 1995, p. 187).

> THOMAS: We also learned cooperation, trying to do tasks as a group. I learned that encouragement was a big part of leadership. We had to encourage one another while climbing in the trees 20 feet off the ground. To the faint at heart it was really intimidating. Sometimes you need to stop leading and listen to what others are saying. You have to kind of "suck it up" (your pride), to let everyone give their ideas and opinions. You must give others respect and common courtesy.

These examples are only a few of the numerous direct and indirect references to team and collaboration behaviors taught during the training of these student leaders. It is significant to note that all of the participants were involved in team-based organizations or programs. The emphasis on team building and cooperation was mentioned as central to the nature of the organization by most of the participants in this study.

Practice 4: Modeling the way. The most prevalent leadership commitment found in these student leaders' reports was "set the example" ("exampling"), a part of the "Model the Way" ("modeling"). Every participant mentioned the concept of being a role model as a significant part of his or her leadership role. The data show that both training programs and ongoing advising or supervision stressed the role-modeling aspect of leadership. Role modeling includes the concepts of integrity, of doing what one says he

or she will do, and promoting unified values (Kouzes & Posner, 1995, p. 7). Many of the students used examples of their training to describe how they were urged to view themselves as role models. Carl was direct when he wrote, "The basic leadership skills taught were leading by example."

Some other examples of this kind of emphasis were revealed in e-journals and interviews.

> DONNA: In both of my leadership roles (as a cadet and as an RA), there has never been any question that those in charge of the program want you, first and foremost, to lead by example.
>
> TREY: The leadership skills that were taught or presented were role modeling, peer advising, listening, and recognizing the needs of others. We were taught that our residents will not only hear what we tell them, but are much more likely to listen to us if we practice what we preach.
>
> KYLE: As for leadership, well, we covered that in terms of being a role model, which I think is the best type of leadership you can have. I don't think that in general, and certainly in a residence hall, you can not demand to command.
>
> MARY: They didn't do much "this is how you become a better leader,." They expected you to be a leader. Where it comes into play is they expect you to be a role model. That's how you're a leader for your residents, through your own actions . . During summer training, we (RAs) were bombarded with the idea that we were role models and were given ideas on how to act in such a role. For example, a whole thirty minute session

> was devoted to analyzing a generic decision-making process which people use. Proper behavior was stressed -i.e. don't drink if you are under 21, and if you are 21 or older don't drink around those who are under.

These statements were typical of the kind of response about the importance of being a role model. One participant eloquently summarized her belief as to why this had been stressed so much in Orientation training.

> TASHA: The one thing that really hit me was exactly how much these incoming students look up to us. Not just the orientation leaders, but all the current students. We are like their north star guiding them through those first scary and confusing few steps of college life. I never understood what an impact we had on their lives and adjustment to college life.

While setting an example as a role model was clearly stressed, with more impassioned comments than any other single practice, the other "modeling" commitment, "achieving small wins," was rarely mentioned in relation to training. Kouzes and Posner (1995) stress strategic planning and resource allocation as central elements in this commitment (pp. 243-265). The date on the training of these student leaders did not reveal any significant evidence of emphasis on this form of leadership. As was already reported, the training did involve some emphasis on goal setting and planning. These goals were long term and related to the overall vision of the program or organization. Short term, "small wins" training was absent from the training.

It is interesting to note the dichotomy within "modeling" training that was discovered in the data. The training programs for all participants highly stressed the

"exampling" role modeling behavior but did not include in any measurable way "small wins" behavior. This makes the overall number of reports of "modeling" behavior fewer than the overall reports of "enabling" behavior. As was stated, however, more comments (and more emphatic comments) were made about "exampling" behavior training than any other single commitment, including the "fostering" and "strengthening" behaviors.

Practice 5: Encouraging the heart. The final practice in the Kouzes and Posner model is Encouraging the Heart ("encouraging"). Kouzes and Posner (1995) found that "leaders encourage the heart of their constituents to carry on" [emphasis theirs] (p.13). The commitments in "encouraging" are "recognize individual contributions" ("recognizing") and "celebrate team accomplishments" ("celebrating") (p. 18). These commitments were found only indirectly in the participants' comments and rarely referred to in training programs for the participants. Elaine claimed that during her training she was "taught various methods of bringing fun to a meeting. Various games, methods of public speaking and ways to get members involved as well as delegating responsibilities." This is the only direct reference to creating any kind of encouraging behavior taught in training. Participants did not mention any formal training session that focused on reward systems, team or individual recognition, or public displays of pride for the group or organization. "Encouraging" behaviors were simply not evident in the training as reported by these participants.

Question 2: Which of These Skills do the Selected Student Leaders Report They use in In-Class-Based Learning Opportunities?

The data suggest that in general these student leaders used the same leadership behaviors in class that they learned out of class. The in-class leadership behaviors

clustered in commitments 3 through 7. As in their out-of-class leadership roles, the most common single in-class leadership behavior was "exampling." It may seem self-evident that student leaders would use the skills they learn. It is possible that individuals would not use skills learned in one environment in another. This section presents evidence to show that these students leaders tended to practice out-of-class learned behaviors during in-class learning opportunities.

Practice 1: Challenging the process. As with their out-of-class leadership training, the participants tended to exhibit "challenging" behaviors mostly through perceived "experimenting" in the classroom. "Experimenting" involves risk taking and modeling risk-taking behaviors to others (Kouzes & Posner, 1995, pp. 18). In the classroom, this behavior usually manifested itself in taking the initiative in class discussions or projects. Students reported that they tended to be the first to speak up or answer questions in class. This in-class behavior was reported to be a leadership skill primarily because it was genuinely perceived to be a form of risk-taking. In large lecture classes, the size of the room and number of students was reported as intimidating even for these confident student leaders. They viewed overcoming this fear and intimidation to ask questions or begin a discussion as leadership (Kouzes & Posner, 1995, p. 67). They believed modeling this risk-taking behavior for other students (pp. 84-85) as important as well. The participants revealed that many times they overcame their own reservations about participating in order to show other students how it could be done. The following dialogue between the researcher and one group provides a sample of how all the groups perceived these actions to be leadership.

GAIL: . . . . I always start talking because I can always think of a question. In a lot of my classes, you are supposed to ask questions. But since I got into my major so late, I was a junior when I started my major. So here's a junior going to 2000-level classes with freshmen and sophomores who didn't want to be asking questions. As far as they're concerned, it's shut up and move on. I was, like, "What about this?" and "What about that?" Some how or another that slides right into leadership.

INTERVIEWER: How does asking questions slide into leadership?

THOMAS: I kind of answered the same way that she did. I ask a lot of questions and consider that leadership just because it shows that you are involved in the conversation and concerned. But you also influence other people just because other people might have questions, too, but they won't ask them. Also, you help to get discussion going by asking questions that others won't ask. I think it's the initial thing. It starts things out when you ask questions.

GAIL: Breaks the silence.

INTERVIEWER: And breaking the silence is hard?

GAIL: One of my professors had to go away for interviews so for two classes we had a different professor come in to teach that lecture. We kept getting a new professor in there. It's like you always have to start over. It's like the first day of class. And so he'll say something and you know he wants class discussion and stuff. And so I'll say I'll be the guinea pig

for the day and raise my hand and try and answer the question. That's starts everybody in. "It's okay. She answered and everything's okay."

WALT: And nothing bad happened.

JEANNIE: If you are the first person to open your mouth, everyone stares. Maybe you're asking a question. Maybe you were paying attention. If you go ahead and do it, even knowing that it's going to be intimidating, then that just shows that you do have initiative. Taking initiative is part of being a leader. Whenever I would be in a group thing, I knew that I would take over unless some else was over me.

NORM: It's not just asking questions. It's also responding to questions asked by the teacher. If you tell a story then the students have someone else to relate to. That shows initiative because it gives other students a chance to join in. It shows them the way.

INTERVIEWER: How often do you all in your classes serve that role as the ice-breaker or initiator?

WALT: I'll do it whenever it's necessary to get things going. In some of the elective courses I have to take because . . . the professor will ask a question and just stand there and say "I'm not going on until somebody says something." Everyone looks around and I will say I'm tired of this and say something. That's when I'll usually spark some others.

Many of the participants reported that after they had initiated question-asking behaviors, they were sought out by classmates to ask questions for them. These participants were informally prodded to lead by taking the risk to ask clarifying or

correcting questions. The participants perceived this to be a kind of informal leadership within the classroom.

The data show that most of the descriptions of these kinds of behaviors occurred in traditional lecture or modified lecture style classes. The general tendency of these classes was to be more formal, with the instructor clearly expected to lead the lecture and discussion and to control the flow of the dialogue. While these students perceived their interrogatory behavior to be leadership, it is not clear whether it was the intention of the professor to allow such leadership or whether the instructor sought out these already designated student leaders to lead discussions. The data do suggest that once these particular leaders were identified as risk-takers in the classroom, both students and instructors expected them to continue to take risks in these areas. Such instructors might be themselves providing leadership by creating a climate in which these students succeed (Kouzes & Posner, 1995, pp. 66-67).

While the participants did not discuss these leadership commitments to the extent they did others, they did report that they were more likely than others in their classes and class groups to engage in initiating behaviors. Almost all of the participants described a scenario similar to Shawn's or Walt's. In this way, the participants were reporting that they perceived that they engaged in initiation behavior more than the other students in the class. Accounts of classroom behavior, therefore, show that most of the participants were willing but reluctant to take the leadership role. Many times they avoided it until they felt they had little but to come forward. The participants were not actively seeking out opportunities for leadership ("searching") or actively seeking chances to take risks ("experimenting") in their academic settings.

The participants rarely reported that they openly challenged the process or experimented in their academic activities as would be necessary to exhibit the behaviors found in search for opportunities. The data showed, however, that many of the participants would initiate planning or dialogue in various settings. Usually, they initiated the behavior because no one else would do it. Kyle's and Shawn's response illustrate this point.

> KYLE: Yes, I would [consider myself a leader]. I am in several groups, and when there is just two people, depending on who they are at least, we are generally pretty even in providing direction. But more than two, and you begin to need someone to start everything, and just ensure that one idea gets out to all team members. And that is where I feel like I become a leader most often. I just start doing something (like with the one project). We had to find a team and a topic. I found my topic and then found people who were interested in joining me and then end up the leader. Since I started the idea, I guess everyone assumed that I would be the leader all the way through, which is fine with me. So I arranged the first meetings with the person we are working for/with, and have tried to keep track of what we have done as a group and what we need to do, and getting things done.
>
> SHAWN: Usually I don't intend to be the person helping everybody along, like be a leader, but it usually happens that way because you get too many slackers that say "I don't want to be here. I don't want to do this" . . . I don't like to be the person who says okay "I'm in charge." I don't like

> to do that. But if I see that there's no natural leader coming out, I'll do it. And it doesn't bother me. I think I do have it in me to say, 'Okay this is what we're doing.' But I don't want to do it other . . . okay, I don't want them doing it to me. Usually when I do become the leader, it's by default almost because nobody else is doing it so somebody has to do this and get this ball going.

While this initiating behavior may have some salience in challenging the process, the participants did not connect these behaviors with the critical elements of experimenting and searching out opportunity (Kouzes & Posner, 1995, p. 79). The evidence of risk taking (experiment and take risks behavior) is stronger but the entire area of challenging the process has a weak connection to their actions. Finally, there is little evidence that the participants' out-of-class behavior involved any more challenging the process behaviors than their in-class behavior. They apparently developed some minimal ability to recognize the importance of these behaviors but did not report the actual practice of them.

Practice 2: Inspiring a shared vision. When describing their behavior in class, these student leaders reported the commitments related to "inspiring" more frequently than those of commitments associated with "challenging." Of the two "inspiring" commitments, however, "enlisting" appeared more often in the comments than "envisioning." Participants reported that the goals for which they strove were not set by them but by either their programs or the class assignments. Only in a few instances did these students report actually practicing the concepts embedded in "envisioning."

The data revealed many examples of "enlisting" behavior. Much of this behavior manifested itself in activities similar to the training mentioned in the last section. The students focused on building a team and getting others to join their project or their way of doing a project. Kyle's statement above shows an element of "enlisting" behavior when he states, "I found my topic and then I found people who were interested in joining me."

The acts of "envisioning" or "enlisting" were difficult to discern among their behaviors. In most cases, the instructor controlled the classroom action by a specific schedule. Interaction was not based on the vision or needs of the class members. When the students participated in group projects, the goal of the assignment and the configuration of the group was usually determined by the instructor. In the cases where the group action was informal classroom discussion, the data suggest that little opportunity for "enlisting" or "envisioning" occurred. The participants who had out-of-class study groups usually focused only on the goal of completing an assignment, studying for a test, or increasing general knowledge. Futuristic goals were not discussed. It appears then that while some evidence of "challenging" behaviors exists, it is minimal in the highly structured environment of the classroom.

Practice 3: Enabling others to act. Leadership behavior "fostering" and "strengthening" were mentioned more often as part of training and experience, both in and out of the classroom, than any other commitment. As was already shown, the data suggest a high degree of "enabling" training and action in the out of class activities of the participants. The results of the analysis show a high frequency of use of techniques which fostered collaboration in the classroom or group projects. The data also show a

high proportion of supportive behaviors on the part of student leaders in their classroom activity.

Most of the participants reported that they had participated in a team or group project in a class within the last year. In nearly all of the group projects discussed, participants stressed the need for collaboration on the project or the desire to have it when collaboration and teamwork were obviously lacking. Donna and Cyril, when asked to describe the best and worst parts of these experiences, described the benefits of collaboration and what they learned from it.

> DONNA: [The] best is coming in with different experiences and with different knowledge of the subject area and being able to learn from the people in the groups about something you don't know a lot about except the bare minimum. The worst is that when I get started on something I want to keep working on it until I get done. And with groups of five and six or more people, you can't do that it's stop and go. That just drives me crazy. It absolutely drives me crazy. That and the fact that you get a lot of people who just want to ride along on the coattails. Those have got to be the worst.
>
> CYRIL: I have to agree with Donna probably on both points. I think the best part is that you can learn more quickly as a group. You put two and two together and get five. You get more than what you put into it. Except for when you have the slackers. Especially when you're working in groups of two and you have somebody who just does not want to do anything. It's not that bad when it's a group of four or five when you

> know you're going to have one slacker and you plan accordingly. It's take 30, take 30, take 30, give Joe over here 10. He won't get it done but he doesn't have a future anyway.

The participants revealed a deep understanding of the nature of collaboration. As Donna and Cyril showed, they also could be extremely critical of non-collaborating group members. Ingrid describes a negative group experience she had in which she expected collaboration but actually had none from her group members:

> INGRID: I ended up scheduling the meetings, assigning the parts of the project, putting the parts of the project together, getting the materials together, just basically doing the entire project because none of my partners were on time to anything, had any ideas, lacked any kind of initiative. It was like telling my dog to go to Kinkos to make copies. It was the worst experience ever had in a group project.

Her response was typical of the negative attitude participants had toward group work. Many of the participants expressed a dislike for classroom group work. They described it as being laborious, time-consuming, and frustrating. These same students reported, as did Ingrid, that little had been done in the way of developing collaborative strategies for groups even though the participants had been trained in collaborative techniques.

For some, however, the group experience was one of strong, active collaboration. Two participants who described self-assigned study groups revealed that these groups established their own mission and worked collectively to solve homework problems, study for tests, and prepare for final examinations. In these cases, the participants

expressed the feeling that collaboration in this setting was similar to that in their out-of-class role.

> VERA: In my group, we all had to work together. Nobody dominated anything. We would just take a problem and work on it. Some people were more math oriented some were more verbal oriented. So usually we just . . . two people would take the math part and two people would take the reading part and we figured it out.

Other participants with class assignment-based experiences discussed how important collaboration was to their activity. Many of these students talked about their own role as the group leader and how important it was for them to work at creating a collaborative atmosphere.

> RON: I feel comfortable being the "leader" of groups in class, not because I may know all the answers, but because I do a good job of bringing everyone in and generating dialogue.
>
> SHAWN: Yes, I often do take on a leadership role in the classroom and in group settings. Leadership meaning motivation, assigning tasks, or getting people to volunteer, asking how things are progressing, kind of like a team leader would be in the industry.

For these students, building trusting relationships and fostering collaboration was a means of assuring quality performance. It became central to their perception of what the group experience in an academic setting required. They also revealed that concomitant with collaboration was the need to support others - the central tenet of “strengthening” behaviors.

The participants described many training, operational, and classroom experiences which show their use of "strengthening" behavior. Like fostering collaboration, ideals of sharing power and information were impressed upon them in their out-of-class training and used in their classroom work.

