2008

Leadership Behaviors Gained As A Result Of Involvement In A Community College Student Leader Program

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LEADERSHIP BEHAVIORS GAINED AS A RESULT OF INVOLVEMENT IN A
COMMUNITY COLLEGE STUDENT LEADER PROGRAM

by
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A dissertation submitted in partial fulfillment of the requirements
for the degree of Doctor of Education
in the Department of Curriculum and Instruction
in the College of Education
at the University of Central Florida
Orlando, Florida

Spring Term
2008

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ABSTRACT

The purpose of this study was to assess whether participation in a community college student leader program had an effect on the leadership behaviors of students based on five (5) practices measured by a student leadership practices inventory. By assessing these leadership behaviors, the community college was able to determine the effectiveness of the program and ways to improve the program's curriculum. This study addressed the following: 1) whether students who participated in a student leader program in a community college showed significant growth in leadership behaviors; 2) whether the growth in leadership behaviors of students who participated in a student leader program in a community college were significantly different from each other in regard to gender; 3) whether the growth in leadership behaviors of students who participated in a student leader program in a community college were significantly different from each other in regard to age.

The student Leadership Practices Inventory (LPI) developed by Kouzes and Posner (2002) was used as the main instrument in this study. The student Leadership Practices Inventory (LPI) is a questionnaire with thirty (30) behavioral statements—six (6) for each of The Five Practices.

The population of this study consisted of 62 student leaders who were participants in a student leader program at a community college. A pre LPI was given to 62 student leaders in the beginning of the school term. A post LPI was given to 62 student leaders at the end of the school term. Thirteen of the original student leaders dropped out of the program and were replaced by new student leaders. Thus, the total number of useable inventories for data input in this study was 49; this yielded a 79% return rate.

This study supports the research that students who were involved in a leadership program gained leadership behaviors. In comparing the student leaders' pretest and posttest scores of the LPI, it showed that there was a significant difference in each leadership behavior. These leadership behaviors were: Challenging the Process, Inspiring a Shared Vision, Enabling Others to Act, Modeling the Way, and Encouraging the Heart.

The results of this study also showed no significant difference in the student leaders' scores in the LPI in relation to the student's age group. According to Astin (1993), the student's age at the time of college entry was not significantly associated with changes in Leadership scores. This evidence supports the argument that increases in leadership skills during undergraduate years is associated with the college experience rather than the student's maturation.

There were no significant differences between the male and female student leaders in regard to the five leadership practices with the exception of the leadership practice Challenging the Process. In this study, the male student leaders scored higher, 24.79, than the female student leaders, 22.37, in Challenging the Process.

The focus group in this study highlighted the leadership behaviors the student leaders gained as a result of their involvement in the student leader program. Not only did the students grow in the leadership behaviors measured by the LPI, they also gained other leadership skills. In regard to their growth as a student leader, the students felt that they grew in many different areas. The opportunity allowed them to network with students, faculty, administration and staff, and gain leadership skills. These leadership skills included: listening skills, communication skills, stress management, multitasking

and customer service. The students also believed in the importance of taking initiative,

practicing patience and developing others.

ACKNOWLEDGMENTS

As I conclude my doctoral program at the University of Central Florida a number of memories, feelings and thoughts come to mind. I want to first express my appreciation to my committee members for their time, patience and advice. To my dissertation chairperson and advisor, Dr. Jeffrey Kaplan, for your guidance, support and belief in my potential. To my co-chairperson and advisor, Dr. David Harrison, for challenging me when needed and setting high expectations that you knew I could achieve.

To the "Stat Girls," Peggy Meli and Michele McCardle, for your undying support, encouragement and long hours at the computer lab and Michele's house. I could not have made it through this program without the two of you. Thanks to my editing and formatting team for your patience, time and insight. To my supervisors, mentors and colleagues for your support and dedication to my personal and professional development.

I am most grateful to my friends and family. To my friends, thanks for keeping me focused on school as well as the importance of taking breaks when needed. To my family, for your encouragement and believing in me even when I had doubts. I love you. To Troy for coming into my life so unexpectedly and making me the happiest I have been in a long time. Thank you.

This has been an incredible journey of persistence, focus and determination. I could not have accomplished this educational goal without all of your support, encouragement and love. As I conclude this journey I am grateful for all the new friends I have made, the family and friends that stayed by my side, and the ability to dig deep within myself to attain a goal that I always wanted to accomplish.

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CHAPTER 1
RATIONALE

<u>Introduction</u>

The importance of student activities in higher education and its benefits to the

students has been well documented in the literature. In the colonial colleges, religion was

the focus of student life. The student activities during this time were regular prayer,

church attendance and other activities influenced by the study of religion (Rentz, 1996).

In 1719 at Harvard, groups of youth gathered to read poetry and discuss issues in life.

The literary society played a major role in campus life in the latter part of the 19th

century. The original purposes of these societies were to provide opportunities in public

speaking and discussion in literature, political science and history. These societies

became very popular and as more students started to join these societies, college and

university administrators recognized their importance to student life. Literary societies

eventually evolved into Greek letter organizations (Rentz, 1996).

After the Civil War, literary societies declined in importance as other forms of

student organizations and athletics grew in popularity. Many other student organizations

were established; some of these included music interest clubs, special sports clubs,

religious groups and academic organizations. Throughout United States history, student

activities continued to evolve with the development of student government, faculty co-

curricular interest activities, and student unions and residence halls. In the 1960s and

1970s, leadership programs and volunteerism also became popular out-of-class activities

(Rentz, 1996).

Today, student activities involve student participation in various clubs and

organizations, student government, student leader programs, volunteer programs,

intramurals sports and faculty sponsored out-of-class activities. Over the years, higher

education student services practitioners, researchers, and executive administrators have

increasingly realized the value student activities play in the student's educational

experience.

Research has shown that the more actively engaged students were with college

faculty and staff, with other students, and with the subject matter they studied, the more

likely they were to learn and to stay in college until they achieved their academic goals

(Kuh, 2001). Berman (1978) indicated that involvement in student activities and

organizations taught students about group processes, decision-making, organizational and

administrative skills, budgeting and accounting, and bureaucratic and programming

skills. Astin (1984) argued that involvement in student activities was essential to the total

education program.

Student involvement in campus activities has been shown to have a profound

impact on students' experiences at college (Astin, 1993). Compared to uninvolved

students, involved students demonstrated higher graduation rates, retention rates, grade

point averages, and institutional satisfaction.

The Community College Survey on Student Engagement (CCSSE) conducted

research on what helped students succeed in college. Several components of student

activities were found to aid in success. For example, the amount of student-faculty

interaction was positively correlated with student success. Students who reported having

a moderate to high level of participation in college-sponsored activities (student

organizations, student government, athletics and publications) also reported a higher level

of interaction with faculty than their less-involved peers (CSSEE, 2005). Additional

benchmarks for success identified by CSSEE included active and collaborative learning and support for learners. Through student activities initiatives like service learning, leadership development curriculum, cultural events and lecture series, student activities offices provide practical opportunities for student engagement.

Higher education institutions have searched for many years for comprehensive student leadership programs that assess effective leadership behaviors. Research has found that effective leadership behaviors gained in student leader programs were connected to positive learning results. These programs have resulted in students' satisfaction in their educational experience, persistence to graduation and the development of personal and social skills (Berman, 1978).

Purpose of Study

The purpose of this study was to assess whether participation in a community college student leader program had an effect on the leadership behaviors of students based on five (5) practices measured by a student leadership practices inventory. By assessing these leadership behaviors, the community college was able to determine the effectiveness of the program and ways to improve the program's curriculum.

Statement of the Problem

Using Kouzes and Posner's student Leadership Practices Inventory (LPI), this study addressed the following questions: 1) whether students who participated in a student leadership program in a community college showed significant growth in leadership behaviors; 2) whether male or female students who participated in a student leader program in a community college grew in leadership behaviors significantly different from each other; 3) whether students in different age groups who participated in

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a student leader program in a community college grew in leadership behaviors significantly different from each other.

<div align="center">Definition of Terms</div>

Community College - A nonresidential junior college offering college courses to the community or region. Students who attend these colleges are able to obtain an Associate of Arts degree (A.A.), an Associate of Science (A.S.), an Associate of Applied Science (A.A.S.) and technical certificates. The A.A. degree is designed for students who intend to transfer to an upper division baccalaureate degree-granting institution. The A.S. or A.A.S. degree is designed for students intending to immediately gain employment in the workforce.

Student Leader Program - An organized program for students that may include an on or off-campus retreat, a credit or non-credit course, weekly seminars or meetings, workshops with guest speakers, and/or a wide range of educational sessions on student leadership and programming.

Welcome Team - A group of student leaders responsible for new student orientation tours, welcome programs, and assistance with promoting and organizing student activities.

Peer Educators - A group of student leaders responsible for health awareness activities and programs such as alcohol abuse, STDs, and stress management.

Atlas Access Team - A group of student leaders responsible for providing course registration assistance and conducting technology based presentations to students on their educational and career plans.

Involvement - Involvement refers to the quantity and quality of physical and psychological energy that students invest in the college experience.

Leadership Practices Inventory (LPI) - The LPI is a questionnaire with 30 behavioral statements—six for each of the five practices. This 360-degree assessment instrument serves two purposes: it allows the researcher to continuously test the initial findings that the five practices model is a valid view of the world of leadership, and it provides a tool that helps leaders assess the extent to which they actually use those practices so that they can make plans for improvement. The students responded using a Likert-type scale between 1 and 5.

- "1" means that the student *rarely or seldom* engaged in that behavior.

- "2" means that the student engaged in the behavior *once in a while*.

- "3" means that the student *sometimes* engaged in the behavior.

- "4" means that the student engaged in the behavior *fairly often*.

- "5" means that the student engaged in the behavior *very frequently*.

Leadership Behaviors - These behaviors are the result of the leadership practices displayed in the (LPI). These five (5) practices include:

1. Challenging the Process - searching for opportunities as well as experimenting and taking risks.

2. Inspiring a Shared Vision - envisioning an uplifting future and enlisting others in a common vision.

3. Enabling Others to Act - fostering collaboration and strengthening others.

4. Modeling the Way - setting the example and achieving small wins.

5. Encouraging the Heart - recognizing individual contributions of others and celebrating team accomplishments (Kouzes and Posner, 2002).

Astin's Student Involvement Theory

Astin (1984) formulated a theory of student development that he called "Student Involvement Theory." Involvement referred to the quantity and quality of physical and psychological energy that students invested in the college experience. From evaluating many studies, Astin (1975) concluded that students who participated in some form of student activity were less likely to drop out and more likely to be satisfied with their college experiences than those who did not participate. Community colleges, where involvement was minimal, had higher drop out rates than four-year colleges.

Astin emphasized that the behavioral aspects of involvement, such as what an individual does and how she or he behaves, were essential; this facet of involvement comprises the first point of Astin's involvement theory. The theory has four other basic ideas: (a) involvement occurs along a continuum; different students display different levels of involvement in different activities at different times; (b) involvement has both quantitative aspects, how much time a student spends doing something, and qualitative aspects, how focused the student time is; (c) the amount of personal development and learning that can occur is directly correlated to the quality and quantity of student involvement; and (d) the effectiveness of educational policies, practices, or programs is directly related to the policy, practice, or program's commitment to increasing student involvement (Astin, 1984).

Astin (1993) addressed the impact that the involvement in clubs and organizations has on students. He reported that elected student officers' public speaking ability, leadership abilities and interpersonal skills were statistically significant with hours per week spent on participating in student clubs and organizations. Later, Astin (1996) found that the three strongest forms of involvement were academic involvement, involvement

with faculty, and involvement with student peer groups. Astin stated that the strongest single source of influence on cognitive and affective development was a student's peer group; the greater interaction with peers, the more favorable the outcome. He proposed that the power of the peer group was found in the capacity of peers to involve each other more intensely in experiences. Interaction with peers was also shown to contribute to students' growth in interpersonal competence, cognitive complexity, and humanitarianism (Kuh, 1995 and Terenzini, 1996).

Astin (1993) assessed the student's degree of involvement with student peers using various methods. One method used was to gain information on the number of hours per week a student reported spending time in the following activities:

- Socialized with friends

- Partied

- Student leader clubs and/or programs

Another measure was based on whether a student identified with any of the statements below:

- Joined or been a member of a fraternity or sorority

- Participated in campus protests or demonstrations

- Elected to leadership or officer position

- Participated in intercollegiate athletics

- Played intercollegiate football or basketball

Five additional measures were based on the frequency of these activities during a term:

- Worked on group projects for class

- Tutored another student

- Participated in intramural sports

- Discussed racial or ethnic issues

- Socialized with someone from another racial or ethnic group

The final measure of peer involvement captured the total frequency of interaction with the peer group. This measure consisted of the sum of the student's responses to the following items:

- Discussed course contend with students outside of class

- Worked on a group project for a class

- Tutored another student

- Participated in intramural sports

- Membership in a social fraternity or sorority

- Participated in campus protests or demonstrations

- Elected to student office

- Hours per week spent in students clubs or groups (Astin, 1993).

Another source of information that was important to assess in terms of involvement was the student's leadership. According to Astin (1993), leadership was defined in terms of three self-rating measures relative to whether the student has been elected to a student office: leadership ability, popularity, and social self-confidence. According to Holland's Enterprising type (1973), leaders tended to have relatively affluent and well-educated parents. In high school, students with high scores in leadership excelled in speech and debates, frequently studied with other students, received varsity letters in sports, and were elected presidents of some student

organization. In college, leaders showed a preference for majors in pre-law, military science and communications, and an interest for career in law, the church, and the military service. Students with high leadership scores tended to have high enrollments in private colleges and universities, and were underrepresented at the community colleges (Astin, 1993).

The increase in leadership appears to be associated with the student's college experience. The percentage of students who qualified as student leaders showed a positive correlation to these factors: living on campus, number of college years completed and degree of student interaction with faculty and peers. The strongest effect was associated with student-student interaction: students who interacted most frequently with peers showed an increase in their percentage qualifying as leaders. The student's age at the time of college entry was not significantly associated with changes in leadership scores. This evidence supports the argument that increases in leadership skills during undergraduate years is associated with the college experience rather than the student's maturation.

Men and students from higher socioeconomic levels showed greater-than-average increases in leadership during the college years. Leaving home to attend college also resulted in greater-than-average increases in leadership during the college years. Larger-than-average increase in leadership scores were also associated with being a member of a fraternity or sorority, playing intramural sports, spending time in volunteer work, tutoring other students, participating in a group project for class, and making presentations to class. The substantial negative effects related to hours spent watching television and hours spent commuting. Both of these activities limit student opportunities for

participation in leadership activities and the development of leadership skills (Astin, 1993).

Research Questions

1. In what ways, if any, do students who participate in a student leader program in a community college show significant growth in leadership behaviors?

2. In what ways, if any, do female and male students who participate in a student leader program in a community college grow in leadership behaviors significantly different from each other?

3. In what ways, if any, do students in different age groups who participate in a student leader program in a community college grow in leadership behaviors significantly different from each other?

Null Hypotheses

1. There will be no statistically significant differences between the means of the student's pre and post scores on the Leadership Practices Inventory (LPI).

2. There will be no statistically significant difference between the student's scores on the Leadership Practices Inventory (LPI) in relation to gender.

3. There will be no statistically significant difference between the student's scores on the Leadership Practices Inventory (LPI) in relation to age groups.

Methodology

Selection of the Population

The population for the study was community college students involved in the student leader program. The student leader program is a program for students that generally includes an on or off-campus retreat, a credit or non-credit course, weekly

seminars or meetings, workshops with guest speakers, and/or a wide range of educational sessions on student leadership and programming.

This particular student leader program encompassed three distinct groups, each with different responsibilities. These groups were the Welcome Team, Peer Educators, and Atlas Access Team. The Welcome Team is responsible for orientation tours, welcome programs, and assistance with student activities (Appendix B). The Peer Educators are responsible for health awareness activities and programs (Appendix C). The Atlas Access Team is responsible for providing registration assistance and conducting technology based presentations for various academic departments (Appendix D).

In order to be a part of the student leader program, a student must meet specific requirements (Appendix A). The student must have a cumulative 2.5 institution GPA, enroll in a least six credit hours each term, commit to the program for a year, and participate in the mandatory leadership trainings. There are 50 to 75 students that participate in this student leader program annually. The students represent diverse backgrounds in regard to age, gender, ethnicity, involvement experience, educational preparation and other characteristics.

<center>Data Collection</center>

The student Leadership Practices Inventory (LPI) developed by Kouzes and Posner (2002) was used as the main instrument in this study (Appendix H). Permission to utilize this instrument was received from Kouzes and Posner (Appendix I). A demographic questionnaire (Appendix E) was also employed to collect information about the independent variables used in the study (gender, age group, ethnicity, student leader

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group and other characteristics). Each student group completed the student version of the Leadership Practices Inventory (LPI) at the beginning and at the end of the term. The inventory took the students approximately 10 minutes to complete. The students also reviewed an informed consent script with the researcher (Appendix F). This study was approved by the Institutional Review Boards (IRB) at the University of Central Florida (Appendix J) and at Valencia Community College (Appendix K).

A focus group was also used to assess the leadership behaviors the students gained as a result of their involvement in the student leader program. The focus group occurred at the end of the term. It consisted of nine open-ended questions. The focus group lasted about an hour. A trained focus group facilitator led the focus group. The focus group consisted of 12 student leaders. There was a student leader that represented each group (Welcome Team, Peer Educator, and Atlas Access Team) per campus. This institution had four campuses (Appendix G).

Instrumentation

Leadership Practices Inventory (LPI)

The Leadership Practices Inventory (LPI) was developed using case studies of over 2,500 corporate managers about their personal best experiences as leaders in business. Content analysis of these case studies suggested a pattern of behaviors used by people when they were most effective as leaders. These behaviors resulted in the five key leadership practices of Challenging the Process, Inspiring a Shared Vision, Enabling Others to Act, Modeling the Way, and Encouraging the Heart.

A same case-study approach was used to investigate whether the leadership behaviors of students were comparable to the managers. A group of outstanding student

leaders were selected based on nominations by faculty and staff at college institutions. There were a total of 264 total responses coded for congruence. The behaviors connected with the leadership practice of Enabling Others to Act were the most frequently mentioned (30 %). The leadership behaviors mentioned next most frequently were those associated with Modeling the (21 %) and Inspiring a Shared Vision (20 %). About one third of the leadership behaviors were coded with the leadership practice of either Encouraging the Heart (15 %) or Challenging the Process (15 %). These findings indicated that college student leaders do engage in the leadership practices researched and that this conceptual framework is relevant to the college student's leadership experience.

The student Leadership Practices Inventory (LPI) is a questionnaire with 30 behavioral statements—six for each of the five practices. These five practices include:

1. Challenging the Process - searching for opportunities and experimenting and taking risks.

2. Inspiring a Shared Vision - envisioning an uplifting future and enlisting others in a common vision.

3. Enabling Others to Act - fostering collaboration and strengthening people.

4. Modeling the Way - setting the example and achieving small wins.

5. Encouraging the Heart - recognizing individual contributions and celebrating team accomplishments (Kouzes and Posner, 2002).

The students self-responded using a Likert-type scale between 1 and 5.

- "1" means that the student *rarely or seldom* engaged in that behavior.

- "2" means that the student engaged in the behavior *once in a while*.

- "3" means that the student *sometimes* engaged in the behavior.

- "4" means that the student engaged in the behavior *fairly often*.

- "5" means that the student engaged in the behavior *very frequently*.

Items 1, 16, 21, 6, 11, and 26 corresponded to Challenging the Process. Items 12, 27, 17, 2, 7, and 22 corresponded to Inspiring a Shared Vision. Items 8, 18, 23, 3, 28, and 13 corresponded with Enabling Others to Act. Items 24, 14, 19, 9, 29, and 4 corresponded to Modeling the Way. Items 20, 15, 10, 25, 5, and 30 corresponded to Encouraging the Heart.

Focus Groups

According to Patton (2002), focus groups were described as "an interview with a small group of people on a specific topic." Patton suggested that focus groups consist of six to10 people, and Krueger (1994) suggested that there be one facilitator and one note taker. According to Patton (2002), focus groups require one to two hours to facilitate. A list of questions or topics is used to guide the group as they discuss the topics. The participants interact with the facilitator providing answers to the questions. The facilitator is usually free to make adjustments to the list and ask follow-up questions as appropriate.

There are many benefits to using focus groups. One of the main benefits is that focus groups are excellent methods of gathering rich data (Marshall and Rossman, 1999). While focus group facilitators have a list of questions or topics that they use during the session, they are free to stray from the list of questions whenever necessary. This allows for deeper levels of information, which is valuable when assessing learning.

For the purpose of this study, a focus group was also used to assess the program's effectiveness. The focus group occurred at the end of the term. It consisted of nine open-

ended questions. The focus group lasted an hour. The focus group consisted of 12

student leaders. There was a student leader that represented each group (Welcome Team,

Peer Educator, and Atlas Access Team) per campus. This institution had four campuses

(Appendix G). A trained focus group facilitator led the focus group.

<div align="center">Data Analysis</div>

Responses from the leadership practices inventory (LPI) were compiled and

inferential statistics calculated to determine if there were any statistically significant

responses based on the hypotheses. The five scores from the leadership practice

subscales were the dependent variables for the study. A demographic questionnaire

(Appendix E) was also employed to collect information about the independent variables

used in the study (gender, age group, ethnicity, student leader group and other

characteristics). To assess the leadership behaviors gained as a result of their

involvement in the student leader program, a focus group was used.

