Women's leadership development: a case study involving Iowa's community colleges and the Leadership Institute for a New Century

Glenda Kay Gallisath

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Women's leadership development:
A case study involving Iowa's community colleges and
The Leadership Institute for a New Century

by

Glenda Kay Gallisath

A Dissertation Submitted to the
Graduate Faculty in Partial Fulfillment of the
Requirements for the Degree of
DOCTOR OF PHILOSOPHY

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Iowa State University
Ames, Iowa
1995

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ABSTRACT

The purpose of the study was to describe the role of the Leadership Institute for a New Century (LINC) in leadership development for women and people of color. The case study of selected LINC stakeholders focused on leadership development, the enhancement of leadership skills, and the use of type theory in leadership development. Data sources used were: (1) the Satisfaction and Perception Survey completed by LINC participants; (2) personal semi-structured interviews of selected LINC stakeholders; and (3) the data base of type profiles for LINC participants, using the Myers-Briggs Type Indicator (MBTI). Methods of data analysis were descriptive statistics for the survey, qualitative methods for the interviews, and the Selection Ratio Type Table program for the MBTI profiles.

Findings of the study included: (a) identifiable ways that leadership skills of LINC participants have been developed or enhanced as a result of completing the program; (b) ways to define leaders and leadership; (c) evidence that LINC is preparing women and people of color to assume enhanced administrative leadership roles at community colleges; (d) identification of major issues facing community college leaders; (e) applications of type theory in leadership development programs; (f) perceptions of women's leadership styles; (g) barriers and challenges facing women leaders in Iowa's community colleges; and (h) roles the sponsoring institution can assume in supplementing and integrating the participants' LINC experience.
CHAPTER I. INTRODUCTION

Background

Community colleges play a significant role in providing educational opportunities for people of all ages, ethnic and racial backgrounds, and levels of academic ability in America. Public community college students make up the largest sector of higher education in the United States (American Association of Community Colleges & Association of Community Colleges Trustees, 1995-1996, p. 2). Nationally, approximately 1,100 community colleges enroll 5.7 million credit students and another five million non-credit students. Forty-four percent of the nation’s undergraduates and 49 percent of all first-time freshmen enroll in these colleges (American Association of Community Colleges & Association of Community Colleges Trustees, 1995-1996, p. 1).

Community colleges, often called "the people’s colleges," are dedicated to an open-door policy and service to many students, including minorities and women (American Association of Community and Junior Colleges, 1988, p. 5). Much of the growth at community colleges during the 1980’s can be attributed to the increased enrollment of women. In 1995, it was reported that women represent 58 percent of all community college enrollees. About forty-seven percent of all minority students enrolled in higher education attend community colleges (American Association of Community Colleges & Association of Community Colleges Trustees, 1995-1996, p. 2).
Even though community colleges are enrolling significant numbers of women and minority students, the administrative leadership at these institutions is not representative of the diversity in the student body. Currently, women comprise approximately 17 percent of chief executive officers in community colleges (American Association of Community Colleges, 1995) and the last time it was reported, 33 percent of the 17 percent women CEOs were women of color (American Association of Community Colleges, 1992, p. 4). However, community colleges are not alone in employing few talented women and minorities as CEOs. On a broader scale, only 12 percent of CEOs at regionally accredited two and four-year public and private postsecondary institutions are women. Of that number, 21 percent are members of religious orders and 69 percent are at institutions with enrollments under 3,000 students (American Council on Education, 1992, Table XIII).

Data regarding Iowa have shown that colleges lack diversity in their leadership. For example, there are no minority or women chief executive officers in any of the 15 community college districts (Iowa Department of Education, 1995). According to the 1995 Community College Directory, only 26 women serve Iowa’s community colleges as a Vice President, Chief Officer, Dean, including associate and assistant Deans, or Executive Director. One woman recently served as a campus president in a multi-campus setting and reported to the male Chancellor of that community college district (Iowa Department of Education, 1995). She has recently left the state for another presidency and now Iowa does not have any women serving as a president.
Leadership development programs for preparing higher education personnel to assume greater leadership roles on college and university campuses have been developed in recent years. In the 1960s, the Kellogg Foundation engineered a systematic leadership development program for community college leadership (Elsner, 1984, p. 38). In 1965, the American Council on Education Fellows Program (AFP) was created, by way of a Ford Foundation grant, to identify and prepare leaders for colleges and universities (Chibucos & Green, 1989, p. 23). Since then, additional national and regional leadership development programs have emerged with a few focusing specifically on women and minorities. The majority of these programs have focused on the leadership preparation for a college presidency (Vaughan 1986; Fisher, 1984). In contrast, the Commission on the Future of Community Colleges, (1988, p. 43), states that leaders are needed at all levels of the organization and that leadership development should be stressed, not only for presidents, but also among faculty and mid-level administrators as well.

In response to these issues and challenges, in 1989 the Leadership Institute for a New Century (LINC) was created as a leadership development program designed for women and ethnic minorities in Iowa’s community colleges. LINC was developed by Iowa State University, the Iowa Association of Community College Trustees, and the Iowa Association of Community College Presidents in response to paucity of women leaders in Iowa’s community college.
Need for the Study

Historically, people have been selected for administrative positions in community college leadership largely due to their intellectual and cognitive prowess and longevity in the institution (Roe, 1992, p. 93). This approach to leadership selection is no longer appropriate if community colleges are to be successful in meeting the challenges and opportunities of the twenty-first century. Without directed and individualized leadership training, it is questionable whether future community college leaders will have the skills to influence, shape, and embed values, attitudes, and behaviors in their followers (Roe, 1992, p. 92).

Early research on leadership proposed that good leaders were born, not made; either you had it or you didn’t (Rouche, Baker, & Rose, 1989, p. 4). Today, the majority believes, as Plato and Socrates did, that leadership can be learned and that the vehicle for that process emanates from education (Rouche et al., 1989, p. 3). Leadership style is a developmental process (LeCroy, 1984; Rouche, Baker, & Rose, 1989) and participation in planned leadership programs will help identify and develop those individuals with potential (Rouche et al., 1989, p.4).

From the 1960’s until the 1980’s a shift in leadership focus occurred for the community colleges. Leadership practices changed dramatically as the president moved from an "errand boy" with routine duties to the "commander" strategy for developing new comprehensive community colleges. Along with the "commander" approach, "great man" images and stereotypes were prevalent. Even though women and minorities were becoming the majority on campus, community college leadership
has typically been about the white male who is expected to be competitive, independent, tough, and uses authority and power to win (Twombly & Amey, 1991).

Community colleges have opened the doors of higher education for many millions of female and minority students; female students outnumber males on most community college campuses, and on a number of campuses, students of color outnumber white students (Vaughan, 1989b, p. 65). Has the door opened as wide for women and people of color to move into community college leadership positions?

The 1988 Report of the Commission on the Future of Community Colleges stated:

Looking to the year 2000, we recommend that community colleges collaborate with universities to develop creative programs aimed at preparing a new generation of community college presidents. A special effort should be made to recruit leaders from among minority and female populations. (p. 42)

In response to this call and the interests of Iowa community college presidents, the Leadership Institute for a New Century (LINC), a leadership development program designed for women and ethnic minorities at Iowa’s community colleges, was created in 1989. Since inception, there have been 96 participants in the program representing all of the 15 community colleges in Iowa. According to the LINC program brochure (Appendix B), the goal and objectives of the program are as follows.

Goal: The purpose of the Leadership Institute for a New Century (LINC) is to provide academic and internship opportunities to encourage the advancement of women and people of color into administrative leadership roles at Iowa community colleges.

Objectives: LINC is designed to encourage and prepare women and people of color for leadership roles. Networking opportunities are provided to
increase diversity of participation in the leadership of Iowa community colleges into the next century. Emphasis is placed on enhancing abilities to:

* Communicate and analyze state and local governance and funding.

* Examine the interaction of the president with the constellation of internal and external constituencies of the community college.

* Understand the theoretical and practical dynamics of community colleges as organizations.

* Improve management and communication skills.

A case study of selected LINC stakeholders is needed to determine the extent it is preparing participants for leadership opportunities, the ways that participants’ leadership skills have been enhanced, and how type theory contributes to leadership development and program planning.

Statement of the Problem

A descriptive study designed to collect reliable data about the first three years of the LINC program was conducted by Vianna Kelly in 1992. A survey was mailed to all 48 LINC participants to elicit descriptive data on the program and its participants, information on the extent that LINC was meeting intended outcomes, and the extent to which participants’ educational needs were met. A 95.8 percent response rate was achieved in this study and the following demographics were reported: all participants were female and three were persons of color (two African-American, one Native American), 80% were married and 87% had children. When they were participating in the program, 15% were under 35 years of age, 24% were 36 - 49 years of age, 33% were 41 - 45 years of age, and 28% were over 45 years of
age. At the time of LINC participation, 24% had completed a bachelor's degree, 56% a master's degree, 10% a doctoral degree, 10% had no degree, but were enrolled in an associate's program. Fifty percent were enrolled in a graduate program while participating in LINC. (Kelly, 1992)

Given the Kelly study (1992) and the continuation of the LINC program, there is a need to study the LINC program and at the same time contribute to the knowledge base regarding leadership, and address the role and contributions of intensive leadership programs in developing administrative leaders at community colleges. The research methodology used for this study will include formally surveying all participants of the six-year cohort; interviewing selected major stakeholders of the LINC program regarding their perceptions of LINC; and preparing and presenting an MBTI profile of all LINC participants. The major stakeholders include the women and ethnic minority participants, the community college presidents who support their employees' participation in LINC, and the LINC staff who have designed and delivered the program. Specifically, the purpose of this study will be to elicit perceptions and insights on how participants' leadership skills are enhanced; investigate how LINC is preparing women and people of color for administrative leadership roles; and describe the role of the sponsoring institutions in the LINC program. Furthermore, the use of the MBTI and its contributions of type theory to leadership development merits additional analysis. In the Kelly study (1992) and through formal and informal participant feedback provided to LINC staff annually, the participants consistently identified the Myers-Briggs Type Indicator
(MBTI) as one of the most beneficial and meaningful components of the program. Though the focus is on the descriptions, experiences, and insights of individuals involved in the development of emerging leaders, the MBTI profile of LINC participants is included for comparison with other leadership development programs. A demographic profile of the six-year cohort will also be presented for enhanced understanding of the LINC program.