One of the most prominent examples of "strengthening" behavior was the nearly unanimous use of task assignment and delegation in group work. Participants revealed that their training emphasized delegation of tasks targeted toward individual strengths. The majority of the participants reported establishing and maintaining some form of cooperative process in their groups. For some, this meant seeking volunteers or assigning critical tasks to members of the group. In some cases, such as Ingrid's, this was not always successful. In most cases however, the students reported that delegation of authority and assignment of tasks to individuals improved the nature of the group work.

> INGRID: I think I try to include a lot of people in the process and am concerned about everyone being satisfied. I am good at addressing individuals in a respectful manner no matter how ridiculous they are being.
>
> SHAWN: I often do take on a leadership role in the classroom and in group settings. Leadership meaning motivation, assigning tasks or getting people to volunteer, asking how things are progressing, kind of like a team leader would be in the industry.

Sherry's description of how she became a leader by recognizing the need to delegate authority and tasks was good example of what many of the students reported for their groups.

SHERRY: For my group, we all wrote our names down and he assigned us in August. We decided that we were going to start it in October. Had to get everybody together. Four of us lived on, one lived off but everybody's schedule was completely different. What it boiled down to is that [Dominique] and I wrote a proposal and gave it to our Prof. Told the guys and the guys were like "hey thanks," then we all met and even still we would get to meetings and only a couple of people would show at a time and [Dominique] and I would start putting out points. "You're doing this, you're doing that, we're doing this." Because nobody could agree on the time to get together and they said just give us what you want us to do.

INTERVIEWER: So then you two wrote the proposal and then you also . . .

SHERRY: Divvied up the parts for everybody. There were five sections of the sewage treatment plant and there were five of us. So each person got a topic. They were all even parts. With ours, it got to a point where we were running out of time and nobody had done anything so [Dominique] and I were like fine, this is what's going to happen. The guys just accepted it. They didn't say anything. If they had said that we don't what to do this but let's do it this way, we would have said fine. Let's get to it. Because we were running out of time. The two of us went into this saying hey we won't have to do anything because there's five of us. But it ended up the other way around. I went in knowing that I did not

want to take charge at all. Finally I had a group presentation where I said I know all these people. They're all strong people especially in their studies. It was a good group no worries. Then as time kept going [Dominique] pressured me to do something. So I said okay fine. And so we said you guys we need to get going how about if we do this, how about if we do that? And then they said okay.

One interesting artifact of Sherry's comments is the desire not to be involved in a team or to participate in group projects. While many of the students recognized the value of teamwork and collaboration within projects, whether academic or non-academic, they expressed a weariness and disdain for some group projects. Again, Sherry's comments seem to summarize the general feeling of many.

SHERRY: I hate group presentations. I just hate them. I always go in thinking somebody else could take over. Then you wait three months, or two months in this case, and nobody said anything until [Dominique] said, "All right we need to do it, will you help me?" I said sure. Then we had to get everything going. That's how it always ends up. I don't like okay everybody let's get together and you do this, you do that. Or what do you all feel about this? How do you want to do it? For once, I'd like to be the person to sit down and say, yeah I'll do that. You get something for me to do, okay. I really hate having to lead people if I don't have to.

The participants revealed that collaboration and team work were central to their thinking in and out of the classroom. Even though many times they wished they did not have to work in teams, the data suggest that a majority of the participants actively

promoted collaborative team efforts in class assignments. They even exhibited "fostering" and/or "strengthening" behaviors in class discussion groups often serving as the person within the group who ensured inclusion and diversity of opinion.

Practice 4: Modeling the way. The data show that in out-of-class training programs "exampling" behaviors were highly evident while "small wins" behaviors were for all intents and purposes non-existent. This dichotomy appeared in the classroom behaviors of the participants as well. The participants reported being role models in the classroom in a variety of ways. The did not, however, extend those behaviors into the areas promoting consistent progress or building commitment through planned gains (Kouzes & Posner, 1995, p. 259) in any significant way.

The participants in this study revealed that they are highly aware of the significance that role modeling plays in social situations. They described many cases in which they perceived that their role in the classroom was to model appropriate behavior to other students. Carl's e-journal response may be the best summary of their perceptions. "Leaders lead by example by encouragement, or by allowing people to make their own mistakes and grow. Leaders also have to know when to listen. I often lead by example."

Some of this behavior had already been revealed in the risk-taking scenarios previously addressed. The concepts of taking risks and modeling that behavior for other students to emulate are inextricably linked for these students. The following comments provide some insight into their perceptions.

ABBY: It's taking an active part of the classroom. If the class isn't progressing, it's helping things out to help the other students learn. The

ways I see it is that the student leaders are the people in the classroom who help make it easier for the other students to get something out of it.

WILL: I think most of the people in this group, at least myself, are pretty comfortable speaking up in the class. Looking at it as a regular student, I think they kind of view the professor as the leader of the class so they expect the faculty member to be right. They may say to themselves, it may be wrong but what do I know, I'm just a student. So they may not be so likely to correct the professor. But maybe some of us, because we have those leadership skills . . . I don't know if you have an extra advantage over the rest of the class, but we might be more likely be we're used to speaking up. . . to challenge.

WALT: I think sometimes leadership is quiet. I'm one of those bookworms Thomas referred too. I always sit in the front row, I almost always write down everything the professor says, and sometimes I think it helps to be the person who is in there doing that. Especially in classes I had been in with younger people. And also sometimes outside of the class. Basically what I did every night until I got into med school was I sat in my room every night and studied with the door open. It seemed to rub off on a few residents here and there. So I think that's sort of a kind of leadership.

KYLE: It is similar in class. I just offer questions and answers, and professors begin to feel that if they need a response from the class, they can look at me and get it. And then peers begin to feel the same way. I

am willing to stick my neck out there and be wrong (and often I am), but at least I said something, and we all learned from it.

CYRIL: There are various ways that I feel that I exhibit leadership in the classroom. One of the primary comes in the form of being a spokesperson for the class to certain professors that intimidate students. I do what I can in these instances to keep the heat off of other students. A large part of leadership is the pressure that it creates and learning how to handle it as well as setting the example.

The participants reported that they perceived the modeling behaviors of other students as leadership. Mary provides a good explanation of that kind of perception.

MARY: There is one person in particular that I can think of that always goes to the professor before we have a paper and talks to this professor and really gets their input. Although he's not a leader, I look to that kind of as an example of maybe I should go and do that. So by example, he's leading.

The data show that while role modeling or serving as an example is critical to these students' perception of leadership in the classroom, the concept of concomitant behavior in "small wins" is only subtly evident. In some cases, students mention making plans, laying out duties for group members, and building commitment. The only direct reference to planning came form Abby. This was one of a few examples where classroom instruction informed out-of-class leadership learning.

ABBY: I kind of had a backwards experience from what you're saying because my curriculum is so based on leadership being that I'm in

> business management public administration. Last semester I had a class and we were talking about planning things out and leadership roles. I had an "ah ha" experience of this is why it went wrong in my extra curricular activity. As in this is why we fell apart and that kind of thing because nobody took the strong, the ideas of planning and looking back at what happened in the past. They were like "well we're going to do it this way . . ." So actually the classes I had, the in classroom experiences were teaching me what I should have done in the extra curricular. But that's because the class was on leadership and management.

Other than this example, there is little evidence of planned small wins or attempts to break tasks down into smaller parts (Kouzes & Posner, 1995, pp. 261-263). There is some evidence of seeking assistance and creating plans but continued analysis of these few comments revealed their relationship to "inspiring" and "enabling" behaviors instead of "small wins" behaviors.

The dichotomy of data in "modeling" behaviors in class may be an artifact of the data collection process as was noted in the section on training. Given that limitation, there is still a significant amount of evidence to suggest that student leaders mention role modeling behavior far more often than any other leadership behavior, both in and out of class.

Practice 5: Encouraging the heart. The final leadership practice, "encouraging" and its commitments "recognizing" and "celebrating," were essentially absent from the data gathered about classroom behavior. In only a three instances did participants mention actions which could be categorized as "recognizing" or "celebrating" behavior.

One of the resident advisors briefly mentioned he would get his floor together periodically to "celebrate." In his description however, the celebration did not reflect a direct connection to having accomplished goals or completed tasks, which are central to the Kouzes and Posner (1995) elements (p. 292-294). These acts were more of an ongoing program of facilitating dialogue and socialization than celebrating specific accomplishments.

No mention of celebration or team accomplishment was associated with the classroom. Two comments were made about "celebrating" after a project. These comments, however, were vague as to who initiated the celebration and whether it was purposely planned by the team. There was no mention of strategies or plans to recognize individual members of classroom teams during or at the end of projects.

Question 3: To What Extent are the Identified Leadership Skills Used to Enhance Classroom-Based Learning of the Selected Student Leaders?

The evidence presented in the review of Questions 1 and 2 shows that these leaders learned a narrow set of leadership practices in their DSA programs and then used those same practices in their classroom interactions. These participants demonstrated leadership behaviors in a narrow range but quite often in their academic work. Environmental and structural issues may mitigate the extent to which these skills enhanced their educational experience.

The data show that these particular student leaders had a more positive classroom experience when they could interact with peers and instructors thus utilizing their leadership abilities. The classes they mentioned as having been the most satisfying were those in which they were engaged by the professor on a personal level and worked

closely with other students. They described leading class project teams and group work as being positive because it gave them a sense that they were able to actively control and contribute to the material they were learning. While many of them disliked conducting group projects, they found the experience of having to lead classroom groups a positive experience because they used skills beyond the required instructional material.

Will summed up his perspective when he said, "because we have those leadership skills . . . I don't know if you have an extra advantage over the rest of the class but we might be more likely be we're used to speaking up. . . to challenge."

Quinton described how his experience as a resident advisor worked directly to help him expand class discussion and by extension his learning experience.

> QUINTON: In my political theory class we were talking about how the election of the American presidency involves different racial things and some one made a comment like "that's just the way it is and that's how it's always going to be' "We'll never have a black president was their exact comment." You can feel yourself move into RA role. Questions like "Why do you feel that way? What makes you say that?" You feel yourself going through this shift.

In one exchange between Rhonda and Betty, Rhonda described the positive sense of accomplishment in using her leadership skills to lead a group of younger classmates and their obvious respect for her. Betty countered that one group of freshman she lead was frustrating because she had to carry the weight of the assignment. Betty later claimed that she felt more comfortable speaking up in class groups because of her training in her leadership position.

> BETTY: I don't think I would have ever talked in class. Not nearly as much as I do now. Now, I feel like sometimes whether or not I want to say something, I am obligated to say something to get other people talking. I feel guilty when nothing is being said. I say something to make sure that other people feel comfortable saying something. Maybe part of it is having gone through [my leadership program] where I am always the one who has to be talking. I made myself more comfortable and gave me more confidence to do that.

These leaders experiences was enriched by their use of skills like "challenging," "fostering," "strengthening," and "modeling." Their own learning was expanded by the use of their leadership skills to draw other members of the class into productive work in projects and group discussions.

The enhancement of classroom experience was more keenly revealed after reflecting upon the nature of the work as will be shown in the last section of this chapter. After students reflected upon their classroom experience and that of other participants, they perceived that their classroom experience was enhanced by their leadership activity in the class. It can be concluded then that the participants in this study did enhance their experience by using leadership behaviors.

The extent to which leadership activity enhanced the classroom experience is somewhat mitigated by the environment in which the activity took place. As the environmental data revealed, the physical structure of the classroom and the instructional style of the faculty had a large impact on whether students could actually use leadership practices in a classroom setting. The data show that a majority of the classes were large

lecture format courses in rooms with fixed seating. This environment was not conducive to the primary leadership behaviors exhibited by these participants. Furthermore, the frustration created by assignments in which group work was expected but few or no formal group processes were established made it difficult for leadership to be an enhancement. In these cases, the participants in this study assumed leadership roles unwillingly to make sure class assignments were met. While the leadership challenge may have been worthy and in most cases the students accomplished their tasks, this unstructured environment made use of the leadership behaviors of the participants as a means for survival, not enhancement of the experience.

It has been shown that there is some evidence that leadership abilities developed outside of the academic setting served to enhance student learning in the classroom. This learning is mitigated by the environment in which the learning takes place. While these student leaders seem to report positive affects of their leadership on their classmates, there no specific evidence to show that the classroom-based learning of other students was positively influenced by the practices of these selected leaders.

Question 4: What Differences Exist in Self-Reported Frequency of Leadership Practices After Students Engage in Reflection on Previously Identified Skills?

The data show that nearly all of the participants in the study did not view themselves as using leadership behaviors in the classroom until after they had been asked to reflect on it. All six groups discussed the concept that their perceptions of the classroom had changed by being asked to consider if their behavior in the classroom could be considered leadership. All participants determined that at some point they used

the leadership skills taught or learned in their co-curricular positions for the benefit of academic work.

The data did not provide enough clues as to whether the participants actually increased or decreased their frequency of behavior in classroom leadership behaviors. Some participants reported that they considered modifying their behavior but there was little evidence to support broad behavioral changes. It is evident, especially from the reflection sessions and post interview survey, that the participants changed their perceptions based on reflection. There was not sufficient data to determine if actual behavioral changes had occurred.

Although the duration of the study did not provide sufficient time to demonstrate changes in their behavior, the participants reported they had changed their perceptions of their behavior. While a few participants denied that their actions could be seen as leader actions, it was possible to identify their actions in the class as leadership when analyzed through the Kouzes and Posner model.

In an attempt to verify some of the reflections on leadership after the main part of the study was complete, a post interview e-journal was distributed in the Fall semester 1997. The students who responded (n= 8, 26%) reported that the discussion and examination of their leadership practices during and since the study had altered their perceptions of their leadership.

The most important aspect of the reflection interviews and the post-interview survey was that the participants reported changes to their perceptions of their own behaviors. They reported becoming more conscious of their actions as those of a leader.

When probed about their perceptions of the interview process, most of the participants reported a new perspective about the subject by the end of the interview process. The resulting impact on the participants manifested itself in at least two different ways. First, the process of discussing their individual response to the e-journal items and to their reactions to that discussion produced a perceptual change within the participants during the study. Second, participants reported that as a result of the discussions and reflection, they began to modify their actions in the classroom.

The process of discussing their individual responses to the e-journal items and to their reactions to that discussion produced a perceptual change within the participants during the study. The interviews assumed a reflexive nature in which the participants, the researcher and the discussion environment actually shaped the outcome (Alvesson, 1996). In one group, the changing nature of their perceptions was even consciously considered as the process continued. Betty reveals how participating in the group discussion and then reflecting on that has changed her perception of her role as a leader.

> BETTY: I think that listening to you guys talk has really helped me reinforce my idea that the people who are named the leaders aren't usually leaders. That the people who are the heads of organizations are not the leaders. The people who take a personal interest that are kind of more behind the scenes than maybe the president of an organization. I think that the people who are really good leaders are doing it because they do feeling a calling to do it not because they want the recognition. I think that's what leads to respect because when people . . . I don't go into the classroom saying "well I'm going to be the leader of this group" That fact

that it comes out that I am the leader of this group, I think that's about respect and that's why people look to me. Not because I sat down and said okay we're going to do this. It's an inclusive nature that you have that gains you respect as a leader.

While Betty was changed by the discussion, the following exchange between the interviewer and the group further illustrates how participant perceptions changed during the process.

THOMAS: You see you (referring to the interviewer) taught me a lot because I never would have thought to be called a leader in the classroom before. I never considered myself that or ever thought about it until you brought up the suggestion. Because in clubs in stuff like that, organizations and leadership training. Yes, you're a leader probably because you have a title. Like the president of an organization or treasurer something like that. Those are all leadership positions. But in the classroom, I never thought about somebody being a leader in the classroom unless someone was teaching the class. But you have taught me so much about how I could be a leader though group discussion and projects. I never realized I was a leader in the classroom.

INT: I haven't taught you anything, you've just told me what you're doing . . .

GAIL: But you made us think.

JEANNIE: Yeah.

WALT: It's the questions you asked and you have influenced us by the way you've directed the conversation.

The second result of the group discussion and interaction was that they began to modify their actions in the classroom during the study. Jeannie's response reveals that although she was not ask to modify her behavior in the process, she began to think about her leadership actions after the third interview in which leadership training was discussed.

JEANNIE: It's made me hyper sensitive to being in control, or like bossy, to people. Because many times I'm just in my group and I'm ready to go and I don't want to be there all night and I'm just telling people, you need to do this you need to get this done. And a couple of times I've just stopped myself and thought, is this being a leader or this being something else. Thinking about my leader style, where I put it, if it's in the right place or if I'm just a controlling psychopath.

Thomas' comments show the process of internalizing the discussion into action within the classroom itself.

THOMAS: It's made me watch what I say a lot more. I just think about the way I decide to say something just from the fact that before I explored everything and now where I'm going to go though the year in the classroom. I feel like I want to be a good leader in the classroom. I want to say the key thing. It just makes me think a lot before I just blurt out an answer or try to start a conversation. I think that people may be depending on me to really have something good to say.