Once the student LPI was distributed and collected, a data analysis was conducted

using SPSS for Windows version 16.0 to calculate each respondent's scores. A paired-

samples *t* test was used to calculate null hypotheses 1, there will be no statistically

significant differences between the means of the student's pre and post scores on the

Leadership Practices Inventory (LPI). A paired-samples *t* test was used to measure a

difference between the two scores (pre/post scores).

A One-Way ANOVA was used to obtain information on null hypotheses 2; there

will be no statistically significant difference between the student's scores on the

Leadership Practices Inventory (LPI) in relation to gender. A One-Way ANOVA was

selected to measure a difference in the two grouping variable (gender/test scores).

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A One-Way ANOVA was used to obtain information on null hypotheses 3; there will be no statistically significant difference between the student's scores on the Leadership Practices Inventory (LPI) in relation to age groups. A One-Way ANOVA was selected to measure a difference in the two grouping variable (age/test scores).

Assumptions

The following assumptions were made in this study:

1. The students provided accurate and reliable information.

2. The information collected from the (LPI) provided a valid measurement of the student's leadership experience.

3. Participants for this study were diverse in terms race, gender, age, educational preparation and other characteristics.

4. All students met the Student Leader Program requirements.

5. All student leaders from each group (Welcome Team, Peer Educators, and Atlas Access) had a sufficient level of involvement in the Student Leader Program.

Limitations

1. The first limitation was the fact that the LPI is a self-reported inventory.

2. The second limitation was that the students may not be a diverse group.

3. The third limitation was that a convenience sample was used.

4. The fourth limitation of the study was that it served a small sample size.

5. The third limitation of the study was the limited duration of the study.

6. The final limitation was the student leaders' retention in the student leader program. Students were not able to be a part of the full study as a result of: withdrawing and/or dropping their courses or not maintaining the Student Leader Program requirements prior to the post-assessment.

Significance of Study

Student leader programs contain various elements that may contribute to the development of leadership behaviors in students. Research has found that effective leadership behaviors gained in student leader programs have been connected to positive learning results. These programs have resulted in student satisfaction in their educational experience, persistence to graduation and the development of personal and social skills. By assessing these leadership behaviors and student programs, we were able to provide successful programs and valuable data that gave institutions concrete evidence on the validity of these programs. This confirmation also enabled the institutions to increase their students' level of involvement and administrative support.

Summary

The importance of student activities in higher education and their benefits to students has been well documented in the literature. Astin's Student Involvement Theory validated these benefits as well. From evaluating many studies, Astin (1975) concluded that students who participated in some form of student activity were less likely to drop out and more likely to be satisfied with their college experiences than those who did not participate. Kouzes and Posner's (2002) Leadership Practices Inventory has been used by many institutions to determine the leadership behaviors that student leaders gain as a result of their involvement in leadership programs, positions and activities. The Community College Survey on Student Engagement (CCSSE) conducted research into what helps students succeed in college. As a result of the CCSSE, we have found the importance of researching community college student's involvement. Several components of student activities related to student-peer and faculty-student interaction have been found to aide in success. Researching effective student leadership programs

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that meet the needs of community college students will help institutions develop the

overall student-personally, professionally and educationally.

CHAPTER 2
REVIEW OF LITERATURE

Introduction

Chapter 2 contains a review of the literature in five broad areas. The first section discusses the involvement benefits that students receive as a result of their participation in leadership activities such as clubs/organizations and leadership programs. The second section describes Astin's (1984) theory of student development he called the "Student Involvement Theory." The third section focuses on community college student involvement. It discusses the mission of community colleges and the challenges they face with getting students involved. The fourth section talks about the components of an effective student leadership program and the benefits it offers to students. The final section discusses related research on gender differences in student leadership positions and programs.

Involvement Benefits

Cress, Astin, Zimmerman-Oster, and Burkhardt (2001), in their study of students who participated in typical leadership activities such as attending leadership workshops and/or holding a student organization officer position, found many benefits associated with such activities. For example, students who participated in leadership activities showed higher gains and growth in decision-making skills and conflict resolution skills than those not involved in leadership activities. In addition, along with growth in other typical leadership areas such as goal setting and civic responsibility, students who participated in leadership activities were dedicated to developing leadership skills for those around them. Students who participated in leadership opportunities also reported

growth in self esteem (Schuh and Laverty, 1983), interpersonal communication (Bialek and Lloyd, 1998), and interdependence (Williams and Winston, 1995).

Involvement in activities that required leadership skills and abilities may even have positively affected academic success (Cooper, Healy, and Simpson, 1994; Peraza, 2004). Leadership opportunities are beneficial to a student's academic life. Student leaders went on to achieve more in education than those not involved with leadership activities (Astin, 1993). These students also achieved higher in tasks associated with their plans for education and career development (Williams and Winston, 1995).

The impact of leadership experiences extends far after graduation. Students with these experiences were positively influenced in personal growth and development measures (Strifflino and Saunders, 1989). Demonstration of leadership and teamwork skills after graduation has been positively linked to involvement and leadership in student organizations in college (Bialek and Lloyd, 1998). Student leader graduates also reported gains in leadership skills such as "ability to deal with complexity, uncertainty, and ambiguity" (Cress et al., 2001, p.22), and community awareness. These skills, as well as other effects such as confidence in a professional setting, positively affected a student's career after college (Bialek and Lloyd, 1998).

The institution itself also benefited from the development of students into leaders (Dooley and Shellogg, 2003). These students became skilled student leaders or club officers who managed campus organizations that were dedicated to the institution and the students they served (Stiffolino and Saunders, 1989). Leadership opportunities also provided students with the means to become involved in the well being of the institution, becoming dedicated and loyal students and future alumni (Bialek and Lloyd, 1998).

Floerchinger (1988) reviewed dozens of articles on student activities to produce a list of six benefits of student involvement in co-curricular activities. These included: (a) increased retention; (b) improved interpersonal skills including communication and group organizational skills; (c) a positive influence on skills in leadership, communication, teamwork, organizing, decision-making and planning; (d) greater satisfaction with their college experience on general dimensions compared with less involved students; (e) useful experience in obtaining a job and providing job related skills; and (f) development of lifelong values of volunteerism and service to others as well as lifelong leisure skills.

Williams and Winston (1985) used the Student Development Task Inventory to study the differences in developmental task achievement. They reported differences between students involved in co-curricular activities and students not involved, and between students who worked and those who did not. The authors concluded that students who did not elect to become involved outside the classroom in either organized student activities or work on campus were developmentally less mature than participants. Considering strategies to encourage students to become more involved in co-curricular activities was also recommended because participation in these activities seemed to be an effective means of stimulating personal development.

Students at a mid-sized public university in the Southeast completed the Student Development Task and Lifestyle Inventory at the beginning of their first year, the beginning of their sophomore year, and the end of their senior year. More involved students reported greater development in moving through autonomy toward independence, and establishing and clarifying purpose. Uninvolved students had consistently lower developmental scores. Students who joined or led organizations

reported more development than those who just attended a meeting (Foubert and Grainger, 2006).

Foubert and Grainger (2006) examined the connections between students who have varying levels of involvement in student clubs and organizations and their psychological development along Chickering and Reisser's vectors (1993). It observed the role of involvement in clubs and organizations in students' psychological development after their first-year experience, by measuring their development just prior to the start of their sophomore year. The students' development was reassessed during the spring of their senior year to measure development over their entire college experience (Foubert and Grainger, 2006).

Chickering and Reisser (1993) developed a comprehensive and frequently cited theory of psychological development. Their theory described development as happening along seven vectors: developing competence, managing emotions, moving through autonomy toward independence, developing mature interpersonal relationships, establishing identity, establishing and clarifying purpose, and developing integrity. This longitudinal study validated Chickering and Reisser's theory, given the assumption that developing purpose and competence are influenced by college experiences (Martin, 2000).

The Student Development Task and Lifestyle Inventory (SDTLI) was used in this study. This instrument was developed to collect students' self-reported behaviors, attitudes, and opinions on psychosocial topics that specifically relate to Chickering and Reisser's theory, particularly establishing and clarifying purpose, developing mature interpersonal relationships, and academic autonomy (Martin, 2000). The inventory was

developed using a factor analysis of items with an initial sample of 500 students from six colleges and universities; a confirmatory factor analysis with 1,100 students at 12 colleges and universities, and an additional confirmatory factor analysis, reliability analysis, and norm collection from 1,200 students across the United States and Canada (Foubert and Grainger, 2006).

A total of 307 students participated in the study. All participants were traditionally aged college students (18-22), 40% men and 60% women. The racial background of the students was 79% Caucasian; 11% Asian American/Pacific Islander; 7% African American/Black; and 3% identified as "other," which included Hispanic/Latino students. All participants lived in residence halls their first year. Approximately half lived in residence halls their sophomore year and one-third during their senior year. All participants attended the same institution. Most students at this institution ranked in the top 10% of their high school class, had SAT scores at least one standard deviation above the mean, and were from middle to upper socioeconomic status homes (Foubert and Grainger, 2006).

The results showed a strong connection between involvement in student organizations and higher levels of development on several indicators of psychosocial development. Enhanced development was apparent after students completed their first year of college and at the end of their college experiences. Students with higher levels of involvement in student organizations reported greater levels of psychosocial development in the areas of establishing and clarifying purpose, educational involvement, career planning, life management and cultural participation. The relationship between involvement and development was statistically significant both after the students' first

year in college and at the end of their senior year. Unlike seniors, more involved students tested at the beginning of their sophomore year also reported statistically significant greater development in their academic autonomy and their lifestyle planning less than involved students. This finding suggests that greater levels of student involvement may have powerful effects on development early in the college experience (Foubert and Grainger, 2006).

<div align="center">Astin's Student Involvement Theory</div>

Astin (1984) formulated a theory of student development that he called "Student Involvement Theory." Involvement referred to the quantity and quality of physical and psychological energy that students invest in the college experience. Astin (1975) concluded, from evaluating many studies, that students who participated in some form of student activity were less likely to drop out and more likely to be satisfied with their college experiences than those who did not participate. Community colleges, where involvement was minimal, had higher drop out rates than four-year colleges.

Astin emphasized that the behavior aspects of involvement, such as what an individual does and how she or he behaves, were essential; this facet of involvement comprises the first point of Astin's involvement theory. The theory has four other basic ideas: (a) involvement occurs along a continuum; different students display different levels of involvement in different activities at different times; (b) involvement has both quantitative aspects, how much time a student spends doing something, and qualitative aspects, how focused the student time is; (c) the amount of personal development and learning that can occur is directly comparative to the quality and quantity of student involvement; and (d) the effectiveness of educational policies, practices, or programs is

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directly related to the policy, practice, or program's commitment to increasing student involvement (Astin, 1984).

Astin (1993) addressed the impact that the involvement in clubs and organizations has on students. He reported that elected student officers' public speaking ability, leadership abilities, and interpersonal skills were statistically significant with hours per week spent on participating in student clubs and organizations. Later, Astin (1996) found that the three strongest forms of involvement were academic involvement, involvement with faculty and involvement with student peer groups. Astin stated that the strongest single source of influence on cognitive and affective development was a student's peer group; the greater interaction with peers, the more favorable the outcome. He proposed that the power of the peer group was found in the capacity of peers to involve each other more intensely in experiences. Interaction with peers was also shown to contribute to seniors' growth in interpersonal competence, cognitive complexity, and humanitarianism (Kuh, 1995 and Terenzini, 1996).

Astin (1993) assessed the student's degree of involvement with student peers using various methods. One method used was to gain information on the number of hours per week a student reported spending time in the following activities:

- Socialized with friends

- Partied

- Student leader clubs and/or programs

Another measure was based on whether a student identified with any of the statements below:

- Joined a fraternity or sorority

- Participated in campus protests or demonstrations

- Elected to a leadership or officer position

- Participated in intercollegiate athletics

- Played intercollegiate football or basketball

    Five additional measures were based on the frequency of these activities during a

semester:

- Worked on group projects for class

- Tutored another students

- Participated in intramural sports

- Discussed racial or ethnic issues

- Socialized with someone from another racial or ethnic group

    The final measure of peer involvement captured the sheer frequency of interaction

with the peer group. This measure consisted of the sum of the student's responses to the

following items:

- Discussed course contend with students outside of class

- Worked on a group project for a class

- Tutored another student

- Participated in intramural sports

- Membership in a social fraternity or sorority

- Participated in campus protests or demonstrations

- Elected to student office

- Hours per week spent in students clubs or groups (Astin, 1993).

Another source of information that was important to assess in terms of involvement was the student's leadership. According to Astin (1993), leadership was defined in terms of three self-rating measures relative to whether the student has been elected to a student office: leadership ability, popularity and social self-confidence. According to Holland's Enterprising type (1973), leaders tended to have relatively affluent and well-educated parents. In high school, students with high scores in leadership excelled in speech and debates, frequently studied with other students, received varsity letters in sports, and were elected president of some student organization. In college, leaders showed a preference for majors in pre-law, military science and communications, and an interest for career in law, the church and the military service. Students with high leadership scores tended to have high enrollments in private colleges and universities, and were underrepresented at the community colleges (Astin, 1993).

The increase in leadership appears to be associated with the student's college experience. The percentage of students who qualified as student leaders showed a positive correlation to these factors: living on campus, number of college years completed and degree of student interaction with faculty and peers. The strongest effect was associated with student-student interaction: students who interacted most frequently with peers showed an increase in their percentage qualifying as leaders. The student's age at the time of college entry was not significantly associated with changes in leadership scores. This evidence supports the argument that increases in leadership skills during undergraduate years is associated with the college experience rather than the student's maturation.

Men and students from higher socioeconomic levels showed greater-than-average increases in leadership during the college years. Leaving home to attend college also resulted in greater-than-average increases in leadership during the college years. Larger-than-average increases in leadership scores were also associated with being a member of a fraternity or sorority, playing intramural sports, spending time in volunteer work, tutoring other students, participating in a group project for class, and making presentations to classes. There were substantial negative effects related to hours spent watching television and hours spent commuting. Both of these activities limit student opportunities for participation in leadership activities and the development of leadership skills (Astin, 1993).

<u>Community College Involvement</u>

As a result, community colleges have faced many challenges in regard to student activity involvement. The American community college, the most important higher education innovation of the twentieth century (Lombardi, 1975; Witt, Wattenbarger, Gollattscheck and Suppiger, 1994), originated with the founding of Joliet Junior College in 1901 (Cohen and Brawer, 2003). Primarily created as junior colleges with an emphasis on academics – and both the premise and promise of higher education for everyone – community colleges have become complex institutions that take on a broad array of educational social and economic functions. These functions include transfer to and preparation for the university, career programs, and technical certificates and/or degrees (Bailey and Averianova, 1998).

Since the early 1980s, community colleges have grown in number, size and organizational complexity (Amey, VanDerLinden, and Brown, 2002). Currently, the American Association of Community Colleges estimates that there are approximately

1,200 community colleges in the United States, with the estimate increasing to 1,600

institutions, if the count includes branch campuses. According to Striplin (2000),

"approximately 50% of all students who enroll in postsecondary education enroll in

community colleges." Community colleges serve a diverse group of students who have a

wide range of personal and professional needs and goals (Phillippe and Valiga, 2000),

and it is expected that the population of students who choose to enroll at a community

college will increase and mirror the increasing diversity of American society (O'Rourke,

1997; Williams, 2002).

The Community College Survey of Student Engagement (CCSSE, 2005) data

indicated three areas that affect the student's involvement level. These areas were:

student work, student's care for dependents and student's commute. The survey

indicated that 57% of community college students work more than 20 hours per week.

Thirty-six percent of students spend 11 or more hours per week caring for dependents. In

regard to the student's commute, 21% commute six to 20 hours per week and 93%

commute at least one hour per week. According to the Community College Survey of

Student Engagement (CCSSE, 2004) at a central Florida community college, 86.5% of

the students reported that they did not participate in college-sponsored activities. These

activities included: clubs/organizations, campus publications, student government,

intercollegiate and intramurals sports.

Eklund-Leen and Young (1997) conducted a study on community college student

involvement. The study was designed to determine the relationship among the intensity

of student involvement in community college organizations, attitudes towards community

involvement, and self-reported projections of participation in community activities. The

study was geared to answer three questions: 1) Were there differences among leadership designations (leader, member, or non-member) in the intensity of involvement in campus activities? 2) Was there a linear relationship between the intensity of student involvement on campus, and students' attitudes and anticipated activities in the community? 3) Was there a relationship between the demographics of the students and campus and community involvement?

The student population in this study was community college student leaders in campus-wide organizations, professional clubs, honorary societies, and special interest clubs. The student leaders had to be in office for at least two quarters. A random numbers list was used to select members from organization membership lists and nonmembers from college enrollment lists. As a result, 350 students at an urban Midwestern community college were identified for this study. Questionnaires were mailed to the potential participants and 50.57% were returned and analyzed.

The Campus and Community Involvement Questionnaire (CCIQ) was developed for this study. The CCIQ contained demographic questions and three involvement scales. The demographic questions asked for the sex, age, and ethnicity of the respondents. The scales included the intensity of general campus involvement, attitudes toward community involvement, and anticipated community involvement activities (Eklund-Leen and Young, 1997).

Women comprised of 66.1% of the sample and men 38.9%. Caucasian students accounted for 76.8% of the respondents and African Americans 23.2%. African Americans represented the only minority in the study. Half of the respondents (50.3%) were between the ages of 20 and 29. The other half included 9.6% between the ages of

17 and 19, 27.1% between the ages of 30 and 39, 11.3% between 40 and 49, and 1.7%

above the age of 50. The results showed no significant difference between the

respondent group and the population of the students at the college on the basis of sex

(Eklund-Leen and Young, 1997).

There was a significant difference in regard to ethnicity. The respondent group

included a higher percentage of African Americans than the college population because

the membership of one of the largest student organizations was almost entirely African

American. The mean age of the sample was significantly lower than the mean average of

the college population (Eklund-Leen and Young, 1997).

In relation to intensity of campus involvement in groups, student leaders were

significantly more involved in campus life than both members and non-members, and

members were significantly more involved than nonmembers. In regard to relationship

between campus involvement, attitude toward community involvement and anticipated

activities, there was a statistical significance. Involvement in campus life was positively

related to attitudes toward community involvement. It was also positively related to

reports of anticipated community activities. Students who were highly involved in

campus life tended to view community involvement more positively and anticipated

engaging in more activities in the community. In relation to relationship between the

demographics and the campus and community involvement scales, there was no

significance between age and the involvement variables (Eklund-Leen and Young, 1997).

The findings of this study validated Astin's (1984) theory of student involvement.

Astin argued that a student's intensity and extent of involvement in college had an impact

on the benefits of the college experience. The more involved the students, the greater the

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benefits. This is especially important in community colleges where students are not campus residents. Students who live in residence halls have more time and opportunity to become involved in all aspects of campus life. Certainly, by eating, sleeping and spending waking hours on the college campus, residential students had a better chance than did commuter students of developing strong identification and attachment to undergraduate life (Astin, 1984).

The study supported the argument that involvement in student organizations enhances the educational outcomes of the institution. Student leaders might well become good citizens, and potentially, community leaders. This outcome has proven to be important at the community college, which is immersed in community involvement. In addition, the community college has suffered by comparison with residential institutions that can involve students on campus more easily than commuter institutions. The study showed that co-curricular involvement could produce a major benefit, even though the time for such involvement is restricted by the nature of the student and institution (Eklund-Leen and Young, 1997).

<u>Student Leadership Programs</u>

As a result of this lack of student participation, many colleges and universities are creating methods for effective leadership training. Carefully planned training programs are of primary importance in successful learning-based student activities. There are several techniques for promoting the learning of leadership skills. One of the most frequently used techniques is a formal student leader program. Such a program could include an on or off-campus retreat, a credit or non-credit course, weekly seminars or meetings, workshops with guest speakers, and/or a wide range of educational sessions on student leadership and programming. In this program, the students can also review the

program's policies and procedures, be introduced to key university and college personnel and participate in goal and objective setting. Often there is a leadership handbook or training manual to use as a reference throughout the program (Berman, 1978).

The Council of the Advancement of Standards in Higher Education (CAS) states that a Student Leader Program (SLP) must include student learning and student development in its mission. A SLP must enhance overall educational experiences. Assessment of the program should include a regular review of whether the program's mission, goals and development outcomes are achieved. The program director should also periodically evaluate how the program parallels the institutional mission (CAS, 2006).

The mission of the SLP must be to prepare students for leadership roles and responsibilities. According to the CAS, in order to accomplish this mission the program must:

- Provide students with opportunities to develop and enhance a personal philosophy of leadership that includes understanding of self, others and community;

- Assist students in gaining a diverse leadership experience;

- Use a variety of leadership techniques, theories and models;

- Acknowledge and reward exemplary leadership behavior; and

- Be inclusive and accessible.

Student Leadership Programs must identify relevant and desirable student learning and development outcomes and provide programs and services that encourage the achievement of those outcomes. Relevant and desirable outcomes include: intellectual growth, effective communication, realistic self-appraisal, enhanced self-

esteem, clarified values, career choices, leadership development, healthy behaviors, meaningful interpersonal relationships, independence, collaboration, social responsibility, satisfying and productive lifestyles, appreciation of diversity, spiritual awareness, and achievement of personal and educational goals (CAS, 2006).

A SLP must provide evidence of its impact on the achievement of student learning and development outcomes. Examples of achievement indicators in these areas include the following:

1. Intellectual growth - produces personal and educational goal statements; employs critical thinking in problem solving; uses complex information from a variety of sources; obtains a degree.