Purpose of the Study

Descriptive data will be presented regarding the role of the Leadership Institute for a New Century (LINC) in leadership development of women and people of color. Valuable information and recommendations will also be shared with LINC program planners and sponsors. In six years, there have been 96 LINC participants. These participants have been supported by their respective presidents from the 15 Iowa community colleges. Four permanent staff members have designed, coordinated, and taught the program. In the Kelly study (1992), formal data were collected from LINC participants. The study was more programmatic in nature, focusing on the overall participant satisfaction with LINC as an educational program.

This case study of selected stakeholders will specifically focus on leadership development, the enhancement of leadership skills, and the use of type theory in leadership development. As a descriptive study, the elements of leadership theory are presented in Chapter II but not one specific theory is used in the context of leadership development and the LINC program. The Myers-Briggs Type Indicator (MBTI) is included as a tool for analyzing leadership development and leadership styles.
according to type theory. The experiences and perceptions of those directly involved in a leadership development program are included for studying the development and enhancement of leadership skills. It should be noted that LINC has been an evolving program and not every participant has been exposed to the exact same program content, delivery methods, and activities. This should be considered when comparing the development of leadership skills between groups of participants.

Research Questions

The following research questions have developed from reviewing the literature and examining the LINC program. They also reflect the personal interests of the researcher. These questions focus on the descriptions, experiences, and insights of leadership development by the major stakeholders of the LINC program. While a demographic profile and current program feedback is valued by LINC staff and sponsors, the purpose of this study is to investigate the ways that leadership development occurs by participating in an intensive program, such as LINC. The specific questions are:

1. In what identifiable ways have the leadership skills of LINC participants been developed or enhanced as a result of participating in the program?

2. Is the LINC program preparing women and people of color to assume enhanced administrative leadership roles at community colleges?

3. What is the role of type theory in leadership development programs?

4. What role can the sponsoring institution assume in supplementing and integrating the participant’s LINC experience?
5. What are the personal and professional career characteristics of LINC participants?

Data Sources

The primary sources of data are:

(A) A data base compiled from a Satisfaction and Perception Survey (SPS) completed by 85 of 96 LINC participants

(B) Nine personal semi-structured interviews completed with the following respondents:

(1) Three LINC participants, one from each of the three leadership levels defined below according to the September 1994 roster of LINC participants with their current addresses and titles.

   Level 1: Upper-level administrative positions including Vice-President, Chief Officer, Dean, Associate Dean, Assistant Dean, Executive Director

   Level 2: Mid-level administrative positions including Director, Associate Director, Assistant Director, Manager, Supervisor, Division Chair, Department Head or Chair, Librarian, Registrar, Associate Registrar, Assistant Registrar, Controller

   Level 3: Entry level administrative positions and nonadministrative positions including Coordinator, Consultant, Specialist, Instructor, Counselor, Senior Advisor, Advisor, Office Manager, Board Secretary

(2) Three community college presidents; selected from only those presidents who have been in their position for a minimum of four years and have sent at least four employees to participate in LINC.

(3) The three permanent members of the LINC staff; the program director, program co-director, and a faculty member

(C) A data base of the psychological type profiles recorded for all participants who completed the Myers-Briggs Type Indicator (Form F) as part of their LINC participation
Secondary sources included information gathered from observing the final session of the 1994-95 LINC program, informal interviews conducted with the three LINC staff members, documents from past LINC programs, and LINC marketing and recruitment materials.

Definitions

This study will rely on the following definitions:

LINC: The Leadership Institute for a New Century. A leadership development program for women and people of color employed at Iowa’s community colleges; founded in 1989 by a consortium of Iowa State University, the Iowa Association of Community College Trustees, and the Iowa Association of Community College Presidents. Appendix B contains a complete description of the program and the recruitment brochure.

Iowa Community Colleges: Fifteen community college districts exist in the state of Iowa. It is the mission of Iowa Community Colleges to offer quality programs, courses, and services to meet the different community interests, student abilities, and personal objectives of citizens of all ages and levels of education for the purpose of improving the quality of life, the economic conditions, and the public welfare of the state (Iowa Association of Community College Trustees, 1995). These 15 comprehensive community colleges, nine of which are multi-campus institutions, offer 28 major campuses to serve citizens in all 99 counties of the state. The following statistics demonstrate the service to Iowa residents by its community colleges (IACCT & IACCP, 1995).
* 94.5% of community college students enrolled in the fall of 1994 were Iowa residents.

* 82.5% of community college alumni with known addresses were Iowa residents, as of the fall of 1993.

* 20,056 community college students were enrolled in vocational/technical programs and 36,078 in arts/sciences programs in the fall of 1994.

* 880 vocational/technical career preparatory programs are offered by Iowa’s 15 community college districts.

* 656 is the number of cities and towns in which Iowa’s community colleges offered credit and/or noncredit classes during FY’94.

LINC class: LINC 1, LINC 2, LINC 3, LINC 4, LINC 5, and LINC 6: Six groups of LINC participants have completed the nine-month program and each group is called a class. Participants are referred to by class according to the academic year of LINC participation.

LINC 1: AY ’89 - ’90
LINC 2: AY ’90 - ’91
LINC 3: AY ’91 - ’92
LINC 4: AY ’92 - ’93
LINC 5: AY ’93 - ’94
LINC 6: AY ’94 - ’95
Leadership Level: LINC participants are grouped by the level of leadership position held in the community college according to the job titles reported as of September, 1994.

Level 1: Upper-level administrative positions including Vice President, Chief Officer, Dean, Associate Dean, Assistant Dean, Executive Director

Level 2: Mid-level administrative positions including Director, Associate Director, Assistant Director, Manager, Supervisor, Division Chair, Department Chair or Head, Librarian, Registrar, Associate Registrar, Assistant Registrar, Controller

Level 3: Entry level administrative positions and nonadministrative positions including Coordinator, Consultant, Specialist, Instructor, Counselor, Senior Advisor, Advisor, Office Manager, Board Secretary

IACCT: The Iowa Association of Community College Trustees. It is a voluntary organization of the trustees from the community colleges and is financially supported by the dues from each institution. Their mission is to provide leadership in developing, strengthening, and coordinating the boards of trustees' efforts to promote educational interests in Iowa and to provide a forum for addressing issues affecting access, excellence, and effectiveness of the public community colleges of Iowa (Iowa Association of Community College Trustees, 1995).

IACCP: The Iowa Association of Community College Presidents. Currently 14 of the 15 Iowa community college presidents are members. This association of chief executive officers (CEOs) meet on a monthly basis to share information and resolve state issues regarding community colleges.
Community College Presidents: The community college presidents are the CEOs from those institutions who have had women or people of color participate in the LINC program since its inception in 1989. All 15 community colleges in Iowa have had employees participate in LINC. All of these presidents are male and their respective years of service range from less than one year to 21 years in office (Iowa Association of Community College Presidents, 1995).

LINC Staff: The staff of The Leadership Institute for a New Century (LINC). Since the program began, LINC has had four permanent staff members; a Director, Co-Director and two faculty members. The Director and Co-Director work together as a team in designing and facilitating the program. They also share the administrative duties of managing the budget, grading assignments, awarding graduate college credit to participants, visits to the participants’ campuses, and maintain positive working relationships with the community college presidents and trustees. The LINC faculty primarily serve as trainers/presenters in the program in addition to visiting the participants’ campuses, and network with community college personnel, presidents, and trustees (Author, Staff Interviews, May 3 & 4, 1995). Iowa State graduate research assistants have assisted the LINC staff but have not been a permanent, on-going part of the program since its inception.

SPS: The Satisfaction and Perception Survey (SPS) was administered to all 96 participants following the sixth year of conducting the LINC program. This survey instrument was taken from V. Kelly’s 1992 thesis on LINC. Minor modifications, as recommended by Kelly, were made to the instrument to gather more information
about the employment levels of the participants during and after LINC participation (Kelly, 1992, p. 91).

**Myers-Briggs Type Indicator (Form F):** The Myers-Briggs Type Indicator (MBTI) was developed for an understandable application of Jung’s (1921/1971) theory of psychological type (Myers & McCaulley, 1985). The MBTI is primarily concerned with the valuable differences in people concerning where they like to focus their attention, the way they take in information, and the decisions and lifestyle they adopt (Myers, 1987). The MBTI has four separate indices, listed below, and each index reflects one of the four basic preferences which direct the use of perception and judgement. The preferences affect not only what people attend to in any given situation, but also how they draw conclusions about what they perceive (Myers & McCaulley, 1985, p. 2).

The MBTI does not have any right or wrong answers and the responses to each item are self-reported. Form F of the MBTI contains 166 items, in the form of word pairs and phrase questions, with forced choices between the poles of the four indices. Form F also contains unscored research items. Sixteen possible combinations called "types" are designated by the four letters of the preferences, e.g., ESTJ, INFP (Myers & McCaulley, 1985).

Each LINC participant has the opportunity to complete the MBTI at the beginning of the program.

The Four Index Preferences of the MBTI:

**EI**  Extroversion or Introversion
SN Sensing perception or Intuitive perception

TF Thinking judgement or Feeling judgement

JP Judgement or Perception

(Myers & McCaulley, 1985, p. 2)

**Type Theory:** Type theory refers to Jung’s theory as interpreted by Isabel Myers and Katharine Briggs in the Myers-Briggs Type Indicator (MBTI). The theory underlying the MBTI enables us to expect specific differences in specific people and to cope with those different behaviors of individuals more constructively. What appears to be unexplainable, chance behavior is actually the logical result of a few basic observable preferences (Myers & McCaulley, 1985, p. 11).

**Leadership:** Leadership is both a *process* and a *property* of an individual. The process of leadership is the use of noncoercive influence to direct and coordinate the activities of the member of an organized group toward the accomplishment of group objectives. As a property, leadership is the set of qualities or characteristics attributed to those who are perceived to successfully employ such influence (Jago, 1984, p. 2).

**Leader:** A person who provides leadership.

**Leadership Skills:** The competencies and abilities needed to perform a leadership role.

**Leadership Style:** An underlying attitude, manner, or technique for how an individual conducts him/herself as a leader.
Leadership Development: An evolving process whereby an individual grows personally and professionally as they formally and informally learn how to enhance their leadership skills and perform leadership roles.