The most striking result was apparent in those students who denied any acknowledgment of having seen or participated in classroom leadership. Alan claimed in his e-journal that he had never even seen let alone been a leader in the classroom. During the final interview, Alan became exceedingly excited and animated over what he was now viewing a "classic leadership." As the interview progressed, Alan changed his perspective and in turn changed the other students' perspective on their leadership because of how he viewed it. The following exchange about whether speaking up in class is a leadership behavior illustrates this point.

> SHAWN: Are you asking were we aware of it at the time? No. I don't think that people who speak up in class are necessarily leaders. It just that I'm annoyed.
>
> MARY: For me it's more of a selfish motivation. I say things because I want my ideas expanded on. I ask questions because I have a question. It's not for the benefit of everybody else.
>
> ALAN: That's classic leadership! You had an idea, you had a vision. You went around, you got consensus from your group and representing your group you made a statement to the professor. That's huge! Aw man! . . . I see what she is doing as so classic and important leadership. I've never seen it done and I have certainly never done it.

While researcher bias has to be considered as a result of this dialogue, the reflexivity of the process revealed that by asking these students about their behavior in the classroom gave them a chance to consider whether or not it was leadership. A review of the e-journals and interviews shows that reflecting on their leadership in relation to the

classroom setting, while reflexive and subject to the relationship between the researcher and the participants, still resulted in a majority of these student leaders adapting their perceptions of their own leadership.

Additional Findings

During the course of the research, additional information related to leadership emerged from the participants. Some of this information stems from the questions posed during the e-journals and interviews. Questions which were originally designed to elicit information about the classroom in order to make clear distinctions between classroom life and out-of-class life also revealed general information about these student leaders. The additional findings were categorized into three general areas: The three general time periods when participants learned most of their current leadership skill; the impact of the classroom environment on leadership practice; and general observations of DSA leadership programs.

Three Time Periods for Learning Leadership

Participants reported their leadership development fell into one of three general periods of time. The largest group of the participants (58%, n = 19) believed their leadership skills were innate or had developed throughout their lives. The second group (26%, n = 8) reported that they learned their leadership skills during their college years but did not describe specific settings for this learning. The final 16% (n = 5) presented detailed descriptions of how specific experiences and training during their tenure in DSA leadership programs accounted for most of their leadership development. These groupings are referred to here as: "life-long leaders," "collegiate leaders," and "DSA leaders" respectively.

Life-long leader. "Life-long" leaders reported that they learned their leadership skills from their parents, family, and community members, and through pre-college experiences. These students also mentioned middle- and high school experience as well as pre-college participation in sports teams, community service, and religious activity as the foundation for their leadership abilities.

Donna and Walt made these comments about their leadership development:

> DONNA: I actually think I was practically born with those leadership "skills" that we have discussed once before. My parents, my father especially, is a community and corporate "leader" and I think that I learned a lot of how to deal with people in general from him. To add to that, I am a very questioning person and I like to know practically everything there is to know about everything in general, so I tend to take a very active role in and out of the classroom. I don't know that I learned that anywhere but at home and it simply being a character trait of mine.
>
> WALT: I can't say that I learned these skills in any particular place or at any particular time. I think I sort of picked them up along the way by emulation. I can say that by the time I got to leadership training provided here at Tech that most of the skills they taught I felt were pretty obvious. Learning these skills took place far earlier than college for me.

Others, like Thomas, made numerous references to leadership as an "inborn" trait.

> THOMAS: I also learned that leadership is not necessarily something you can just pick up. Leadership is more of an inborn trait. You can improve and strengthen your leadership, but it comes from a natural source inside

of you. Just because you do not hold a recognized leadership position does not mean that you are not a leader. Leaders can be in all forms and areas. This really hit me this summer when I realized how diverse all of us were, but how that diversity combined together to form a leadership bond.

This perspective on personal leadership development was evident in a majority of the students in the study. While these students had learned what they believed to be their core leadership skills from pre-college experiences, a third of the "life-long" leaders mentioned the fact that these skills had been improved during their student leadership experiences at Virginia Tech. They acknowledged that while they had learned many of their leadership skills before college, the collegiate training and experiences improved their leadership abilities. Comments made by Earl, Kyle, and Sherry were typical of this perspective.

EARL: Some of these skills I think I've pretty much always had inherently, but have been developed and strengthened along the way. Others have been drawn out through experiences with jobs and training, and from just being a resident advisor and head RA 24/7.

SHERRY: I like to think that these skills were ones that I learned throughout my years of schooling. I was always challenged by my teachers and coaches to be the best and to do the best I could. The skills that make you a leader are developed through the years. I have always been taught to be patient, understanding, and open-minded. It is easy to be a leader when you have a good head on your shoulders, you have patience,

> social skills, and experience. Social skills and experience come with time and some training. The good head will come from schooling in various subjects that will make the person well rounded. Patience is a virtue. Oh, and I learned how to be a "University Leader" [emphasis hers] through the class.

When asked where he learned his leadership skills, Kyle provided this response:

> KYLE: Partly from experience, partly from my parents I guess. Just a feeling of being secure in myself, so that I didn't worry about speaking out and being wrong. Also, from my training and earlier leadership positions, I gained the confidence to do it, and the experience of having done it before. It isn't something that frightens me, I can just assume the lead and I don't worry about what will happen, because I know that I can get it done, I have in the past.

While Earl and Sherry reveal a combination of the life-long and DSA leader patterns, Kyle's comments are more closely linked with the life-long and collegiate patterns. Of the 17 student life-long leaders, six added that the DSA or other organizational training either enhanced or complemented life-long experiences.

Collegiate leader. The second category contains those participants who reported learning most of their leadership skills during their college years but did not specify where they learned those skills. These participants reported that experience in various leadership roles was their chief teacher while de-emphasizing formalized leadership training. Participants here may have included their DSA leadership roles in their description but did not specifically attribute their leadership development to those roles.

In general, students in this category made it clear that college experiences contributed most to their leadership development. They did not, however, specify which college experience contributed the most. Penny is typical in her e-journal response. "I definitely learned these skills through my extensive leadership positions about campus," she claimed, but she did not specify if she was including or excluding her DSA leadership role.

These students talked about observing others in similar roles, using trial and error, and "just working at" leading an organization or group. Vera's comments reveal that the experience of serving as a leader was the most important part. Although Vera trained as a resident advisor, she does not mention that experience directly.

> VERA: I have learned most of my leadership skills through working with other people as a student leader. I think that part of being a leader is responding to different personalities appropriately. This I learned through first hand experience, be it that I am interacting with another classmate or a professor. The leadership skills that I have developed have made me more confident in approaching others.

Vera went on to state that her leadership role in other organizations played a more critical role in her development than her position as a resident advisor.

Within the "collegiate" leaders, a sub-group emerged which included those who learned from their life experience but who also made it clear that their training and experience in their Virginia Tech position had a direct impact on their personal leadership development. In most cases, these students reported that the experiential component of their student leader positions accounted for most of their leadership learning.

Will demonstrated his sense of humor and his insight into his experience when he told the group where he learned his skills. When asked where he learned leadership, he laughed and said:

> I guess just watching people, and just since I got to college, the [student organization] is where I got most of the stuff. Just talking to people. I really don't know. It just came to me one day. I woke up and said "I'm going to be a leader."

DSA leader. Some students discussed specific training for DSA leadership programs as the key element in their leadership development. For them, the training appeared to have more meaning than for students who claimed they learned only through experience. The DSA training and directed experience opportunities at Virginia Tech served as the primary source for these students' leadership development. These students are referred to here as DSA leaders. While some of this group did mention pre-college experience or family as part of their leadership development in some way, they attributed their knowledge and skill as leaders to the specific training and learning opportunities provided for them in their DSA programs. DSA leaders reported that their initial training and subsequent experience in their leadership roles were intertwined and therefore perceived as one element. While collegiate leaders claimed that experience was their primary teacher, DSA leaders acknowledged an important relationship between leadership experience and training.

When asked where she learned her leadership skills Gail responded:

> GAIL: For me, [the resident advisor and Orientation Leader] classes taught me about other people and what they have to offer and that

> influenced my leadership skills. I learned to utilize them. I learned more about myself as an orientation leader than in any other experience I have been through. Basically, because of the depth of the experience (i.e., living, eating, sleeping, and working with 25 people, 24 hours a day), working together as leaders was very different than most student experiences.

Betty and Rhonda echoed that sentiment:

> BETTY: Most of [the leadership] skills I learned through being an orientation leader. I learned how to get people talking and keep them involved in the group. I also got some training on how to facilitate dialogue on touchy topics from [the peer education program]. I learned conflict diffusion skills from doing [the peer education program] and Orientation.
>
> RHONDA: Before my resident assistant training I would have never considered myself a leader. It took me a while throughout the training to consider myself a leader. I had some of those skills to bring them out. If I hadn't had training, I don't think, it would have ever come out.

Oscar and Cyril, both former Corps of Cadets members, claimed that the Corps was a primary source for leadership development. Cyril wrote the following in his e-journal: "I learned the majority of my leadership skills from the Corps of Cadets. It's the only place I've found where a person can learn from mistakes without having dire consequences."

Oscar made a very clear distinction between his experiences while still maintaining that these DSA programs were the major source for his leadership development.

> OSCAR: Leaders are made not born... I think that my involvement in extra curricular activities and the Corps fostered leadership qualities within me. However both the Corps and [my organization] taught different styles of leadership which I use alternately whichever is appropriate.

While both collegiate leaders and DSA leaders emphasized the fact that most of the learning occurred while the student was active in a leadership role, there is a critical difference. DSA leaders made specific and detailed references to the DSA programs in which they were involved. Collegiate leaders only referred to being a student leader and thus may be referring to other leadership experiences outside the scope of this study.

While none of the participants fits perfectly into any of the groupings developed, the evidence of their stories strongly suggest that these students believed their leadership development occurred in one of three ways: before college, during college in general activities, or during college through specific opportunities provided by student affairs. What is also evident is that all of these participants strongly believed that their leadership skills were enhanced by student affairs opportunities even if they already learned the basics in other ways.

Classroom Environment Impacts Leadership Opportunity

The participants in this study provided a detailed portrait of the kind of classroom and out-of-class settings in which they exhibited leadership. While it may seem self-evident, it was clear from these students' reports that the nature of the environment had

an impact on the kind of leadership in which students could engage in the classroom. The results of the relationship between environment and leadership are revealed in this section.

Physical environment, instructional style and group interaction. The first e-journal and interview sought to determine the kinds of classroom environments in which the students were placed. The participant groups were asked to generate a list of the various aspects of the classroom environment in the first interview. For purposes of analysis these lists were combined into two large lists for each area: most satisfying and least satisfying. These lists were then analyzed and coded. The results grouped into three general categories. The "physical environment" included the physical aspects of the rooms and buildings including lighting, temperature, and seating as well as factors such as time of day and number of students enrolled in the class. "Instructional style" included the information delivery format, personality and style of the instructor, and the nature of course materials and assignments. "Group interaction" included items such as class discussions and group projects or assignment.

The participants presented an image of the standard classroom setting at Virginia Tech not unlike most major universities. The participants reported that of the 136 total class sections in which they were enrolled, 31% were large classes, 26% were medium classes and 35% were small classes. Four sections were held in rooms that had no real seating structure, including the marching band which met on a field. The seating was fixed in 90% of the large lecture halls, whereas in 94% of the medium classrooms and 71% of the small classes, the seating was either movable or non existent. It is interesting to note that more than one quarter (29%) of small classes had fixed seating. In one case,

a participant reported a class of 20 students was scheduled in a classroom with more than 70 seats - none of which were ever moved.

For the least satisfying physical aspects of the class, all group lists included the concepts of large, uncomfortable classrooms with poor lighting. The participants reported that this made learning difficult. The participants reported that many rooms had fixed seating – even a few smaller classrooms used for more interactive class style. In classrooms without fixed seating, the participants reported that the room was so crowded, movement was again hampered. Additional physical conditions of poor sound insulation and environmental noise from HVAC units and hallways were reported by the participants as having a negative effect on their satisfaction with the learning environment in the classroom.

As one might expect, most of the satisfying physical factors appear to be the opposite of the least satisfying factor. The participants preferred smaller class sizes with moveable furniture in well lit, well ventilated rooms. The time of day when the class occurred was important to four of the six groups. Not surprisingly, these groups preferred mid morning classes to late afternoon or evening classes.

Although the majority of the students in this study were upperclassmen (seniors = 65%), the students reported that most of their classes were primarily lecture format. The participants were enrolled in 136 classes in the fall of 1996. Of those classes, 63% (n=85) were classified by the students as “straight lecture” or lecture with only question/response formats. Participants reported 23% (n= 31) of the classes had mixed formats, which included varying combinations of lecture, group participation, group discussion, and presentations (see Table 6). Only 14% of classes were fully interactive,

Table 6

Number and Percentage of Classroom Types Described by Participants

Classroom Type	#	%
Instructional Format (n=136)		
Lecture	85	63
Mixed	16	12
Interactive	31	23
Other	4	2
Type of Seating (n=143)		
Movable	61	43
Fixed	61	43
N/A	21	14
Size of Classroom (n=143)		
Large	42	29
Medium	53	37
Small	48	34

classes which included laboratory classes and classes in which the students were assigned interactive group work for the entire semester as the basis of their grade. All the participants reported having some form of group project, discussion, or interaction in at least one class in the fall of 1996.

The participants revealed that the personal characteristics and organization of the instructor had the greatest impact on satisfaction. The most satisfying classes were those in which the instructors were personable, cared about students, seemed approachable, knew their topic, and showed an interest in students' learning. These instructors were also highly organized yet flexible; good presenters or public speakers; provided coherent and useful notes, syllabi, and information in a variety of formats; and created assignments that were genuinely productive. To the contrary, instructors who were disorganized, poor speakers, or showed little interest in the students or the materials made class dissatisfying for the participants.

In terms of group interaction, the participants reported that classes in which they received hands-on application combined with group interaction were the most satisfying for them. All of the groups reported that class discussion and interaction during the class time added to their satisfaction with the class. In classes where group projects were assigned, the participants felt the projects added to satisfaction only if they were well organized, had some relevancy to the subject material, and demonstrated a relationship to "real world" team project scenarios.

Group interaction was not satisfying for these participants when it was poorly planned, had little relevancy to the class or real world applications, and involved class members who would not complete their share of the work. The grading of group work

was also a dissatisfier. In groups where the entire group received the same grade, the existence of a "slacker" or someone who did little work, was very dissatisfying. In classes where individuals received individual grades and where the group graded each, group participation was reported as satisfying. Thomas' response was typical.

> THOMAS: The class I took that was most satisfying was Psych Foundations class. It was very interactive and the class had to keep up with the readings and always do the work. It was always fun and stuff. We always did group work and stuff like that which I don't particularly like to do it all the time. The group work was a lot of fun just because it got a lot of people interacting. People who didn't know each other. It was hi tech and that kind of thing. Everyone got to know little bit about what was going on campus.

It seems clear then that the physical setting, the instructional style and the level of group interaction all have an important impact on the satisfaction of students in the classroom.

Similarly, there were environmental constraints on these students' in-class leadership experiences. The participants in this study revealed that classroom environment had a direct effect on the kinds of leadership behavior they could exhibit. As was already mentioned, questioning and role modeling behaviors were viewed as a form of leadership by the participants. These two kinds of leadership behavior were prevalent in large classes and straight lecture formats. Walt and Rhonda provide and examples of these behaviors.

WALT: I think sometimes leadership is quiet. I'm one of those bookworms Thomas referred too. I always sit in the front row I almost always write down everything the professor says and sometimes I think it helps to be the person who is in there doing that. Especially in classes I had been in with younger people. So I think that's sort of a kind of leadership.

RHONDA: In my religion class, when we were together, the whole big class, she would ask a question and no one would speak. I would have to break that feel, then everyone else would follow. I don't think it was let the leader speak, I think there was something there. I think they waited for me to answer first. That's kind of why I like to sit in the front of the class. I like to make the eye contact with the teacher. I like to initiate things. Maybe that's why I sit in the front of the class instead of the back where I feel just like everyone else.

While this kind of unintentional leadership was described by the participants, some described the standard academic setting as one in which leadership either did not occur or should not necessarily occur.

VERA: I think that much of what I do is motivated by being a role model and doing things that are expected of me as a student. Because my classes are so large there is not a lot of opportunity for leadership but when the opportunity arises I think that I take advantage of it. In small groups I think that I am usually one of the driving forces behind getting things rolling and getting the group on task.

Discussion and interaction were difficult in the larger lecture classes. In at least one case, the interaction in a small class was influenced by the physical environment.