2. Effective communication - writes and speaks effectively; able to influence others through writing and speaking; makes presentations; writes and speaks after reflection.

3. Enhanced self-esteem - shows self-respect and respect for others; initiates actions toward achievement of goals; takes reasonable risks; functions without need for constant reassurance from others.

4. Realistic self-appraisal - articulates personal skills and abilities; acknowledges personal weaknesses and strengths; learns from past experience; seeks feedback from others.

5. Clarified values - articulates personal values; makes decisions that reflect personal values; identifies personal, work, and lifestyle values and explains how they influence decision-making.

6. Career choices - articulates career choices based on assessment of interests, skills, and abilities; makes connections between classroom and out-of classroom learning.

7. Leadership development - articulates leadership philosophy or style; serves in a leadership position in a student organization; comprehends the dynamics of a group.

8. Healthy behavior - chooses behaviors and environments that promote health and reduce risk; articulates the relationship between health and wellness and accomplishing life-long goals.

9. Meaningful interpersonal relationships - listens to and considers others' points of view; treats others with respect; develops and maintains satisfying interpersonal relationships.

10. Independence - manages time effectively; functions autonomously; exhibits self-reliant behavior; accepts supervision as needed; exhibits ability to function independently.

11. Collaboration - works cooperatively with others; seeks feedback from others; exhibits effective listening skills; contributes to the achievement of a group goal.

12. Social responsibility - participates in service/volunteer activities; appropriately challenges the unfair, unjust, or uncivil behavior of other individuals or groups.

13. Satisfying and productive lifestyles - achieves a balance between education, work, and leisure time; overcomes obstacles that hamper goal achievement; articulates long-term goals and objectives.

14. Appreciating diversity - understands one's own identity and culture; seeks involvement with people different from oneself; understands the impact of diversity on one's own society.

15. Spiritual awareness - develops and articulates a personal belief system; understands roles of spirituality in personal and group values and behaviors.

16. A personal and educational goal - sets, articulates, and pursues individual goals; understands the effect of one's personal and educational goals on others (CAS, 2006).

A SLP must be comprehensive in nature and must include 1) opportunities to develop the competencies required for effective leadership; 2) training, education and development activities; and 3) multiple delivery methods. The program must be based on a broad philosophy of leadership upon which subsequent competencies are built. The program must contain components that assist the student in gaining self-awareness, the relationship to self and others, the uniqueness of the institutional environment within which leadership is practiced, and the relationship to local and global communities. It must advance competencies in the categories of foundations of leadership, individual development, and organizational development (CAS, 2006).

Student Leadership Programs must conduct regular assessment and evaluations. SLPs must employ effective qualitative and quantitative methodologies as appropriate to determine whether and to what degree the stated mission, goals and student learning outcomes and development outcomes are being met. The process must use sufficient and sound assessment measures to ensure comprehensiveness. Data collected must include responses from the students and other affected constituencies.

SLPs must evaluate periodically how well they complement and enhance the institution's stated mission and educational effectiveness. Results of these evaluations must be used in revising and improving programs and services and recognizing staff performance (CAS, 2006).

One purpose of leadership programs is to provide students with an additional opportunity for the growth of cognitive skills in the context of the institution's

educational mission (Buckner and Williams, 1995). Many times, students involved in leadership development programs are more invested in their academic and out-of-class success because of these experiences, more so than students not involved in leadership programs (Striffolino and Saunders, 1989). Opportunities in leadership development programs for self and other awareness, and appreciation of other's values and viewpoints (CAS, 2006) broaden the academic component of higher education (Buckner and Williams, 1995).

Another purpose of leadership development programs is to develop more effective leaders. These leaders should have the knowledge needed to create good change, and create that change with purpose as leaders of their organizations (CAS, 2006). In addition, leadership is a constant learning process, as each lesson builds on the last, so students can apply what they have learned in leadership positions in college to their careers and interests once they have graduated.

Leadership development is a fundamental responsibility of colleges and universities. Connaughton, Lawrence, and Ruben (2003), presented the theoretical foundation of an innovative initiative as well as criteria for assessing leadership programs in higher education. They used the Student Leadership Development Institute (SLDI) at Rutgers University as a case study for demonstrating that leadership development initiatives should be systematic, multidisciplinary and research-oriented and have several experiential components.

The Student Leadership Development Institute at Rutgers University serves as a case study that draws from concepts and perspectives from the behavior sciences, ideas from organizational and communication studies, and thoughtful reviews from analyses of

professional practice. The SLDI has nine principles that define its initiative. The first is

that leadership is complex; second, leadership is other oriented; third, leadership is

interactive and dynamic; fourth, leadership is contextual; fifth, leadership may be

emergent; sixth, leadership is a science and an art; seventh, leadership is enacted through

communication; eighth, leadership is increasingly medicated and virtual in nature and

ninth, leadership can be learned and taught (Connaughton, Lawrence, and Ruben, 2003).

This study also stated successful benchmarks needed for leadership development

programs in higher education. According to research, leadership development programs

must consider four criteria. First, leadership courses where the faculty's teaching

methods match the desired outcomes. Second, learning opportunities must be created that

allow students to apply and practice their knowledge and to experience the consequences

of their actions. Third, students must be strongly encouraged to reflect on and discuss

their leadership experiences with faculty and peers. Fourth, students must have vicarious

learning opportunities. Students learn from more experienced leaders by listening and

interacting with them. The SLDI model encompasses these criteria (Connaughton,

Lawrence, and Ruben, 2003).

The SLDI has five objectives and five components. The five objectives are: a) to

ground the student's comprehension in the academic study of leadership theory; b) to

foster opportunities for students to develop leadership competencies while working on

projects of social and civic consequence; c) to enable students to network with peers,

experts, and organizations; d) to encourage students to reflect on their own personal

leadership philosophy and experience; and e) to attract national and international experts

to Rutgers for conferences.

The five components of the institute's leadership development programs are:

1. Student Leadership Certificate

2. A Leadership Forum

3. The Student Leadership Conference

4. The Leadership and Technology Practicum

5. Leadership Research and Development

Some assessments of outcomes that are used in this institute consist of student's formally and informally evaluating individual courses and faculty. Also, feedback is regularly gathered from student participants at various lectures, meetings and events. A pre/post expectation survey will also be utilized in the future with the students. The information gathered will be in forms of surveys, focus groups and one-on-one interviews. There will also be an initiative to do research on the progress of the SLDI program graduates (Connaughton, Lawrence, and Ruben, 2003).

Student participation in self-governing activities has a strong historical foundation in even the earliest forms of higher education. This participation has evolved greatly to situations to students displaying real power in institutional behavior. Undergraduate and graduate students, however, view their role as institutional decision making participants differently, often based on the idea that their expectations and purposes for enrollment differ. Love and Miller (2003) employed a survey of students in a particular program and provided an initial profiling of some of those differences, focusing on how undergraduate and graduate students saw opportunities for building more involvement.

Student involvement in institutional governance was closely tied to two rationales. One holds that students had the right to be involved in how they are treated

and the activities and governance of their institution. Students had typically held control

over many aspects of student life, such as free money distribution, but had not been

granted equal status with faculty members in decision-making in areas such as course

scheduling or in other curricular matters (Love and Miller, 2003).

The second rationale for student involvement was the contention that there was a

direct correlation between student involvement in out of class activities and learning and

development. Research has shown that students who were actively involved in both

academic and out of class activities gained more from the college experience than those

who were not so involved. Research has also shown over the 20 years that involvement

was correlated with greater persistence rates, personality development and college

satisfaction (Love and Miller, 2003).

The current case study was done at an urban research university of 30,000

students, most of whom identified themselves as commuters. Students enrolled in an

elementary education program were surveyed in the fall semester of 2002. Two pools of

students were involved in the data collection: one group of 31 undergraduate students

who were enrolled in a bachelor's degree program leading to a teaching credential, and

one group of 43 graduate students enrolled in an elementary teacher credential

preparation program (Love and Miller, 2003).

The survey instrument included 57 strategies for increasing student participation

in governance, where the respondent rated each item on a 1 to 5 Likert type scale, with 1

= no agreement that the strategy would work progressing to 5 = strong agreement that the

strategy would work in increasing participation. The researchers collected the data by

visiting the classrooms with the identified targeted students. Respondents completed the surveys during class time (Love and Miller, 2003).

Respondents overall expressed moderate to agreement levels on the survey. The overall mean agreement level for all items, all respondents was 3.86. The graduate students' agreement level was somewhat higher at 3.94 and the undergraduates' somewhat lower at 3.74. Within the strong agreement classification, both parties in particular agreed with three strategies. These included making activities more enjoyable and rewarding, that administrators should respect decisions of student governance, and having employers speak with the students about the value of the self-governance experience. Conversely, the two least agreed upon with strategies were that student leaders should encourage their friends to get involved, and discussing controversial issues (Love and Miller, 2003).

For graduate students, the strategy of having administrators respect the decisions of student government was most agreed with, followed by publicizing student government meetings and activities. Undergraduate students agreed most strongly with providing benefits such as parking, copies and tuition reimbursements for members of the student government, followed closely by the strategy of having administrators respect the decision of student government. Both undergraduate and graduate groups agreed the least that the strategy of discussing controversial issues would increase participation in self-governance (Love and Miller, 2003).

There are many benefits to involvement in leadership programs. Similar to those benefits found by participation in student activities, participants in leadership programs showed growth in relation to their leadership skills and confidence in their abilities to

lead (Zimmerman-Oster and Burkardt, 1999). Leadership programs gave the participants

the opportunity to understand theory and apply theory (Buckner and Williams, 1995),

amplifying their knowledge and abilities (Cress et al., 2001).

Indeed, student leader programs prepare students to develop the leadership skills

that are critical to their success as students and after they graduate. A number of

dimensions are related to these leadership skills that can be taught and measured. Some

leadership skills students' gains that positively affect their development are self-

management, interpersonal skills, problem solving and others. Students who participated

in leadership programs and activities rated higher on self-management skills such as

stress management and establishing priorities (Cooper, Healy and Simpson, 1994).

Interpersonal skills are also important skills gained as a result of involvement in a

student leadership program. Students who participated in one leadership experience

reported higher levels of interpersonal communication because of their involvement

(Bialek and Lloyd, 1998). Students in different leadership development programs stated

that they improved in their public speaking skills because of their campus/college

involvement, not only outside, but also inside the classroom. Group interactions within

student organizations built other skills such as conflict resolution and the reliance on

others to work effectively despite inclinations to work alone (Outcalt, 2001).

Mastery of skills in problem solving and decision-making also are indicative of a

good leader (CAS, 2006). Those who participated in leadership programs and activities

reported more growth in conflict resolution skills and decision-making abilities (Cress et

al., 2001). Leadership activities outside of the classroom provided students with the

opportunity to improve their decision-making skills (Schuh and Laverty, 1983).

Career development is another important aspect of leadership development. Many students build invaluable skills that they use beyond college because of their involvement in leadership programs and activities. Students who were involved with student organizations and leadership activities showed higher achievement in regard to their career plans (Williams and Winston, 1985).

Skills in organization and planning are also associated with leadership. Students who participated in leadership programs and activities showed higher abilities to plan and organize programs (Cress et al., 2001) for the welfare of their organization or group. This included setting and meeting goals and deadlines (Schuh and Laverty, 1983).

Self-confidence can also be increased through a student's participation in leadership programs. Students that participated in leadership programs funded by the W.K. Kellogg Foundation reported growth in their confidence in their abilities (Zimmerman-Oster and Burkhardt, 1999). These results, as well as an increase in the clarification of their own personal values, have been duplicated in research of other leadership activities or programs as well (Bialek and Lloyd, 1998; Cress et al., 2001; Outcalt, 2001). Because of increased self-confidence, student leaders went on to take risks and became secure in their leadership roles (Komives, 2005).

To really use leadership, we must tap into a student's potential for leadership. Developing students throughout the college or university with the use of leadership programs prepares students for the changing demands of our society for leaders (CAS, 2006; Roberts and Ullom, 1989). Roberts and Ullom (1989 p. 74) contended that, "student leadership programs should be the integral part of our academic and co-curricular offerings." Not only do leadership programs prepare students for future

leadership roles, they also prepare students for the roles they play on campus, thereby improving campus life. Student leadership training and development benefit our institutions (Janosik and Sina, 1988).

<div align="center">Gender Roles</div>

Erwin's (2005) study examined the leadership practices of members of student government organizations at Midwestern universities. The researcher examined whether women in student government practice leadership in ways that are different than their male counterparts. The researcher also investigated whether election versus appointment was associated with differences in the way women and men practice leadership. Finally, the researcher examined whether holding a leadership position within student government impacted the ways men and women practice leadership.

Survey research was used in studying the leadership practices of members of student government. The Student Leadership Practices Inventory (SLPI) was administered at eight public universities during regularly scheduled meetings of student government organizations. The SLPI measures leadership practices that are valuable in effective leadership. The five scores from the leadership practice subscales were the dependent variables for the study. A demographic questionnaire was also employed to collect information about the independent variables used in the study (gender, leader/non-leader, elected/appointed). The data collected from the completed SLPIs and the demographic questionnaires were analyzed using a multivariate analysis of variance (MANOVA) procedure. Follow-up analysis of variance (ANOVA) tests were employed (Erwin, 2005).

The results revealed no statistically significant differences between men and women members of student government with regard to the five leadership practices

measured by the SLPI. There were no statistically significant differences between student government participants with regard to whether they were elected or appointed. There were strong differences between members of student government according to whether or not they held a leadership position. Leaders obtained higher scores than non-leaders on four out of the five leadership practices. Gender did not make a difference in the practice of leadership in student government as measured by SLPI. However, student government leaders practiced effective leadership behaviors more frequently than did non-leaders (Erwin, 2005).

Miller and Kraus (2004) examined whether women were equally represented in leadership roles in college student governance at 21 Midwestern comprehensive universities. The college student governments were surveyed and asked to report how many women participated in executive student government positions such as president and vice president. The analyses showed that while women were elected as representatives to student government, they were under-represented in presidential and vice-presidential positions. Structural and/or institutional factors, such as having a female advisor to student government, were correlated with greater likelihood of having a female student government leader (Miller and Kraus, 2004).

There were two main reasons why women did not participate in student government leadership roles. These reasons were lack of interest in politics and government, and the feeling that they did not qualify for the position. They also felt that student government did not address women's concerns. They were more attracted to organizations that met their personal and academic interests (Miller and Kraus, 2004).

The results showed that while women held nearly half (a mean of 47.9%) of the student government positions, the majority of the student leaders were male. In this study, 71.4% of the student government presidents and 71.4% of the vice presidents were male. Additionally, women were under-represented as leaders in the past five years. Out of the 105 chances for women to be elected to the presidential position in the previous five years, women were elected 27 times or 25.7% of the times. Women were much more likely to be elected to vice president. Out of the 105 chances in the previous five years, women were elected to the vice presidential position 47 times (Miller and Kraus, 2004).

Student government leaders represent a great resource for the institutions in many ways. The women participants in this study served in leadership roles less frequently than men. Colleges must be intentional about their efforts to ensure that women students have the opportunity to gain leadership skills through student activities and organizations. According to Kuh and Lund (1994), "Participation in campus governance is linked to desirable outcomes for individual students as well as to positive contributions to the welfare of the campus community." Students who participate in these programs gain organizational, planning, managing and decision-making skills. They are also able to put to use ideas and methods they learned in their classes. Women could be missing out on valuable experiences useful in any career (Miller and Kraus, 2004).

Jago and Vroom (1982) conducted a study that dealt with differences in leadership styles among college students in relation to gender. One-hundred sixty women and 322 men were asked to assume the role of leader in 30 hypothetical cases and respond to the decision-making process. Women were found to be more participative in

their self-reported leadership style than men (p<.01). In addition, women used group

decision-making procedures more frequently than men (p<.01).

Linimon, Barron, and Fablo (1984) examined gender differences in perceptions of

leadership of 320 college students (157 men; 163 women). The researchers found no

significant differences in self-esteem, self-evaluations, or peer evaluations of leadership

skills. However, a significant difference was found by gender in self-ratings of

democratic leadership style (p<.05), with women (M=4.08) rating themselves higher than

men (M-3.86) as democratic leaders.

Kouzes and Posner's (1988) Leadership Practices Inventory (LPI) has also been

used as an instrument in assessing student leader gender differences. The LPI rates a

leader's effectiveness on five factors: a) Challenging the Process; b) Inspiring a Shared

Vision; c) Enabling Others to Act; d) Modeling the Way; and e) Encouraging the Heart.

This instrument was developed in the business sector as a result of interviewing 1,000

managers.

Komives (1994) used the Student Leadership Practices Inventory to investigate

student leadership in a campus-based leaders' conference. Thirty-four women who had

attended a campus conference for women student leaders were surveyed; 27 completed

the instrument. The women's scores ranged from 22.11 for Challenging the Process,

23.26 for Inspiring a Shared Vision, 23.41 for Modeling the Way, 24.85 for Encouraging

the Heart, to 26.04 for Enabling Others to Act. The scores showed that women believed

they had most leadership skills in Enabling Others to Act and the least amount in

Challenging the Process.

In a later study, Posner and Brodsky (1994) surveyed fraternity and sorority presidents and their constituents. One national fraternity and one sorority were chosen and asked to have their chapter members complete the Student Leadership Practices Inventory. Sixty-five fraternity presidents (65% response rate), 96 sorority presidents (71% response rate), 239 fraternity executive council members (48% response rate) and 389 sorority executive council members (59% response rate) completed the instrument. The more effective presidents engaged in the five leadership practices more often than the less effective presidents ($p<.001$). There were no differences in leadership practices between female and male student leaders.

Adams and Keim (2000) conducted a study on leadership skills developed among Greek student leaders. The purpose of the study was to examine leadership practices of Greek-affiliated student leaders at three public, Midwestern universities and to measure their effectiveness as determined by chapter presidents, executive council members, and general members of on campus fraternities and sororities.

Participants in this study consisted of 233 undergraduate students (101 men; 132 women), who were active fraternity and sorority members at three public universities, located in Nebraska, Missouri and Illinois. Participants completed the 30-item Student Leadership Practices Inventory and the Leadership Effectiveness Survey, and when responses were compared, significant differences were revealed (Adams and Keim, 2000).

On all five practices measured by the SLPI, scores for women were above 25.02. Scores for men on Inspiring a Vision, Enabling Others to Act, and Encouraging the Heart were above 24.36, but were not as high as the women's scores on the same practices.

Scores of women general members and executive council members were higher than scores of men general members and executive council members. However, men presidents' self-perceptions on Inspiring a Vision and on Modeling the Way were higher than women presidents' self-perceptions (Adams and Keim, 2000).

A statistically significant difference was found between men and women on Challenging the Process, with women rating their presidents higher than men did (p<.05). Another significant difference was found by position within gender on Inspiring a Shared Vision (p<.05). The mean scores of women general and executive council members were higher than the mean scores of men general and executive council members. A statistically significant difference was found by gender on Enabling Others to Act (p<.05). Women felt more strongly than men that their presidents were effective leaders (Adams and Keim, 2000).

Several major conclusions were drawn from this study in regard to gender differences. Some of these include: men chapter presidents were older than women chapter presidents, women earned higher grades than the men, women chapter presidents were less experienced as presidents than men, and men appear more confident in their leadership abilities than women presidents (Adams and Keim, 2000).

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

This chapter reviewed Astin's Student Involvement Theory and the benefits students receive as a result of being involved in student activities and student leadership programs. These benefits included educational, personal and career development among the participating students. From evaluating many studies, Astin (1975) concluded that students who participated in some form of student activity were less likely to drop out

and more likely to be satisfied with their college experiences than those who did not participate.

Community colleges, where involvement was minimal, had higher drop out rates than did four-year colleges. The Community College Survey of Student Engagement (CCSSE, 2005) data indicated three areas that affect the student's involvement level. These areas were: student work, student's care for dependents, and student's commute. According to the Community College Survey of Student Engagement (CCSSE, 2004), at a central Florida community college, 86.5% of the students surveyed reported that they did not participate in college-sponsored activities. These activities included: clubs/organizations, campus publications, student government, and intercollegiate and/or intramural sports.

As a result of the data it is imperative that we begin to find ways to involve our community college students. One way to involve them would be through participation in a comprehensive student leadership program. Such a program could include an on or off-campus retreat, a credit or non-credit course, weekly seminars or meetings, workshops with guest speakers, and/or a wide range of educational sessions on student leadership and programming (Berman, 1978).

CHAPTER 3
METHODOLOGY

Introduction

Many of the leadership development programs designed for college students are based on studies and models that were developed from the business and corporate sectors. As a result, there have been questions raised as to whether such models and instruments are applicable to college students and collegiate environments (Freeman, Knott and Schwartz, 1994). Based on her literature review, Brodsky (1988) concluded that "valid instruments designed specifically for college students to measure their leadership development did not exist." The student version of the Leadership Practices Inventory (LPI) emerged to fill this gap (Kouzes and Posner, 1998).

Statement of the Problem

Using Kouzes and Posner's student Leadership Practices Inventory (LPI), this study addressed the following questions: 1) whether students who participated in a student leadership program in a community college showed significant growth in leadership behaviors; 2) whether male or female students who participated in a student leader program in a community college grew in leadership behaviors significantly different from each other; and 3) whether students in different age groups who participated in a student leader program in a community college grew in leadership behaviors significantly different from each other.

Research Questions

1. In what ways, if any, do students who participate in a student leader program in a community college show growth in leadership behaviors?

2. In what ways, if any, do female and male students who participate in a student leader program in a community college grow in leadership behaviors differently from each other?