Limitations of the Study

There are several limitations to this study:

1. LINC participants have had varying degrees of leadership opportunities since completing the program. As a result, it is difficult to accurately chart their leadership advancement because of factors including the availability of leadership positions and the extent of being personally place-bound.

2. The grouping of the participants into the three leadership levels was based on the titles reported in September, 1994. Changes in titles may have occurred since that time. The definitions of these titles are not known. Title inflation and different interpretations of titles may also affect the accuracy of these leadership levels. For example, at some institutions a director may possess more direct authority and responsibility for college operations than an associate dean. It is not known if these titles accurately reflect the responsibilities and leadership skills required for the position.

3. The three community college presidents interviewed are only those who have been president for at least four years and have had a minimum of four employees participate in LINC. The relationship between these two criteria and their actual support for improved leadership diversity on their campus cannot be determined from this study.
4. All of the Iowa community college presidents are white males and that may influence their perceptions of this leadership development program designed for women and people of color.

5. The career aspirations and leadership skills of LINC participants were not recorded when they began the program. This study cannot be used to measure a change in career aspirations and leadership skills.

6. The six year cohort of LINC has had only three people of color as participants. However, this is comparable to the fact that only four percent of the state of Iowa’s total population are people of color. (United States Department of Commerce, 1991)

7. This study does not attempt to establish a cause-and-effect relationship between leadership advancement and LINC. This study only focuses on ways that LINC has influenced the leadership development of its participants. Many other personal and professional factors influence leadership advancement.

8. This study does not reflect the impact that the specific membership of each LINC class may have on the leadership development and enhancement of individual participants. Class membership and its respective leadership expertise may have an impact on a participant’s LINC experience.

9. Ninety-six LINC participants were asked to complete the Satisfaction and Perception Survey (SPS); however a larger sample is needed for some statistical analyses.
10. The perceptions and opinions of the direct supervisors of LINC participants were not included in this study. Additional information from this source would also assist in describing the participants’ leadership development.

11. Personnel at each of the Iowa community colleges were not consistently reported in the 1995 Iowa Community College Directory. Some institutions reported only the names of their top administrators while others also cited personnel in other supervisory positions. Therefore, the number of women currently occupying administrative leadership positions at Iowa community colleges may not be accurate.

12. The content of the LINC program has not remained constant throughout the past six years. LINC has been an evolving program and not every participant has been exposed to the exact same program content, delivery methods, and activities. Some of the original program features have been modified or deleted to better serve the needs and interests of program participants. This should be considered when comparing the development of leadership skills between groups of participants.

Assumptions

Data presented will assumably be valuable to program planners and sponsors, especially for the leadership development and enhancement of leadership skills of future LINC participants. The Satisfaction Perception Survey (SPS) and interviews of selected LINC participants, community college presidents, and LINC staff are assumed to be credible and trustworthy data collection methods. Transcripts from
these interviews are assumed accurate for reporting and interpretations. The validity and reliability of the Myers-Briggs Type Indicator (MBTI) for studying type theory is presented in Chapter III. Methodology. The self-reported MBTI profiles of LINC participants are assumed credible and trustworthy for analysis using the Selection Ratio Type Table (SRTT) computer software program. Additional details on SRTT analysis are presented in Chapter III Methodology.

Significance of the Study

Traditional views of leadership will be enhanced by studying the leadership development of women and people of color; and examining the leadership skills and development at all administrative levels of a community college. By analyzing the leadership development process and the enhancement of leadership skills, the ways that women and people of color emerge as leaders may be found. Investigating leadership skills development for all administrative levels of a community college may encourage researchers to explore leadership skills and behaviors for campus leaders other than the president.

Exploring the use of type theory for leadership development will benefit practitioners who design and/or deliver leadership training programs. Specific learning activities may be suggested that demonstrate how the use of type theory, especially the increased awareness of self, contributes to leadership styles and managerial processes. The potential relationship between type theory and gender issues in leadership may enlighten organizations on the possible similarities and differences between male and female emerging leaders. The use of type theory for the
development of community college leaders may inspire additional research on using type for leadership development in other professional settings.

Program staff and sponsors may find the information from LINC stakeholders instrumental in describing the development of emerging leaders at Iowa’s community colleges. Since LINC is the only program of its kind in the state, it is crucial to maintain program quality and credibility for serving the needs of participants and the sponsoring community colleges. Research on the LINC program and its role in leadership development will raise the awareness that Iowa community colleges continue to lack diversity in leadership. Feedback will be provided to program planners for designing future sessions of LINC and other similar leadership development programs.

Dissertation Overview

This dissertation is divided into five chapters. Chapter I is the introduction to the study and chapter II is a review of the literature on leadership in academe, community college leadership, leadership development, leadership styles and issues of women, and the use of type theory in leadership. Research methods are described in chapter III; details are provided on sample identification, the survey instrument, interview questions, and type profiles, data collection, and data analysis. Research findings are presented in chapter IV; the results of the participant survey, the respondents’ perceptions of LINC and leadership development are summarized from the interviews, and the MBTI profiles of LINC participants are presented and compared to national samples. Chapter V presents a discussion of the findings in
relation to the research questions, provides conclusions, and offers recommendations for practical application and further research.
CHAPTER II. REVIEW OF THE LITERATURE

Introduction

This chapter explores the past and current research regarding leadership theories and models, including those in a college or university setting. The second section is devoted to the needs and issues of community college leadership. The rationale, processes and programs of leadership development are highlighted followed by an overview of the styles and issues attributed to women leaders. The final section of the review is the use of type theory in studying leadership and gender differences.

Defining Leaders and Leadership

Defining Administrative Leadership

Leadership is a word that continues to be analyzed both as a noun and a verb. A somewhat ambiguous topic, most will agree that leadership is important for moving forward to accomplish large and small tasks, both formally and informally in any organizational setting. The characteristics, behaviors, and situational factors of leaders continue to be studied in hopes of defining the somewhat mysterious and intriguing role of a leader (Darling & Brownlee, 1982). According to Kuh and Whitt (1988), humans, seeking understanding in the midst of ambiguity, develop shared meanings to resolve uncertainty, make actions seem reasonable, and create satisfying explanations of causes. The study of leadership can be particularly challenging in academe. Birnbaum (1989, pp. 125-126) states that studying leadership in colleges and universities is even more difficult than in many other settings because of dual control
systems, conflicts between professional and administrative authority, unclear goals, and other properties unique to normative, professional organizations.

Many attempts have been made to define, describe, and explain leaders and leadership success. There are probably as many different definitions offered as there are researchers engaged in the study of leadership (Bensimon, 1994, p. 30; Hoy & Miskel, 1987, p. 270). However, most definitions of leaders and the leadership process make reference to the relationship between the leader and followers and the activities or accomplishments being pursued. Hersey and Blanchard (1977) define leadership as the process of influencing the activities of an individual or a group in efforts toward goal achievement in a given situation. Jago (1984) proposes a comprehensive definition that incorporates aspects from several of his predecessors:

Leadership is both a *process* and a *property* of the individual. The process of leadership is the use of noncoercive influence to direct and coordinate the activities of the members of an organized group toward the accomplishment of group objectives. As a property, leadership is the set of qualities or characteristics attributed to those who are perceived to successfully employ such influence. (p. 2)

In recent years, definitions of leadership continue to emphasize the relationship between the leader and followers. Gardner (1990) elaborated on the human element by mentioning the team approach. He defines leadership as the process of persuasion or example by which an individual (or leadership team) induces a group to pursue objectives held by the leader or shared by the leader and his or her followers (p. 1). More details of leadership relationships will be presented in the overview of theories and models.
In defining leadership, it is necessary to make some distinctions between leadership and some related concepts. Leadership should not be confused with status, power, and official authority. According to Gardner (1990, p. 2-3), leadership positions often carry a certain amount of status and leaders always have some measure of power or capacity to persuade. However, neither of these guarantee leadership behavior and outcomes. Official authority is legitimized by the power associated with a specific position. Leadership is different because of major efforts and energy it requires beyond the usual managerial functions of planning, organizing, and controlling processes, resources, and people (Gardner, 1990, pp. 2-4).

**Characteristics and Personality Traits**

Early research on leadership sought to identify the unique characteristics and personality traits that separated leaders from followers (Roueche, Baker & Rose, 1989; Cohen & Brawer, 1994). Though the popularity of this approach has declined, it is still quite prevalent in the literature on leadership, including studies on higher education leadership (Robbins, 1979; Kerr & Gade, 1986; Vaughan, 1989b; Kapolowitz, 1986). In most cases, the characteristics and traits needed for effective leadership are presented in the context of the college/university president (Fisher, 1984; Birnbaum, 1989; Rouche et al., 1989; Vaughan, 1989b; Birnbaum, 1992). Examples of desired leadership traits and characteristics include intelligence, extroversion, self-assurance, empathy (Darling & Brownlee, 1982, p. 168); and confidence, courage, fairness, respect for the opinions of others, and sensitivity (Bensimon, Neumann, & Birnbaum, 1989, p. 36). Kaplowitz (1986) adds humor,
integrity, persistence, hard work, vision, and compassion to the list. Vaughan (1989b, p. 6) describes community college presidents as competitive, innovative, fast-moving, and flexible. There are still believers in the personality and traits approach who use it for selecting candidates for leadership positions. Deciding if these characteristics and traits are present or absent in an individual is a highly subjective process (Bensimon et al., 1989). This approach is also very limited because it ignores relationships with others and situational factors (Darling & Brownlee, 1982, p. 168). Results of studies using this approach are usually inconclusive and often have conflicting results (Bensimon et al., 1989; Roueche et al., 1989; Birnbaum, 1992).

**Leadership Behaviors and Skills**

The study of leadership includes how leaders behave or what specific actions they take and the skills needed for how they do various tasks. The behavioral approach also includes studying a leader’s approach to task and orientation to people (Blake & Mouton, 1964; Blake, Mouton, & Williams, 1981). One of the earliest studies on leadership skills, conducted by Mintzberg (1973), named these eight prime skills: (Bennis, 1989, p. 159)

- **Peer skills** - the ability to establish and maintain a network of contacts with equals.
- **Leadership skills** - the ability to deal with subordinates and all the complications that come with power, authority and dependence.
- **Conflict resolution skills** - the ability to mediate conflict, to handle disturbances under psychological stress.
- **Information-processing skills** - the ability to build networks, extract and validate information, and disseminate information effectively.
Skills in unstructured decision making - the ability to find problems and solutions when alternatives, information, and objectives are ambiguous.