> MARY: [In my Darwin class], the classroom was fairly small, but the seats were bolted to the floor. On several occasions the professor and students commented on the fact that it would be nicer if the chairs could be moved into a circle to make discussion easier. This class always had a great deal of discussion in it because we focused not only on Darwin, but the effects of his writings and how those issues are still prevalent in our society today.

In this class, it was difficult for students to show leadership because the physical arrangement made the group interaction process difficult.

However, leadership practices flourished in the more satisfying environments as described by the participants. Moos (1975) reported that "relationship and innovation oriented classes can create student satisfaction and interest in subject matter" (p. 196). In class discussion or group projects, it was evident that the availability of interaction and the relationships created facilitated leadership. It has already been shown that the participants assumed group leadership roles, however reluctantly, when assigned projects or group discussion. In classes where group discussion and projects were absent, the only possibility of leadership behavior arising was through the questioning or role modeling behavior. This parallels findings on social interaction change within classrooms (Blocher, 1978; Fraser & Fisher, 1982; Johnson & Johnson, 1987; Kolb, 1984; Slavin, 1991).

One interesting finding is that many of the participants expressed the desire to have at least some large classes with a passive learning format. These students expressed the idea that large lecture classes provide a form of anonymity that at times is comforting to those involved in a significant amount of interactive work. Donna provided a summary of this position in her response to the post-interview survey.

> DONNA: I still find that the [Virginia Tech] classroom environment inhibits the potential for leadership to occur because this is such a technically-based school. In most classes, the course is extremely lecture-based with very little in-class interaction between the students and the teacher, other than the occasional question that arises during a lecture or is induced by the homework prompting a student to venture into office hours. By the same token, I am not so sure this is always a bad thing. Yes, it inhibits the student leadership process in the classroom, but if all of my courses were based on letting someone show their leadership skills either through group work or some other activity, I would have class year-round just to get through the material. I think that the time factor is a major role in why our learning environment is not more student-enhancement oriented and instead offers opportunities for students to show their leadership in organizations that involve professional memberships, undergrad research, undergrad TA, extra-curricular, special interest, etc. These activities are VERY pushed, in my major at least, because there is so little opportunity in the classroom.

In responding to that concept, many of the students felt that this form of passivity is related to how they had been taught in school all their lives. Will made this made the following observation.

> WILL: The more people you have in a class the harder it is to really facilitate that kind of [interactive] process. What we've been taught our entire lives anyway the way classrooms are structured. We've been taught all our lives that the teacher is in the front of the room the students are in back. They listen to the teacher. When you start having classes where the teacher is a little secondary to that and the students are interacting more, it's hard for students to become more accustomed to that. The big thing is that you're taught that talking in class is not allowed and I think that even that fosters at least a little bit of hesitation to discuss or ask questions. You're taught that you must raise your hand to ask a question. The fundamental structure of the educational system is the hardest thing to change. There's a lot of talk now about elementary schools that are restructuring to eliminate that and the children are interacting a lot more and learning a lot more. That's got to be carried throughout the entire system. If you carried it throughout the entire system and you come to college and you're used to ding that anyway, it would be a lot different

This comment was echoed by others. The resulting perception is then that the environment in which these students learn and possibly exercise leadership behaviors is a product of overall environment which currently places little value on interaction in the classroom. The participants themselves expressed the concept that while this may be

changing, it was still obvious to them that most of their classes do not provide opportunities for interaction and leadership behavior to occur.

Comparisons of DSA Leadership Programs.

The participants described in detail a range of practices and skills for which they received varying degrees of training. Little of the leadership training described involved instruction or experiences which were easily compatible with the work of Kouzes and Posner (1995) or Rost (1993). For the most part, the students described the process of being instructed in student development theory, management practices, and personal development theory such as personal style or personality type. Concepts such as the Community Intervention Model, and Maslow's "Hierarchy Of Needs" were mentioned by some of the residential staff as significant parts of their training. Orientation leaders listed teamwork and public presentation as significant topics in their training. Other participants listed time management, program planning, and organizational operations as leadership skills for which they received training. Selection and supervision practices were mentioned by a few of the organizational leaders as critical elements of the informal training process. The only participants to specifically mention leadership theory and practice were those who participated in the Summer Leadership Employment Program or the Student Media Board Summer Workshop.

The training programs for the student leaders in all categories varied widely. Each of the major student leader groups received training in different ways from different trainers. While there were some similarities between the training programs, the only conclusive result from analysis of the participants' descriptions of these programs was that they were unique to the organization and were not coordinated with other groups.

While it was found that 84% of the participants were members of Level 1 programs with the highest order of training (see Table 4), training within this category and indeed all categories, varied greatly.

Residential staff. Residential staff received the most extensive training, with both a classroom and summer pre-service program required for all resident advisors and head resident advisors. Perceptions on the nature and depth of this training varied by individual within the study. While a few participants claimed the training was extensive and important, the remaining residential staff reported that it was superficial and focused too much on trivial clerical duties or policy enforcement. All participants reported that they perceived the training to be predominantly job skill enhancement with minimal leadership training involved. Beyond their ambivalence toward the content, most of the residence staff expressed frustration with the training process. This dialogue between three hall staff members summarizes what most of the resident staff reported.

> VERA: I hate RA training. The whole fall thing, we dread it, the whole time. I know that it is necessary, but they could cut out a lot of it.
>
> TREY: Especially for returnees.
>
> SHERRY: You start at 8:00 in the morning and you don't get done until 10:00 at night and half of it's BS in between. It's ridiculous. A lot of it's unnecessary.
>
> VERA: The facility's this huge apartment and especially returners don't need to hear that. Filling out forms, protocol, who to contact when such and such happens, like conflict resolution stuff.
>
> SHERRY: Conflict resolution? Like behind closed doors?

VERA: I think...that's very necessary, but like paper work and how to program, programming ideas...been there, done it. I have a file, thanks.

An example of the extensive nature of the resident advisor training programs was "Behind Closed Doors." The resident advisors described the "Behind Closed Doors" segment of training as an elaborate role play situation in which new or returning resident advisors were required to enter into a typical residence hall room and respond to the mock scenario occurring. These role-plays usually involved testing the resident advisors on their ability to follow certain protocols and procedures when confronted with an activity that involved violation of university rules. While some of the resident advisors perceived this role play to be unduly harsh and even referred to it as hazing, others reported that it helped them practice appropriate behaviors and gave them a chance to learn from their mistakes – a commitment supported by Kouzes and Posner (p. 68). The participants in these discussions were highly animated and emotional when discussing this part of the training program. The emotional nature of the response elicited in this topic revealed the depth of impression made by this program which contains some leadership elements. For the residential staff, training was a hybrid of laborious administrative process review with some active leadership development.

Orientation leaders. The next most extensively trained participants in this study were orientation leaders. They too completed a one semester course and some pre-service training. The data suggest that there was no way fully to categorize the training for the years which this study covers. The orientation leaders involved in this study reported that the training program changed as described below in the three consecutive years leading up to this study. No consistent pattern of training existed for comparison,

so it was difficult to determine that orientation leader training as a generalized program influenced the students' leadership abilities in any specific way. There is evidence, however, to suggest that within certain orientation groups, some leadership practices (collaboration and role modeling) were emphasized over others (challenging and risk taking).

Orientation leader training started with a one semester class in the spring prior to summer orientation. This program usually consisted of lectures and presentations about various aspects of student life, academic work, and services. In the previous two years (1995, 1996), class work was expanded to include issues of diversity, alcohol and substance abuse, and some personal development issues. Jack stated, "In orientation, we analyzed our leadership styles and discussed strengths and weaknesses of each style." The most extensive example of leadership training was the participation in a ropes course in the summer of 1996. Gail and Tasha describe the intensity of the experience as well as their changed perceptions of their colleagues.

> GAIL: The week that we came back for training before everyone showed up we did a ropes course up in Harrisonburg and it's supposed to build unity, team work and all that stuff, and also trust. . . . There was a vertical wall out in the middle of the woods. . . . we had to get everybody to the other side and we figured out that if the two biggest guys are up on top and the two smallest, most agile were females (we figured) would be the lightest were on the bottom, we'd be able to get all of us over. So that's what we proceeded to do. These guys were literally half hanging over the wall with me. Tasha and I grabbed on and the two guys pulled us over. I

> don't know how we figured it out, but our lives were in these two guys' hands and in each other's hands. I remember the whole time, once I did open my eyes, Tasha has ten times more determination than I do. I was whiny and Tasha wouldn't let up. She reached and grabbed on . . . .
>
> TASHA: From that point on I would have totally trusted the three of them with anything, because I know that my life was in their hands for that 20 minutes it took us to get over the wall. We were screaming, yelling. From that point on though I would have totally trusted them, that they weren't going to let things happen in a bad way. They were really going to fight to try to help me, which was good.
>
> GAIL: They could do anything to me now and that's okay.

Kouzes and Posner (1996) describe these kinds of outdoor adventures as fitting their concept of "experiment and take risks" when they mention a program similar to the one the orientation leaders attended (pp. 66-68). The orientation leaders reported that this experience was the most crucial one in their training program. This revealed a similar pattern to that of the resident advisors, in which an intense experiential session left the strongest impression about the training. An important dichotomy exists between the orientation leaders and the resident advisors. The orientation leaders viewed their experience as promoting themselves in an extremely positive way. Conversely, the intense experience for resident advisors created feelings of hostility and futility. While both received intense experiences, the vastly different outcomes clearly influenced their perceptions of the utility of the experience.

Other leader groups. In all other groups, including the Corps of Cadets, the variety and depth of leadership and organizational training involved does not allow for simple description. The organizational leaders described training programs, both formal and informal, which stressed decision-making, process orientation, meeting management, and counseling or consultation skills. While programs such as the Corps and Student Leader Employment Program both have Level 1 ratings, the diversity of methods and models used for leadership training make any comparison spurious. Training programs in Level 2 and Level 3 varied equally. Each organization emphasized its own particular style of training. Each emphasized differing expectations of leaders. Little comparison between these forms of training can be made even though all are within the Division of Student Affairs at Virginia Tech.

Two members of one organization attended an outdoor adventure canoe trip during the summer of 1996. They did not, however, report any significant leadership practices learned or taught. Will, a student organization leader for two years, described his training this way:

> WILL: In the summer, we have [the organization] retreat and all the [member] organizations meet in a room in Squires and talk about a number of different things mainly about different types of leadership styles and talked about futuristic. . . . This is my second year as [the leader] so that was the first year. The second retreat that I went on, we went white water rafting and we learned how to build a campfire, it was structured very differently. A new person had taken over [advising the organization], so we got to know each other a little bit. So that was really

> – training. A lot of it, I knew like certain things I had to do, I had to conduct staff meetings, I had to meet deadlines. This is how you meet deadlines, this is how you delegate, so it was learning. [But mostly it was] self taught.

Clearly Will's outdoor experience influenced his perception of training in a much different way than the orientation leaders who experienced the ropes course. This serves as another example of how training, even similar types of training, can have vastly different results depending on the design of the program.

For organizational leaders and Corps of Cadets members, it was difficult to find any single pattern, style, method, or theory behind the leadership training. Essentially each of those programs had some element of leadership training but the participants of this study were unable to articulate the specifics of their training.

The general findings reveal that the DSA did not have leadership development program that served all DSA student leaders. While the administrative areas responsible for the DSA leaders provided a variety of experiences, only some of them provided elements of leadership training. Furthermore, there is no evidence of a central theory base or even a general concept of what leadership should have been across the DSA programs. The training of these participants greatly varied even where similar types of training were offered. There is enough evidence to suggest that while the processes may have been different, practices similar to those outlined by Kouzes and Posner (1995) were present in most of these training programs.

Employment. The vast majority (26) of the student leaders in this study were employed by the DSA to serve as student leaders. Paid student leaders accounted for

84% of the participants. In the general student leader population selected for this study, paid leaders accounted for only 78%. Resident advisors, head resident advisors, and orientation leaders were paid by DSA departments. Student Media Board members were paid by the organizations for which they were the chief officer. This factor adds an interesting dimension to the relationship between student leader and trainer/employer.

The most evident finding is that student leaders who were paid participated in more extensive training. Residential staff and orientation leaders were paid by the DSA to serve as student leaders. While not directly addressed in the interviews, it seems obvious that these students understood that in order to keep their jobs, they had to attend training. Student Media leaders, while not paid directly by the university, were expected as part of their jobs to attend training and did so again showing that students attended paid training programs. Student leaders in the non-paid positions received the lower levels of training and in general did not participate in the significant training programs that paid leaders did. While not statistically verified, there appears to be a direct relationship between paid positions and level of training.

Summary

This chapter presented the results of the study. The descriptive findings showed that the population of the study with the exception of class was representative of the general population of Virginia Tech and that the participants were generally representative of the target population of student leaders.

This chapter also presented the results of the study in relation to each of the research questions. Sufficient evidence was presented to adequately address the first three research questions. It was determined that sufficient time had not passed to

determine behavioral changes as required in the fourth question. There was evidence to suggest, however, that perceptual changes may have taken place as a result of the interactive nature of the study.

Finally, this chapter presented information about additional findings not related directly to the research questions. Findings on the connection between classroom environment and leadership, time period for learning leadership skills, and the role employment plays in leadership training were presented.

CHAPTER 5

SUMMARY, DISCUSSION, AND RECOMMENDATIONS

A Summary of the Study

This chapter presents a summary and conclusions of the findings of the study. It relates the various themes to relevant research and includes recommendations for future study and practice.

The purpose of this study was to identify the leadership skills students believe they learned in co-curricular activities, to determine how those skills are used in the classroom, and to discover whether those skills enhance the academic experience for students. The study involved 31 student leaders who held positions in organizations or programs which are trained and supervised by staff in the Division of Student Affairs (DSA) at Virginia Polytechnic Institute and State University (Virginia Tech). The students submitted electronic journals (e-journals) sent via e-mail and participated in group interviews based on Kruger (1994). The participants were divided into six groups of no less than four members. Each group participated in four rounds of e-journal submissions and group interviews during spring semester 1997.

After all of the rounds were complete and the initial analysis of data had begun, the researcher sought volunteers from the original 31 participants to respond to a post-process e-journal. This provided an additional step in determining the impact of reflection upon the participants' perceptions of their leadership skill and training. The post-interview e-journal was conducted in fall 1997 with eight of the original 31 responding.

Participants' responses to e-journals were copied and coded using HyperQual II, a (hyper card method) to categorize, sort, and count responses based on the Kouzes and Posner (1995) model. Interviews were transcribed for content and coded in a similar manner. The researcher constructed a clustered matrix to organize responses in relation to research questions. Four major conclusions arose from this analysis of the data:

1. Leadership practice training and execution is clustered around central practices of the theory: inspiring, enabling, and modeling.
2. Leadership in the classroom is affected by training, experience, and environment.
3. The differences in DSA training programs affected both the level of skill and the perception of skill among student leaders.
4. Reflection about leadership involvement was significant to understanding the leader role.

Conclusions related to each of these themes will be presented in the following section. General recommendations as a result of this research are presented at the end of this chapter.

The summary also provides some review of the related findings which emerged beyond the original intent of the study. This combination of findings provides a more developed image of the complex relationship between the in-class and out-of-class leadership experience for specific student leaders.

Discussion

Leadership Practice, Training, and Execution are Clustered.

The leadership practices learned and exhibited by the student leaders in this study were concentrated in the central practices of the Kouzes and Posner (1995) model. The

central practices of “inspiring,” “enabling,” and “modeling” showed the frequencies of 26%, 28%, and 32% respectively while “challenging” were only 12% and “encouraging” was a meager 3% of all practices (see Figure 1). The results demonstrate that these student leaders learned the practices of inspiring, enabling, and modeling outside of the classroom and also reported these same practices more often in classroom practice.. The practices of challenging and celebrating were less evident both in and out of the classroom.

The reasons for this pattern are somewhat unclear. One study by Kouzes and Posner (1998) showed that experienced student leaders demonstrated superior levels of leader practices when compared to new leaders or those with no leader experience at all. The literature in general, however, does not show that among trained student leaders there are expected levels of ability in each individual practice area. While the student leaders in this study may have been overwhelmingly trained and experienced in certain practices, there is not enough evidence to suggest that they were different from or similar to leaders in other studies.

Another finding in this study was that student leaders working in jobs as resident assistants or paid orientation staff were less likely to exhibit challenging behaviors, perhaps because of the nature of the employee relationship. In this study, it was clear that resident assistants and orientation leaders did not report a great deal of training or experience in challenging behaviors. Because paid leaders were the vast majority of leaders in the study, their lack of challenging behavior may have skewed the results of the study. However, if the Posner and Brodsky (1994) study is considered, it may be assumed that the employee role was not a factor. Assuming that is the case, the current

study shows that the lack of challenging behavior may be attributable to the lack of training in that particular area and possibly due to an institutional reluctance to allow student leader/employees to exhibit behaviors that may not be accountable in the system of supervision established. The participants hinted that this may be the case.