3. In what ways, if any, do students in different age groups who participate in a student leader program in a community college grow in leadership behaviors differently from each other?

Null Hypotheses

1. There will be no statistically significant differences between the means of the student's pre and post scores on the Leadership Practices Inventory (LPI).

2. There will be no statistically significant difference between the student's scores on the Leadership Practices Inventory (LPI) in relation to gender.

3. There will be no statistically significant difference between the student's scores on the Leadership Practices Inventory (LPI) in relation to age groups.

Selection of Population

The population for the study was community college students involved in the student leader program. The student leader program is a program that generally includes an on or off-campus retreat, a credit or non-credit course, weekly seminars or meetings, workshops with guest speakers, and/or a wide range of educational sessions on student leadership and programming.

This particular student leader program encompassed three distinct groups, each with different responsibilities. These groups were the Welcome Team, Peer Educators, and Atlas Access Team. The Welcome Team is responsible for orientation tours, welcome programs, and assistance with student activities (Appendix B). The Peer Educators are responsible for health awareness activities and programs (Appendix C).

The Atlas Access Team is responsible for providing registration assistance and conducting technology-based presentations for various academic departments (Appendix D).

In order to be a part of the student leader program, a student must meet specific requirements (Appendix A). The student must have a cumulative 2.5 institution GPA, enroll in a least six credit hours each term, commit to the program for a year, and participate in the mandatory leadership trainings. There are 50 to 75 students that participate in this student leader program annually. The students represent diverse backgrounds in regard to age, gender, ethnicity, involvement experience, educational preparation and other characteristics.

<u>Data Collection</u>

The student Leadership Practices Inventory (LPI) developed by Kouzes and Posner (2002) was used as the main instrument in this study (Appendix H). Permission to utilize this instrument was received from Kouzes and Posner (Appendix I). A demographic questionnaire (Appendix E) was also employed to collect information about the independent variables used in the study (gender, age group, ethnicity, student leader group and other characteristics). Each student group completed the student version of the Leadership Practices Inventory (LPI) at the beginning and at the end of the term. The inventory took the students approximately 10 minutes to complete. The students also received an informed consent script (Appendix F). This study was approved by the Institutional Review Boards (IRB) at the University of Central Florida (Appendix J) and Valencia Community College (Appendix K).

A focus group was also used to assess the leadership behaviors the students gained as a result of their involvement in the student leader program. The focus group

occurred at the end of the term. It consisted of nine open-ended questions. The focus

group lasted an hour. The focus group consisted of 12 student leaders. There was a

student leader that represented each group (Welcome Team, Peer Educator, and Atlas

Access Team) per campus. This institution had four campuses (Appendix G). A trained

focus group facilitator led the focus group.

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

<div align="center">Leadership Practices Inventory (LPI)</div>

The Leadership Practices Inventory (LPI) was developed using case studies of

over 2,500 corporate managers about their personal best experiences as leaders in

business. Content analysis of these case studies suggested a pattern of behaviors used by

people when they were most effective as leaders. These behaviors resulted in the five

key leadership practices of Challenging the Process, Inspiring a Shared Vision, Enabling

Others to Act, Modeling the Way, and Encouraging the Heart.

A same case-study approach was used to investigate whether the leadership

behaviors of students were comparable to the managers. A group of outstanding student

leaders was selected based on nominations by faculty and staff at college institutions.

There were a total of 264 total responses coded for congruence. The behaviors connected

with the leadership practice of Enabling Others to Act were the most frequently

mentioned (30 %). The leadership behaviors mentioned next most frequently were those

associated with Modeling the Way (21 %) and Inspiring a Shared Vision (20 %). About

one third of the leadership behaviors were coded with the leadership practice of either

Encouraging the Heart (15 %) or Challenging the Process (15 %). These findings

indicated that college student leaders do engage in the leadership practices researched and

that this conceptual framework is relevant to the college student's leadership experience.

The student Leadership Practices Inventory (LPI) is a questionnaire with 30 behavioral statements—six for each of the five practices. These five practices include:

1. Challenging the Process - searching for opportunities and experimenting and taking risks.

2. Inspiring a Shared Vision - envisioning an uplifting future and enlisting others in a common vision.

3. Enabling Others to Act - fostering collaboration and strengthening people.

4. Modeling the Way - setting the example and achieving small wins.

5. Encouraging the Heart - recognizing individual contributions and celebrating team accomplishments (Kouzes and Posner, 2002).

The students self-responded using a Likert-type scale between 1 and 5.

- "1" means that the student *rarely or seldom* engaged in that behavior.

- "2" means that the student engaged in the behavior *once in a while*.

- "3" means that the student *sometimes* engaged in the behavior.

- "4" means that the student engaged in the behavior *fairly often*.

- "5" means that the student engaged in the behavior *very frequently*.

Items 1, 16, 21, 6, 11, and 26 corresponded to Challenging the Process. Items 12, 27, 17, 2, 7, and 22 corresponded to Inspiring a Shared Vision. Items 8, 18, 23, 3, 28, and 13 corresponded with Enabling Others to Act. Items 24, 14, 19, 9, 29, and 4 corresponded to Modeling the Way. Items 20, 15, 10, 25, 5, and 30 corresponded to Encouraging the Heart.

Focus Groups

According to Patton (2002), focus groups are described as "an interview with a small group of people on a specific topic." Patton suggested that focus groups consist of six to 10 people, and Krueger (1994) suggested that there be one facilitator and one note taker. According to Patton (2002), focus groups require one to two hours to facilitate. A list of questions or topics is used to guide the group as they discuss the topics. The participants interact with the facilitator providing answers to the questions. The facilitator is usually free to make adjustments to the list and ask follow-up questions as appropriate.

There are many benefits to using focus groups. One of the main benefits is that focus groups are excellent methods of gathering rich data (Marshall and Rossman, 1999). While focus group facilitators have a list of questions or topics that they use during the session, they are free to stray from the list of questions whenever necessary. This allows for deeper levels of information, which is valuable when assessing learning.

A focus group was also used to assess the leadership behaviors the students gained as a result of their involvement in the student leader program. The focus group occurred at the end of the term. It consisted of nine open-ended questions. The focus group lasted an hour. The focus group consisted of 12 student leaders. There was a student leader that represented each group (Welcome Team, Peer Educator, and Atlas Access Team) per campus. This institution had four campuses. A trained focus group facilitator led the focus group (Appendix G).

Reliability

The student (LPI) is a reliable and valid instrument. Reliability of a survey instrument relates to the extent to which an instrument consistently measures responses when administered at different times or to different people (Gall, Borg, and Gall, 1996). In regard to reliability, this can be displayed in two ways. First, the student LPI has shown sound psychometric properties. The scale of each leadership practice is internally reliable, meaning that the statements within each practice are highly correlated with one another. Second, results of multivariate analyses indicate that the statements within each leadership practice are more highly correlated with one another than they are between the five leadership practices (Kouzes and Posner, 1998). Analyses from Posner and his colleagues' data (N = 1,255) have demonstrated internal reliability scores of .66 for challenging, .79 for Inspiring, .70 for Enabling, .68 for Modeling, and .80 for Encouraging. Other published studies have reported internal reliabilities for the five leadership practices ranging between .63 (Challenging and Enabling) and .83 (Inspiring), and ranging as high as between .83 and .92 (Levy, 1995).

Validity

Validity of an instrument is related to the extent the instrument measures what it intends to measure (Gall, Borg, and Gall, 1996). In regard to validity, the student LPI has good face validity and predictive validity. First, the results are clear and predictable. Second, scores on the student LPI significantly differentiate high-performing leaders from their less successful counterparts. Whether measured by the leader, his or her peers, student personnel administrators, those student leaders who engage more frequently,

rather than less frequently, in the five leadership practices are more effective (Kouzes and Posner, 1998).

The most common assessment of validity is called face validity. On the basis of subjective evaluation, does the instrument appear to be measuring what we think it is measuring? Given that the statements on the student leadership practices inventory are clearly related to the leadership program curriculum, we can say that the instrument has excellent face validity.

The validity of the instrument is also determined empirically. Factor analysis is used to determine the extent to which the various instrument items are measuring common or different content areas. The results of these analyses consistently reveal that the student LPI contains five factors and that the items within each factor correspond more among themselves than they do with other factors. For example, the items that measure Challenging the Process are all more correlated with one another than they are with items measuring the other four practices.

<div align="center">Data Analysis</div>

Responses from the Leadership Practices Inventory (LPI) were compiled and inferential statistics calculated to determine if there were any statistically significant responses based on the hypotheses. The five scores from the leadership practice subscales were the dependent variables for the study. A demographic questionnaire (Appendix E) was also employed to collect information about the independent variables used in the study (gender, age group, ethnicity, student leader group and other characteristics). A focus group was used to assess the leadership behaviors gained as a result of their involvement in the student leader program.

Once the student LPI was distributed and collected, a data analysis was done using SPSS for Windows version 16.0 to calculate each respondent's scores. A paired-samples *t* test was used to calculate null hypotheses 1, there will be no statistically significant differences between the means of the student's pre and post scores on the Leadership Practices Inventory (LPI). A paired-samples *t* test was used to measure a difference between the two scores (pre/post scores)

A One-Way ANOVA was used to obtain information on null hypotheses 2; there will be no statistically significant difference between the student's scores on the Leadership Practices Inventory (LPI) in relation to gender. A One-Way ANOVA was selected to measure a difference in the two grouping variable (gender/test scores).

A One-Way ANOVA was used to obtain information on null hypotheses 3; there will be no statistically significant difference between the student's scores on the Leadership Practices Inventory (LPI) in relation to age groups. A One-Way ANOVA was selected to measure a difference in the two grouping variable (age/test scores).

Summary

This study used a mixed methodology to collect quantitative and qualitative data in order to explore the leadership behaviors students in a community college gained as a result of their participation in a student leader program. The student Leadership Practices Inventory (LPI) developed by Kouzes and Posner (2002) was used as the main instrument in this study. The student LPI elicited data on leadership behaviors based on five principles of leadership. A focus group was used to assess the leadership behaviors the students gained as a result of their involvement in the student leader program. A demographic questionnaire was also employed to collect information about the

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independent variables used in the study (gender, age group, ethnicity, student leader

group and other characteristics).

CHAPTER 4
RESULTS

Introduction

This chapter provides a description of the respondents and an analysis of data
relevant to the research questions. The chapter is divided into four sections. The first
section presents results of this study's reliability and validity examinations of Kouzes and
Posner's (2002) Student Leadership Practices Inventory (LPI). Section two describes the
sample and presents demographic characteristics of the community college student
leaders. Section three analyzes the data within the framework of the research questions
and includes a discussion on the assumptions related to the data of this study. Section
four reveals the results of the focus group. A summary concludes the chapter.

Leadership Practices Inventory (LPI) Instrument

The Leadership Practices Inventory (LPI) has been used by other researchers to
explore the leadership behaviors of student leaders at different levels and in different
settings. Each of the leadership behaviors were examined using this instrument. The
behaviors examined were: Challenging the Process, Inspiring a Shared Vision, Enabling
Others to Act, Modeling the Way, and Encouraging the Heart. The LPI has not been
used with student leaders at the community college level. Therefore, reliability and
validity examinations were completed on data from the returned inventories in this study.
In this study, there was a 79% return rate on the inventories.

Reliability

Cronbach's coefficient alpha, a reliability of the internal consistency of test items,
was computed for the LPI in relation to the five leadership behaviors: Challenging the
Process, Inspiring a Shared Vision, Enabling Others to Act, Modeling the Way, and

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Encouraging the Heart on the returned and completed inventories. According to George and Mallory (2005), the closer the alpha value was to 1.00, the greater the internal consistency of items in the instrument being examined.

The student Leadership Practices Inventory (LPI) is a questionnaire with thirty (30) behavioral statements—six (6) for each of The Five Practices. These five practices include:

1. Challenging the Process - Searching for opportunities and experimenting and taking risks.

2. Inspiring a Shared Vision - Envisioning an uplifting future and enlisting others in a common vision.

3. Enabling Others to Act - Fostering collaboration and strengthening people.

4. Modeling the Way - Setting the example and achieving small wins.

5. Encouraging the Heart - Recognizing individual contributions and celebrating team accomplishments (Kouzes and Posner, 2002).

The students self-responded using a Likert-type scale between 1 and 5.

- "1" means that the student *rarely or seldom* engaged in that behavior.

- "2" means that the student engaged in the behavior *once in a while*.

- "3" means that the student *sometimes* engaged in the behavior.

- "4" means that the student engaged in the behavior *fairly often*.

- "5" means that the student engaged in the behavior *very frequently*.

Items 1, 16, 21, 6, 11, and 26 corresponded to Challenging the Process. Items 12, 27, 17, 2, 7, and 22 corresponded to Inspiring a Shared Vision. Items 8, 18, 23, 3, 28, and 13 corresponded with Enabling Others to Act. Items 24, 14, 19, 9, 29, and 4 corresponded to

Modeling the Way. Items 20, 15, 10, 25, 5, and 30 corresponded to Encouraging the

Heart.

Cronbach's alpha for the five behaviors in this study were Challenging the

Process = .656, Inspiring a Shared Vision = .739, Enabling Others to Act = .347,

Modeling the Way = .399, and Encouraging the Heart = .700. Although these results

were not consistent with the results reported by Kouzes and Posner (1998), the pre

assessment for the leadership behaviors was .891 and post assessment was .782. The

overall assessment of the leadership behaviors measured was .887.

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

Validity evidence supporting the conclusion that the scores from the LPI

instrument were a valid assessment of the student leaders' behaviors gained was

investigated. This type of validity evidence is referred to as internal structure evidence

because it suggests that items line up in a predictable manner according to what

thematically ties them together conceptually (Gall, Gall, & Borg, 2003).

In the context of this study, a factor analysis of the 30 items of the LPI was

performed on the researcher's data to investigate the grouping of the five behaviors as

described by Kouzes and Posner (1998). A pre LPI was given to 62 student leaders in the

beginning of the school term. A post LPI was given to 62 student leaders at the end of

the school term. Thirteen of the original student leaders dropped out of the program and

were replaced by new student leaders. Thus, the total number of useable inventories for

data input in this study was 49; this yielded a 79% return rate.

The purpose of this investigation was to explore the factor structure underlying

the LPI item responses. Factor analysis has as its key objective reducing a larger set of

variables to a smaller set of factors, fewer in the number than the original set, but capable of accounting for a large portion of the total variability in the items. The identity of each factor is determined after a review of which items correlate the highest with that factor. Items that correlate the highest with a factor define the meaning of the factor as judged by what conceptually ties the items together. A successful result is one in which a few factors can explain a large portion of the total variability and those factors can be given a meaningful name using the assortment of items that correlate the highest with it.

In the context of this study, when such success is attained, we may say that we have validity evidence supporting the conclusion that the scores from this instrument are a valid assessment of the student's leadership behaviors. The descriptive statistics of the item responses are presented in Table 1. It may be observed that the standard deviations were smaller than the respective means and that no standard deviation stood out upon grass observations as remarkably larger than the other variables.

Table 1
Descriptive Statistics Factor Analysis

		Descriptive Statistics						
		N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
1.	I look for opportunities that challenge my skills and abilities.	49	5	0	5	3.78	1.085	1.178
2.	I describe to others in our organization what we should be capable of accomplishing.	49	5	0	5	2.94	1.345	1.809
3.	I include others in planning the activities and programs of our organization.	49	5	0	5	3.65	1.466	2.148
4.	I share my beliefs about how things can be run most effectively within our organization.	49	5	0	5	3.45	1.324	1.753
5.	I encourage others as they work on activities and programs in our organization.	49	5	0	5	3.92	1.239	1.535
6.	I keep current on events and activities that might affect our organization.	49	5	0	5	3.49	1.340	1.797
7.	I look ahead and communicate about what I believe will affect us in the future.	49	5	0	5	3.39	1.367	1.867
8.	I treat others with dignity and respect.	49	5	0	5	4.69	.940	.884
9.	I break our organization's projects down into manageable steps.	49	5	0	5	3.43	1.190	1.417
10.	I make sure that people in our organization are recognized for their contributions.	49	5	0	5	3.69	1.388	1.925
11.	I take initiative in experimenting with the way we do things in our organization.	49	5	0	5	3.59	1.171	1.372
12.	I am upbeat and positive when talking about what our organization is doing.	49	5	0	5	4.14	1.155	1.333

		N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
	Descriptive Statistics							
13.	I set a personal example of what I expect from other people.	49	5	0	5	4.27	1.016	1.032
14.	I praise people for a job well done.	49	5	0	5	4.49	.960	.922
15.	I look for ways to improve whatever project or task I am involved with.	49	5	0	5	4.12	1.073	1.151
16.	I talk with others about how their own interests can be met by working toward a common goal.	49	5	0	5	3.57	1.137	1.292
17.	I foster cooperative rather than competitive relationships among people I work with.	49	5	0	5	4.29	1.000	1.000
18.	I talk about the values and principles that guide my actions.	49	5	0	5	3.82	1.149	1.320
19.	I can give people in our organization support and express appreciation for their contributions.	49	5	0	5	4.08	1.152	1.327
20.	I ask, "What can we learn from this experience when things do not go as we expected?"	49	5	0	5	3.14	1.472	2.167
21.	I speak with conviction about the higher purpose and meaning of what we are doing.	49	5	0	5	3.37	1.286	1.654
22.	I give others a great deal of freedom and choice in deciding how to do their work.	49	5	0	5	4.22	.963	.928
23.	I follow through on the promises and commitments I make in this organization.	49	5	0	5	4.43	.866	.750
24.	I find ways for us to celebrate our accomplishments publicly.	49	5	0	5	2.88	1.333	1.776
25.	I let others experiment and take risks even when the outcomes are uncertain.	49	5	0	5	3.20	1.291	1.666
26.	I show my enthusiasm and excitement about what our organization is doing.	49	5	0	5	4.10	1.159	1.344
27.	I provide opportunities for others to take on leadership responsibilities.	49	5	0	5	3.76	1.392	1.939
28.	I make sure that we set goals and make specific plans for the projects we undertake.	49	5	0	5	3.67	1.345	1.808
29.	I make it a point to tell others about the good work done by our organization.	49	5	0	5	3.92	1.134	1.285
30.	Valid N (listwise)	49						

The maximum likelihood estimation procedure was used to extract the factors

from the variable data. Kaiser's rule was used to determine which factors were most

eligible for interpretation because this rule requires that a given factor is capable of

explaining at least the equivalent of one's variable's variance. Using this rule, five

factors were extracted. Together they were capable of explaining roughly 67% of all the

variable variances. This is displayed in Table 2. A plot of the eigenvalues is provided

below in Figure 1. A review of the initial factor loadings suggests that a proper solution

was attainable through maximum likelihood, as it was capable of converging in 18

iterations. This is displayed in Table 3. The computer printout does not warn that the

results are non-positive definite, so one important condition for proceeding with the

interpretation has been met.