Resource allocation skills - the ability to decide among alternative uses of time and other scarce organizational resources.

Entrepreneurial skills - the ability to take sensible risks and implement innovations.

Skills of introspection - the ability to understand the position of a leader and his or her impact on the organization.

Using Mintzberg's framework (1973), Dill (1984, p. 91) reviewed the literature on administrative behaviors in higher education and reported these behaviors of senior administrators in higher education:

* Perform a great variety of work at a continuous pace;
* Carry out activities characterized by variety, fragmentation, and brevity;
* Prefer issues that are current, specific, and ad hoc;
* Demonstrate preference for verbal media (telephone calls, meetings, brief discussions);
* Develop informal information systems.

Most behavioral researchers suggest specific actions or priorities for achieving leadership success. Hesburgh (1988, p. 8) suggests that a leader has:

* a clear and challenging vision;
* the ability to motivate others;
* magic with words;
* courage to stay on course;
* persistence not to lose hope or cease to inspire it;
* humility to inspire what glory there is in success.

Kouzes and Posner (1987, p. 8-9) suggest that leaders challenge the process, inspire a shared vision, enable others to act, model the way, and encourage followers to carry on. Another example of the behavioral approach is Whetten and Cameron’s
(1985) study which recommends these eight practices for effective administrative leadership in any type of higher education institution:

1. Place equal emphasis on process and outcomes.
2. Possess a low fear of failure - be willing to take risks.
3. Nurture the support of strategic constituencies - build coalitions.
4. Don’t succumb to the tyranny of "legitimate demands".
5. Leave a distinct imprint on the institution.
6. Error in favor of overcommunication, especially during times of flux.
7. Respect the power of organizational cultures.
8. Preserve and highlight sources of opportunity at an institution - at any cost.

**Situational and Contingency Approaches**

Predicting leadership effectiveness is more complex than isolating selected personality traits or recommending specific behaviors and styles. Leadership performance in an academic institution also depends largely on the situation. Not only are leaders responding to task, they are reacting to other elements such as the organizational structure, the culture of the environment, rules and regulations, resources, and follower sentiments (Rouche et al., 1989, p. 20). It suggests the leader be flexible enough to adapt to differences among faculty members, departments and collegiate units (Darling & Brownlee, 1982, p. 170). Bolman and Deal (1991) describe how different organizational frames provide conceptual maps for leaders to understand the unique situations and priorities of an organization. Structural, human resource, political, and symbolic frames provide interpretations of different approaches to organizational processes such as planning, communication, motivation, and decision making (Bolman & Deal, 1991, p. 323).
The situational perspective which later evolved into the contingency theory, purposes that an effective leader must cause the internal functioning of the college to be consistent with the demands of the college mission, technology or external environment, and to meet the needs of its various groups and members (Roueche et al., 1989, p. 21.) Common to this approach is that instead of searching for one best way to lead under all conditions, one should examine the goals in relationship to the needs of its particular members and the impact of external pressures (Lorsch & Lawrence, 1970).

The analysis of leadership styles is included in contingency theories. Fiedler’s work (1967) carefully distinguished between style and behavior; behavior differs from situation to situation; style is an underlying and constant attitude towards people which motivates behavior (Roueche et al., 1989, p. 21). James (1985, p. 60) proposes that a leadership style evolves out of one’s approach to man, work, truth, and community. Guskin and Bassis (1985) studied the behaviors of leaders and presented three leadership styles for higher education administration: labeled the hero, mediator, and team leader.

*Hero Style* The hero style is when people trust the leader to solve problems, fight off threats in the environment, and use power and authority to make the majority of the decisions. While this style sets a clear direction for the institution it often reduces risk taking, creativity, and entrepreneurial spirit at all levels of the organization. It often alienates faculty, causes ambiguity and uncertainty, reduces communication, and does not promote integrating activities (p. 19).
Mediator Style  The mediator style emphasizes negotiation and compromise between competing units, priorities emerge from history and tradition, integration mechanisms are weak, and the equilibrium between units is preserved (pp. 19-20). The team leader style is effective in facilitating creativity and innovation among highly educated and professional personnel. There is more concern for the process of decision making instead of only the product. The development of relationships between key decision makers is crucial.

Team Leader  The team leader encourages faculty, staff and administration to work together on establishing institutional priorities. This leadership style emphasizes broad participation and exercising influence rather than authority and control by a few (p. 20).

Power and Influence Theories

According to Bensimon, Neumann, and Birnbaum, (1989, p. 390) there are two types of power and influence leadership theories, those that view the process in terms of the influence or effects that leaders may have on their followers and those that consider leadership by mutual influence and reciprocal relationships between leaders and followers. Charismatic, transactional, and transformational theories are reviewed as examples.

Charismatic Leadership  Charisma often implies a magical and mysterious way of leading that is difficult to explain. Charismatic leaders use the power of persuasion to convince others to follow a course of action articulated by the leader. This type of leader enjoys high degrees of esteem, value, and popularity attributed by
others (Roe & Baker, 1991, p. 8). They give little attention to structure, routine, and established order, and instead rely on personality to motivate followers (Birnbaum, 1992, p. 31). The intent is to develop a loyal following and the organization is managed as political arenas (Whetten, 1984, pp. 38-40). With charismatic leadership, individuals learn to believe their effort "makes a difference" (Bennis & Nanus, 1985). Charismatic leadership maintains that academic leaders can cultivate this type of leadership by remaining distant or remote from constituents, by attending to their personal appearance and style, and by exhibiting self-confidence (Bensimon et al., 1989, p. 391). Practitioners and researchers have questioned the importance of this approach (Bensimon et al., 1989; Drucker, 1988; Whetten, 1984) because the distance between leaders and followers creates an image of the leader being separate, mysterious, and indispensable. This prohibits the building of coalitions and relationships which are crucial to leadership success in any setting.

Transactional Leadership Transactional leadership theory downplays the charismatic and directive styles by describing leaders as coordinators of ongoing activities (Bensimon et al., 1989, p. 392). Viewed as a two-way process between leaders and followers, transactional leadership emphasizes means, attempts to meet the needs of followers, and preserves the organizational culture as it exists. It depends on the exchange of desired goods and the relationship continues as long as the exchange is considered satisfactory by both the leader and follower (Burns, 1978; Birnbaum, 1992, p. 28).
Transformational Leadership  

While transactional leadership creates a managerial image, transformational leadership pertains to new levels of morality and motivation, a more wholistic approach. The original definition of transformational leadership (Burns, 1978) is a one-way view of the relationship between the leader and followers often fostered by a vision of new beliefs and goals. According to Nanus (1992, p. 8), a vision is a realistic, credible, attractive future for the organization. The right vision attracts commitment and energizes people, creates meaning in individual's lives, establishes a standard of excellence, and bridges the present and future (Nanus, 1992, pp. 16-17). All of these new ideas alter perceptions and attitudes, leading to changes in the roles of group members (Bensimon, 1994, p. 32). The transformational approach creates an image of extraordinary leaders who are bold and inspiring. Another popular belief has been that transformational leaders are concerned with "doing the right things" while transactional leaders or managers focus on "doing things right" (Bennis & Nanus, 1985; Cameron & Ulrich, 1986). As a result, it has become one of the most recurring themes when studying leadership in higher education. Scholars have questioned the application of transformational leadership to a college or university setting because of the many unique characteristics of an academic institution (Bensimon et al., 1989). Successful leaders have been found to use strategies of both the transactional and transformational approaches. Attention to both values and activities are needed by institutional leaders for influencing others and adjusting their styles to fit the situation (Bass, 1985; Roueche et al., 1989, p. 35; Birnbaum, 1992, p. 30).
Cultural and Symbolic Theories

This approach sees leadership less as a behavioral style or management technique and more as a cultural expression. A strong bond brings people together to work on behalf of the organization and as a result, an organizational culture emerges which details what is important and provides guidelines for governing behavior (Sergiovanni, 1984, p. 111). Cultural and symbolic theories study the influence of leaders in maintaining or reinterpreting the systems of shared beliefs and values that give meaning to organizational life (Bensimon et al., 1989, p. iv). This perspective has shown to be very useful in understanding the internal dynamics of institutions in financial crisis (Bensimon et al., 1989, p. 398).

Cognitive Theories

These theories suggest that leadership is a social attribution permitting people to make sense of an obscure and complex world (Bensimon et al., 1989 p. iv). A common example is when a campus assigns the credit or blame to the president for certain outcomes. Followers or constituents perceive the leader as causing events to happen (Birnbaum, 1989). Cognitive theories offer a fairly new way to study leadership but their use in higher education has been limited to date (Bensimon et al., 1989, p. 398).

Community College Leadership

Community colleges differ from other colleges and universities in ways that influence their needs, issues, and models of leadership. The history, characteristics,
and traditional model of community college leadership are reviewed; followed by a
discussion of current leadership needs and issues facing community colleges.

History and Characteristics

When studying the history of community college leadership, most research
focuses on the leadership role of the president. The presidents’ evolving leadership
role began in the 1950’s and 1960’s as "builders" who steered the attention away
from public school systems to that of planning and developing comprehensive
community colleges. New institutions were being built at a rapid pace, money was
readily available and the presidents were strong, authoritarian, risk-takers who usually
got what they wanted (Lewis, 1989; Alfred & Smydra, 1985; and Twombly & Amey,
1991). People referred to this period as the "community college movement" and there
is little doubt that the early presidents were an essential part of this "force" (Lewis,
1989, p. 9).

The 1970’s to the mid-1980’s was a period of selective growth and redefinition
for community colleges. The formation of unions and local governing boards as well
as state-level coordination and government intervention had a significant impact on
the presidents’ leadership (Twombly & Amey, 1991, p. 392; Lewis, 1989, p. 10).
Confronted with several internal and external challenges and constituencies, the
president’s leadership focus moved to efficiency, financial accountability, shared
decision making, and managing the productivity of the organization (Twombly &
The president’s leadership role shifted from manager to that of a visionary and motivating leader in the late 1980's and into the 1990's (Lewis, 1989, p. 14). A summary of this shift in leadership focus is included in the section on current and future leadership needs of the community colleges.