The participants were clear about their training and use of the middle three practices. The evidence strongly suggests that these students were heavily trained and expected to exhibit enabling and modeling behaviors and to a lesser extent the inspiring behaviors. The kinds of training experiences the participants described can be directly linked to these practices. The participants described team building seminars, ROPES courses, canoe trips, and retreats. All of these experiences were designed to enhance the students' sense of teamwork. This parallels findings by Zimmerman-Oster and Burkhardt (1999). In a study of leadership development programs, they found that a majority of the programs used seminars (95%), summer programs (63.3%), and staff training (60.7%) to develop leadership practices (p. 57). They also found that as many as 48% use outdoor programs and 35% use ROPES courses (p. 57). The Virginia Tech DSA training programs used all of these types of programs. The Zimmerman-Oster and Burkhardt (1999) study also found that among the skills most improved through training were civic/social awareness, communication skills, self-esteem, problem solving, galvanizing action, and conflict resolution (p. 58). At the low end of the improvement scale were ethics, risk-taking, and job identity (p.58). The participants in this study draw a close parallel to the Zimmerman-Oster and Burkhardt (1999) data. The students in this study reported that they were role models (civic/social awareness), team/group oriented (personal/social responsibility), first to start tasks (galvanizing), and able to keep groups

working (conflict resolution). Risk-taking was not readily evident in either training or behavior in either study.

The training and experiential programs of these student leaders are clustered in the central practices of the model, weak on the first and fifth practices, and this is not dissimilar from other programs at other universities.

Leadership in the Classroom is Affected by Training, Experience, and Environment.

The display of student leadership in the classroom is affected by training, experience, and environment. This study provided ample evidence that there is a strong relationship between the type of training student leaders received, their level of experience, the classroom environment, and exercise of leadership in the classroom. The data show that the practices the participants learned and reinforced in their co-curricular life were also the ones they used most often in the classroom setting. The best example is that role modeling was the most frequently reported practice (32% of all practices reported) and that students reported role-modeling behaviors even in classrooms where interactive practices such as leadership are hampered by physical constraints.

The connection between these two seems obvious. One would assume that skills learned in the world outside of the classroom would be transferred to the classroom. However, presuming that the skills were developed outside of the classroom, the training and experience must be sufficient to allow for transferability. The classroom environment must be such that it at least allows, if not encourages, the exercise of leadership. This study found that in the classes where training, experience, and environment coalesced, leadership was evident.

Much of the previous research on the connection between the curricular world and co-curricular world has focused on persistence, academic achievement, and overall achievement (Astin, 1996; Pascarella & Terenzini, 1991). The wealth of studies on student involvement shows, for the most part, that involvement with peers outside of the classroom is positive for the curricular experience (Astin, 1996). This study shows that out-of-class leadership training has a more direct effect. It positively affects in-class leadership activity itself.

The participants displayed leadership practices in their classes especially as related to group project work. These leaders reported that they took leader roles more often than not, and even took those roles when attempting to avoid them, in order to prevent the group from failing. The most frequently reported practices were inspiring, enabling, and modeling. The use of these practices parallels the out-of-class training the student leaders received. These students did not challenge or risk a great deal in their classes nor did they find ways to celebrate their accomplishments in class. Only occasionally did they take risks by challenging the authority of the instructor.

The ability of the participants to exhibit leader practices was affected by the environment of the classroom. The physical arrangements of the classroom in many cases prevented students from engaging in leader behaviors because students were seated in rows or in unmovable seats. Collaborating, role modeling, and engaging fellow students was reportedly difficult and uncomfortable. These findings support the claims of previous researchers that the physical structure of the classroom environment has a direct impact on the quality of interaction (Fraser & Fisher, 1982; Fraser & Treagust,

1987; Fraser, Treagust, & Dennis, 1986; Hadley & Graham, 1987; Moos, 1979; Winston et al., 1994).

The instructional style of the classroom also had an impact on the participants' ability to exercise leader skills. In lecture classes with few group projects, little leadership could be expressed. These classes were typical and held in large lecture rooms with little chance for interaction except with the instructor. In some cases, these students reported going beyond the physical limits of the classroom to exhibit leader behaviors. Most prominently among those was role modeling. They would model good classroom behavior and ask questions on behalf of other students. They stretched beyond the environment and used the role modeling and enabling practices from their experience.

The classrooms where leader activity was the strongest were those that relied on open, engaged instructional formats. Cooperative learning theory and environmental theory both suggest that these are the classrooms best suited for learning. For leadership to exist, there must be groups. Participants reported the greatest use of leader skills in the classes where participants were assigned group work regularly. These collaborative classrooms provided the best learning environments for academic work (Cantor, 1995) and the best environment for academic leadership.

Finally, these students revealed that leadership in the classroom was a major part of their academic experience – when they realized it. The connection between the out-of-class leader experience and the academic experience was strong. This supports the contention of Terenzini, Pascarella and Blimling (1996) that "out-of-class experiences appear to be far more influential in students' academic and intellectual development than many faculty members and academic and student affairs administrators think" (p. 157).

The leadership experiences these students had in their co-curricular lives directly influenced what they did to succeed in the academic world to the benefit of their own academic experience and that of their fellow students.

These findings provide evidence of the direct influence of out-of-class leadership experience have on academic development. They also show that the physical environment, format of the class, and the personal experience students bring into class each have an influence on whether or not students can exhibit leadership when necessary in the classroom setting.

The Differences in DSA Training Programs Affected Both the Level of Skill and the Perception of Skill of Student Leaders.

The evidence presented in this study shows that different programs and organizations under the umbrella of the Virginia Tech DSA provided widely different training and experiences. The results showed that all of these student leaders received the some level of training. The student leaders' stories reveal training programs ranging from semester long classes to simple advising and one hour programs. The student leaders in the programs with the most direct relationship to DSA departmental management, such as residence halls and orientation programs, received the most extensive training and experience. It was also shown that leader positions which were also employment positions such as resident advisors, orientation leaders and student media staff, received the highest level of training. What is more important is that leaders in these programs were trained in significantly different ways, with different leadership theories, approaches, and models. The result creates separate sets of trained student leaders with little understanding of the similarities among their experiences. Although

some of the student leaders received training in more than one leadership position, they did not demonstrate any sense of a collective understanding of leadership across their experiences.

Reflection About Leadership Involvement was Significant to Understanding the Leader Role

Reflection is a critical part of learning in team or group settings (Adams & Hamm, 1996; Johnson & Johnson, 1987; Johnson, Johnson, & Smith, 1991; Slavin, 1991, 1995a, 1995b). The results of this study showed that every participant involved in the post-study survey reported that reflection was important to their understanding of their leadership role. In this study, reflection became both a research method and a learning tool. While the participants were reflecting on their leadership experience and the experience of others in their cadre, they were also learning about themselves and their leadership skills. This is not an unexpected occurrence in a qualitative study (Ely, 1991). What is important about the finding in this study is that these students did not necessarily perceive themselves as leaders until they reflected on their own behaviors or the behaviors of others in their group. The interchange in which Alan recognized the leadership in Mary, and yet she did not see it herself until he pointed it out, illustrates the importance of this kind of exchange. Even the experience of reflecting on their own leadership practices as part of a research project became an educational process. It is clear that reflection can have a significant impact on the understanding of leader practice and of leadership in general.

Considerations and Limitations

The limitations of this study are contingent upon the nature of a qualitative study conducted on a single population. The population and sample were limited to undergraduate students at Virginia Tech involved in specified programs sponsored by student affairs practitioners at the time of the research. This is a very narrow population and findings may be affected by the particular culture of this university.

The sample contains bias toward students who are already involved in activities that train them to use skills in all areas of their lives. Because students in Division of Student Affairs programs were assumed to have received at least some training, a bias may exist because these students may already act as leaders. In many ways, these students have already self-selected to serve in leadership roles.

Another limitation may be the disproportionate number of seniors in the study when compared with the Virginia Tech population in general. It was not determined if any of the possible leadership positions required specific class or age. While it may be common for most leadership positions to be held by upperclass students, this limitation should be considered when considering the results. Because these students were older upperclass students, they may have entered their positions, and by extension their classroom-based learning experiences, with more "pre training" leadership experience and life experience. There was no attempt to study "non-leaders" in the classrooms to see if they exhibited leadership practices.

The final limitation is the concept of employment. Of the student leaders in the study, 91% were paid to serve in their leadership position either by a DSA department or by the organization itself. In some cases, the responses to interviews may have been

more as employees of the institution than of independent students leaders with no specific ties to the institution. The nature of the employed leader role should be considered when comparing to other student leader groups.

Because of the specificity of the sampling, the study may not lend itself to generalizations beyond the Virginia Tech population. Each institution has its own culture. The results of this study may not have applicability beyond the culture specific to Virginia Tech. Generalizing results beyond this narrow population would have to supported by research at other institutions.

Recommendations for Practice

This section provides some suggestions for practical application of the findings and for further research to enhance knowledge in the area of leadership and its relationship to the classroom.

Improve Leadership Training Across the Division of Student Affairs

The results of this study reveal some areas where enhanced planning of leadership development could benefit student leaders in and out of the classroom. In general, the Division of Student Affairs should select a set of leadership principles then develop all training programs around those principles. This would give student leaders throughout the division's programs a common lexicon and experience. Because of its applications and instrumentation, the leadership practices model of Kouzes and Posner (1995) is recommended.

In addition, the training should focus on the areas of the Kouzes and Posner (1995) model in which these students were weaker. Student leaders should be given more opportunities to develop the skills that were not evident in the findings of this study.

A more broadly based development program may enhance the leadership abilities of students during and after their experience at Virginia Tech.

Create Purposeful Links Between Co-Curricular and Curricular Leadership

The student leaders who participated in this study demonstrated leadership in the classroom. While they reported leadership actions, they also reported that they were reluctant to begin those actions in class and in many cases the classroom environment actually hampered their ability to serve as leaders.

Student affairs practitioners and faculty should begin to develop explicit programs which blend curricular and co-curricular leadership. This study showed that the leadership skills students learn outside the classroom are used to enhance the learning experience in collaborative, cooperative and experiential classrooms. These same skills are the primary skills employers are seeking in graduates of colleges and universities. It is incumbent upon student affairs practitioners to teach leadership skills to the student in a purposeful way that will help them translate those skills to the classroom. Student affairs should also encourage and support efforts in the academy to alter environments and teaches practices to exploit leadership skills. Encouraging and training faculty to engage in leadership training or preparation before assigning work groups is one example of how student affairs could make a significant difference in the quality of the class work as well as the leadership involved in the process. Finally, student affairs must demand recognition from the academy for contributing to learning. Out-of-class leadership development programs contribute to learning.

Provide Training and Development to Instructional Faculty

Faculty should be trained to use more leadership-friendly instructional models in upper level classrooms. Faculty need not only to be aware of the leadership potential of the classroom but also to have the instructional tools to enhance that part of the course. Since few faculty receive specific training in instructional or group process models, student affairs staff who conduct training could train faculty to make more purposeful assignments and design of group project work to enhance leadership outcomes because this enhances the quality of the academic experience.

Implications for Theory

This study found strong evidence to support the middle three practices of the Kouzes and Posner (1995) model by college student leaders. The first and fifth practices were not nearly as evident. This suggests that challenge and reward behaviors of leaders may not be developed in the more traditional college age groups. Further research will be needed to learn whether college students in fact practice all elements of the Kouzes and Posner model. It will also be necessary to learn whether cognitive and psychosocial development limit the practical application of any leadership the Kouzes and Posner leadership practices. The absence of the first and fifth practices among student leaders in this study may reflect not lack of training, but the lack of personal development needed to understand and implement those practices.

While this study focused on the Kouzes and Posner model, it also used the Rost (1991) theory to underscore general leadership. Additional study needs to be conducted to learn whether Rost's post-modern vision of leadership reasonably applies to college student leaders. As with the Kouzes and Posner theory, it will be necessary to learn

whether traditional age college students possess the development on cognitive and psychosocial levels to understand and work in the complex mutual relationships envisioned in Rost's theory. One central question of this research would be: is it enough to be taught and learn the basis of the theory or must one also be developmentally able to practice it?

Implications for Further Study

Given the obvious limitations of studying a small set of students at a particular institution, this study has provided a richness of data which will expand the basic understanding of the relationship between the co-curricular experience and the classroom. The strength of this study lies in its use of multiple methods of investigation to reach into the experience of student leaders and allow them to describe how they view their actions and to reflect on those actions. This method created a powerful spiral of energy which drew out important perceptions and observations while still maintaining a rigor that allowed for interpretation through various qualitative techniques.

This study was important because it advanced knowledge about students as student leaders and how their academic and co-curricular worlds are not as separate as administrative structures, institutional perceptions, or the students themselves would suggest. These students were acting as student leaders both in the positions they were trained and hired to fill but also, more importantly, in the classroom where there were few expectations for leadership. By gaining an understanding of the complex relationship between the curricular and co-curricular experience, student affairs professionals can join with other university administrators and faculty to conduct more

research and develop environments conducive to providing positive outlets for leadership.

Further research is needed to understand more fully the relationship between co-curricular, curricular leadership practice, and improved educational experience. It will be useful for this study to be replicated at other institutions of varying types to determine if these results are more widely found. It would be useful to determine if training prior to the start of group intensive classes would enhance the leadership and academic outcomes of the class. It would also be helpful as well to determine if coordinated leadership programs, as have been recommended, can truly enhance the knowledge and practice of leadership both in and out of the classroom. Any of these studies and any comparisons of these findings with similar findings in other studies will help increase the general understanding of the complex relationship between the co-curricular and curricular parts of a student's life in higher education.

REFERENCES

A perspective on student affairs. (1987). Washington, DC: National Association of Student Personnel Administrators.

Adams, D. M., & Hamm, M. E. (1996) Cooperative learning: Critical thinking and collaboration across the curriculum. Springfield, IL: C.C. Thomas.

Alvesson, M. (1996) Leadership studies: From procedure and abstraction to reflexivity and situation. Leadership Quarterly 7, 455-485.

American College Personnel Association (ACPA). (1994). The student learning imperative: Implications for student affairs. Washington, DC: Author.

Amey, M., and Tombley, M. (1992) Re-visioning leadership in community colleges. The Review of Higher Education, 15, 152-150.

Anaya, G. (1996). College experiences and student learning: the influence of active learning, college environments and co-curricular activities. Journal of College Student Development, 37, 611-622.

Astin, A. W. (1977). Four critical years: The effects of college on beliefs, attitudes, and knowledge. San Francisco: Jossey-Bass.

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

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

Astin, A. W. (1996). Involvement in learning revisited: Lessons we have learned. Journal of College Student Development, 37, 123-34.

Astin, A. W. (1999). Involvement in learning revisited: Lessons we have learned. Journal of College Student Development, 40, 587-598.

Badura, A. S., Millard, M., Peluso, E. A., & Ortman, N. (2000). Effects of peer education training on peer educators: Leadership, self-esteem, health knowledge, and health behaviors. Journal of College Student Development, 41, 471-478.

Bannister, P., Burman, E., Parker, I., Taylor, M., & Tindall, C. (1994). Qualitative methods in psychology: A research guide. Buckingham, UK: Open University Press.

Bass, B. M. (1981). Stogdill's handbook of leadership: Theory and research. (2nd ed.). New York: Bantam Books.

Bass, B. M. (1990). Bass & Stogdill's handbook of leadership: Theory and research and managerial applications. (3rd ed.). New York: Free Press.

Baxter Magolda, M. B. (1992). Knowing and reasoning in college: Gender related patterns in students' intellectual development. San Francisco: Jossey-Bass.

Belenky, M.F., Clinchy, B. M., Goldberger, N., and Tarule, J. M. (1986) Women's ways of knowing: The development of self, voice, and mind. New York: Basic Books.

Bennis, W. (1989) On becoming a leader. Reading, Mass: Addison-Wesley.

Bennis, W., & Nanus, B. (1985). Leaders: The strategies for taking charge. New York: Harper and Row.

Bensimon, E., and Neumann, A. (1993) Redesigning collegiate leadership. Baltimore: Johns Hopkins.

Best, J. W., & Kahn, J. V. (1989). Research in education. New York: Prentice-Hall.

Binard, K., & Brungardt, C. (1997) Learning leadership: Assessing students at the Community College of Denver. The Journal of Leadership Studies, 4, 128-140.

Blocher, D. H. (1978). Campus learning environments and the ecology of student development. In J. H. Banning (Ed.). Campus ecology, a perspective for student affairs. National Association of Student Personnel Administrators, 17-23.