Table 2
Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	12.741	42.469	42.469	11.706	39.019	39.019	9.490
2	2.570	8.566	51.035	2.451	8.170	47.189	7.511
3	1.763	5.878	56.913	1.243	4.142	51.332	7.002
4	1.649	5.497	62.410	1.441	4.804	56.136	7.320
5	1.359	4.530	66.940	1.201	4.004	60.140	5.377
6	1.243	4.144	71.083				
7	1.059	3.531	74.615				
8	.877	2.922	77.536				
9	.793	2.644	80.180				
10	.713	2.378	82.559				
11	.661	2.203	84.761				
12	.587	1.957	86.718				
13	.545	1.817	88.535				
14	.475	1.582	90.117				
15	.412	1.374	91.491				
16	.397	1.322	92.813				
17	.332	1.106	93.919				
18	.300	1.000	94.918				
19	.257	.858	95.776				
20	.227	.756	96.533				
21	.200	.666	97.199				
22	.167	.557	97.756				
23	.135	.451	98.207				
24	.123	.409	98.616				
25	.098	.328	98.943				
26	.092	.305	99.249				
27	.072	.239	99.487				
28	.057	.190	99.677				
29	.049	.163	99.840				
30	.048	.160	100.000				

Extraction Method: Maximum Likelihood.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.
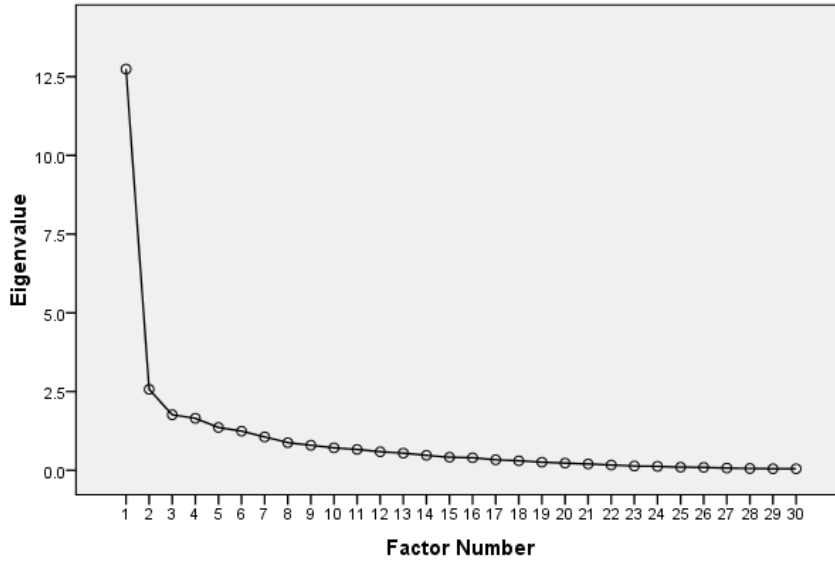
Figure 1 Scree Plot

Table 3
Factor Matrix

	Factor				
	1	2	3	4	5
27. I show my enthusiasm and excitement about what our organization is doing.	.858	.125	-.389		
7. I look ahead and communicate about what I believe will affect us in the future.	.828	-.497		.112	
15. I praise people for a job well done.	.827	.284			
16. I look for ways to improve whatever project or task I am involved with.	.798	.117		-.258	.254
12. I am upbeat and positive when talking about what our organization is doing.	.779	.151	-.182	-.122	
22. I speak with conviction about the higher purpose and meaning of what we are doing.	.747			-.272	-.180
14. I set a personal example of what I expect from other people.	.711	.233			
4. I share my beliefs about how things can be run most effectively within our organization.	.710	-.327	.193		-.144

	Factor				
	1	2	3	4	5
5. I encourage others as they work on activities and programs in our organization.	.673		.547		
23. I give others a great deal of freedom and choice in deciding how to do their work.	.650	.315			.387
6. I keep current on events and activities that might affect our organization.	.646			.180	.225
11. I take initiative in experimenting with the way we do things in our organization.	.636			.113	.199
24. I follow through on the promises and commitments I make in this organization.	.608	.394	.300		
17. I talk with others about how their own interests can be met by working toward a common goal.	.607	-.108	.114	-.113	.377
29. I make sure that we set goals and make specific plans for the projects we undertake.	.604		.207	-.195	-.436
28. I provide opportunities for others to take on leadership responsibilities.	.596	.211	-.155		
9. I break our organization's projects down into manageable steps.	.583	.199		.372	-.297
1. I look for opportunities that challenge my skills and abilities.	.582		.543	-.118	
30. I make it a point to tell others about the good work done by our organization.	.577	.376		.312	
25. I find ways for us to celebrate our accomplishments publicly.	.575	.105			-.261
21. I ask, "What can we learn from this experience?' when things do not go as we expected.	.566		.181	-.443	
20. I give people in our organization support and express appreciation for their contributions.	.538	.529			-.259
2. I describe to others in our organization what we should be capable of accomplishing.	.523	-.109		.354	-.218
3. I include others in planning the activities and programs of our organization.	.518	.284	.319	.340	
19. I talk about the values and principles that guide my actions.	.511	.298	.110	-.203	.155
10. I make sure that people in our organization are recognized for their contributions.	.493	.319	.116	.301	-.186
13. I support the decisions that other people in our organization make on their own.	.492	.431		.464	.163
8. I treat others with dignity and respect.	.473	.336	.142		
18. I foster cooperative rather than competitive relationships among people I work with.	.359	.591			.225
26. I let others experiment and take risks even when the outcomes are uncertain.	.194	.416	-.175	.300	.240

Extraction Method: Maximum Likelihood.

Another portion of the results to inspect before proceeding with an interpretation

is the table of communalities. This is displayed in Table 4. Communalities are

interpreted like Multiple R^2s in multiple regression. Communalities indicated the degree

to which the factors explained the variance of the variables. In a proper solution, two sets

of communalities are provided, the initial set and extracted set. In this study, the

communalities were fine, providing further evidence that the results were appropriate for

interpretation. With greater confidence that the maximum likelihood solution is proper,

interpretation of the results is permissible. Once the factors were extracted using

maximum likelihood, a linear transformation of the data was necessary so that the

interpretation of the results could be easily accomplished.

Table 4
Communalities

	Initial	Extraction
1. I look for opportunities that challenge my skills and abilities.	.824	.649
2. I describe to others in our organization what we should be capable of accomplishing.	.641	.460
3. I include others in planning the activities and programs of our organization.	.770	.572
4. I share my beliefs about how things can be run most effectively within our organization.	.828	.674
5. I encourage others as they work on activities and programs in our organization.	.880	.762
6. I keep current on events and activities that might affect our organization.	.758	.500
7. I look ahead and communicate about what I believe will affect us in the future.	.882	.948
8. I treat others with dignity and respect.	.745	.365
9. I break our organization's projects down into manageable steps.	.635	.608
10. I make sure that people in our organization are recognized for their contributions.	.772	.483
11. I take initiative in experimenting with the way we do things in our organization.	.777	.466
12. I am upbeat and positive when talking about what our organization is doing.	.834	.686
13. I support the decisions that other people in our organization make on their own.	.785	.676
14. I set a personal example of what I expect from other people.	.766	.568
15. I praise people for a job well done.	.857	.768
16. I look for ways to improve whatever project or task I am involved with.	.874	.791
17. I talk with others about how their own interests can be met by working toward a common goal.	.793	.548
18. I foster cooperative rather than competitive relationships among people I work with.	.743	.539
19. I talk about the values and principles that guide my actions.	.673	.427
20. I can give people in our organization support and express appreciation for their contributions.	.801	.654

	Initial	Extraction
21. I ask, "What can we learn from this experience when things do not go as we expected?"	.730	.561
22. I speak with conviction about the higher purpose and meaning of what we are doing.	.835	.672
23. I give others a great deal of freedom and choice in deciding how to do their work.	.826	.671
24. I follow through on the promises and commitments I make in this organization.	.761	.624
25. I find ways for us to celebrate our accomplishments publicly.	.758	.412
26. I let others experiment and take risks even when the outcomes are uncertain.	.741	.389
27. I show my enthusiasm and excitement about what our organization is doing.	.892	.919
28. I provide opportunities for others to take on leadership responsibilities.	.773	.430
29. I make sure that we set goals and make specific plans for the projects we undertake.	.834	.639
30. I make it a point to tell others about the good work done by our organization.	.834	.580

Extraction Method: Maximum Likelihood.

a. One or more communality estimates greater than 1 were encountered during iterations. The resulting solution should be interpreted with caution.

Among the various rotational procedures available, Promax was chosen because it assumed that nonzero correlations among the factors were theoretically tenable or at least plausible. When the results were generated, interpretation of the factor correlation matrix was to ensue. This is displayed in Table 5. If the correlations were large enough given the educated judgment of the researcher, then the Promax solution was further interpreted. If the researcher decided that the correlates were too low, then the results were re-run using the varimax rotation. These correlations were large enough to justify retention of the Promax results because two of the correlations exceeded the value of .25.

Table 5
Factor Correlation Matrix

Factor	1	2	3	4	5
1	1.000	.477	.477	.574	.530
2	.477	1.000	.479	.418	.243
3	.477	.479	1.000	.395	.235
4	.574	.418	.395	1.000	.337
5	.530	.243	.235	.337	1.000

Factor	1	2	3	4	5
1	1.000	.477	.477	.574	.530
2	.477	1.000	.479	.418	.243
3	.477	.479	1.000	.395	.235
4	.574	.418	.395	1.000	.337
5	.530	.243	.235	.337	1.000

Extraction Method: Maximum Likelihood.
Rotation Method: Promax with Kaiser Normalization.

When the results were generated, interpretation of the structure matrix was to

ensue. Reviewing the structure coefficient matrix suggested that the five factors grouped

the items in a theoretically understandable way. The coefficients suggested that the way

in which people responded to the leader items was very consistent among the leadership

behaviors. How the student leaders responded to one leadership behavior was very

similar to how they responded to all of them. The variables together contributed most

prominently to Factor 1. The structure coefficients of these variables suggested that the

Leadership Practices Item 27 is correlated .883 with Factor 1, therefore sharing roughly

78% of the variance of that factor. All remaining coefficients may be interpreted this

way.

The remaining factors, ascertained by the magnitude of the coefficients, are

identified in Table 6 by the shading, where shaded coefficients are the largest coefficients

for a factor. Names of these factors are as follows: Challenging the Process, Inspiring a

Shared Vision, Enabling Others to Act, Modeling the Way, and Encouraging the Heart.

Table 6
Structure Matrix

	Factor				
	1	2	3	4	5
27. I show my enthusiasm and excitement about what our organization is doing.	.883	.557	.512	.674	.231
22. I speak with conviction about the higher purpose and meaning of what we are doing.	.803	.348	.325	.550	.502
12. I am upbeat and positive when talking about what our organization is doing.	.797	.529	.481	.569	.346
15. I praise people for a job well done.	.775	.684	.611	.601	.408
16. I look for ways to improve whatever project or task I am involved with.	.705	.688	.322	.674	.543
29. I make sure that we set goals and make specific plans for the projects we undertake.	.701	.237	.423	.289	.626
14. I set a personal example of what I expect from other people.	.658	.609	.477	.525	.402
21. I ask, "What can we learn from this experience when things do not go as we expected?"	.639	.390	.149	.337	.599
25. I find ways for us to celebrate our accomplishments publicly.	.613	.308	.446	.352	.376
23. I give others a great deal of freedom and choice in deciding how to do their work.	.485	.770	.417	.575	.279
18. I foster cooperative rather than competitive relationships among people I work with.	.319	.715	.343	.160	.173
24. I follow through on the promises and commitments I make in this organization.	.511	.683	.517	.380	.514
19. I talk about the values and principles that guide my actions.	.478	.590	.274	.340	.374
8. I treat others with dignity and respect.	.439	.540	.373	.275	.353
26. I let others experiment and take risks even when the outcomes are uncertain.		.473	.380	.169	-.201
9. I break our organization's projects down into manageable steps.	.505	.338	.757	.380	.278
30. I make it a point to tell others about the good work done by our organization.	.455	.563	.717	.387	.252
13. I support the decisions that other people in our organization make on their own.	.297	.625	.702	.410	
3. I include others in planning the activities and programs of our organization.	.358	.463	.691	.345	.402
10. I make sure that people in our organization are recognized for their contributions.	.414	.419	.677	.284	.267
20. I give people in our organization support and express appreciation for their contributions.	.562	.566	.677	.190	.334
2. I describe to others in our organization what we should be capable of accomplishing.	.407	.131	.568	.462	.261
7. I look ahead and communicate about what I believe will affect us in the future.	.643	.182	.382	.913	.459
11. I take initiative in experimenting with the way we do things in our organization.	.464	.404	.375	.661	.279

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| | Factor | | | | |
	1	2	3	4	5
6. I keep current on events and activities that might affect our organization.	.447	.476	.450	.657	.273
17. I talk with others about how their own interests can be met by working toward a common goal.	.430	.467	.173	.657	.407
4. I share my beliefs about how things can be run most effectively within our organization.	.635	.161	.333	.637	.625
5. I encourage others as they work on activities and programs in our organization.	.536	.362	.438	.522	.810
1. I look for opportunities that challenge my skills and abilities.	.463	.387	.333	.438	.761

Extraction Method: Maximum Likelihood.
 Rotation Method: Promax with Kaiser Normalization.

Population and Demographic Profile

The population of this study consisted of 62 student leaders who were participants in a student leader program at a community college. A pre LPI was given to 62 student leaders in the beginning of the school term. A post LPI was given to 62 student leaders at the end of the school term. Thirteen of the original student leaders dropped out of the program and were replaced by new student leaders. Thus, the total number of useable inventories for data input in this study was 49; this yielded a 79% return rate.

Personal Characteristics

A demographic questionnaire was distributed to the students to collect information about the independent variables used in the study. The questionnaire consisted of nine questions pertaining to their involvement experience in relation to community service and student leadership, and obtained personal and institutional characteristics. Table 7 details the personal characteristics obtained from questions 1, 2, 3, 4, and 7. Question 2 dealt with age categories of the student leaders. The student leaders fell into two age categories. Approximately 93.9% (n=46) indicated they were between the ages of 18-30. Approximately 6.1% (n=3) indicated they were between the

ages of 41-50. No respondents were over the age of 51. No respondents were between

the ages of 31-40. Results from question 3 indicated that more than twice as many

females (n=35, 71.4%) in this sample held student leader positions than males (n=14,

28.6%). Question 1 related to the students race. A majority of the students were African

American (n=14, 28.6%) or other (n=13, 26.5%). Other groups represented were Asian

(n=3, 6.1%), Caucasian (n=10, 20.4%) and Hispanic (n=9, 18.4%). There were no Native

American students.

Question 4 asked the students the level of higher education they planned to pursue

at the college. The majority of the students were pursuing an Associate of Arts (A.A.)

Degree (n=33, 67.3%) and an Associate of Science (A.S.) Degree (n=12, 24.5%). The

remainder of the students were pursuing an Associate of Applied Science (A.A.S.)

Degree (n=3, 6.1%) or other (n=1, 2%). Question 7 asked the students how long they had

been a college student. Over half of the student were in college for over a year (n=25,

51%) and (n=10, 20.4%) were in college for less than a year. Approximately (n=8,

16.3%) of the students were in their first term and (n=4, 8.2%) were transfer students.

The rest of the students reported other (n=2, 4.1%). These results are presented in Table

8.

Table 7
Personal Characteristics – Age, Gender, Race (N=49)

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-30	46	46.5	93.9	93.9
	41-50	3	3.0	6.1	100.0
	Total	49	49.5	100.0	
Missing	System	50	50.5		
Total		99	100.0		

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	14	14.1	28.6	28.6
	Female	35	35.4	71.4	100.0
	Total	49	49.5	100.0	
Missing	System	50	50.5		
Total		99	100.0		

Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	African American	14	14.1	28.6	28.6
	Asian	3	3.0	6.1	34.7
	Caucasian	10	10.1	20.4	55.1
	Hispanic	9	9.1	18.4	73.5
	Other	13	13.1	26.5	100.0
	Total	49	49.5	100.0	
Missing	System	50	50.5		
Total		99	100.0		

Table 8

Personal Characteristics – College Degree, Amount of Time as a College Student (N=49)

College Degree

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	AA	33	33.3	67.3	67.3
	AS	12	12.1	24.5	91.8
	AAS	3	3.0	6.1	98.0
	Other	1	1.0	2.0	100.0
	Total	49	49.5	100.0	
Missing	System	50	50.5		
Total		99	100.0		

Amount of Time as a College Student

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	FT	8	8.1	16.3	16.3
	<1	10	10.1	20.4	36.7
	>1	25	25.3	51.0	87.8
	TF	4	4.0	8.2	95.9
	Other	2	2.0	4.1	100.0
	Total	49	49.5	100.0	
Missing	System	50	50.5		
Total		99	100.0		

Involvement Experience

Questions 8 and 9 of the demographic questionnaire asked the students their

involvement experience in relation to leadership and community service. Table 9 details

these results. More than half of the students did not have any past leadership experience

(n=30, 61.2%). Approximately (n=18, 36.7%) of the students had past leadership

experience.

Table 9
Involvement Experience – Past Leadership Experience, Past Community Service
Experience (N=49)

Past Leadership Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	30	30.3	61.2	61.2
	yes	18	18.2	36.7	98.0
	3	1	1.0	2.0	100.0
	Total	49	49.5	100.0	
Missing	System	50	50.5		
Total		99	100.0		

In regard to past community service experience, the majority of the students

reported that they had past community service experience (n=29, 59.2%). The remainder

of the students did not have past community service experience (n=20, 40.8%).

Past Community Service Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	20	20.2	40.8	40.8
	Yes	29	29.3	59.2	100.0
	Total	49	49.5	100.0	
Missing	System	50	50.5		
Total		99	100.0		

Institutional Characteristics

Questions 5 and 6 of the demographic questionnaire asked the students to report

what campus and leadership group they were a part of. Table 10 details these results.

Approximately (n=21, 42.9%) of the students were Welcome Team, (n=11, 22.4%) were

Peer Educators and (n=17, 17.2%) were Atlas Access.

Table 10
Institutional Characteristics – Student Leader Group, Campus (N=49)

Student Leader Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	WT	21	21.2	42.9	42.9
	PE	11	11.1	22.4	65.3
	AA	17	17.2	34.7	100.0
	Total	49	49.5	100.0	
Missing	System	50	50.5		
Total		99	100.0		

In terms of college campus, almost half of the students were from East Campus

(n=24, 49%). Approximately (n=12, 24.5%) were from West Campus. The remainder of

the students were from Osceola Campus (n=7, 14.3%) and Winter Park Campus (n=6,

12.2%).

Campus

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	East	24	24.2	49.0	49.0
	West	12	12.1	24.5	73.5
	Osceola	7	7.1	14.3	87.8
	WPC	6	6.1	12.2	100.0
	Total	49	49.5	100.0	
Missing	System	50	50.5		
Total		99	100.0		

Focus Group Questions and Results

Purpose

The purpose of the focus group was to gain information on the leadership

behaviors the students gained as a result of their involvement in the student leader

program. Three areas guided this focus: growth as a student leader, growth as a result of

the student leader program, and growth in the leadership behaviors gained as a result of their involvement in the student leader program.

Description of Focus Group Study

A total of 12 student leaders participated in the focus group. There was representation from each student leader group (Welcome Team, Peer Educators and Atlas Access Team). The students also represented all the community colleges campuses. This institution has four main campuses and two centers. A trained focus group facilitator led the discussion. The focus group lasted one hour and consisted of nine questions. The focus group was audio taped and transcribed by the researcher. The transcriptions were analyzed for similar phrases, patterns, ideas and themes. The researcher drew conclusions and then revisited the summarized data to compare derived congruence in interpretation. All data remained confidential and anonymous. A more detailed explanation on the focus group process is in the Focus Group Protocol (Appendix G).

Focus Group Questions

A. **Student Leader Growth**

   In what ways, if any, have you grown as a student leader?

B. **Student Leader Program Growth**

   Do you contribute this growth to your participation in the Student Leader Program?

C. **Student Leadership Behaviors Gained**

1. Have you grown in your leadership behavior related to "Challenging the Process"?

   If so, how?

2. Have you grown in your leadership behavior related to "Inspiring a Shared Vision"?

   If so, how?

3. Have you grown in your leadership behavior related to "Enabling Others to Act"?

   If so, how?

4. Have you grown in your leadership behavior related to "Modeling the Way"?

   If so, how?

5. Have you grown in your leadership behavior related to "Encouraging the Heart"?

   If so, how?

6. Which of the leadership practices and behaviors are you most comfortable with?

   Why?

7. Which of the leadership practices and behaviors are you least comfortable with?

   Why?

Results

Student Leader Growth

In regard to their growth as student leaders, the students felt that they grew in many different areas. The opportunity allowed them to network with students, faculty, administration and staff, and gain leadership skills. These leadership skills included: listening skills, communication skills, stress management, multitasking and customer service. The students also believed in the importance of taking initiative, practicing patience and developing others.

Student Leader Program Growth

In this area, the participants felt that they were selected as a student leader because they met the requirements. As a result of the Student Leader Program, they were able to enhance or refine their existing leadership skills. Aside from this, they were able to gain other skills that helped them become better leaders and students. The participants

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believed that the program helped them empower others to lead and follow. They also believed that the leadership skills, interaction and opportunities were priceless.

Student Leadership Behaviors Gained

The students communicated that they did gain student leadership behaviors as a result of their participation in the student leader program. These leadership behaviors included: Challenging the Process, Inspiring a Shared Vision, Enabling others to Act, Modeling the Way, and Encouraging the Heart. The students left the program feeling most comfortable with the leadership behaviors Encouraging the Heart and Modeling the Way. The students felt the least comfortable with Challenging the Process.

In regard to Challenging the Process, the students stressed the importance of going above and beyond in their positions. To the students this meant collaborating with other departments/areas during high volume times, being honest with the students, and being able to step out of the box when assessing the students' needs. They also conveyed the value of being a student advocate. As students themselves, they felt that they could relate and understand the needs of the students and communicate them effectively to administration. This communication would result in positive changes for the students and institution. In order to achieve this behavior, the students recommended four C's: Do not be **Close-Minded**, have open **Communication**, have a **Common Ground**, and learn **Customer Service.**

The students learned that they had also grown in the leadership behavior Inspiring a Shared Vision. The vision of the student leader program was built around the concept of teamwork and community. The students accomplished this vision by establishing positive relationships with their peers and collaborating with them to establish

events/programs that met these goals. The students also expressed the significance of engaging other student leader groups and the student body. This would allow for more support and commitment to the common vision.

In relation to Enabling Others to Act, the participants felt strongly that it was important to help others develop themselves. They believed they could do this by serving as positive mentors and role models. They also thought an effective approach could be to delegate projects based on skills and the value of working on projects together. As a group, they also supported the following statement, "Leadership: the art of getting others to do something you are convinced should be done."

In regard to Modeling the Way, the students understood that once they took on their leadership positions they were considered role models to others. Small wins for the student leaders included: receiving praise or appreciation from a student, not only being a student leader in the program but also a leader in the classroom and in their personal life, and empowering others when a job is well done. This leadership behavior to them is doing the right thing, even when no one is watching. This behavior is not turned on or off; it has become a conscious state of their being. In order to continue to excel in this behavior, the students emphasized the importance of continuous training and the reinforcement of good practices.

The students learned that they had also grown immensely in the leadership behavior Encouraging the Heart. The participants recognized that people are different and are individuals. Encouraging those you work with and celebrating their successes is also important in building a sense of community in the student leadership program. It is also vital to create a positive and productive environment. Focus on your peer

similarities not their differences. As a team, the students believed in the power of choice, to change what you can and move past what you cannot. They also enjoy the fact that they are able to make a positive difference in people's lives everyday and in themselves through their leadership positions.

Research Questions and Results

Research Question 1

In what ways, if any, do students who participate in a student leader program in a community college show growth in leadership behaviors?