Fryer and Lovas (1990, p. 136) identified the indicators or characteristics of effective leadership in community college governance. The preoccupation with the practical, or here and now, seems especially acute among community college administrators due to their work load and the high value placed on ready response. These leaders and the faculty also tend to focus on applied learning, rather than theoretical, partly because of their academic background and preparation. Community college leaders also spend a great deal of time and energy articulating and implementing the values inherent to this type of institution. Access, diversity, community responsiveness, and educational opportunity are priorities for community college administrators and leaders throughout the organization (Fryer & Lovas, 1990, p. 147).

George Vaughan’s study of community college presidents (1986) described the typical path to upper-level leadership positions, particularly that of the presidency. Seventy-seven percent of community college presidents with a doctorate degree had it in education rather than a traditional academic discipline. The most popular route to the presidency was through the academic pipeline with over 50 percent previously serving as deans of instruction, chief academic officer, or vice president. Close to 90
percent of today's community college presidents assumed the presidency from within the community college leadership ranks (Vaughan, 1986, p. 28-30).

Leadership and Governance Models

Community colleges have traditionally been labeled as examples of bureaucratic governance. Factors contributing to this characterization include the faculty, institutional mission, lines of authority, and decision making processes (Bensimon, 1989, p. 421; Reyes & Twombly, 1987, p. 5-7). Two-year college faculty are typically described as having less professional identity and autonomy than four-year college faculty (Cohen & Brawer, 1977). They often have little say in the decision-making process including resource allocations and the appointment of campus leaders. The traditional community college model, with a mission of clear organizational goals, emphasizes a high level of administrative dominance (Baldrige et al., 1978; Bensimon, 1984; Reyes & Twombly, 1987) with clear lines of authority. The president often takes the lead in determining alternatives and choosing the best one to implement (Bensimon, 1989). Palmer (1985) states that the evolution of these schools, the presence of collective bargaining, and the state-level coordination also explain the bureaucratic tendencies of the community colleges. Even though several researchers have described the community college as a bureaucracy, they do not advocate this approach as being the best suited for current and future community college leaders (Bensimon, 1989; Vaughan, 1986; Reyes & Twombly, 1987; Hall & Alfred, 1985).
Current Leadership Needs and Issues

Changing times provide opportunities for emerging leaders and new leadership styles. Community college leaders of the late 1980's and 1990's are challenged to be an environmental scanner, political persuader, master plan developer, and skillful practitioner in establishing greater participation and coalition building among constituent groups (Twombly & Amey, 1991, p. 394). Today's leaders cannot rely exclusively on the authoritarian approaches of the past; they need to communicate, compromise, and share their authority and power (Lewis, 1989, p. 14). Decision making and communication processes should be known for clarity, openness, and fairness (Fryer & Lovas, 1990, p. 150). The leadership skills needed for tomorrow's community colleges possess hybrid qualities (Hall & Alfred, 1985, p. 40). Leaders need to have the capacity to take risks while maintaining stability through modifying their leadership style to fit changing situations. When group conditions mandate a consensus rather than divisiveness, the effective community college leader will have the ability to facilitate a compromise. Furthermore, an acute sense of timing for when to push initiatives and when to pull back and let situations emerge is crucial.

During the next decade, community colleges will continue to search for a sense of renewal (Twombly & Amey, 1991). Current and future issues include managing diminishing resources, including state and federal funding, the increased competition for student enrollments, an aging faculty, decreasing student skills in contrast to demands for increased job skills (Roe & Baker, 1991, p. 5), and the complexities of information processing resulting from technological change (Roe, 1992, p. 79).
Additional challenges, as suggested by Twombly and Amey (1991, p. 395) include achieving the institutional mission, building communities on and off campus, meeting the needs of diverse student populations, program development and evaluation, administrative team relations, and working effectively with the college’s governing board.

Another issue for maintaining the vitality of the community college is to determine appropriate roles and sources of leaders (Twombly & Amey, 1991, p. 376). The right combination of management and leadership talents, knowledge, and skills (Roe & Baker, 1991) are needed to lead these institutions through the challenges of the twenty-first century. While new leaders and leadership styles are not a panacea, it is imperative that community colleges assume a greater responsibility for the development and training of emerging leaders (Hall & Alfred, 1985; Parrish, 1988; American Association of Community and Junior Colleges, 1988).

Leadership Development

Without planning and without training, the potential of many who could become excellent leaders is either underdeveloped or lost completely (Roe & Baker, 1991, p. 5). Similar thoughts are presented by various scholars as the rationale for leadership development programming. The discussion continues with leadership paths and processes, including the relevant issues of leadership readiness, diversity, selection processes, and the college president’s role in developing leaders. An overview of formal leadership development programs followed by a summary of ways to supplement leadership development programming concludes this section.
The Need for Leadership Development

It is understood that leadership is situational and training cannot prepare leaders for every unique challenge and opportunity they will face, whether it be in a community college setting or elsewhere. However, it has been recognized that adequate leadership training is lacking at all levels of community college leadership (Roe, 1992, pp. 91-92); and effective leadership skills can be taught and learned (Roueche, Baker & Rose, 1989, p. 288; Gardner, 1990; Bennet & Shayner, 1988; March, 1980). Without directed and individualized leadership training, it is doubtful whether future community college leaders will have the skills for developing values, attitudes, and behaviors in their followers (Roe, 1992, pp. 91-92). Elsner (1984, p. 33) claims that since a carefully designed training paradigm is nonexistent, future leaders are often molded and selected according to office politics, pressure groups, internal lineage, and word of mouth. He states that this approach will not provide the far-sighted, innovative thinking needed for a community college to be effective in meeting current and future demands. In the Building Communities Report, (American Association of Community and Junior Colleges, 1988, p. 42), the Commission on the Future of Community Colleges endorsed and encouraged universities to conduct creative leadership development programs for emerging community college leaders. The Commission also placed special emphasis on the need to increase diversity among community college leaders. Therefore, processes and programs need to be developed to identify and train future leaders for community colleges (Roe & Baker,
Planned professional development is the key to developing good leadership into excellent leadership (Baker, 1992, p. 94).

**Paths and Processes for Leadership Development**

Dressel (1981, p. 3) is quick to point out that it is a big mistake to judge administration in higher education to be like that of administrative experiences elsewhere. Emerging leaders in higher education have typically pursued advanced graduate degrees, such as a doctorate, and have developed their leadership skills by experiences of advancing positions with increased responsibility. In the 1980's it became very popular to bridge the issues of appropriate degrees and the hierarchy of positions by participating in a formal leadership development program (McDade, 1991, p. 88). These programs take participants beyond their functional areas to consider management and leadership of the whole institution and the whole system of higher education in the United States (McDade, 1991, p. 89). The following concepts and issues found in the literature relate directly to this study of leadership development: such as readiness for leadership; diversity; selection processes; and the college president’s role in developing leaders.

**Readiness for Leadership**

Leadership readiness is the confidence in one’s ability to lead through acceptance of the challenge of leadership. Readiness implies that an individual has the ability to lead effectively in a given situation using various strategies to unite the situation, tasks, and followers (Roe & Baker, 1991, p. 12). Roe elaborates on the readiness concept by claiming that leadership development may be
conceptualized in a systematic fashion with each potential leader moving along an individual continuum in various stages of leadership readiness (1992, p. 89).

Leadership Diversity Tidball (1986) states that although the general issues in higher education may be similar, women and men often interpret and respond to them very differently. Evidence tells us men and women do lead differently because they enter positions with different modes of behavior that have grown out of different value systems. While the outcomes may be similar, the processes and lessons learned from leadership experiences will be different for men and women (Bennett & Shayner, 1988, p. 37). Diversity in community college leadership is also affected by stereotypes about the roles of women and minorities and the images of appropriate leadership (Twombly & Amey, 1991, p. 408). An exhaustive attempt was made in the 1970's to ascertain how many women were in community colleges leadership positions, how they compared to their male colleagues, to determine their barriers to leadership advancement, and to develop networking and skill building strategies for the advancement of women into upper-level leadership positions. During that time it was also assumed that if the characteristics of successful leaders, who were usually men, could be identified then remedial efforts could be designed to equip women with what they needed to compete for advanced leadership positions (Twombly & Amey, 1991, p. 409). The literature suggests that in community colleges, perhaps even more so than in four-year institutions, the image of leadership is a critical determinant of both who is an acceptable candidate for a leadership positions and also of effective behavior (Twombly & Amey, 1991, p. 413).
Selection Processes  Selection processes for community college leaders are often focused on the candidate's "fit" with the institution, which is largely determined by the selection committee's image of effective leadership. That image is who, how, and what we perceive a leader should be (Twombly & Amey, 1991, p. 414). Selection processes for leadership positions frequently use organizationally irrelevant criteria and a tendency for persons to like and select candidates they perceive as similar to themselves is common practice (Pfeffer, 1977, p. 106). Self-selection affects the succession to leadership positions because of the roles and images an organization attaches to a position. How a person perceives these roles and images will influence their desire to apply for an advanced leadership position. Self-selection along with organizational selection practices limit the range of abilities and behaviors in a given organizational role (Pfeffer, 1977).

The Role of Community College Presidents  Current community college presidents should assume responsibility for the development of future leaders (Roe, 1992; Roe & Baker, 1991; Bennet & Shayner, 1988; Parrish, 1988). With the tremendous workload of a president, it may appear that this responsibility will be another imposition that becomes a low priority. However, a plan for identifying and developing current and future leaders will not only benefit the present culture of the organization, it will also improve national community college leadership for the future. The direct involvement of current presidents is critical to the successful identification, training, and nurturing of high-quality future community college leaders (Roe, 1992, p. 95). Current presidents should enhance their own expertise as they
work with emerging leaders (Roe & Baker, 1991). In fact, professional development activities for community college presidents should be designed to enhance their expertise in understanding the components of excellent leadership and transferring this knowledge to potential future leaders (Roe, 1992, p. 94).