Bloland, P. A., Stamatakos, L.C. & Rogers, R. R., (1996). Redirecting the role of student affairs to focus on student learning. Journal of College Student Development, 37, 217-26.

Brannen, J. (Ed). (1992). Mixing methods: Qualitative and quantitative research. Aldershot, UK: Avebury-Ashgate.

Bruffee, K. A. Sharing our toys: Cooperative learning versus collaborative learning. Change, 27, 12-18.

Bryman, A. (1988). Quantity and quality in social research. London: Unwin Hyman.

Bryman, A. (1992). Quantitative and qualitative research: further reflections on their integration. In J. Brannen (Ed.). Mixing methods: Qualitative and quantitative research. Aldershot, UK: Avebury-Ashgate.

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

Cantor, J. A. (1995). Experiential learning in higher education: Linking classroom and community. ASHE-ERIC Higher Education Report No.7 Washington, DC: The George Washington School of Education and Human Development.

Leadership and Student Organization Programs (LSOP). (1996). Catalog of Leadership Opportunities. Blacksburg, VA: Virginia Tech.

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

Chambers, T., & Phelps, C. E. (1993). Student activism as a form of leadership and student development. NASPA Journal, 31, 19-29.

Chickering, A. (1969). Education and identity. San Francisco: Jossey-Bass.

Chickering, A. (1994). Education and identity. San Francisco: Jossey-Bass.

Chickering, A. W., Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. AAHE Bulletin, March. *3-7.*

Clark, K. E. (1985), Teaching undergraduates to be leaders. American Association of Higher Education Bulletin, March, 11-14.

Clements, A. D. (1995). Experiential-learning activities in undergraduate developmental psychology. Teaching of Psychology 22, 115-18.

Conger, J. (1992). Learning to lead. San Francisco: Jossey-Bass.

Covey, S. R. (1989). The seven habits of highly effective people. New York: Simon & Schuster.

Covey, S. R. (1996). Three roles of the leader in the new paradigm. In Hesselbein, F., Marshall, G., & Beckhard, F., (Eds.). (1996) The leader of the future: New visions, strategies and practices for the next era. San Francisco: Jossey-Bass.

Crosby, P. B. (1990). Leading: The art of becoming an executive. New York: McGraw-Hill.

Denzim, N. K., & Lincoln, Y. S. (1996) Handbook of qualitative research. Thousands Oaks, CA: Sage Publications.

Depree, M. (1989). Leadership is an art. New York: Doubleday.

Dewey, J. (1938). Experience and education. In Boydston, J. A. (1991). John Dewey: the later works, 1925-1953. Carbondale: Southern Illinois University Press.

Ely, M. (1991). Doing qualitative research: Circles within circles. London: The Falmer Press.

Farren, C., & Kaye, B. L. (1996). New skills for new leadership roles. In F. Hesselbein, M. Goldsmith, & R Beckhard (Eds.). The leader of the future: New visions, strategies, and practices for the next era. San Francisco: Jossey-Bass.

Fraser, B. J., & Fisher, D. L. (1982). Predicting students' outcomes from their perceptions of classroom psychosocial environments. American Educational Research Journal, 4 , 498-518.

Fraser, B. J., & Treagust, D. F. (1987). Validity and use of an instrument for assessing classroom psychosocial environment in higher education. Higher Education, 15, 37-57.

Fraser, B. J., Treagust, D. F., & Dennis, N. C. (1986). Development of an instrument for assessing classroom psychosocial environment at universities and colleges. Studies in Higher Education, 11, 43-54.

Gardner, J. W. (1986). The nature of leadership. Washington, DC: Independent Sector

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

Gill, R., Levine, N., & Pitt, D. C. (1998). Leadership and organizations for the new millenium. The Journal of Leadership Studies, 5, 46-59.

Gilligan, C. (1977). In a different voice: Psychological theory and women's development. Cambridge, MA: Harvard University Press.

Gilligan, C. (1982) In a different voice. Cambridge, MA: Harvard University Press.

Greenwood, R. G. (1993). Leadership theory: A historical look at its evolution. The Journal of Leadership Studies, 1, 4-19.

Hadley, T., & Graham, J. W. (1987). The influence of cognitive development on perceptions of environmental press. Journal of College Student Personnel, 28, 388-394.

Hammersly, M. (1992). Deconstructing the qualitative-quantitative divide. In J. Brannen (Ed.). Mixing methods: Qualitative and quantitative research. Aldershot, UK: Avebury-Ashgate.

Hashem, M. (1997). The role of faculty, in teaching leadership studies. The Journal of Leadership Studies, 4(2), 89-100.

Hershey, P. (1984). The situational leader. Escondido, CA: The Center for Leadership Studies.

Hesselbein, F., Marshall, G., & Beckhard, R. (Eds.). (1996). The leader of the future: New visions, strategies and practices for the next era. San Francisco: Jossey-Bass.

Horowitz, H. L. (1987) Campus life: Undergraduate cultures from the end of the eighteenth century to the present. New York: A.A. Knopf

Johnson, D. W., & Johnson, R. T. (1987). Learning together and alone: cooperative, competitive, and individualistic learning. Englewood Cliffs, NJ: Prentice-Hall.

Johnson, D. W., Johnson, R. T. & Smith, K. A. (1991). Cooperative learning: Increasing college faculty instructional productivity. (Report No. EDO-HE-91-4). Washington, DC: Office of Educational Research and Improvement , (ERIC Clearinghouse on Higher Education ED 343 465).

Kanter, R. M. (1983). The change masters. New York: Simon & Schuster.

Kanter, R. M. (1996). World-class leaders: The power of partnering. In F. Hesselbein, M. Goldsmith, & R Beckhard (Eds.). The leader of the future: New visions, strategies, and practices for the next era. San Francisco: Jossey-Bass.

Kegan, R. (1982). The Evolving Self. Cambridge, MA: Harvard University Press.

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

King, P. M., & Baxter Magolda, M. B. (1996). A developmental perspective on learning. Journal of College Student Development, 37, 163-173.

Kitchener, K. & King, P., (1981). Reflective judgment: concepts of justification and their relationship to age and education. Journal of Applied Developmental Psychology, 2. 89-116.

Klenke, K. (1993) Leadership education at the great divide: Crossing into the 21st century. The Journal of Leadership Studies, 1, 111-128.

Kohlberg, L. (1969). Stage and sequence: The cognitive-developmental approach to socialization. In, D. Goslin (Ed.). Handbook of socialization theory and research. Chicago: Rand McNally.

Kohlberg, L. (1971). Stages of moral development. In C. M. Beck, B. S. Crittenden, & E. V. Sullivan (Eds.). Moral education. Toronto: University of Toronto Press.

Kolb, D. A. (1984). Experiential learning: experience as the source of learning and development. Englewood Cliffs, NJ: Prentice-Hall.

Komives, S. R. (1994). Women student leaders: Self-perceptions of empowering leadership and achieving style. NASPA Journal, 30. 102-112.

Komives, S. R., Lucas, N., & McMahon, T. (1998). Exploring leadership. San Francisco: Jossey-Bass.

Kouzes, J. M., & Posner, B. Z. (1987). The leadership challenge. San Francisco: Jossey-Bass.

Kouzes, J. M., & Posner, B. Z. (1993). Leadership practices inventory (LPI). Erlanger, KY: Pfeiffer & Company.

Kouzes, J. M., & Posner, B. Z. (1995). The leadership challenge. 2nd ed. San Francisco: Jossey-Bass.

Krueger, R. A. (1994). Focus Groups: A practical guide for applied research. Thousand Oaks, CA: SAGE Publications.

Kuh, G. D. (1996). Guiding principles for creating seamless learning environments for undergraduates. Journal of College Student Development, 37. 135-48.

Kuh, G. D., Schuh, J. H., Whitt, E. J., & Associates. (1991). Involving Colleges: Successful approaches to fostering student learning and development outside the classroom. San Francisco: Jossey-Bass.

Leonard, M. M., and Sigal, B. A. (1989). Empowering women student leaders: A leadership development model. In C. S. Pearson, D. L. Shavlik, & J. G. Touchton (Eds.). Educating the majority: Women challenge tradition in higher education. 230-249. New York: MacMillan.

Lincoln, Y., & Guba, E., (1985). Naturalistic inquiry. Beverly Hills, CA: SAGE Publications.

Merriam-Webster's collegiate dictionary (10^{th} ed.). (1993). Springfield, MA: Merriam-Webster.

Merton, R. K., Fiske, M., & Kendall, P. L., (1990). The Focused interview: A manual of problems and procedures. New York: The Free Press.

Miles, M. B,. & Huberman, A. M. (1994). Qualitative date analysis: An expanded sourcebook. Thousand Oaks, CA: Sage Publications.

Moos, R. (1979). Evaluating educational environments: Procedures, measures, findings, and policy implications. San Francisco: Jossey-Bass.

Muffo, J, (Ed.). (1996a). Department of Hospitality and Tourism Management Outcome Assessment Report. Blacksburg, VA: Virginia Polytechnic Institute and State University.

Muffo, J, (Ed.). (1996b). Department of Marketing Outcome Assessment Report. (1996). Blacksburg, VA: Virginia Polytechnic Institute and State University.

NCLP Leadership Bibliography. (1999). College Park, MD: National Clearinghouse for Leadership Programs.

Parry, K. W. (1998). The new leader: A synthesis of leadership research in Australia and New Zealand. The Journal of Leadership Studies, 5, 82-105.

Pascarella, E.T., & Terenzini, P.T. (1991). How college effects students. San Francisco: Jossey-Bass.

Patton, M. Q. (1980). Qualitative evaluation methods. London: SAGE Publications.

Payne, K. E., Fuqua, Jr., H. E., and Canegami, J. P. (1997). Women as leaders. The Journal of Leadership Studies, 4, 45-63.

Perry, W. G., Jr. (1968). Forms of Intellectual and Ethical Development in the College Years. New York: Holt, Rinehart, Winston.

Posner, B. Z., & Brodsky, B., (1992). Leadership practices inventory - student (LPI-Student). Endicino, CA: Kouzes & Posner International.

Posner, B. Z., & Brodsky, B., (1994). Leadership practices of effective student leaders: Gender makes no difference. NASPA Journal, 31. 113-120.

Roberts, D. C. (1981) Student leadership programs in higher education. Washington, D.C. The American Personnel Association Publishing Board.

Roberts, D. C. (1997) The changing look of leadership programs. Concepts & Connections, 5, 11-14.

Roberts, D. C., and Ullom, C. (1989). Student leadership program model. NASPA Journal, 27, 67-74.

Romano, C. R. (1996). A qualitative study of women student leaders. Journal of College Student Development, 37, 676-683.

Rosen, R. (1996). Leading People: Transforming business from the inside out. New York: Viking Penguin.

Rossing, B. E. (1998). Learning laboratories for renewed community leadership: Rationale, programs, and challenges. The Journal of Leadership Studies, 5, 68-81.

Rost, J. C., & Barker, R. A. (2000). Leadership education in colleges: Toward a 21st century paradigm. The Journal of Leadership Studies, 7, 3-12.

Rost, J. C. (1991). Leadership for the twenty-first century. Westport, CT: Praeger.

Rost, J. C. (1993). Leadership for the twenty-first century. 2nd Ed. Westport, CT: Praeger.

Rudolph, F. (1962). The american college and university: A history. New York: Random House.

Schroeder, C. C., & Hurst, J. C. (1996). Designing learning environments that integrate curricular and co-curricular experiences. *Journal of College Student Development*, 37, 174-181.

Schwartz, M. K., Axtman, K. M., & Freeman, F. H. (1998). Leadership education source book 7TH edition. Greensboro, NC: Center for Creative Leadership.

Senge, P. (1990). The fifth discipline: The art and practice of a learning organization. New York: Doubleday.

Sergiovanni, T. J. (1989). The leadership needed for quality schooling. In T. J. Sergiovanni & J. H. Moore (Eds.). Schooling for tomorrow. Boston: Allyn & Bacon.

Sherman, R., & Webb, R. (1988). Qualitative Research in Education: Focus and Methods. London: Falmer Press.

Silverman, D. (1993). Interpreting qualitative data. London: SAGE Publications.

Singh-Gupta, V., & Troutt-Ervin, E. D. (1996) Preparing students for teamwork through collaborative writing and peer review techniques. Teaching English in the Two-Year College, 23, (May) p. 127-36.

Slavin, R. E. (1983). Cooperative learning. New York: Longman.

Slavin, R. E. (1991). Student team learning: A practical guide to cooperative learning. 3rd Ed. Washington, DC: National Education Association.

Slavin, R. E. (1995a). Cooperative learning. New York: Longman.

Slavin, R. E. (1995b). Cooperative learning: Theory, research and practice. 2nd Ed. Boston, MA: Allyn and Bacon.

Spears, L. C. (Ed.). (1995). Reflections on leadership: How Robert K. Greenleaf's theory of servant-leadership influenced today's top management thinkers. New York: John Wiley & Sons.

The student personnel point of view. (1937). Washington, DC: American Council on Higher Education.

The student personnel point of view. (1949). Washington, DC: American Council on Higher Education.

Terenzini, P.T., Pascarella, E.T., & Blimling, G.S. (1996). Students' out-of-class experiences and their influence on learning and cognitive development: A literature review. Journal of College Student Development, 37, 149-62.

Tinto, V. (1987). Leaving college: Rethinking the causes and cures of student attrition. Chicago: University of Chicago Press.

White, P. H. (Ed.). (1995). Undergraduate Course Catalog and Academic Policies. Blacksburg, VA: Virginia Polytechnic Institute and State University.

Virginia Tech. (1996) Unpublished demographic data compiled from the office of undergraduate admissions. Blacksburg, VA: Author.

Virginia Tech. (1999). University fact book. Blacksburg, VA: Author.

Vermette, P. J., & Erickson, D. B. (1996) Cooperative learning in the college classroom: Three structures and seven activities. College Student Journal, 30, 203-13.

Winston, R. B., Vahala, M. E., Nichols, E. C., Gillis, M. E. Wintrow, M. & Rome, K. D. (1994). A measurement of college classroom climate: The college classroom environment scales. Journal of College Student Development, 35, 11-18.

Zimmerman-Oster, K., & Burkhardt, J.C. (1999). Leadership in the making: A comprehensive examination of the impact of leadership development programs on students. The Journal of Leadership Studies, 6, 50-66.

Zullo, J. R. (118). Leadership and adult development: Postindustrial paradigms and parallels. The Journal of Leadership Studies, 4, 118-127.

APPENDICES

Appendix A: Sequential Steps of Study

Week	Date	Alt. Date	Primary Activity	Secondary Activity
1.	10/14		Participant Selection Finalized	
2.	10/21		Participant Workshop	Administer Pre-Observation Survey
3.	10/28		Analysis of Pre-Observation Survey	
4.	11/4		Submission/ Return of E-Journal #1	Analysis of E-journal #1
5.	11/11		Focus Group - Round 1	Analysis of Round 1 -
6.	11/18		Submission/ Return of E-Journal #2	Analysis of E-journal #2
7.			Fall Break	
8.	12/5		Focus Group - Round 2	Analysis of Round 2 -
9.			Analysis of Data Thus far	
10.	12/10 - 1/19		Semester Break	Analysis con't
11.	1/20		Submission/ Return of E-Journal #3	Analysis of E-journal #3
12.	1/27		Focus Group - Round 3	Analysis of Round 3
13.	2/5		Submission/ Return of E-Journal #4	Analysis of E-journal #4
14.	2/12		Focus Group - Round 4	Analysis of Round 4
15.	2/19		Submission/ Return of E-Journal #5	Analysis of E-journal #5
16.	2/26		Analysis of Fall Data	
17.	3/4		Focus Group - Round 5	
18.	3/4		Submission/Return of Post-Observation Survey	
19.	3/11		Final Data Analysis Begins	Analysis of Round 5
20.	4/8		First Draft of Final Analysis	

Appendix B: Letter to Student Leaders

Virginia Tech
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Division of Student Affairs
Dean of Students Office
107 Brodie Hall
Blacksburg, Virginia 24061-0255
(703) 231-3787 FAX (703) 231-4035

November 22, 1996

Blacksburg, VA
24060

Dear

You have been identified as a student leader with valuable skills and experience. As a student leader at Virginia Tech, you are extremely busy. I have worked with student leaders at Tech for over nine years now and I understand the commitment you make to your position, your studies and your university. It is because of your experience and commitment as a student leader that I am writing to ask your assistance with a project that will help understand that experience better.

I am currently engaged in research for my dissertation. My study is designed to add to the general understanding of how student leaders interact in the classroom. I am seeking volunteers to work with me for the end of this semester and the beginning of next to investigate these questions. I need at least 50 students who have received training from Division of Student Affairs programs for my study to be adequate, so your participation is crucial.