A paired-samples *t* test was calculated to compare the mean pretest score to the posttest score of the student leaders (LPI) Leadership Practices Inventory. The LPI measured the student leaders' increase in regard to five leadership behaviors. These leadership behaviors are: Challenging the Process, Inspiring a Shared Vision, Enabling Others to Act, Modeling the Way, and Encouraging the Heart. These results are highlighted in Table 11. The effect size was also calculated. The effect size is the defined as the standardized difference between the means. To determine the amount of difference an effect size scale can be used. In the scale, .01 determines a small difference, .06 determines a moderate difference and .14 determines a large difference (Shavelson, 1996).

The mean for the Challenging the Process pretest was 21.61 (*sd*=3.90), and the mean on the posttest was 23.06 (*sd*=3.44). A significant increase from pretest to posttest was found ($t(48)$= -2.715, p<.001). In regards to the effect size, Eta Squared= .133. Approximately, 13% of the error variance can be accounted for by these scores. This determined a large difference between the means.

The mean on the Inspiring a Shared Vision pretest was 21.90 (*sd*=4.81), and the mean on the posttest was 23.33 (*sd*=4.03). A significant increase from pretest to posttest was found (*t*(48)= -2.449 , p<.001). In regards to the effect size, Eta Squared= .110. Approximately, 11% of the error variance can be accounted for by these scores. This determined a large difference between the means.

The mean on the Enabling Others to Act pretest was 25.12 (*sd*=3.11), and the mean on the posttest was 27.73 (*sd*=6.28). A significant increase from pretest to posttest was found (*t*(48)= -2.859 , p<.001). In regards to the effect size, Eta Squared= .145. Approximately, 14% of the error variance can be accounted for by these scores. This determined a large difference between the means.

The mean on the Modeling the Way pretest was 23.49 (*sd*=3.65), and the mean on the posttest was 24.80 (*sd*=3.00). A significant increase from pretest to posttest was found (*t*(48)= -2.225 , p<.001). In regards to the effect size, Eta Squared= .093. Approximately, 9% of the error variance can be accounted for by these scores. This determined a large difference between the means.

The mean on the Encouraging the Heart pretest was 23.43 (sd=4.19), and the mean on the posttest was 24.92 (sd=3.66). A significant increase from pretest to posttest was found (t(48)= -2.742, p<.001). In regards to the effect size, Eta Squared= .135. Approximately, 13% of the error variance can be accounted for by these scores. This determined a large difference between the means.

Table 11
Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRECHALL	21.61	49	3.904	.558
	POSTCHALL	23.06	49	3.442	.492
Pair 2	PREINSP	21.90	49	4.810	.687
	POSTINSP	23.33	49	4.033	.576
Pair 3	PREENAB	25.12	49	3.113	.445
	POSTENAB	27.73	49	6.278	.897
Pair 4	PREMODEL	23.49	49	3.646	.521
	POSTMODEL	24.80	49	3.007	.430
Pair 5	PREENCOU	23.43	49	4.193	.599
	POSTENCOU	24.92	49	3.662	.523

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	PRECHALL & POSTCHALL	49	.489	.000
Pair 2	PREINSP & POSTINSP	49	.586	.000
Pair 3	PREENAB & POSTENAB	49	.210	.148
Pair 4	PREMODEL & POSTMODEL	49	.249	.085
Pair 5	PREENCOU & POSTENCOU	49	.538	.000

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PRECHALL - POSTCHALL	-1.45	3.736	.534	-2.52	-.38	-2.715	48	.009
Pair 2	PREINSP - POSTINSP	-1.43	4.082	.583	-2.60	-.26	-2.449	48	.018
Pair 3	PREENAB - POSTENAB	-2.61	6.396	.914	-4.45	-.78	-2.859	48	.006
Pair 4	PREMODEL - POSTMODEL	-1.31	4.109	.587	-2.49	-.13	-2.225	48	.031
Pair 5	PREENCOU POSTENCOU	-1.49	3.803	.543	-2.58	-.40	-2.742	48	.009

Research Question 2

In what ways, if any, do female and male students who participate in a student leader program in a community college grow in leadership behaviors differently from each other?

A One-Way ANOVA was calculated to compare the mean pretest score to the posttest score of the student leaders (LPI) Leadership Practices Inventory in regard to their gender. According the demographic questionnaire, more than twice as many females (n=35, 71.4%) in this sample held student leader positions than males (n=14, 28.6%). The LPI measured the student leaders' increase in regard to five leadership behaviors. These leadership behaviors are: Challenging the Process, Inspiring a Shared Vision, Enabling Others to Act, Modeling the Way, and Encouraging the Heart. These results are presented in Table 12. The effect size was also calculated. The effect size is the defined as the standardized difference between the means. To determine the amount of difference an effect size scale can be used. In the scale, .01 determines a small difference, .06 determines a moderate difference and .14 determines a large difference (Shavelson, 1996).

The Challenging the Process pretest means of the student leaders who took the LPI in regard to their gender were compared using a One-Way ANOVA. No significant difference was found (F(1,47=.578, p >.05). The male and female student leaders did not differ significantly at the start of term in relation to this leadership behavior.

The Inspiring a Shared Vision pretest means of the student leaders who took the LPI in regard to their gender were compared using a One-Way ANOVA. No significant difference was found (F(1,47=2.44, p >.05). The male and female student leaders did not differ significantly at the start of term in relation to this leadership behavior.

The Enabling Others to Act pretest means of the student leaders who took the LPI in regard to their gender were compared using a One-Way ANOVA. No significant difference was found (F(1,47=.005, p >.05). The male and female student leaders did not differ significantly at the start of term in relation to this leadership behavior.

The Modeling the Way pretest means of the student leaders who took the LPI in regard to their gender were compared using a One-Way ANOVA. No significant difference was found (F(1,47=.073, p >.05). The male and female student leaders did not differ significantly at the start of term in relation to this leadership behavior.

The Encouraging the Heart pretest means of the student leaders who took the LPI in regard to their gender were compared using a One-Way ANOVA. No significant difference was found (F(1,47=.022, p >.05). The male and female student leaders did not differ significantly at the start of term in relation to this leadership behavior.

Table 12
Pretest Gender One-Way ANOVA

Pretest on Gender – Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
PRECHALL	M	14	22.29	3.667	.980	20.17	24.40	16	27
	F	35	21.34	4.014	.679	19.96	22.72	14	28
	Total	49	21.61	3.904	.558	20.49	22.73	14	28
PREINSP	M	14	23.57	3.797	1.015	21.38	25.76	16	30
	F	35	21.23	5.053	.854	19.49	22.96	10	30
	Total	49	21.90	4.810	.687	20.52	23.28	10	30
PREENAB	M	14	25.07	2.269	.606	23.76	26.38	21	29
	F	35	25.14	3.423	.579	23.97	26.32	16	30
	Total	49	25.12	3.113	.445	24.23	26.02	16	30
PREMODEL	M	14	23.71	2.998	.801	21.98	25.45	18	27
	F	35	23.40	3.912	.661	22.06	24.74	12	30
	Total	49	23.49	3.646	.521	22.44	24.54	12	30
PREENCOU	M	14	23.57	3.081	.824	21.79	25.35	18	28
	F	35	23.37	4.602	.778	21.79	24.95	12	30
	Total	49	23.43	4.193	.599	22.22	24.63	12	30

Pretest on Gender – ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
PRECHALL	Between Groups	8.890	1	8.890	.578	.451
	Within Groups	722.743	47	15.378		
	Total	731.633	48			
PREINSP	Between Groups	54.890	1	54.890	2.444	.125
	Within Groups	1055.600	47	22.460		
	Total	1110.490	48			
PREENAB	Between Groups	.051	1	.051	.005	.943
	Within Groups	465.214	47	9.898		
	Total	465.265	48			
PREMODEL	Between Groups	.988	1	.988	.073	.788
	Within Groups	637.257	47	13.559		
	Total	638.245	48			
PREENCOU	Between Groups	.400	1	.400	.022	.882
	Within Groups	843.600	47	17.949		
	Total	844.000	48			

The Challenging the Process posttest means of the student leaders who took the LPI in regard to their gender were compared using a One-Way ANOVA. A significant difference was found among the male and female student leaders ($F(1,47=5.37, p <.05$). Tukey's HSD was used to determine the nature of the differences between the male and female student leaders. This analysis revealed that the male student leaders scored higher in this behavior (*m*= 24.79, *sd* =2.58) than the female student leaders (*m*=22.37, *sd*=3.53). The male and female student leaders did differ significantly at the end of term in relation to this leadership behavior. This information is presented in Table 13. In regards to the effect size, Eta Squared= .102. Approximately, 10% of the error variance can be accounted for by these scores. This determined a large difference between the means.

The Inspiring a Shared Vision posttest means of the student leaders who took the LPI in regard to their gender were compared using a One-Way ANOVA. No significant

difference was found (F(1,47=2.39, p >.05). The male and female student leaders did not differ significantly at the end of term in relation to this leadership behavior.

The Enabling Other to Act posttest means of the student leaders who took the LPI in regard to their gender were compared using a One-Way ANOVA. No significant difference was found (F(1,47=1.99, p >.05). The male and female student leaders did not differ significantly at the end of term in relation to this leadership behavior.

The Modeling the Way posttest means of the student leaders who took the LPI in regard to their gender was compared using a One-Way ANOVA. No significant difference was found (F(1,47=3.29, p >.05). The male and female student leaders did not differ significantly at the end of term in relation to this leadership behavior.

The Encouraging the Heart posttest means of the student leaders who took the LPI in regard to their gender were compared using a One-Way ANOVA. No significant difference was found (F(1,47=.455, p >.05). The male and female student leaders did not differ significantly at the end of term in relation to this leadership behavior.

Table 13
Posttest Gender One-Way ANOVA

Posttest on Gender – Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
POSTCHAL	M	14	24.79	2.577	.689	23.30	26.27	20	28
	F	35	22.37	3.532	.597	21.16	23.58	14	30
	Total	49	23.06	3.442	.492	22.07	24.05	14	30
POSTINSP	M	14	24.71	2.840	.759	23.07	26.35	20	29
	F	35	22.77	4.332	.732	21.28	24.26	12	30
	Total	49	23.33	4.033	.576	22.17	24.48	12	30
POSTENAB	M	14	29.71	11.255	3.008	23.22	36.21	23	68
	F	35	26.94	2.222	.376	26.18	27.71	22	30
	Total	49	27.73	6.278	.897	25.93	29.54	22	68
POSTMODE	M	14	26.00	2.602	.695	24.50	27.50	19	30
	F	35	24.31	3.056	.517	23.26	25.36	18	30
	Total	49	24.80	3.007	.430	23.93	25.66	18	30
POSTENCO	M	14	24.36	3.586	.959	22.29	26.43	19	30
	F	35	25.14	3.719	.629	23.87	26.42	13	30
	Total	49	24.92	3.662	.523	23.87	25.97	13	30

Posttest on Gender – ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
POSTCHAL	Between Groups	58.288	1	58.288	5.366	.025
	Within Groups	510.529	47	10.862		
	Total	568.816	48			
POSTINSP	Between Groups	37.747	1	37.747	2.388	.129
	Within Groups	743.029	47	15.809		
	Total	780.776	48			
POSTENAB	Between Groups	76.808	1	76.808	1.989	.165
	Within Groups	1814.743	47	38.612		
	Total	1891.551	48			
POSTMODE	Between Groups	28.416	1	28.416	3.293	.076
	Within Groups	405.543	47	8.629		
	Total	433.959	48			
POSTENCO	Between Groups	6.173	1	6.173	.455	.503
	Within Groups	637.500	47	13.564		
	Total	643.673	48			

Research Question 3

In what ways, if any, do students in different age groups who participate in a student leader program in a community college grow in leadership behaviors differently from each other?

A One-Way ANOVA was calculated to compare the mean pretest score to the posttest score of the student leaders (LPI) Leadership Practices Inventory in regard to their age group. The student leaders fell into two age categories. Approximately 93.9% (n=46) indicated they were between the ages of 18-30. Approximately 6.1% (n=3) indicated they were between the ages of 41-50. The LPI measured the student leaders' increase in regard to five leadership behaviors. These leadership behaviors are: Challenging the Process, Inspiring a Shared Vision, Enabling Others to Act, Modeling the Way, and Encouraging the Heart. This data is highlighted in Table 14. The effect size was also calculated. The effect size is the defined as the standardized difference between the means. To determine the amount of difference an effect size scale can be

used. In the scale, .01 determines a small difference, .06 determines a moderate difference and .14 determines a large difference (Shavelson, 1996).

The Challenging the Process pretest means of the student leaders who took the LPI in regard to their age group were compared using a One-Way ANOVA. No significant difference was found (F(1,47=.001, p >.05). The 18-30 and 41-50 student leaders did not differ significantly at the start of term in relation to this leadership behavior.

The Inspiring a Shared Vision pretest means of the student leaders who took the LPI in regard to their gender were compared using a One-Way ANOVA. No significant difference was found (F(1,47=.2.55, p >.05). The 18-30 and 41-50 student leaders did not differ significantly at the start of term in relation to this leadership behavior.

The Enabling Others to Act pretest means of the student leaders who took the LPI in regard to their gender were compared using a One-Way ANOVA. No significant difference was found (F(1,47=1.50, p >.05). The 18-30 and 41-50 student leaders did not differ significantly at the start of term in relation to this leadership behavior.

The Modeling the Way pretest means of the student leaders who took the LPI in regard to their gender were compared using a One-Way ANOVA. No significant difference was found (F(1,47=.061, p >.05). The 18-30 and 41-50 student leaders did not differ significantly at the start of term in relation to this leadership behavior.

The Encouraging the Heart pretest means of the student leaders who took the LPI in regard to their gender were compared using a One-Way ANOVA. No significant difference was found (F(1,47=.214, p >.05). The 18-30 and 41-50 student leaders did not differ significantly at the start of term in relation to this leadership behavior.

Table 14
Pretest Age Groups One-Way ANOVA

Pretest Age Groups – Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
PRECHALL	18-30	46	21.61	3.896	.574	20.45	22.77	14	28
	41-50	3	21.67	4.933	2.848	9.41	33.92	16	25
	Total	49	21.61	3.904	.558	20.49	22.73	14	28
PREINSP	18-30	46	22.17	4.601	.678	20.81	23.54	11	30
	41-50	3	17.67	7.095	4.096	.04	35.29	10	24
	Total	49	21.90	4.810	.687	20.52	23.28	10	30
PREENAB	18-30	46	25.26	2.879	.424	24.41	26.12	19	30
	41-50	3	23.00	6.245	3.606	7.49	38.51	16	28
	Total	49	25.12	3.113	.445	24.23	26.02	16	30
PREMODEL	18-30	46	23.46	3.710	.547	22.35	24.56	12	30
	41-50	3	24.00	3.000	1.732	16.55	31.45	21	27
	Total	49	23.49	3.646	.521	22.44	24.54	12	30
PREENCOU	18-30	46	23.50	4.032	.594	22.30	24.70	12	30
	41-50	3	22.33	7.371	4.256	4.02	40.64	14	28
	Total	49	23.43	4.193	.599	22.22	24.63	12	30

Pretest Age Groups – ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
PRECHALL	Between Groups	.009	1	.009	.001	.980
	Within Groups	731.623	47	15.566		
	Total	731.633	48			
PREINSP	Between Groups	57.214	1	57.214	2.553	.117
	Within Groups	1053.275	47	22.410		
	Total	1110.490	48			
PREENAB	Between Groups	14.396	1	14.396	1.501	.227
	Within Groups	450.870	47	9.593		
	Total	465.265	48			
PREMODEL	Between Groups	.832	1	.832	.061	.805
	Within Groups	637.413	47	13.562		
	Total	638.245	48			
PREENCOU	Between Groups	3.833	1	3.833	.214	.645
	Within Groups	840.167	47	17.876		
	Total	844.000	48			

The Challenging the Process posttest means of the student leaders who took the

LPI in regard to their age group were compared using a One-Way ANOVA. No

significant difference was found ($F(1,47=.519, p >.05)$). The 18-30 and 41-50 student

leaders did not differ significantly at the end of term in relation to this leadership

behavior. This data is displayed in Table 15.

The Inspiring a Shared Vision posttest means of the student leaders who took the

LPI in regard to their age group were compared using a One-Way ANOVA. No

significant difference was found ($F(1,47= 1.40, p >.05)$). The 18-30 and 41-50 student

leaders did not differ significantly at the end of term in relation to this leadership

behavior.

The Enabling Others to Act posttest means of the student leaders who took the

LPI in regard to their age group were compared using a One-Way ANOVA. No

significant difference was found (F(1,47=.091, p >.05). The 18-30 and 41-50 student

leaders did not differ significantly at the end of term in relation to this leadership

behavior.

The Modeling the Way posttest means of the student leaders who took the LPI in

regard to their age group were compared using a One-Way ANOVA. No significant

difference was found (F(1,47=.074, p >.05). The 18-30 and 41-50 student leaders did not

differ significantly at the end of term in relation to this leadership behavior.

The Encouraging the Heart posttest means of the student leaders who took the LPI

in regard to their age group were compared using a One-Way ANOVA. No significant

difference was found (F(1,47=.198, p >.05). The 18-30 and 41-50 student leaders did not

differ significantly at the end of term in relation to this leadership behavior.

Table 15
Posttest Age Groups One-Way ANOVA

Posttest Age Groups – Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
POSTCHALL	18-30	46	23.15	3.425	.505	22.14	24.17	14	30
	41-50	3	21.67	4.163	2.404	11.32	32.01	17	25
	Total	49	23.06	3.442	.492	22.07	24.05	14	30
POSTINSP	18-30	46	23.50	3.960	.584	22.32	24.68	12	30
	41-50	3	20.67	5.132	2.963	7.92	33.41	15	25
	Total	49	23.33	4.033	.576	22.17	24.48	12	30
POSTENAB	18-30	46	27.80	6.476	.955	25.88	29.73	22	68
	41-50	3	26.67	.577	.333	25.23	28.10	26	27
	Total	49	27.73	6.278	.897	25.93	29.54	22	68
POSTMODEL	18-30	46	24.83	3.028	.446	23.93	25.73	18	30
	41-50	3	24.33	3.215	1.856	16.35	32.32	22	28
	Total	49	24.80	3.007	.430	23.93	25.66	18	30
POSTENCOU	18-30	46	24.98	3.697	.545	23.88	26.08	13	30
	41-50	3	24.00	3.606	2.082	15.04	32.96	20	27
	Total	49	24.92	3.662	.523	23.87	25.97	13	30

Posttest Age Groups – ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
POSTCHALL	Between Groups	6.215	1	6.215	.519	.475
	Within Groups	562.601	47	11.970		
	Total	568.816	48			
POSTINSP	Between Groups	22.609	1	22.609	1.402	.242
	Within Groups	758.167	47	16.131		
	Total	780.776	48			
POSTENAB	Between Groups	3.645	1	3.645	.091	.765
	Within Groups	1887.906	47	40.168		
	Total	1891.551	48			
POSTMODEL	Between Groups	.684	1	.684	.074	.787
	Within Groups	433.275	47	9.219		
	Total	433.959	48			
POSTENCOU	Between Groups	2.695	1	2.695	.198	.659
	Within Groups	640.978	47	13.638		
	Total	643.673	48			

Summary

   Chapter 4 presented an analysis of data obtained from the responses of 49 students in a community college student leader program. The data was obtained from Kouzes and Posner's (2002) Student Leadership Practices Inventory (LPI) and a focus group. Three research questions and nine focus group questions provided the framework for the analysis of the survey data. In addition, this chapter also displayed a demographic profile on the sample population in relation to their personal and institutional characteristics and involvement experience. A summary and discussion of results, study conclusions, and recommendations for future research follow in Chapter 5.

CHAPTER 5
CONCLUSIONS AND RECOMMENDATIONS

<u>Introduction</u>

Section one of Chapter 5 presents a brief summary of the study. Section two

includes a discussion of the finding related to the research questions and focus group.

Section three discusses the limitation of the study followed by implications for practice in

section four. The fifth section consists of recommendations for future research.

<u>Summary</u>

Purpose of the Study

The purpose of this study was to assess whether participation in a community

college student leader program had an effect on the leadership behaviors of students

based on five (5) practices measured by a student leadership practices inventory. By

assessing these leadership behaviors, the community college was able to determine the

effectiveness of the program and ways to improve the program's curriculum. This study

addressed the following: 1) whether students who participated in a student leader

program in a community college showed significant growth in leadership behaviors; 2)

whether growth in leadership behaviors of students who participated in a student leader

program in a community college were significantly different from each other in regard to

gender; 3) whether growth in leadership behaviors of students who participated in a

student leader program in a community college were significantly different from each

other in regard to age.

Four rationales validated the importance of this study. The first rationale was the

limited amount of community college research on the significance of student leader

programs. The majority of the research on student leadership is focused on community

service learning projects and university programs related to Student Government and Universities. Research conducted using university students may not be applicable to community college students. Community colleges serve a different population than universities (Bailey, T. R., & Averianova, 1998). This difference in student population constitutes the second rationale. The community college's open door policy affords many students from diverse backgrounds the opportunity to an education. Over 70% of incoming community college freshman test into a least one preparatory course, thus showing the significance difference in educational preparation. Many community college students also attend a community college to explore second or third career changes. The third rationale is the lack of community college involvement. According to the Community College Survey of Student Engagement (CSSE), 86.5% of students are not involved in student leadership programs. This high percentage also emphasizes the importance of this study. The Kouzes and Posner Leadership Practices Inventory (2002), has been tested and has demonstrated high reliability and validity. Kouzes and Posner have shown significant results in utilizing this survey with university student leaders and community college service learning and civic leadership programs. The reliability and validity of this instrument is the final rationale for the purpose of this study.