**Leadership Development Programs**

A few colleges and universities, national associations, and foundations have developed formal training programs for preparing leaders in higher education. Historically, the Kellogg Foundation pioneered this training movement when they funded a national system of junior college leadership training centers in the 1960s (Elsner, 1984, p. 33). Some of today’s leadership programs are targeted for certain levels of leadership, such as middle managers or those preparing to assume the role of president; others are designed for special audiences such as leaders at four year institutions, community colleges leaders, women and minorities, and experienced college presidents. Examples of these programs are reviewed in this section. Special attention is devoted to the work of the National Institute for Leadership Development.

**ACE Fellows Program** The American Council on Education (ACE) Fellows Program began in 1965 by way of a Ford Foundation grant. It started during a period of rapid growth in higher education: community colleges were founded at a rapid pace; teachers’ colleges became multipurpose institutions; and the emphasis was on universal higher education (Chibucos & Green, 1989, p. 21). ACE Fellows spend an academic year in an interning relationship with a senior officer of a college or
university to learn firsthand about the intricacies and challenges of higher education leadership (McDade, 1991, p. 89).

**Harvard University Programs**  
Harvard University's Management Development Program (MDP) is aimed at mid-level administrators to develop competencies in management, leadership, and higher education policy. Harvard’s Institute for Educational Management (IEM) is designed for senior level administrators, those moving into the presidency, and experienced presidents desiring rejuvenation. Program content includes developing management and leadership capacities for monitoring the environment, setting directions, marshaling resources and support, and managing implementation (McDade, 1991, p. 90).

**HERS Summer Institute**  
Higher Education Resource Services (HERS) conducts the Summer Institute for Women in Higher Education Administration on the campuses of Bryn Mawr and Wellesley Colleges. Its clientele includes mid-level women administrators and faculty both in academic and administrative support (McDade, 1991, p. 89). The core curriculum focuses on the following six areas: professional development; academic governance; human relations skills; finance and budgeting; administrative uses of the computer; management and leadership (Secor, 1984, p. 29).

**Center for Creative Leadership**  
The Center for Creative Leadership, located in Greensboro, North Carolina, offers leadership development programs for senior executives of business and industry and welcomes senior officers of colleges and
their programs have solid track records of helping senior officers move into executive team positions (McDade, 1991, p. 90).

League for Innovation in the Community College  The Executive Leadership Institute, offered by the League for Innovation in the Community College, provides an avenue for potential community college presidents to review their interests, augment skills, and strengthen leadership skills in preparation for the presidency (McDade, 1991, p. 98).

Programs for College Presidents  There are four types of leadership development programs offered for new and seasoned college presidents (McDade, 1991, p. 98). Their purposes are to:

1. Introduce new presidents to responsibilities and pitfalls of the job.
2. Provide renewal and networks for all presidents.
3. Develop specialized areas of presidential responsibilities.
4. Provide intellectual invigoration for more seasoned presidents.

Providers of these programs include the American Association of Community Colleges, the Council of Independent Colleges, the American Association of State Colleges and Universities, and the League for Innovation in the Community College (McDade, 1991, pp. 98-99).

National Institute for Leadership Development  Founded in 1980, the National Institute for Leadership Development was originated by the League of Innovation in the Community College and the American Association for Women in Community and Junior Colleges (AAWCJC) and a generous grant from the Fund for the Improvement of Postsecondary Education (FIPSE). Its mission is to develop
women leaders in all disciplines and functional areas of an institution (McDade, 1991, p. 90). The Institute is located at Rio Salado Community College, which is part of the Maricopa County Community College District in Arizona. Carolyn Desjardins, who was a co-director of the project in its early years, has continued to lead the Institute for training women to successfully fill leadership positions in community colleges across the country (Gillett-Karam, Roueche, & Roueche, 1991, p. 149).

The Leaders Project, probably one of the most well-known programs of the Institute, brings together mid-level community college managers from advancement, students services, administration, and academics. For six days, they work at strengthening their administrative leadership, building networks for support and sharing, and prepare for advancement into senior leadership positions (McDade, 1991, p. 90). Candidates for The Leaders Project must have a master's degree or equivalent, be employed full-time in a two year institution, and express a strong interest in career advancement. The three components of The Leaders Project are:

1. "Learning by Doing" - Design an innovative campus project which will build administrative skills within real world organizational dynamics. A college mentor, often the campus CEO, will provide invaluable help in the success of the project.

2. "Achieving by Believing" - Attend the intensive week-long workshop which begins a process of change with an emphasis on individual vision and confidence. Participants are exposed to powerful role models from colleges across the country. New frames of reference based on leadership styles and administrative issues are created in addition to individual skill building exercises.

3. "Succeeding by Cooperating" - Participants develop a supportive nationwide network of contacts. A newsletter prepared by the Institute
staff keeps participants in touch with one another (Gillett-Karam, Roueche, & Roueche, 1991, p. 151).

Ways to Supplement Leadership Development Programming

Participation in a leadership development training program will have very limited results unless leadership growth and skills enhancement is supported in the workplace. An apprenticeship experience (Trachtenberg, 1988) would be one way to support leadership training by having the emerging leader practice what they have learned and experience leadership in action. In addition to skills, talents, and political savvy, good leadership depends on the ability to tolerate anxiety, loneliness, and the threat of unpopularity (Trachtenberg, 1988, p. 38).

Role models are particularly important to supplement leadership training (Trachtenberg, 1988, p. 38). Observing role models can teach a person how to practice manners, self-restraint, and strategies for effectively working with groups. Role models can also help emerging leaders deal with ethical issues, maintain self-respect, and develop a sense of empathy.

Mentoring has been cited by women as important to advancement in their careers (Vaughan, 1989a). Moore (1982) noted that many mentors do not teach directly, but often awaken, challenge, or engage the protege’s talents. Planned mentoring is another process for identifying future leaders and providing leadership training on the job. The mentoring process should be established by leaders through self-assessment of their own leadership capabilities as well as the status of their transactional and transformational leadership (Roe, 1992, p. 94).
Women and Leadership

Studies about leadership have examined women and the challenges and opportunities they face as leaders. Important issues and concerns of women leaders will be presented including the barriers and challenges they encounter. Differences between the leadership styles of men and women are discussed and a description of the "feminine" leadership approach included. Recommended action and initiatives for women leaders concludes this section.

Concerns and Issues of Women Leaders

Many people, men and women alike, believe that campus discrimination against women has ended. The elimination of overt discriminatory policies, rising numbers of female graduate students, more women faculty, and a couple women present in upper level administrative posts have led to the assumption that discrimination is no longer a major problem for women in higher education (Sandler, 1986, p. 1). According to Hensel (1991, p. 11), gender discrimination still exists on American college campuses and it is very costly personally for the women with advanced degrees and experience. It is also costly to students who cannot avail themselves to perspectives represented by women.

Despite increasing numbers, laws, policies, and practices, many things still have not changed. Numerous reasons are given for the slow progress such as institutions are facing a budget crunch and it is hard for anyone, male or female, to be hired. Some say that it is going to take time for women to move up the pipeline (Sandler, 1986, p. 2).
The study of leadership in higher education is largely about white males, even at community colleges where women and minorities are often the majority (Twombly & Amey, 1991, p. 377). Higher education has a pyramidal structure and women are often clustered at the bottom (Tinsley, 1984, p. 17). Majority and minority designations are sometimes seen as a numbers game with trick mirrors; they shift depending on the intent of the individual or group using the terminology. Women students are a numerical majority in higher education yet their needs and interests are often low priority. At the same time, white males may be a minority in a college or university but may have more power to define the college's goals and values (Shavlik, Touchton, & Pearson, 1989).

Several recent behaviors of female college administrators have affected the pool of women pursuing upper level administrative positions. More women in recent years have attained a higher level of educational credentials, such as those earning a doctorate degree (Jones, 1986, p. 119). Female administrators are more likely than male counterparts to be unmarried. Several are divorced or never married and they have made distinct choices between families and careers (Jones, 1986, p. 119). Job responsibilities assigned to women reflect sexual stereotyping associated with the traditional female management model. Women college administrators are often in "people oriented" or care-taking areas like student services and academic support areas, such as admission, registrar, and bookstore. Men usually are assigned "task oriented" positions like financial affairs and curricular decisions (Jones, 1986, p. 119).
The discussion continues about the relationship between gender and leadership. Some argue that no research evidence exists to show that leadership aptitude and behavior is gender related (Kanter, 1977; Bass, 1990; Denmark, 1977; Statham, 1987). However, it has been proposed that gender-related differences in leadership styles exist and certain "feminine" characteristics are well suited for newer approaches to effective leadership (Rosener, 1990; Shavlik, Touchton, & Pearson, 1989). The literature documents several ways that women are apparently seen differently as leaders and subsequently treated differently by groups and individuals (Birnbaum, 1992).

**Barriers and Challenges**

Most college personnel want to treat their colleagues fairly yet many men and women treat women colleagues differently. They send the message that women are not as serious professionally or as capable as men to be forceful leaders (Sandler, 1986, p. 2). For recruiting and hiring practices, human beings tend to be most comfortable with people most like themselves and selection committees, usually having white male membership, prefer the candidates who remind them of themselves or younger versions of themselves (Taylor, 1989, p. 30). Sometimes when women are asked to serve on search committees they are untenured, non-assertive, or known as non-supportive of other women (McCallister, 1994). Women are often eliminated from searches because male applicants have degrees from more prestigious institutions, have published more books and articles, received more and larger grants, belong to more honor societies, and have moved more rapidly in their careers. The
reality is that white males still have an advantage in acquiring the credentials to make them appear highly promising (Taylor, 1989, p. 30). Male candidates lacking the required credentials often apply and end up in the final pool while women candidates are expected to meet every criterion to perfection (McCallister, 1994; Sandler, 1986; Hirsch, 1994). Women candidates may also have career histories showing periods of interruption or lessened productivity because of child rearing responsibilities (Taylor, 1989, p. 30). Interview questions and issues confronting women include their ability to control the faculty, their ability to get along in a "man's world", and are they "tough enough" to withstand the pressures of the job (Vaughan, 1989a, p. 21).

Women also cite the lack of role models and mentors as a challenge to leadership advancement (Twombly & Amey, 1991; Josefowitz, 1982). Many women and minorities prefer mentors that are "one of their own" (Vaughan, 1989a), and since most senior administrators are male, the field is very limited for personal one-to-one relationships (Moore, 1987). Women need positive role models, effective listeners, and unbiased feedback. Good mentors provide constructive suggestions that allow room for individual input. Their indirect and resourceful guidance can enhance a woman's career in many ways (LeBlanc, 1993, p. 48).