What would you need to do? -- Participants would be asked to agree to work with me in two areas. The first part of the study is a series of four e-mail submissions (e-journals) sent via e-mail. This can be done in the convenience of your home, library or office - wherever you can spend some time reflecting and responding to the items. Each of these submissions will take no more than one hour. You return the statements to me by e-mail. No paper. No mail. No meetings for that part.

In the other part of the study, you would be asked to join with five to eight other students in four group interviews spread out over the course of the six weeks. The interviews would take 90 minutes and be held in Squires or another convenient place for your group. The groups will discuss items from the e-journals and from information I have prepared. The interviews will be taped recorded for analysis.

To begin the study, you would be asked to attend a preparation meeting of about 1 1/2 hours which would explain the process and procedures of the study. You would also be asked to complete some basic demographic information and sign a consent form as a final agreement to take part in the study.

In all, you are being asked to commit no more than 12 hours to this study over an eight week period.

What would you get out of this? You will receive $25.00 if you complete all of the requirements and at all interviews sessions, refreshments will be served. Mostly you will receive the satisfaction of getting to know some other students as well as helping learn something important about student leaders.

I know you are receiving this during break. I am inviting you to an information and preparation meeting on Monday, December 9 at 6:30 p.m. in the Multicultural Center (140 Squires). *If you are even remotely interested or curious about this study and want to know more before signing up, come to this meeting.* If you are intending to come to the meeting, please give me a call or drop me an e-mail note. I will be sending an e-mail reminder of the meeting after break. I sincerely hope you will consider joining this study. I think it will be a worthwhile experience.

Sincerely,

Timothy A. Reed
Doctoral Student,
Educational Leadership & Policy Studies/College Student Personnel
reedta@vt.edu

[Email Message Sent to All Student Leaders]

January 13, 1997

Hi leaders! Happy New year and welcome back!

I am writing to beg, plead, whatever for more of you to participate in my study. Right now I have fourteen students and I need at least 40. That means I need 26!!!

I realize that many of you were frazzled at the end of last semester and could not possibly conceive of getting involved in anything else. I know some of you did not have any idea what you classes would be like. I know many of you simply could not make the set meetings.

Happily, it's a new semester and many of those problems may have faded with rest, a firm schedule and a some flexibility on my part. Maybe you can reconsider and help me out.

I am starting the first fourteen in the process this week. I would like to start a second set of groups in two weeks. If you are at all interested, curious or meant to sign up but just did not have time last semester -- please let me know. I will meet with you individually to explain the study and get you the necessary information. You could be part of a very interesting study starting in two weeks.

Please- consider that the information from this study may help many in students affairs understand the importance of your learning and leadership.

Thank you- have a great semester.

Appendix C: Participant Informed Consent Form

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
College of Human Resources and Education

Informed Consent for Participants of Investigative Projects

Title of Study: The Relationship of Co-Curricular Experience to the Classroom: The Identification, Classification and Application of Student Leadership Practices at Virginia Tech

Principle Researcher: Timothy A. Reed, Doctoral Candidate
Additional investigators: Dr. Don G. Creamer, Student Advisory Committee Chair
Dr. Cathryn T. Goree. Dissertation Director

1. Purpose of the Research Project

1.1. I understand that the purpose of this study is to examine student leaders and their behavior in the classroom. Student leaders are those students who received training in a program sponsored by the Division of Student Affairs. Approximately 50 student leaders will participate in this study.

2. Procedures

2.1. I understand that I will be asked to complete a general demographic survey seeking information about me that will help to determine group assignment and in the analysis of the data gathered.

2.2. I understand that I will be asked to respond to four sets of a 5-item form sent to me electronically. These "e-journals" will contain open-ended statements about various aspects of leadership, classroom experience or out-of-class experience related to leadership practices. All answers will be submitted to the researcher via email and will remain confidential known only to the researcher and the research committee.

2.3. I understand that I will participate in four focus group interviews led by the researcher. These interviews will be scheduled to last for 90 minutes and be tape-recorded for further analysis. Tape recording and subsequent analysis of tape recordings will remain confidential to the researcher and committee. Information and themes from e-journal submission will be used to form the general pattern of questions asked during the interviews. Open, honest and free I understand that I am free not to participate in any discussion if the subject matter is objectionable to me.

3. Benefits of the Project

3.1. I understand that this research is being conducted to further general knowledge of student leadership practices and how it relates to the classroom. I understand that this information may be helpful to Virginia Tech and possibly other institutions in understanding a designing positive learning environments for students leaders. I further understand that I may personally benefit from the knowledge I receive about my own leadership experiences and from participating in in-depth discussion about how leadership practices are used in the classroom.

4. Anonymity and Confidentiality

4.1. I understand that my participation in this study will not be anonymous. I further understand that my e-journal submissions will remain confidential to the researchers and the research committee. I understand that the tapes and subsequent transcripts of taped sessions will remain confidential. I understand, however, that although participants will be encouraged to keep discussions and information from interviews confidential, the researcher can not be held responsible if members of the interview groups reveal items discussed. Participants violating the general trust of the interview

groups may be removed from the study. I understand that the researcher agrees not to release confidential information to anyone other than those working on the project without the written consent of the participant(s).

4.2. Tapes of interview sessions will remain in the possession of the principle researcher and maintained in a secure location in his domicile. Tapes will not be transcribed verbatim but be subjected to a thematic transcription. Tapes will be kept for not less than one year and not more than five years after completion of the study. At the end of five years, tapes will be erased.

4.3. I understand that the researcher may be required to break confidentiality. In the case that the researcher believes that participants are describing dangerous, illegal or highly unethical practices which may result in harm to the participant or other member of the community, the researcher may break confidentiality and inform proper authorities of the behavior.

5. Compensation

5.1. I understand the I will receive $25.00 cash for my participation in this study. I also understand that I am responsible for any federal, state or local taxes or fees related to that payment. Full payment will be made only to those students who complete all aspects of the study to the best of their ability.

6. Freedom to Withdraw

6.1. I understand that I am free to withdraw from this study at any time. I understand that my compensation will be prorated to the portion of the study I competed. Participants are free to refrain from answering any question asked or submitted to them during the course of the study without penalty. I understand that should I be removed from the study at any time I will be compensated for the portion of the study I completed.

7. Approval of Research

7.1. The research project has been approved, as required, by the Institutional Review Board for Research Involving Human Subjects at Virginia Polytechnic Institute and State University (IRB #96-274).

8. Participant's Permission

8.1. I _____ voluntarily agree to participate in this study.
(print name)
I understand my responsibilities and duties as stated in this form.

8.2. I have read and understand the Informed Consent and conditions of this project. I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent for participation in this project.

_____ _____
Participant Signature **Date**

_____ _____
Researcher Signature **Date**

Timothy A. Reed
1102 Scott Alan Circle, Blacksburg, VA 24060-3272 540-552-6935 reedta@vt.edu
Multicultural Center, 140 Squires Student Center, Blacksburg, VA 24061-0255 540-231-8584

Appendix D: IRB Approval

Virginia Tech
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Office of Sponsored Programs
301 Burruss Hall
Blacksburg, Virginia 24061-0249
(540) 231-5013 Fax: (540) 231-4822

MEMORANDUM

TO: Timothy A. Reed
AES/EDSP

FROM: H. T. Hurd
Director

DATE: November 08, 1996

SUBJECT: IRB EXPEDITED APPROVAL/"The Relationship of Co-Curricular Experience to the Classroom: The Identification, Classification and Application of Student Leadership Practices at Viginia Tech" - IRB #96-274

I have reviewed your request to the IRB for the above referenced project. I concur that the activity is of minimal risk to the human subjects who will participate and that appropriate safeguards have been taken. Please add Dr. Creamer, Dr. Goree and my name on the consent form as a point of contact should there be questions. On behalf of the Institutional Review Board for Research Involving Human Subjects, I have given your request expedited approval.

This approval is valid for 12 months. If the involvement with human subjects is not complete within 12 months, the project must be resubmitted for re-approval. We will prompt you about 10 months from now. If there are significant changes in the protocol involving human subjects, those changes must be approved before proceeding.

Best wishes.

HTH/pli

Appendix E: Demographic Data and Class Schedule Forms

The Relationship of Co-Curricular Experience to the Classroom

Demographic Data

Name _____
Last First MI

Address _____

Home Phone _____ **Work Phone** _____

Email _____

Date of Birth _____ **Age** _____

Sex (Circle one) **Female** **Male**

College _____ **Major** _____

Class (check)
_____ Freshman
_____ Sophomore
_____ Junior
_____ Senior
_____ Graduate

Race (check)
_____ African American/Black
_____ Asian-Pacific American
_____ European American/Caucasian
_____ Hispanic/Latino American
_____ Native American/Indian
_____ International (non-US citizen)
_____ Other

Leadership Experience and Training

Please list all leadership experience and training at Virginia Tech

Leadership Experience (Organizations, Offices, Honors, Roles)	Leadership Training Related to that Experience

Reed 12/96

Class and Activity Schedule

This schedule will be used to determine all interview times. Please list all classes, standing meetings, organizational meetings and other commitments.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
9:00 a							
10:00							
11:00							
12:00							
1:00 p							
2:00							
3:00							
4:00							
5:00							
6:00							
7:00							
8:00							
9:00							

Please list any periods of time when you will be away from campus that might effect your participation in interviews.

Appendix F: Form for Data Collection in a Cadre-Based Conceptually Clustered Matrix

		Research Questions			
Participants		Skill Attributed to out of class leadership experience in the DSA	Skills used in-class	Skills used to enhance in-class learning	Differences reported after reflection
Cadre 1					
Participant #1					
Participant #2					
Participant #3					
Cadre 2					
Participant #1					
Participant #2					
Participant #3					

Appendix G: Form for Data Collection in a Leadership Practice-Based Conceptually Clustered Matrix

Research Questions

Participants – Leadership Practices		Skill Attributed to out of class leadership experience in the DSA	SKILLS USED IN-CLASS	Skills used to enhance in-class learning	Differences reported after reflection
Level 1					
Searching					
Envisioning					
Enabling					
Modeling					
Encouraging					
Level 2					
Searching					
Envisioning					
Enabling					
Modeling					
Encouraging					

Appendix H: E-Journal 1

E-JOURNAL #1

DIRECTIONS

Reflect upon the classes in which you were enrolled last semester. Answer the following items based on your experience in those classes. Please answer each item in as much detail as possible.

a) Please read each item completely and carefully. Take some time to consider your responses. Remember, however, that you are not to spend over one hour on your reflection and response.

b) Each item has a general statement in capital letters with questions underneath to prompt your thought processes. Please answer the items as fully as possible. You may, and usually will, think of experiences which go beyond the prompts. It is perfectly acceptable to add any information like that as long as you stay within the time limit.

c) Write your reply UNDER each of the item statements. You may use as much space as you need to answer fully.

d) When you are ready to respond, use the "Reply" key on your e-mail program.

e) If you have questions, contact me a reedta@vt.edu

ITEMS

1. DESCRIBE THE GENERAL ACADEMIC FOCUS OF EACH CLASS. (What was the field of study? Was this an entry level or advanced level course? Was the course required or elective? Was it part of your major / minor or taken for another reason?

2. DESCRIBE THE CLASSROOM SETTING FOR EACH CLASS.
(Was the room large or small? Did the room have fixed or movable seats? How many students were in the class? What time of day was the class held?)

3. DESCRIBE THE INSTRUCTIONAL STYLE OF EACH CLASS.
(Did the class include faculty lecture, student presentations, guest presentations, interactive group work, out of class projects, and reports or other instructional approaches ?)

4. DESCRIBE THE HOW THE "WORK" OF EACH CLASS WAS ACCOMPLISHED.
(Describe the nature of the assignments, how you approached completing the assignments, and whether you worked with others [students, faculty, tutors] on your class assignments, when appropriate.)

5. DESCRIBE YOUR LEVEL OF SATISFACTION WITH THESE CLASSES.
(What are your feelings about your experiences in these classes? Why do you feel the way you do about them? Did you complete an evaluation of the class and inform the "system" of your feelings about the class? Why or why not?)

PLEASE RESPOND NO LATER THAN 5:00 P.M. ON JANUARY 16, 1997.

Appendix I: Interview Protocol 1

Interview Protocol
Interview #1

1. Set-up & Introduction

    a) Interviews were held in meeting room with central table. Participants sat around the table with interviewer at one end.

    b) Flip Chart Newsprint was used for recording lists.

    c) Students and interviewer introduced themselves around the table. Each were asked to state their name and tell a little bit about themselves .

2. Review E-Journal #1

    a) Participants were handed a print out of their individual response to E-journal #1.

    b) Participants read over their response.

3. Discussion of Items

    a) Participants were instructed to discuss the items in the Journal in a general way starting with Item one then proceding to Item #5.

4. Discussion of Stories

    a) Each student Presented a description of the class they lists as the most satisfying.

5. Creation of List

    a) After each student informed the group about his/her most satisfying class, the group is instructed to create a short/collective list of “items”, “experiences”,” or “perceptions,” which contributed to that class being the most satisfying.

    b) A volunteer from the group is asked to list these “satisfiers” on the newsprint paper and post them on the wall.

    c) During the discussion of the satisfiers, participants are asked to consider new “items” that did not occur to them during their reading or during the initial discussion. These satisfiers are added to the list as well.

6. Identification /Discussion of the Elements of the Least Satisfying Class

    a) Repeat process from above focusing on the Least Satisfying class and the dissatisfiers associated with it.

7. Re-Evaluation of E-journal Submission

    a) Participants are asked to review their original E-journal response and then look at the list.

    b) Participants are asked if they have altered their views about Item #5. Did they view those classes differently? Did they have a new perceptions or perspective s about what they wrote? Did he/she change his/her mind about the original perception of the classes.

Appendix J: Interview Protocol for Interview #1

INTERVIEW PROTOCOL INTERVIEW #1
CADRE 2

1. Set-up & Introduction

    a) Interviews were held in meeting room with central table. Participants sat around the table with interviewer at one end.

    b) Flip Chart Newsprint was used for recording lists.

    c) Students and interviewer introduced themselves around the table. Each were asked to state their name and tell a little bit about themselves .

2. Review E-Journal #1

    a) Participants were handed a print out of their individual response to E-journal #1.
    b) Participants read over their response.

3. Discussion of Individual Items

    a) Each Group in Cadre @ received their entire E-journal.. They discussed each item on the E-journal from Item #1 through Item #5.

4. Identification/Discussion of the elements of the Most Satisfying Class

    a) They are then instructed to think about their MOST Satisfying Class from the previous semester.
    b) They are to write down or just be prepared to discuss the significant elements which contributed to that class being the most satisfying.

5. Discussion of Stories

    a) Each student Presented a description of the class they lists as the most satisfying.

6. Creation of List

    a) After each student informed the group about his/her most satisfying class, the group is instructed to create a short/collective list of “items”, “experiences”,” or “perceptions,” which contributed to that class being the most satisfying.

Appendix K: E-JOURNAL 2

E-journal #2

DIRECTIONS

Reflect upon the classes in which you were enrolled last semester. Answer the following items based on your experience in those classes. Please answer each item in as much detail as possible.

a) Please read each item completely and carefully. Take some time to consider your responses. Remember, however, that you are not to spend over one hour on you reflection and response.

b) Each item has a general statement in capital letters with questions to prompt you thought processes underneath. Please answer the item as fully as possible. You may, and usually will, think of experiences which go beyond the prompts. It is perfectly acceptable to add any information like that as long as you stay within the time limit.

c) Write your reply UNDER each of the item statements. You may use as much space as you need to answer fully.

d) When you are ready to respond, use the "Reply" key on your e-mail program.

e) If you have questions, contact me a reedta@vt.edu

For these items, think about a classroom group in which you were involved last semester. This should be a group assignment, group project or formal study group for a class. It should be a group related to one of your courses.

If you did not participate in a group assignment, project or formal study group last semester, stop right now and email me. We will discuss how you should proceed.

****

1) DESCRIBE THE PROCESS BY WHICH THE GROUP ACCOMPLISHED THE ASSIGNMENT OR GOAL. (Who did what? How did the group assign tasks? What was your role?)

2) DESCRIBE THE ATMOSPHERE OF THE GROUP MEETINGS.
(What were the relations between members? How were meetings conducted?)

3) DESCRIBE ANY PROBLEMS THAT AROSE WITH THE GROUP PROCESS.
(What was the nature of any conflict? Was the group process clearly defined? How were problems addressed?)

4) DID THE GROUP SUCCESSFULLY COMPLETE THE ASSIGNED TASK? DESCRIBE IN DETAIL HOW YOU DETERMINED WHEN THE GOAL WAS REACHED.

(Was a grade assigned by the instructor? Was the success of the assignment judged by the group separately from the instructor? If you reached the goal, What helped the group reach the goal? If the group did not reach the goal, what prevented the group from reaching it? How did you personally define the success of the group?)