<center>Population and Data Collection</center>

The population of this study consisted of 62 student leaders who were participants in a student leader program at a community college. A pre LPI was given to 62 student leaders in the beginning of the school term. A post LPI was given to 62 student leaders at the end of the school term. Thirteen of the original student leaders dropped out of the

<center>102</center>

program and were replaced by new student leaders. Thus, the total number of useable

inventories for data input in this study was 49; this yielded a 79% return rate.

Instrumentation

The student Leadership Practices Inventory (LPI) developed by Kouzes and

Posner (2002) was used as the main instrument in this study. The student Leadership

Practices Inventory (LPI) is a questionnaire with thirty (30) behavioral statements—six

(6) for each of The Five Practices. These five (5) practices include:

1. Challenging the Process - Searching for opportunities and experimenting and taking

    risks.

2. Inspiring a Shared Vision - Envisioning an uplifting future and enlisting others in a

    common vision.

3. Enabling Others to Act - Fostering collaboration and strengthening people.

4. Modeling the Way - Setting the example and achieving small wins.

5. Encouraging the Heart - Recognizing individual contributions and celebrating team

    accomplishments (Kouzes and Posner, 2002).

The students self-responded using a Likert-type scale between 1 and 5.

- "1" means that the student *rarely or seldom* engaged in that behavior.

- "2" means that the student engaged in the behavior *once in a while*.

- "3" means that the student *sometimes* engaged in the behavior.

- "4" means that the student engaged in the behavior *fairly often*.

- "5" means that the student engaged in the behavior *very frequently*.

Items 1, 16, 21, 6, 11, and 26 corresponded to Challenging the Process. Items 12, 27, 17,

2, 7, and 22 corresponded to Inspiring a Shared Vision. Items 8, 18, 23, 3, 28, and 13

corresponded with Enabling Others to Act. Items 24, 14, 19, 9, 29, and 4 corresponded to Modeling the Way. Items 20, 15, 10, 25, 5, and 30 corresponded to Encouraging the Heart.

A demographic questionnaire asked the research participants nine questions regarding demographic information on personal and institutional characteristics and involvement experience. Personal characteristics included age, gender, race, college degree they are pursuing and amount of time as a student. Institutional characteristics included the student leader group and campus they are a part of. Involvement experience asked the students about their past leadership experience and their community involvement.

A focus group was used to gain information on the leadership behaviors the students gained as a result of their involvement in the student leader program. The focus group consisted of nine questions. Three areas guided this focus: growth as a student leader, growth as a result of the student leader program, and growth in the leadership behaviors gained as a result of their involvement in the student leader program.

Discussion of Findings

While Chapter 4 contained a full presentation of results, this section summarizes the findings as they relate to each of the study's research questions and focus group. This section also includes a summary of the demographic profile of the sample population.

Demographic Profile

Personal characteristics revealed that the vast majority of the students were in the 18-30 age group. Female students (n=35, 71.4%) outnumbered the male students (n=14, 28.6%). A majority of the students were African American (n=14, 28.6%) or Other (n=13, 26.5%). The greater part of the students were pursuing an Associate of Arts

(A.A.) Degree (n=33, 67.3%) and an Associate of Science (A.S.) Degree (n=12, 24.5%).

Over half of the students were in college for over a year (n=25, 51%) and (n=10, 20.4%)

were in college for less than a year.

Institutional characteristics revealed that almost half of the students were from

East Campus (n=24, 49%). Approximately (n=12, 24.5%) were from West Campus. The

remainder of the students were from Osceola Campus (n=7, 14.3%) and Winter Park

Campus (n=6, 12.2%). Approximately (n=21, 42.9%) of the students were Welcome

Team, (n=11, 22.4%) were Peer Educators and (n=17, 17.2%) were Atlas Access.

In regard to the student involvement experience, more than half of the students

did not have any past leadership experience (n=30, 61.2%). Approximately (n=18,

36.7%) of the students had past leadership experience. In regard to past community

service experience, the majority of the students reported that they had past community

service experience (n=29, 59.2%). The remainder of the students did not have past

community service experience (n=20, 40.8%).

<div align="center">Research Question 1</div>

In what ways, if any, do students who participate in a student leader program in a
community college show growth in leadership behaviors?

The purpose of this study was to assess whether participation in a community

college student leader program had an effect on the leadership behaviors of students

based on five practices measured by a student leadership practices inventory. The first

research question addressed this purpose.

A paired-samples *t* test was calculated to compare the mean pretest scores to the

posttest scores of the student leaders (LPI) Leadership Practices Inventory. The LPI

measured the student leaders' increase in regard to five leadership behaviors. These

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leadership behaviors were: Challenging the Process, Inspiring a Shared Vision, Enabling Others to Act, Modeling the Way, and Encouraging the Heart.

The data indicated a statistically significant difference in the pretest and posttest mean scores in regard to the student leaders' growth in leadership behaviors. The paired-samples t test revealed statistically significant differences in all leadership behaviors, $p<.05$. This findings support the fact that student leader programs provide opportunities for student leadership growth.

There are many benefits to involvement in leadership programs. Similar to those benefits found by participation in student activities, participants in leadership programs have shown growth in relation to their leadership skills and confidence in their abilities to lead (Zimmerman-Oster and Burkardt, 1999). Leadership programs give the participants the opportunity to understand theory and apply theory (Buckner and Williams, 1995), amplifying their knowledge and abilities (Cress et al., 2001).

To really use leadership, we must tap into a student's potential for leadership. Developing students throughout the college or university with the use of leadership programs will prepare students for the changing demands of our society for leaders (CAS, 2006; Robert and Ullom, 1989). Roberts and Ullom (1989) contend that, "student leadership programs should be the integral part of our academic and co-curricular offerings" (p.74). Not only do leadership programs prepare students for future leadership roles, they also prepare students for the roles they play on campus, thereby improving campus life. Student leadership training and development will benefit our institutions (Janosik and Sina, 1988).

Research Question 2

In what ways, if any, do female and male students who participate in a student leader program in a community college grow in leadership behaviors differently from each other?

The second research question addressed whether there was a difference in the growth of the student's leadership behaviors in terms of gender. A One-Way ANOVA was calculated to compare the mean pretest scores to the posttest scores of the student leaders (LPI) Leadership Practices Inventory in regard to their gender. In the pretest scores, the one-way ANOVA revealed that there was no statistically significant difference in the leadership behaviors in regard to gender, $p>.05$.

The study also indicated that more than twice as many females (n=35, 71.4%) in this sample held student leader positions than males (n=14, 28.6%). This did not serve as a very diverse group of student leaders in regard to gender. There may have been a statistically significant difference in the student leaders' gender if this variable was equally represented.

In the posttest scores, the One-Way ANOVA showed that there was no statistically significant difference in the leadership behaviors of Inspiring a Shared Vision, Enabling Other to Act, Modeling the Way, and Encouraging the Heart. There was though, a statistically significant difference in regard to gender in the leadership behavior of Challenging the Process. A significant difference was found among the male and female student leaders (F(1,47=5.37, p <.05). Tukey's HSD was used to determine the nature of the differences between the male and female student leaders. This analysis revealed that the male student leaders scored higher in this behavior (*m*= 24.79, *sd* =2.58)

than the female student leaders (*m*=22.37, *sd*=3.53). The male and female student leaders

did differ significantly at the end of term in relation to this leadership behavior.

This data is in accordance with other LPI studies. In other LPI studies, males

tended to score higher in the leadership behavior of Challenging the Process. This may

have to do with research that shows that men tend to gravitate to leadership opportunities

that allows them to take risks. Males find ways to get outside of the imaginary

boundaries of organizational convention. They take risks and focus on mistakes as

learning opportunities (Kouzes and Posner, 1998).

<div align="center">Research Question 3</div>

In what ways, if any, do students in different age groups who participate in a student
leader program in a community college grow in leadership behaviors differently from
each other?

The third research question addressed whether there was a difference in the

growth of the student's leadership behaviors in terms of age. A One-Way ANOVA was

calculated to compare the mean pretest scores to the posttest scores of the student leaders

(LPI) Leadership Practices Inventory in regard to their age. In the pretest and posttest

scores, the One-Way ANOVA revealed that there was no statistically significant

differences in the leadership behaviors in regard to age, $p > .05$.

According to Astin (1993), the student's age at the time of college entry was not

significantly associated with changes in Leadership scores. This evidence supports the

argument that increases in leadership skills during undergraduate years is associated with

the college experience rather than the student's maturation. According to the student

demographic data, over half of the student were in college for over a year (n=25, 51%)

and (n=10, 20.4%) were in college for less than a year. Approximately (n=8, 16.3%) of

the students were in their first term and (n=4, 8.2%) were transfer students. The rest of the students reported other (n=2, 4.1%).

Some consideration should also be taken for the age groups represented. The student leaders fell into two age categories. Approximately 93.9% (n=46) indicated they were between the ages of 18-30. Approximately 6.1% (n=3) indicated they were between the ages of 41-50. No respondents were over the age of 51. No respondents were between the ages of 31-40. This did not allow for a diverse group of students in relation to age.

<center>Focus Group Questions</center>

The purpose of the focus group was to gain information on the leadership behaviors the students gained as a result of their involvement in the student leader program. Three areas guided this focus: growth as a student leader, growth as a result of the student leader program, and growth in the leadership behaviors gained as a result of their involvement in the student leader program.

In regard to their growth as a student leader, the students felt that they grew in many different areas. The opportunity allowed them to network with students, faculty, administration, and staff and gain leadership skills. These leadership skills included: listening skills, communication skills, stress management, multitasking and customer service. The students also believed the importance of taking initiative, practicing patience and developing others.

In this area, the participants felt that they were selected as a student leader because they met the requirements. As a result of the Student Leader Program, they were able to enhance or refine their existing leadership skills. Aside from this, they were able

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to gain other skills that helped them become a better leader and student. The participants believed that the program helped them empower others to lead and follow. They also believed that the leadership skills, interaction and opportunities were priceless.

The students communicated that they did gain student leadership behaviors as a result of their participation in the student leader program. These leadership behaviors included: Challenging the Process, Inspiring a Shared Vision, Enabling Others to Act, Modeling the Way, and Encouraging the Heart. The students left the program feeling most comfortable with the leadership behaviors Encouraging the Heart and Modeling the Way. The students felt the least comfortable with Challenging the Process.

They felt most comfortable with Encouraging the Heart and Modeling the Way because they found these behaviors rewarding and believed they should be a role model and mentor to their peers. They felt least comfortable with Challenging the Process because they felt at times their staff and administration did not support them. This lack of support did not allow them to have the autonomy to make changes that met the needs of the students they served.

This focus group validated that the students displayed growth in the five leadership behaviors of: Challenging the Process, Inspiring a Shared Vision, Enabling Others to Act, Modeling the Way and Encouraging the Heart. This increase was a result of the student leaders' involvement in the student leader program.

<center>Comparing Results of this Study to Other LPI Studies</center>

This study supports the research that students who are involved in a leadership program gain leadership behaviors. In comparing the student leaders' pretest and posttest scores of the LPI, it shows that there was a significant difference in each leadership

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behavior. These leadership behaviors were: Challenging the Process, Inspiring a Shared Vision, Enabling Others to Act, Modeling the Way, and Encouraging the Heart. There are many benefits to involvement in leadership programs. Similar to those benefits found by participation in student activities, participants in leadership programs have shown growth in relation to their leadership skills and confidence in their abilities to lead (Zimmerman-Oster and Burkardt, 1999). Leadership programs give the participants the opportunity to understand theory and apply theory (Buckner and Williams, 1995), amplifying their knowledge and abilities (Cress et al., 2001).

Kouzes and Posner's (1988) Leadership Practices Inventory (LPI) has also been used as an instrument in assessing student leader gender differences. The LPI rates a leader's effectiveness on five factors: Challenging the Process; Inspiring a Shared Vision; Enabling Others to Act; Modeling the Way; and Encouraging the Heart. This instrument was developed in the business sector as a result of interviewing 1,000 managers.

Komives (1994) used the Student Leadership Practices Inventory to investigate student leadership in a campus-based leaders' conference. Thirty-four women were surveyed who had attended a campus conference for women student leaders; 27 completed the instrument. The women's scores ranged from 22.11 for Challenging the Process, 23.26 for Inspiring a Shared Vision, 23.41 for Modeling the Way, 24.85 for Encouraging the Heart, to 26.04 for Enabling Others to Act. The scores showed that women believe they had most leadership skill in Enabling Others to Act and the least amount in Challenging the Process. These results were consistent with this study. In this study, the male student leaders scored higher, 24.79, than the female student leaders, 22.37, in Challenging the Process.

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Survey research was used in studying the leadership practices of members of student government. The Student Leadership Practices Inventory (SLPI) was administered at eight public universities during regularly scheduled meetings of student government organizations. The SLPI measured leadership practices that were valuable in effective leadership. The five scores from the leadership practice subscales were the dependent variables for the study. A demographic questionnaire was also employed to collect information about the independent variables used in the study (gender, leader/non-leader, elected/appointed). The data collected from the completed SLPIs and the demographic questionnaires were analyzed using a multivariate analysis of variance (MANOVA) procedure. Follow up analysis of variance (ANOVA) tests were employed (Erwin, 2005).

The results revealed no statistically significant differences between men and women members of student government with regard to the five leadership practices measured by the SLPI. This is consistent with the results of this study. There were no significant differences between the male and female student leaders in regard to the five leadership practices with the exception of the leadership practice Challenging the Process.

The results of this study also showed no significant difference in the student leaders' scores in the LPI in relation to the student's age group. According to Astin (1993), the student's age at the time of college entry was not significantly associated with changes in Leadership scores. This evidence supports the argument that increases in leadership skills during undergraduate years is associated with the college experience rather than the student's maturation.

The focus group in this study highlighted the leadership behaviors the student leaders gained as a result of their involvement in the student leader program. Not only did the students grow in the leadership behaviors measured by the LPI, they also gained other leadership skills. In regard to their growth as student leaders, the students felt that they grew in many different areas. The opportunity allowed them to network with students, faculty, administration, and staff and gain leadership skills. These leadership skills included: listening skills, communication skills, stress management, multitasking and customer service. The students also believed in the importance of taking initiative, practicing patience and developing others.

Floerchinger (1988) reviewed dozens of articles on student activities to produce a list of six benefits of student involvement in co-curricular activities. These included: a) increased retention; b) improved interpersonal skills including communication and group organizational skills; c) a positive influence on skills in leadership, communication, teamwork, organizing, decision-making and planning; d) greater satisfaction with their college experience on general dimensions compared with less involved students; e) useful experience in obtaining a job and providing job related skills; and f) development of lifelong values of volunteerism and service to others as well as lifelong leisure skills.

In the focus group, the student leaders also discussed the importance of developing leadership skills and how these skills can help them with their career and education. The impact of leadership experiences extends far after graduation. Students with these experiences were positively influenced in personal growth and development measures (Strifflino and Saunders, 1989). Demonstration of leadership and teamwork skills after graduation was positively linked to involvement and leadership in student

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organizations in college (Bialek and Lloyd, 1998). Student leader graduates also reported gains in leadership skills such as "ability to deal with complexity, uncertainty, and ambiguity" (Cress et al., 2001, p.22), and community awareness. These skills, as well as other effects such as confidence in a professional setting, positively affected a student's career after college (Bialek and Lloyd, 1998).

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

There were several limitations that existed in this study. The first limitation was the fact the LPI was a self-reported inventory. This opened up the inventory for inaccurate and unreliable information. Since this study was based on the opinions students have on their own leadership behaviors, it may have relied too much on students who over or under-estimated their leadership skills.

Another limitation was that the student leaders were not diverse in terms of age groups, gender, race and duration as a college student. The student leaders fell into two age categories. Approximately 93.9% (n=46) indicated they were between the ages of 18-30. Approximately 6.1% (n=3) indicated they were between the ages of 41-50. More than twice as many females (n=35, 71.4%) in this sample held student leader positions than males (n=14, 28.6%). A majority (n=27, 55%) of the students came from minority groups. The student leaders were African American (n=14, 28.6%) or Other (n=13, 26.5%). Over half of the student were in college for over a year (n=25, 51%) and (n=10, 20.4%) were in college for less than a year. Approximately (n=8, 16.3%) of the students were in their first term and (n=4, 8.2%) were transfer students. The rest of the students reported other (n=2, 4.1%).

The third limitation of the study was that a convenience sample was used. The researcher used the student leaders out of a department and institution that was easily

accessible. The fourth limitation was that the study served a small sample size. The

sample size was 49 student leaders. Most studies using the LPI serve over a hundred

students. The fifth limitation was the limited duration of the study. The students'

leadership behaviors were only assessed on a term basis. A term basis is about four

months. In the future, it would be interesting to do a longitudinal study on this student

leader program.

       The final limitation was the student leaders' retention in the student leader

program. Of the 62 students who started the program, 49 remained in the program at the

end of the term. These student leaders were not able to be a part of the full study as a

result of: withdrawing and/or dropping their courses or not maintaining the Student

Leader Program requirements prior to the post-assessment.

<u>Implications for Practice</u>

       The results of this study have implications for those involved in leadership

development of community college students. This research displayed the leadership

development of community college students though mixed methods of qualitative and

quantitative research. A structured leadership program showed growth in the student's

leadership behaviors.

       The Community College Survey on Student Engagement (CCSSE) conducted

research into what help students succeed in college. Several components of student

activities have been found to aide in success. For example, the amount of student-faculty

interaction was positively correlated with student success. Students who reported having

a moderate to high level of participation in college-sponsored activities (student

organizations, student government, athletics, publications) reported a higher level of

interaction with faculty than their less-involved peers (CSSEE, 2005). Additional

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benchmarks for success identified by CSSEE included active and collaborative learning and support for learners. Through student activities initiatives like service learning, leadership development curriculum, cultural events and lecture series, student activities offices provide practical opportunities for student engagement.

According to the Community College Survey of Student Engagement (CCSSE, 2004), at a central Florida community college, 86.5% of the students reported that they did not participate in college-sponsored activities. These activities included: clubs/organizations, campus publications, student government, intercollegiate and/or intramurals sports. The significance of this study will help empower students to become more involved.

This student leader program contained various elements that led in the development of leadership behaviors in the students. This research found that effective leadership behaviors gained in the student leader program were connected to positive learning results. This program resulted in student satisfaction in their educational experience, persistence to graduation and the development of their personal and social skills.

The findings of this study could benefit policymakers and current policies in higher education. This valuable data will give institutions concrete evidence on the validity of these programs. This research could result in leadership requirements for students, the assessment and evaluation of current student leader program, and financial and administrative support.

Many institutions emphasize the importance of community service and some have required it as a component of graduation and have also implemented service-learning

programs into the curriculum. This can also be done in terms of student leadership. Some ways this could be done is through leadership courses, student leader certification programs and the development of comprehensive student leader programs.

This study could trigger the importance of researching other community college leadership programs. Although these programs do exist, little research has been done on the success of these programs. This study could open the doors to more research on community college student leader programs and provide data on the effectiveness of them.

Showing the effectiveness of these programs would allow for administrative support and ensure financial support. The institution itself also benefited from the development of students into leaders (Dooley and Shellogg, 2003). These students became skilled student leader or club officers who managed campus organizations that were dedicated to the institution and the students they served (Stiffolino and Saunders, 1989). Leadership opportunities also provided students with the means to become involved in the well being of the institution, becoming dedicated and loyal students and future alumni (Bialek and Lloyd, 1998).

<u>Recommendations for Future Research</u>

Additional research with student leaders involved in a student leader program can be conducted. Considerations on sample size, duration of study, student demographics and other variables should be considered.

1. This study used the LPI (Self) Instrument. Other studies should be conducted using the LPI (Observer) version in addition to the LPI (Self). Some of the student leaders may have rated themselves higher in the leadership behaviors in comparison with observer ratings.

2. Student leaders interact with their advisors almost as frequently as they interact with their peers. A study utilizing the LPI (Observer) with their advisors who work closely with them might provide insight into their leadership.

3. Student leaders also interact with their peers on a regular basis. As study using the LPI (Observer) with their peers might provide insight into their leadership.

4. Sample size and a sample of convenience should be taken into consideration in future studies. It would be interesting to research other community colleges in the Unites States and have a larger sample size.

5. Further analysis can be done with a more diverse group of students. A more diverse group of student leaders in terms of age and gender can be conducted. A more equal representation in these groups may show a statistically significance in these variables.

6. Use of a control group along with the experimental group would be beneficial in comparing the benefits of involvement in terms of leadership development, retention, and GPAs.

7. A longitudinal study would be able to capture the long-term effects of the student leaders' involvement in the community college student leader program. This could capture their transfer rate to the 4-year colleges, graduation rates and career success.

8. The LPI can be used with other student leader groups at the community college level. Some of these groups include: Phi Theta Kappa (PTK), Student Government Association (SGA), and other clubs and organizations.

9. A comparison study between community college and university student leader programs could be implemented. A future study could focus on the difference between the student demographics and their leadership development. In the current

study, there was a high percentage of minorities in the student leader program. It is believed student leader programs at the university level have different demographics and curriculum needs.

10. An exploratory study might investigate university and community college articulation agreements with a student leadership component. This study may propose an agreement focusing on collaboration on program curriculum, the student leader program transfer process, and academic courses related to student leadership.

APPENDIX A: STUDENT LEADER APPLICATION

Student Leadership Application

- Name_____

- VID (Valencia ID#)_____

- Address_____

- Phone #_____

- ATLAS E-mail address_____

- Which position do you prefer? Circle one:

  Welcome Team   Atlas Lab   Peer Educator

Please type the answers to the following questions on a separate sheet of paper.
- o Why are you interested in a Student Leadership Position?
- o What do you consider your best quality? Why?
- o What does "service" mean to you?
- o Please describe a situation where you helped someone learn something new.
- o Please explain why you think you can be a good example to other students.
- o Name a leader. What qualities or characteristics make this person a leader?
- o What special talents do you have to contribute to these student leadership positions?
- o What does teamwork mean to you?