A "double standard" is often applied to women and minorities whereby they are expected to do more and be forgiven less for mistakes than their white male counterparts (Vaughan, 1989a, p. 67; Josefowitz, 1982). Cantor and Bernay (1992, p. 61) give examples of these contradictory expectations as follows.
* Take risks, but be consistently outstanding.

* Be tough, but don’t be macho.

* Be ambitious, but don’t expect equal treatment in pay, perks and rate of advancement.

* Take responsibility but follow others’ advice.

Additional practices and attitudes that make a "chilly campus climate" (Sandler, 1986) include how women are frequently interrupted in meetings, assigned routine tasks, and denied credit for successful projects (Collins & Gilbert, 1988, p. 39). When describing accomplishments, a woman’s success may be attributed to luck, happenstance, or uncontrollable factors, while a man’s success if attributed to their ability and competence. Women’s competence is often described as an exception to the "rule" when they are dubbed a "qualified woman administrator" (Sandler, 1986, p. 6). Women leaders have also complained of undue attention on their personal lives, differing expectations for their marital and parental status, and questioning of their husband’s support for their career (Sandler, 1986; Vaughan, 1989a; Taylor, 1989).

**Women’s Ways of Leadership**

Sexual identification alone does not guarantee a unique leadership approach and some women, but not all, provide leadership perspectives and experiences that men lack (Cadwell, 1992, p. 9). Several views on the perceived differences between the leadership styles of men and women have been presented. Historically, women who have made it in administration did so by emulating men’s leadership styles (Anderson, 1993, p. 31). Researchers have reported that women are more likely than
men to influence people by working collaboratively, with demonstrated respect and
care for individuals which contributes to a greater sense of openness, trust and
collegiality. Men are viewed as more action oriented and place higher value on
rewards than women leaders (Roueche, Baker, & Rose 1989, p. 240; Twombly &

The new "feminine" leadership style focuses on creating a nourishing
environment for personal growth. Instead of imitating "male" strategies, women have
succeeded practicing this style of leadership which transforms people's self-interests
into organizational goals and brings out their best. This path to leadership success
comes naturally for women because of their socialization and shared experiences
(Rosener, 1990). This approach is not about being nice to people, it is caring about
people and supporting them in a balanced and objective way (Aburdene & Naisbitt,
universities and they referred to the "process of empowerment" or mobilizing energy.
Women involve people in decision making and empower them through teaching,
encouragement, shared power, and open communication. Instead of the traditional,
mal command - and - control approach, women leaders like to be in the center of
things (Aburdene & Naisbitt, 1992).

Theoretically, this new approach is traced back to a study by Carolyn
Desjardins (1989), co-founder of the National Institute for Leadership Development.
She used the theories on moral development by Gilligan (1992) and Kohlberg (1981)
to study the differences among community college chief executive officers. Gilligan
says that leaders who function with a traditional approach, typically associated with males, make managerial decisions with a justice and fairness orientation. Leaders with a different "voice", have a style that reflects traditional female characteristics such as attachment and care in their relationships with others. This type of leader emphasizes interdependence, is nurturing and supportive of others, and uses a collaborative leadership strategies. Like Gilligan, Desjardins concluded that the moral "voice" is gender-related but not gender determined. She also recognized the movement toward a more horizontal model of leadership that is collective, interactive, and values people, both male and female, within the organization (Desjardins, 1989; Gillett-Karam, Roueche, & Roueche, 1991, p. 149; Bensimon, 1994; Blackmore, 1989).

This caring and collaborative style of leadership can be effective in organizations that are accepting of it. It has proven to be successful in times of rapid change and in some crisis situations depending on the organizational context (Rosener, 1990, p. 125). Despite its overwhelming advantages, the acceptance of this new approach is still in transition. To implement a new paradigm, women must remember to consider how this approach is viewed by those locked in the old ways (Aburdene & Naisbitt 1992, p. 105). Helgesen (1990, p. 5) also warns that several beliefs in this approach are intuitive and backed by anecdotes instead of arguments.

In 1985 (Jones, p. 119), a study was conducted that reported a new breed of female administrators emerging with significant differences noted between younger and older female administrators. Female administrators over 40 years of age were
more collaborative and emphasized participative decision making while younger women used more centralized decision making and task orientation. The differing social environments and indoctrination into educational administration could be why the leadership styles are different. Younger females developed different styles because society has been more receptive to female leaders and younger men may be more comfortable working side by side with women administrators.

**Recommendations and Initiatives**

Several scholars have recommended steps for women to take for leadership enhancement and professional advancement. Julian (1992, p. 134) suggests that women implement strategies under their control such as seeking advanced education, acquiring and continuing in professional positions, seeking mentors, and preparing to work long hours. In terms of specific work behaviors, Sossen (1995, p. 14) tells women to "blow their own horn" with style, acknowledge mistakes without always putting yourself down, and pick your battles and pick the right ones. She went on to suggest that women leaders build a team and delegate, learn to make major time sacrifices, and volunteer as much as possible to work with others as a team.

To meet professional and personal responsibilities, women administrators must be comfortable with themselves and their values and yet adaptable enough to accept and operate within sometimes alien surroundings (Kaplan & Helly, 1984, p. 69). Assessing personal skills and abilities, developing and maintaining a positive self-concept, understanding and coping with job stress and sexual stereotypes, and
developing life and career objectives are ways to accomplish a greater sense of personal and professional identity (Stokes, 1984, p. 15; Ausejo, 1993).

For organizational improvements, Shavlik, Touchton, and Pearson (1989, p. 446-447) include the following in their new agenda for women in higher education.

1. Seek a strong commitment from the leadership of the institution to understanding and addressing the concerns of women students, faculty, staff, and administration.

2. Correct inequities in hiring, promotion, tenure, and salary of women faculty, administrators, and staff.

3. Provide a supportive campus climate for women.

4. Make leadership development and the commitment to fostering women’s leadership joint priorities.

Type Theory: Leadership and Gender Differences

Type theory refers to Jung’s (1921/1971) theory of psychological type as interpreted by Isabel Myers and Katharine Briggs in the Myers-Briggs Type Indicator (MBTI). The theory underlying the MBTI enables us to expect specific differences in specific people and to cope with those different behaviors of individuals more constructively (Myers & McCaulley, 1985, p. 11). In this section, the basics of conducting type research are reviewed followed by a discussion of type theory in relation to leaders, leadership development, and leadership processes. Gender differences found when using the MBTI and the influence of gender on type and leadership styles conclude the review.
The Basics of Type Research

According to Fitzgerald (1993) there are three possible levels of interpretation and use of the Myers-Briggs Type Indicator (MBTI). Level one, MBTI dimensions, is using the MBTI for explaining MBTI preferences and how to help people identify and understand the meaning of their own preferences. Level two, type dynamics, is the interplay of the MBTI functions within each type. Level three, type development, is the pattern of development of the MBTI functions across the life span. Each of these three levels of interpretation and use of the MBTI can make a substantial contribution to understanding and facilitating leadership development (Fitzgerald, 1993, p. 1).

Type theory can also be very useful in research, such as in descriptive studies involving human behaviors. Using Jung’s theory of psychological type, human behavior is viewed from within the capacities of the mind itself, not from the perspective of curricula, the structure of the job, or any particular problem-solving process (Hanson, Moirao, Silver, & Strong, 1991, p. 2). In a descriptive study the researcher examines a sample and looks at one or more characteristics of interest to describe the nature of the sample and its respective population. In MBTI research the frequency distribution of types in a sample is not only used to describe a sample’s characteristics, but can also be used to explore the concept of self-selection (Macdaid, 1987, p. 251). The basic notion behind self-selection is that people of different types select for themselves different opportunities and situations that are satisfying, and these selections will be congruent with their type preferences. Self-selection data are
reported using the type table. Isabel Myers designed this format of data presentation as a standard way for representing type distributions of groups. In a type table one can get a visual impression of the frequency distribution of that group, as well as determine more carefully the precise breakdown of the percentages and numbers of the types and type groupings (Macdaid, 1987, p. 251).

One of the most common hypotheses in type research addresses whether certain types are found more frequently in a given sample than would be expected in a base population (MacDaid, 1987, p. 256). As described in Chapter III. Methodology, the Selection Ratio Type Table (SRTT) program allows for this convenient analysis of type data and produces output from 44 separate analyses on a one-page type table (Macdaid, 1987, p. 256). When using the SRTT to analyze a sample of type profiles, the base or reference population should have as many characteristics in common with the sample as possible (Macdaid, 1987, p. 256). Care should also be exercised in interpreting the type tables so over-generalization does not occur from small samples (McCaulley, 1993a, p. 24). No matter how one analyzes type profiles and the MBTI, type theory makes "the whole greater than the sum of its parts" and serves as a potent system of explanation. It permits understanding and assessment of a very broad range of human characteristics, from everyday attitudes and behaviors to complex unconscious processes (Quenk, 1992, p. 5).

Type Theory and the Study of Leadership

Research has been conducted on type theory and its application to the study of leaders, leadership styles, leadership development, and leadership processes. A study
was conducted by P. E. Robertson, (1990), to investigate personality characteristics and demographic profiles of women in upper level management positions and describe how they differed from men in upper level management positions and women in middle-level management positions. Participants in the study had participated in programs at the Center for Creative Leadership in Greensboro, North Carolina. Upper level women and men differed significantly on Sensing/Intuition type, Thinking/Feeling type and Judging/Perception type (Robertson, 1990, p. 198). A higher proportion of upper level men significantly more often preferred Sensing, Thinking, and Judging. A significantly larger proportion of upper level women in this study preferred Feeling and Perceiving than the proportion of upper level men. More than 50 percent of both upper level women and upper level men preferred Extroversion to Introversion, Intuition to Sensing, Thinking to Feeling, and Judging to Perceiving (Robertson, 1990, p. 198-199). Lueder (1986) also reported an overpresentation of ENTJs when he studied the type profiles of 100 executive educators in North America and the "rising stars" in educational administration.