5) DESCRIBE YOUR LEVEL OF SATISFACTION WITH THIS GROUP PROCESS.
(How did you feel about over-all process? If you were assigned to work with this group again, what would you change? What would have made this process better?)

PLEASE RESPOND BY 11:59 P.M. SATURDAY, MARCH 22.

Appendix L: Interview Protocol 2-4

PROTOCOL
INTERVIEWS #2 - 4

1. Introduction
   a) Members of the group meet in a pre determined location and sit around a large conference style table.

   b) The Interviewer Informs them of the process for that session.

2. Process
   a) Participants were given a copy of their response to E-Journal #2 (3 or 4) for their review.

   b) They were given approximately 5 minutes to review their response.

   c) The Interviewer then asked the members of the group to inform the entire group about their response to each Item individually.

   d) The group discussed Item 1 fully, then when the Inteviewer determined that discussion on the Item had been exhausted or a natural seque to the next Item discussion arose, he aksed the group to respond to the next Item. This process occured for all five Items.

   e) Participants were encouraged to embellish their response by adding information or thoughts which may have occurred to them while reviewing it.

   f) Interviewer would ask clarifying or probing questions realted to the direction of the conversation. No specific probe questions were developed in a advance. After the first Interview, however, some probing questions were used to maintai n some balance in conversational flow from one interview to the next.

   g) Members of the group were encouraged to ask clarifying questions if they did not understand a part of the response. Dialogue between participants was encouraged.

3. Conclusion of Session
   a) After all items had been discussed or time was nearing the end, the Interviewer asked the participants for any last general thoughts about the discussion that had occurred.

Appendix M: E-Journal 3

E-journal #3

Below are a set of items about your experiences with leadership at Virginia Tech.

a) Please read each item carefully and fully.

b) Do not answer the items immediately. Remember, however, that you are not to spend over one hour on you reflection and response.

c) Take some time to consider your responses carefully.

d) When you are ready to respond, use the "Reply" key on your e-mail program.

e) Write your reply UNDER each of the item statements. You may use as much space as you need to answer fully.

f) If you have questions, contact me at reedta@vt.edu (231-8584 or 552-6935).

Reflect upon the leadership training you received from the Division of Student Affairs program you listed on your demographic data form. In responding to the items below, use this training and experience as the basis for your responses.

DESCRIBE THE FORMAL TRAINING PROCESS(ES) IN WHICH YOU PARTICIPATED. (What were you formally taught in your classes, retreats or leadership seminars offered as part of your leadership position?)

1. Describe any theory taught. (What were the basic elements of these theories?)

2. Describe any leadership skills taught or presented.

3. Describe any other ideas and concepts which were taught in the classes, retreats or seminars.

DESCRIBE THE INFORMAL LEADERSHIP PROCESS IN WHICH YOU HAVE BEEN INVOLVED. (This is the experiential part of your training. Consider what you have learned in you leadership position.)

4. Describe what you have learned by observing the leadership activity of others and yourself. How has observing others in leadership roles in your organization or program helped you in learning about leadership?

5. What have you learned about leadership from serving as a student leader? What insights do you have after having participating in the leadership process? How has participating in the leadership process helped you understand what you were taught in your formal training?

PLEASE RETURN THIS E-JOURNAL BY 11:59 P.M. SUNDAY, FEBRUARY 16, 1997.

Appendix N: E-Journal 4

E-JOURNAL #4

Below are a set of items about your experiences with leadership at Virginia Tech.

a) Please read each item carefully and fully.

b) Do not answer the items immediately. Remember, however, that you are not to spend over one hour on you reflection and response.

c) Take some time to consider your responses carefully.

d) When you are ready to respond, use the "Reply" key on your e-mail program.

e) Write your reply UNDER each of the item statements. You may use as much space as you need to answer fully.

f) If you have questions, contact me a reedta@vt.edu

This is the last E-journal of the study. In this E-journal and the following discussion, we are going to explore much of what we have already discussed. Think back on the process thus far.

IN E-journal #1, you described your classroom settings, course work and satisfaction with the process. IN E-journal #2 you discussed group projects and processes in the classroom. In E-journal #3, you described and elaborated on your leadership training and experience in the student affairs program in which you are a leader.

Consider your responses and discussion over the last three sessions.

1. WOULD YOU DESCRIBE ANY OF YOUR BEHAVIORS IN THE CLASSROOM SETTINGS OR GROUP SETTINGS RELATED TO THE CLASSROOM AS LEADERSHIP? IF SO, WHY IS IT LEADERSHIP?

2. THINK ABOUT THE LEADERSHIP SKILLS YOU USED IN THAT SETTING. WHERE DID YOU LEARN THOSE SKILLS?

ANSWER ONLY 3A OR 3B. DO NOT ANSWER BOTH.

3A. IN ITEM #2, DID YOU LIST YOUR CO-CURRICULAR LEADERSHIP ACTIVITY? IF NOT, DID YOU CONSCIOUSLY USE THOSE SKILLS, LEARNED OUT OF THE CLASSROOM, IN THE CLASSROOM SETTING?
(How did you use them? Why did you use those skills?)

3B. IN ITEM #2, DID YOU LIST YOUR CO-CURRICULAR LEADERSHIP ACTIVITY? IF NOT, WHY DO YOU THINK YOUR LEADERSHIP TRAINING AND EXPERIENCE OUT OF THE CLASSROOM WAS NOT USED IN THE CLASSROOM?

4. WHAT CONNECTIONS DO YOU MAKE BETWEEN THE LEADERSHIP YOU EXPERIENCED IN THE CLASSROOM AND THE LEADERSHIP YOU EXPERIENCED OUT OF THE CLASSROOM?

5. HOW WOULD YOU ALTER YOUR CO-CURRICULAR LEADERSHIP TRAINING TO FACILITATE THE TRANSLATION OF LEADERSHIP SKILLS TO THE CLASSROOM? (Please give examples of skills you would teach, programs you would include or general theories and concepts you would include if you were developing a leadership training program for your co-curricular program.)

PLEASE SUBMIT YOUR RESPONSE BY 11:59 P.M., WEDNESDAY, MARCH 12.

THANKS!!!!!!!

Appendix O: Follow-Up Email Request

[EMAIL SENT TO STUDY PARTICIPANTS]

Hi Folks -

"I'm Back!"

I hope all of you had a great summer.

For those of you who graduated, I hope you are finding grad school or the real world rewarding.

For those of you who have returned, welcome back. I hope this year will be educational and interesting.

I realize that many of you who might be getting this are far way from Tech now. You can ignore the rest of this note if you wish. For those of you still here, I have a favor to ask.

I have been working over the summer to compile the results of my interviews with all of you. This has not been an easy task. If any of you had not realized, you are all marvelously complicated individuals. That made my task of determining what you were "really" telling me even more of a challenge than I had originally anticipated. I have learned a great deal about the complexities of leadership and how it manifests itself on our campus.

So, here's the favor. I need a group of you to read over what I've written about you already. It's about 30 pages of boring research writing but the information is interesting. If you agree I will send this to you in advance.

Then I need to meet with that group for about an hour to 1.5 hours to discuss the findings. This is a step we've added to my study for validation purposes. It's a chance to check myself against your perceptions of my findings.

Of course, I will feed you!

I am looking at Wednesday, September 10 or Thursday September 11 at about 5:00 p.m. (place TBA). Let me know if you would participate. Then let me know which of either of those days is better. I'd like to have about six to eight people for this so I'm willing to be flexible to get as many there as I can.

As always, send questions or comments my way.

Thanks in advance.

Tim

Appendix P: Follow-Up E-Journal

E-journal #5

DIRECTIONS

Reflect upon the entire process we went through last spring with the interviews and E-journals. Think about the conversations and answers you gave. The statements below are preliminary findings of my research. When reading each item, answer two questions.

a) How does this finding reflect what you heard and experienced during the research process?

b) Do you find this still to be accurate? Why or why not?

a) Please read each item completely and carefully. Take some time to consider your responses.

b) Each item has a general statement in capital letters with questions underneath. Please answer the items as fully as possible. You may, and usually will, think of experiences which go beyond the prompts. It is perfectly acceptable to add any information like that as long as you stay within the time limit.

c) Write your reply UNDER each of the item statements. You may use as much space as you need to answer fully.

d) When you are ready to respond, use the "Reply" key on your e-mail program.

e) If you have questions, contact me a reedta@vt.edu

---

1. WHERE THE LEADERSHIP ABILITIES OF THESE PARTICIPANTS WAS LEARNED CAN BE CATEGORIZED INTO THREE AREAS: 1) LEARNED BEFORE COLLEGE, 2) LEARNED DURING COLLEGE IN A VARIETY OF WAYS AND 3) LEARNED IN COLLEGE THROUGH A SPECIFIC STUDENT AFFAIRS PROGRAM (RA, OL, ETC.)

a) How does this finding reflect what you heard and experienced during the research process?

b) Do you find this still to be true? Why or why not?

2. LEADERSHIP SKILLS TAUGHT AND PRACTICED BY THE STUDENTS IN THIS STUDY TENDED TO EMPHASIZE COMMUNITY BUILDING, TEAM BUILDING, AND ROLE MODELING SKILLS AND TENDED TO DE-EMPHASIZE RISK TAKING, CHALLENGING AUTHORITY, AND PERSONAL/COMMUNITY REWARDS SYSTEMS.

a) How does this finding reflect what you heard and experienced during the research process?

b) Do you find this still to be true? Why or why not?

3. STUDENT LEADERS IN THIS STUDY EITHER TENDED TO SEE THEMSELVES AS LEADERS IN THE CLASSROOM ONLY AFTER BEING PROMPTED TO CONSIDER IT.

a) How does this finding reflect what you heard and experienced during the research process?

b) Do you find this still to be true? Why or why not?

4. THE TYPICAL VIRGINIA TECH CLASSROOM ENVIRONMENT INHIBITS THE POTENTIAL FOR LEADERSHIP TO OCCUR.

a) How does this finding reflect what you heard and experienced during the research process?

b) Do you find this still to be true? Why or why not?

5. THE "STUDENT LEADERS" IN THIS STUDY LACKED A COMMON LEADERSHIP VOCABULARY AND EXPERIENCE ACROSS THE VARIOUS STUDENT AFFAIRS PROGRAMS.

a) How does this finding reflect what you heard and experienced during the research process?

b) Do you find this still to be true? Why or why not?

Appendix Q: Vitae

Timothy A. Reed

Office:
907 Floyd Avenue, PO Box 842032
Richmond, Virginia 23284-2032
(804) 828-6500 fax: (804) 828-6182
tareed@vcu.edu

Home:
13907 Cobble Glen Court
Chester, Virginia 23831
(804) 796-1014

Education

2001 (anticipated) **Doctor of Philosophy, College Student Affairs**
Virginia Polytechnic Institute and State University
(Virginia Tech)
Blacksburg, Virginia

June 1985 **Masters of Arts, Student Personnel Work in Higher Education**
The Ohio State University
Columbus, Ohio

May 1982 **Bachelor of Science, Communication Studies, cum laude**
University of Evansville
Evansville Indiana
European Study Semester – Harlaxton College (UE), England

Employment

1998-present **Director**
University Student Commons and Activities
Virginia Commonwealth University
Richmond, Virginia

1997-1998 **Special Assistant to the Vice President**
Office of the Vice President for Student Affairs
Virginia Tech, Blacksburg, Virginia

1996-1997 **Doctoral Graduate Assistant for the Multicultural Center**
Dean of Students Office
Virginia Tech, Blacksburg, Virginia

1987-1989 **Assistant Director of Student Activities (1989-1996)**
Coordinator of Student organizations (1988-1989)
Program Coordinator (1987-1988)
University Unions and Student Activities
Virginia Tech, Blacksburg, Virginia

1985-1987 **Dean of Students**
Harlaxton College, British Campus

University of Evansville, Grantham, England

Teaching and Training

Spring 2000 **Recreation 431 – Advanced Recreation Facilitation Techniques (for Student Leaders)** 3 credit hours
A study of advanced leadership, group dynamics, and human relationships used in volunteer organization and leisure delivery systems.

Fall 1989 **VCU 101 (1 credit hour)**
Introductory Course for Freshman

1991-1996 **Student Leadership and Management Seminars**
Developed and facilitated one semester non-credit courses in leadership and organization management.

1992-1995 **Summer Orientation Leader Training**
Trained leaders in general presentation and interaction skills as well as coached/directed the Student Affairs evening program skits/role plays.

1989-1995 **Staff Training**
University Unions and Student Activities/Leadership and Student Organization Programs
Conducted in-service organizational development programs on goal setting, team building, and communication. Planned and conducted staff retreats.

1990-1991 **Multicultural Awareness Programs (MAPs)**
1996-1997 Division of Student Affairs
Proposed a comprehensive peer education program for multicultural and diversity education. Assisted with design and final implementation of program.

1988-1990 **Interactive Student Leadership Experience (ISLE)**
University Unions and Student Activities, Virginia Tech
Develop and implemented, and supervised these highly interactive weekend leadership retreats for student leaders and advisors.

Spring 1985 **Student Leadership Course (Co-instructed)**
The Ohio State University
3 credit course in leadership development and organizational management

Committee Assignments

1998-present **Virginia Commonwealth University**
Student Activities Advisory Committee (1998-present)
AA/504 (Affirmative Action Committee) (2001–present)

1990-1998 **Virginia Tech**

Computer Requirement Implementation Task Force (1997-1998)
Division of Student Affairs Research Committee (1995-1997)
Black History Monthly Planning Committee (1994-1997)
Student Media Board, chair (1990-1996)
Service Learning Advisory Committee (1994-1996)
DSA Graduate Student Selection Committee (1990-1994)
DSA Staff Development committee (1989-1993)
UUSA Comprehensive Program Review Design Committee (1993)
Multicultural Awareness programs Advisory Committee (1990-1992)
Greek Life Advisory Committee, chair (1990-1992)

1985-1987 **Harlaxton College, University of Evansville**
Advisory Board of Trustees, Student Affairs Committee

1983-1984 The Ohio State University
Michigan Weekend Planning Committee (1983)
Welcome Week Planning Committee (1983)
South Area Judicial Committee (1983-1984)

Professional Activity

Associations & Positions

American College Personnel Association (ACPA)
Association of College Unions International (ACUI)
Region V Leadership Team
National Association of Student Personnel Administrators (NASPA)
Virginia Association of Student Personnel Administrators (VASPA)
Executive Committee
VASPA Interchange Co-editor
Web manager
Conference program Committee (Co-Chair 1990, Chair 1991)

Special Training & Honors

Vice President for Student Affairs Award for Excellence, Virginia Tech
Academy for Leadership Excellence, Virginia Tech (inducted 1996)
Omicron Delta Kappa
Mid-Managers Institute, Virginia Tech
Interfraternity Institute

Presentations

2001 *Student Lifestyles, Luxuries and Leadership (with Kirsten Hirsch)*
Virginia Student Leadership Conference

1999 Keynote address: *Leadership, Like Driving, Requires Learning and Experience*
Peer Based Student Employee Training (with John Leppo)
Virginia Tech Drive In Workshop

1997 *Leaders of the Future: Start Here*
Virginia Student Leadership Conference

1996 *The Professional and the Job Search: Making Our Way the Right Way*

(with Dr. Gerry Kowalski)
ACPA Annual Conference

1995 *The Professional and the Job Search: Making Our Way the Right Way (with Dr. Gerry Kowalski)*
VASPA/VACUHO Annual Conference

1994-1995 *What is Leadership? New Perspectives for a New Age*
Virginia Highlands Community College Leadership Program

1994 *Exploring Values in the Student Leadership Journey*
ACUI Region V Conference

1994 An Investigation of Adult Student at Two Colleges
(Graduate Student Forum)
ACPA National convention

1993 Student leaders: Do They Practice What We Preach
VASPA/VACUHO Annual Conference

Risk Management Should Be A Part of Every Program
1991 University of South Carolina Student Leadership Conference

1990 Risk Management: A Student/Staff Partnership
VASPA/VACUHO Annual Conference

Community Activity

1993-present Boy Scouts of America
Cubmaster & Den Leader Pack 815, Chester, Virginia
Charter Organization Rep. & Den Leader, Pack 150,
Blacksburg, VA

1999-present Community Idea Stations
WCVE Television Community Advisory Board
Chair, 2001 - present

1997-1998 Southwest Virginia Soccer Association (Coach)

1994-1998 YMCA of Virginia Tech, Inc.
Board of Directors

1995-1997 Summer Musical Enterprise, Inc., Blacksburg, VA
Board of Directors
Lighting and Production Design – “Fiddler on the Roof” 1995
Lighting Design – “South Pacific” 1996