Qualifications
- o Have a 2.5 GPA (or equivalent High School GPA for new students)
- o Be enrolled in at least 6 credit hours in both fall and spring terms, and at least 3 credit hours summer term
- o Be a degree seeking student (AS, AAS, AA, or certificate)
- o Be able to commit to the position for at least one year
- o **MUST attend all summer training programs (dates to be announced)**

Student Leaders Receive:
- o Minimum wage an hour for up to 20 hours per week
- o Up to $300 per term for special projects (for service hours completed outside of the 20 hours scheduled)
- o Advanced leadership opportunities and professional training

APPENDIX B: WELCOME TEAM DESCRIPTION

Welcome Team

Goal: To assist Student Development by serving as an ambassador of the college to positively promote the student experience to potential and current students and to offer yourself as a role model, providing a good example that you would wish other to follow.

Qualifications:

- Strong interpersonal skills
- A positive attitude, highly motivated
- Working knowledge of Microsoft Office
- 2.5 GPA, Enrolled in 6 hours
- Be reliable and responsible
- Work effectively as a member of a team
- Work well with minimal supervision

Benefits/Rewards:

- Sharpen communication and public speaking skills
- Improve interpersonal and conversational skills
- Meet and network with future students, current students, staff and faculty
- Develop and enhance leadership skills
- Have fun
- Advanced registration
- Leadership award opportunity

Job Responsibilities include, but not limited to:

- Maintain appropriate office attire
- Maintain appropriate communication with students, staff, and campus visitors
- Issue identification cards to student, faculty and staff
- Conduct campus tours
- Assist with New Student Orientation; prep packets, assist with registration, conduct tour
- Keep office neat and well organized
- Staff information station and reception desk
- Post informational flyers as directed
- Update and keep current marquee
- Frequently check duty trays for job tasks
- Refresh table tents/bulletin boards removing dated material, keeping bulletin boards neat and orderly on a regular basis
- Assist with campus events, department activities
- Conduct presentations to Student Success classes on Student Development opportunities

- Maintain appropriate communication with students, staff, and campus visitors
- Assist with organizing and participating in activities for prospective students, such as Welcome Week, College Night
- Participate in trainings/meetings as assigned
- Complete projects and other tasks as assigned

Other:

- Includes inside/outside tasks, lifting, bending
- Work schedule includes evening and mandatory workdays

APPENDIX C: PEER EDUCATOR DESCRIPTION

Peer Educators

Goal: Peer educators are trained student leaders, serving as a resource educator and role model for other students. Peer educators assist students on a daily basis by helping them better understand the LifeMap philosophy and the importance of being educated about health, wellness and safety issues. Peer educators provide important wellness services, programs, information and resources that empower students with a greater understanding of self and also foster a campus community that is healthier, safer, and more enjoyable.

Qualifications:

- Strong interpersonal skills
- A positive attitude, highly motivated
- Working knowledge of Microsoft Office
- 2.5 GPA, Enrolled in 6 hours
- Be reliable and responsible
- Work effectively as a member of a team
- Work well with minimal supervision
- Interest in wellness/health issues
- Prefer experience with programming

Benefits/Rewards:

- Sharpen communication and public speaking skills
- Improve interpersonal and conversational skills
- Meet and network with future students, current students, staff and faculty
- Develop and enhance leadership skills
- Have fun
- Advanced registration
- Leadership award opportunity

Job Responsibilities include, but not limited to:

- Complete mandatory training
- Create bulletin boards on wellness messages
- Assist in the publicity efforts for Peer Educator events/activities
- Recruit other Peer Educators
- Plan and implement wellness educational programming and outreach, special events
- Discuss available resources on sensitive health & wellness topics
- Conduct presentations to Student Success classes on Health/Wellness
- Assist with organizing and participating in activities: Alcohol Awareness, Great American Smoke Out, and World AIDS Day.

- Participate in trainings/meetings as assigned
- Complete projects and other tasks as assigned
- Maintain appropriate office attire
- Keep office neat and well organized
- Staff information station and reception desk
- Post informational flyers as directed
- Update and keep current marquee
- Frequently check duty trays for job tasks

Other:

- Includes inside/outside tasks, lifting, bending
- Work schedule includes evening and mandatory workdays

APPENDIX D: ATLAS ACCESS DESCRIPTION

Atlas Access

Goal: The Atlas Access Team is committed to offering an outstanding level of quality in student services by facilitating the usage of academic technologies that enhance learning for students and staff, promoting staff advancement through the development of individual learning plans that correlate with educational and career goals, and encouraging a culture of collaboration, contribution, inclusion, service and outreach. Atlas assistants support students in their career and educational planning by assisting them with the application of LifeMap Educational Tools as well as other academic technologies.

Qualifications:

- Strong interpersonal skills
- A positive attitude, highly motivated
- Working knowledge of Microsoft Office
- 2.5 GPA, Enrolled in 6 hours
- Be reliable and responsible
- Work effectively as a member of a team
- Work well with minimal supervision
- Familiar with navigating the Internet through a Windows Environment

Benefits/Rewards:

- Sharpen communication and public speaking skills
- Improve interpersonal and conversational skills
- Meet and network with future students, current students, staff and faculty
- Develop and enhance leadership skills
- Have fun
- Advanced registration
- Leadership award opportunity
- Refinement of technical skills through continued exposure to advanced operations with a variety of educational technologies.

Job Responsibilities include, but not limited to:

- Maintain appropriate office attire
- Staff information station and reception desk
- Participate in trainings/meetings as assigned
- Complete projects and other tasks as assigned
- Conduct presentations to Student Success classes on Atlas Tools
- Assist with organizing and participating in activities: Graduation, College Night, and Matador Day.
- Keep lab neat and well organized

- Assist students with Valencia and non-Valencia affiliated online tools and educational technologies
- Assist students with the registration process

Other:

- Includes inside/outside tasks, lifting, bending
- Work schedule includes evening and mandatory workdays

APPENDIX E: STUDENT DEMOGRAPHIC QUESTIONNAIRE

Instruction: <u>Please mark the appropriate responses with an "X"</u>

Student Name: _____

1. What is your racial/ethnic background?

☐ African American

☐ Asian or Pacific Islander

☐ Caucasian

☐ Hispanic

☐ Native American

☐ Other

2. What is your age?

☐ 18-30

☐ 31-40

☐ 41-50

☐ 51 and above

3. What is your gender?

☐ Female

☐ Male

4. What level of higher education are you pursuing now at the college?

☐ Associate of Arts (A.A.) Degree

☐ Associate of Science (A.S.) Degree

☐ Associate of Applied Science (A.A.S.) Degree

☐ Other_____

5. Which student leader group are you a part of?

☐ Welcome Team

☐ Peer Educators

☐ Atlas Access Team

6. Which campus are you a student leader at?

☐ East

☐ West

☐ Osceola

☐ Winter Park

7. How long have you been a college student?

☐ First time in college (First Term)

☐ Less than a year

☐ More than a year

☐ Transfer

☐ Other_____

8. Have you been involved in past student leadership experience?

☐ No

☐ Yes

9. Have you been involved in community service projects?

☐ No

☐ Yes

APPENDIX F: INFORMED CONSENT SCRIPT

August 28, 2007

Dear Student:

I am a graduate student at the University of Central Florida. As part of my dissertation, I am conducting a pre and post Student Leadership Practices Inventory. You are being asked to comment on your leadership skills and past leadership experiences. The purpose of this study is to assess whether participation in a community college student leader program has an effect on the leadership behaviors of students based on the five (5) practices measured by the Student Leadership Practices Inventory. By assessing these leadership behaviors, the community college will be able to determine the effectiveness of the program and ways to improve the curriculum. The leadership practices inventory should take approximately 10 minutes to complete. The inventory consists of 30 behavior statements. You will answer the statements using a Likert-type scale between 1 and 5. You will not have to answer any statements you do not wish to answer. Your identity will be kept confidential and will not be revealed in the final manuscript. You must be 18 years of age or older to participate.

There are no anticipated risks, compensation or other direct benefits to you as a participant in this inventory. You are free to withdraw your consent to participate and may discontinue your participation in the inventory at any time without consequence.

If you have any questions about this research project, please contact me at (407) 582-2404. My faculty supervisor, Dr. Jeffrey Kaplan, may be contacted at **(407) 823-2041** or by email at **jkaplan@mail.ucf.edu**. Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (IRB). Questions or concerns about research participants' rights may be directed to the Institutional Review Board Office, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246. The telephone numbers are (407) 823-2901 and (407) 882-2276.

Sincerely,

Chanda Torres

APPENDIX G: FOCUS GROUP PROTOCAL

<center>Introduction</center>

Hi. My name is _____ and these are my colleague(s):

<center>Purpose.</center>

We've asked you here today because we are trying to determine any impact that the Student Leader Program might have on the leadership behaviors you have gained. We're not here to provide you with any information about the Student Leader Program, and we won't give you our opinions. There are no right or wrong, desirable or undesirable answers. Feel free to express your opinion, whether it's positive or negative. You are welcome to disagree with each other, and you can change your mind. We just want you to be honest saying what you really think and feel. Please try to relax and be comfortable.

<center>Procedure</center>

I will be tape recording the discussion so that we do not miss anything you have to say. We will only be using the recording to verify that we haven't missed anything. When we are finished with it we will erase it. Your responses will be kept confidential and no one outside this group will know who said what. I want this to be a group discussion, so feel free to respond to me and to other members in the group without waiting to be called on. However, we would appreciate it if only one person talked at a time. This discussion will last approximately 60 minutes. There is a lot that we want to discuss, so at times I may move the discussion along.

<center>Participant Introductions</center>

Now, let's start by having you introduce yourselves. Just give your first name, student leader position and campus and how long you have been student leaders. OK, thank you. Let's get started.

Questioning Period

In what ways, if any, have you grown as a student leader?

Do you contribute this growth to your participation in the Student Leader Program?

Have you grown in your leadership behavior related to "Challenging the Process"?

If so, how?

Have you grown in your leadership behavior related to "Inspiring a Shared Vision"?

If so, how?

Have you grown in your leadership behavior related to "Enabling Other to Act"?

If so, how?

Have you grown in your leadership behavior related to "Modeling the Way"?

If so, how?

Have you grown in your leadership behavior related to "Encouraging the Heart"?

If so, how?

Which of the leadership practices and behaviors are you most comfortable with? Why?

Which of the leadership practices and behaviors are you least comfortable with? Why?

Review Information

Leadership Behaviors - These behaviors are the result of the leadership practices

displayed in the (LPI). These five (5) practices include:

Challenging the Process - Searching for opportunities as well as experimenting and

taking risks.

Inspiring a Shared Vision - Envisioning an uplifting future and enlisting others in a

common vision.

Enabling Others to Act - Fostering collaboration and strengthening others.

Modeling the Way - Setting the example and achieving small wins.

Encouraging the Heart - Recognizing individual contributions of others and celebrating

team accomplishments.

Wrap-Up

Check in back for additional questions. Thank respondents-remind of confidentiality.

APPENDIX H: LEADERSHIP PRACTICES INVENTORY (LPI)

STUDENT LEADERSHIP PRACTICES INVENTORY-SELF

Your Name: _____

Instructions

On the next two pages are thirty statements describing various leadership behaviors. Please read each statement carefully. Then rate *yourself* in terms of *how frequently* you engage in the behavior described. *This is not a test* (there are no right or wrong answers).

Consider each statement in the context of the student organization (for example, club, team, chapter, group, unit, hall, program, project) with which you are most involved. The rating scale provides five choices:

(1) If you RARELY or SELDOM do what is described in the statement, circle the number one (1).
(2) If you do what is described ONCE IN A WHILE, circle the number two (2).
(3) If you SOMETIMES do what is described, circle the number three (3).
(4) If you do what is described FAIRLY OFTEN, circle the number four (4).
(5) If you do what is described VERY FREQUENTLY or ALMOST ALWAYS, circle the number five (5).

Please respond to every statement.

In selecting the response, be realistic about the extent to which you *actually* engage in the behavior. Do *not* answer in terms of how you would like to see yourself or in terms of what you should be doing. Answer in terms of how you *typically* behave. The usefulness of the feedback from this inventory will depend on how honest you are with yourself about how frequently you actually engage in each of these behaviors.

For example, the first statement is "I look for opportunities that challenge my skills and abilities." If you believe you do this "once in a while," circle the number 2. If you believe you look for challenging opportunities "fairly often," circle the number 4.

When you have responded to all thirty statements, please turn to the response sheet on the back page and transfer your responses as instructed. Thank you.

STUDENT LEADERSHIP PRACTICES INVENTORY-SELF

How frequently do you typically engage in the following behaviors and actions?
Circle the number that applies to each statement.

1 **SELDOM OR RARELY**	· 2 **ONCE IN A WHILE**	3 **SOMETIMES**	4 **FAIRLY OFTEN**		5 **VERY FREQUENTLY**		

1. I look for opportunities that challenge my skills and abilities.	1	2	3	4	5
2. I describe to others in our organization what we should be capable of accomplishing.	1	2	3	4	5
3. I include others in planning the activities and programs of our organization.	1	2	3	4	5
4. I share my beliefs about how things can be run most effectively within our organization.	1	2	3	4	5
5. I encourage others as they work on activities and programs in our organization.	1	2	3	4	5
6. I keep current on events and activities that might affect our organization.	1	2	3	4	5
7. I look ahead and communicate about what I believe will affect us in the future.	1	2	3	4	5
8. I treat others with dignity and respect.	1	2	3	4	5
9. I break our organization's projects down into manageable steps.	1	2	3	4	5
10. I make sure that people in our organization are recognized for their contributions.	1	2	3	4	5
11. I take initiative in experimenting with the way we do things in our organization.	1	2	3	4	5
12. I am upbeat and positive when talking about what our organization is doing.	1	2	3	4	5
13. I support the decisions that other people in our organization make on their own.	1	2	3	4	5
14. I set a personal example of what I expect from other people.	1	2	3	4	5
15. I praise people for a job well done.	1	2	3	4	5

1 SELDOM OR RARELY	2 ONCE IN A WHILE	3 SOMETIMES	4 FAIRLY OFTEN	5 VERY FREQUENTLY

16. I look for ways to improve whatever project or task I am involved in.
    1   2   3   4   5

17. I talk with others about how their own interests can be met by working toward a common goal.
    1   2   3   4   5

18. I foster cooperative rather than competitive relationships among people I work with.
    1   2   3   4   5

19. I talk about the values and principles that guide my actions.
    1   2   3   4   5

20. I give people in our organization support and express appreciation for their contributions.
    1   2   3   4   5

21. I ask, "What can we learn from this experience?" when things do not go as we expected.
    1   2   3   4   5

22. I speak with conviction about the higher purpose and meaning of what we are doing.
    1   2   3   4   5

23. I give others a great deal of freedom and choice in deciding how to do their work.
    1   2   3   4   5

24. I follow through on the promises and commitments I make in this organization.
    1   2   3   4   5

25. I find ways for us to celebrate our accomplishments publicly.
    1   2   3   4   5

26. I let others experiment and take risks even when outcomes are uncertain.
    1   2   3   4   5

27. I show my enthusiasm and excitement about what our organization is doing.
    1   2   3   4   5

28. I provide opportunities for others to take on leadership responsibilities.
    1   2   3   4   5

29. I make sure that we set goals and make specific plans for the projects we undertake.
    1   2   3   4   5

30. I make it a point to tell others about the good work done by our organization.
    1   2   3   4   5

APPENDIX I: KOUZES POSNER (LPI) APPROVAL LETTER

KOUZES POSNER INTERNATIONAL

15419 Banyan Lane
Monte Sereno, California 95030 USA
FAX: (408) 354-9170

March 14, 2007

Ms. Chanda Torres
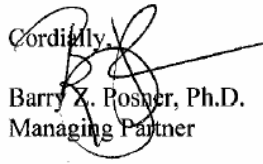693 St. Johns Court
Winter Park, Florida 32792

Dear Chanda:

Thank you for your request to use the Leadership Practices Inventory (LPI) in your dissertation. We are willing to allow you to reproduce the instrument as outlined in your request, at no charge, with the following understandings:

(1) That the LPI is used only for research purposes and is not sold or used in conjunction with any compensated management development activities;

(2) That copyright of the LPI, or any derivation of the instrument, is retained by the authors, and that the following copyright statement is included on all copies of the instrument: "Copyright © 2003 James M. Kouzes and Barry Z. Posner. All rights reserved. Used with permission.";

(3) That one (1) **electronic** copy of your dissertation and one (1) copy of **all** papers, reports, articles, and the like which make use of the LPI data be sent **promptly** to our attention; and,

(4) That you agree to allow us to include an abstract of your study and any other published papers utilizing the LPI on our various websites.
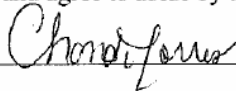
If the terms outlined above are acceptable, would you indicate so by signing one (1) copy of this letter and returning it to us. Best wishes for every success with your research project.

Cordially,

Barry X. Posner, Ph.D.
Managing Partner

I understand and agree to abide by these conditions:

(Signed)_____Date: 3/20/07

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APPENDIX J: INSTITUTIONAL REVIEW BOARD APPROVAL (UCF)

University of
**Central
Florida**

Notice of Expedited Initial Review and Approval

From :   **UCF Institutional Review Board
FWA00000351, Exp. 5/07/10, IRB00001138**

To   :   **Jeffrey S. Kaplan**

Date :   **July 27, 2007**

IRB Number: SBE-07-05077

Study Title: **Leadership Behaviors Gained Through Involvement in a Student Leader Program**

Dear Researcher:

Your research protocol noted above was approved by **expedited** review by the UCF IRB Vice-chair on 7/24/2007. **The expiration date is 7/23/2008.** Your study was determined to be minimal risk for human subjects and expeditable per federal regulations, 45 CFR 46.110. The category for which this study qualifies as expeditable research is as follows:

> 7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

A **waiver of documentation of consent** has been approved for all subjects. Participants do not have to sign a consent form, but the IRB requires that you give participants a copy of the IRB-approved consent form, letter, information sheet, or statement of voluntary consent at the top of the survey. All data must be retained in a locked file cabinet for a minimum of three years (six if HIPAA applies) past the completion of this research. Any links to the identification of participants should be maintained on a password-protected computer if electronic information is used. Additional requirements may be imposed by your funding agency, your department, or other entities. Access to data is limited to authorized individuals listed as key study personnel.

To continue this research beyond the expiration date, a Continuing Review Form must be submitted 2 – 4 weeks prior to the expiration date. Advise the IRB if you receive a subpoena for the release of this information, or if a breach of confidentiality occurs. Also report any unanticipated problems or serious adverse events (within 5 working days). Do not make changes to the protocol methodology or consent form before obtaining IRB approval. Changes can be submitted for IRB review using the Addendum/Modification Request Form. An Addendum/Modification Request Form **cannot** be used to extend the approval period of a study. All forms may be completed and submitted online at http://iris.research.ucf.edu .

Failure to provide a continuing review report could lead to study suspension, a loss of funding and/or publication possibilities, or reporting of noncompliance to sponsors or funding agencies. The IRB maintains the authority under 45 CFR 46.110(e) to observe or have a third party observe the consent process and the research.

On behalf of Tracy Dietz, Ph.D., UCF IRB Chair, this letter is signed by:

Signature applied by Janice Turchin on 07/27/2007 03:51:44 PM EDT

IRB Coordinator

APPENDIX K: INSTITUTIONAL REVIEW BOARD APPROVAL (VCC)

VALENCIA COMMUNITY COLLEGE
Human Research Protection (HRP) Institutional Review Board (IRB)

IRB Determination Form

Title of Research Protocol: ___Leadership Behaviors Gained as a Result of Involvement in a Community
College Student Leader Program___

Principal Investigator (PI): ___Chanda Torres___

Date Received by IRB Chair: ___06/27/07___

IRB Number: ___08-001___

Based on the IRB Protocol Initial Submission Form (or, as appropriate, the IRB Continuing Review/Termination Form or the IRB Addendum/Modification Form) submitted by the Principal Investigator and for the project identified above, the following determination has been made by the Valencia IRB:

☒ The research is exempt from IRB review. Exemption category: __2__

☐ The research is eligible for expedited review and has been approved.

☐ The research is eligible for expedited review but requires modifications and re-submission before approval can be given.

☐ The research is subject to full review and will be discussed at the next IRB meeting, currently scheduled for _____.
           (date)

☐ The research has been subjected to full review and has been approved.

☐ The research has been subjected to full review and has been disapproved.

Period of Approval: ___07/06/07___ to ___12/07/07___
(cannot be retroactive)

Exemption from Valencia IRB review does not exempt the PI or Co-PI from compliance with all applicable institutional, Federal, State, and local rules, regulations, policies, and procedures.

Although the IRB has determined that this application is exempt from IRB review, the Principal Investigator is encouraged to read, understand, and apply the attached Investigator Responsibilities document, which is required of Principal Investigators whose research protocols are approved under the Valencia IRB full or expedited review process.

If you have any remaining questions about Valencia's IRB process, contact the IRB Chair at irb@valenciacc.edu .

___Elizabeth J. Gombash___   ___07/05/07___
Signature of IRB Chair or Designated Representative   Date

C: IRB File, IRB Members, PI Supervisor/Administrator

1

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