Analysis of the MBTI profiles indicated that the women and men in upper level management participating in this study were not "typical" in a number of areas. Most of upper level men and upper level women scored higher on Intuition than Sensing. This study helps validate that the majority of upper level managers prefer Intuition to Sensing (Robertson, 1990, p. 199).

If the majority of women in United States prefer Sensing and Feeling, can we assume that women who are unique, who prefer Intuition and Thinking, are more
likely than "typical" women to move into upper level management positions? Or, can we assume that experiences that moved these women to upper level positions shaped their preferences (Robertson, 1990, p. 200-201)? Women in management were not "typical" on their MBTI preferences. The majority preferred Intuition to Sensing and Thinking to Feeling. An investigation into this issue could result in finding that the women were very "typical" until they move into management positions and find that their preferences need to change in order to compete in the environment that is considered a "male-dominated" world (Robertson, 1990, p. 215). Women, on the average, had less variation between Thinking and Feeling scores and their Judging and Perceiving scores. This balance may give them greater selection of behaviors from which to draw. Assisting managers in utilizing skills from each preference could increase their effectiveness and their versatility in responding to problems, making decisions, being creative, organizing and planning (Robertson, 1990, p. 215).

Carskadon's research (1992) deals with what type profile is most frequently found in leaders. He concludes that leaders certainly tend toward Thinking and Judging (TJ): STJ at the more concrete, close-to-the-product levels and NTJ at the higher, more strategic levels. Even in groups where these types are relatively infrequent, they still seem to be found disproportionately in leadership roles (Carskadon, 1992, p. 22) An extremely important point is that in all the research samples of substantial size, all or virtually all types were represented among the leaders. There is not a type that is doomed to "follower" status, nor, obviously, is every person of any particular type necessarily going to be a leader (Carskadon, 1992,
Probably the most important prerequisite for accomplishment among leaders is not type per se, but type development. The most outstanding leaders have been many types, but they all shared an ability to relate well to all types and keep everyone in the game, "bringing out the strengths each had to offer" (Carskadon, 1992, p. 23).

The theory that drives empowerment is the theory of individual differences. To execute one's tasks expertly, requires a verbalized knowledge of different psychological types or learning styles (Hanson, Moirao, Silver, & Strong, 1991, p. 1).

The most logical way to get the best from people is to keep them happy; the surest way to have disorder in an organization is to leave no room for flexibility (Carskadon, 1992, p. 23).

In applying type theory to work settings, Keirsey and Bates (1978) distinguish four clusters of MBTI types as constituting the following distinctive Management/Leadership Styles:

(a) NT: Rational/Visionary style with a strong preference for creating new theories and structures to organize ideas and organizations.

(b) NF: Feeling/Catalyst style with strength in communicating feelings and working harmoniously with others.

(c) SP: Troubleshooter/Artisan style characterized by high flexibility and improvisational strength.

(d) SJ: Guardian/Traditionalist style with careful attention to maintaining standards and dealing with problems in a practical and responsible manner.

Type theory is useful in understanding leaders and leadership, and leaders come from all types. Each leadership style has its own assets, liabilities, and blind
spots (Hanson et al., 1991, p. 2) Perhaps more importantly, type enables individuals to gain a perspective for understanding and valuing differences in being a leader and doing leadership (Pearman, 1992, p. 3). Pearman discusses the use of type theory in relation to leadership effectiveness. Three important type-related qualities seem present in those men and women who would be evaluated as effective in their work. These qualities mirror the three most important principles of type: polarity, compensation, and level of awareness (Pearman, 1992, p. 3).

**Polarities**: there are two sides of a coin, whatever the coin or phenomena. Effective leaders express an awareness and comfort with a duality of experience. They seem to understand that to place too much energy in one direction or activity is to affect the balance of their overall effort. *Compensation* is thought of as a process, largely unconscious in which individual balance is maintained. Highly effective leaders seem to have an inherent understanding that balance is important and to be valued. Effective leaders have a level of awareness about themselves, their effect on others, and valuing of others contributions is heightened. It is as if they understand their own psychology, its limitations, and gifts (p. 3).

Pearman also states that type is a useful tool for the leadership development process. Type can provide a frame for part of the leadership process and a tool to encourage it. Leadership is always in service to an idea, purpose, or person and it requires a shared vision, common understanding, commitment, and action. Utilizing type as a model may foster an environment which promotes the leadership experience (Pearman, 1992, p. 4).
Two leadership processes which have been studied using type theory are teambuilding and problem solving/decision making. In teambuilding it is important to use the strengths of various individuals in a group or as members of a leadership team. Rideout and Richardson (1989, p. 529) suggest the MBTI may provide a valuable bridge to including developmental theory into our teambuilding models.

The concept of appreciation of differences through understanding personality types and female/male developmental issues adds not previously tapped dimensions to teambuilding. Leadership that supports, appreciates, and encourages differences and provides an environment for mutual respect can only enhance the effectiveness of teams. An environment can be created whereby differences are appreciated and nurtured; there can be creative choices and decisions, with an outcome of excellence, for both individuals and agencies (Rideout & Richardson, 1989, p. 532).

Huitt (1992) summarizes individuals’ preferences by type theory in relation to their approaches to problem solving and decision making. Examples of how personality type can affect problem solving include descriptions of individuals with a Thinking (T) compared to a Feeling (F) preference and those with a Judging (J) compared to a Perceiving (P) preference.

Individuals with a thinking preference will tend to use logic and analysis during problem solving. They are also likely to value objectivity and to be impersonal in drawing conclusions. They will want solutions to make sense in terms of the facts, models, and/or principles under consideration. By contrast, individuals with a feeling preference are more likely to consider values and feelings in the
problem solving process. They will tend to be subjective in their decision making to consider how their decisions could affect other people.

Js are more likely to prefer structure and organization and will want the problem solving process to demonstrate closure. Ps are more likely to prefer flexibility and adaptability. They will be more concerned that the problem solving process consider a variety of techniques and provide for unforeseen change (Huitt, 1992, p. 34).

**Type Theory and Gender Differences**

The literature on type theory and gender differences includes the concept of androgyny, how type is affected by external pressures, and research on differing type preferences among and within genders. In the 1960s, researchers using career interest inventories reported college men beginning to report more feminine scores and college women had more masculine scores. After a mini-uproar, it was reported that students were simply responding to the effects of becoming educated people (McCaulley, 1994 Winter, p. 15). Several years later Sandra Bem and June Singer talked about androgyny and the acceptance began for males and females legitimately having both male and female interests. Stokes (1987) has conducted research on androgynous males and females in relation to the preferences found in the Myers-Briggs Type Indicator (MBTI): Extroversion/Introversion, Sensing/Intuition, Thinking/Feeling, and Judging/Perception. Analysis of the E/I dimension revealed androgynous women tend to be more extroverted than traditional feminine women. More androgynous males were Fs (Feeling) while most masculine males were Ts (Thinking). Therefore, a
strong correlation between the T/F dimension and androgyny was reported. Researchers found no gender differences for the S/N or J/P dimensions of the MBTI (Stokes, 1987, p. 44). For function pairs, ST women were more often scored androgynous, while SF women and NF women were more often feminine. The research "hints" that androgyny occurs most among men who are ESFJ, INFP, ENFP, or ENFJ and among women who are ESTJ, ESTP, or ISTP (Stokes, 1987, p. 44).

When looking for a trend of gender differences in the United States population, the Thinking (T) and Feeling (F) functions are the only dimensions of the MBTI where a notable discrepancy occurs. Approximately 60 percent of the male population in the U.S. prefers Thinking and approximately 65 percent of the U.S. female population prefers Feeling for making decisions and reaching conclusions (Myers & McCaulley, 1985). In addition to Thinking and Feeling, watch the tendency within female samples to have more extroverts than comparable male samples; it is a small difference but consistent. No consistent pattern occurs between males and females on the S/N dimension so don’t look for support of "women’s intuition" (McCaulley, 1994 Winter, p. 16).

Our culture still encourages Thinking behavior in boys and Feeling behavior in girls (Noddings, 1984). Desjardins (1989) also suggests that women may learn to orient their moral judgments toward a care orientation because they have traditionally been care-givers in Western society. They have been taught to consider relationships and others over equity and law in making decisions. While statements that women lean toward certain characteristics associated with Feeling and men toward Thinking,
reliance on these trends may cause one to overlook what is actually happening including the opportunity to understand and value the "minority types" of each gender (Carskadon, 1990, p. 31). Careers can override these consistent trends. For example, females in fields where thinking is an important tool, such as engineering and management, often prefer Thinking (McCaulley, 1994 Winter, p. 16). It is also possible that professional women with graduate degrees may not have been taught or may have rejected the role of the traditional care-giver and therefore, may prefer a justice orientation over the care (Noddings, 1984). They have become more assertive and aggressive to survive in their environment and to be successful in their chosen professions (Johnson, 1987, p. 127).

The effects of these learnings and pressures are not known when people answer the questions on the MBTI. It is assumed that type preferences are inborn and can be encouraged or falsified by social pressures. An individual may face many interactions between inborn dispositions and the effects of gender, social pressures, and a multicultural world (McCaulley, 1994 Winter, p. 16). For example, Stokes reported that on the T/F scale, it was evident that females, even those who in their behavior and attitudes indicated class preference for Thinking, had a greater tendency to give certain Feeling responses than did males. The difference was ascribed either to the possibility that certain feeling responses were more socially desirable for females than males, or to the effect of social training (Stokes, 1987, p. 47). Another example cited in research by McCaulley (1994 Winter) says thinking males have higher T scores than thinking females, and feeling females have higher F scores than
feeling males. Feeling males and Thinking females may be more sensitized to their preferences that go against cultural norms. More research is needed to learn if males who prefer Feeling and females who prefer Thinking are less comfortable living with preferences that go against social norms. Negative characteristics should also not be ascribed to certain type preferences (McCaulley, 1994 Winter, p. 16).

Additional research on the study of type theory and gender differences reports a significant difference found between executive women and women in traditional roles on the E/I index. Executive women were more E (extroverted) and traditional women were more I (introverted). No significant difference was found between executive women and women in traditional roles on the Sensing-Intuition index. But the two items within the index differed significantly which indicated that executive women had a more flexible outlook on life than did women in traditional roles. Significant difference was found between executive women and traditional women on the Thinking-Feeling index (Brittain, 1981, p. xi-xv).

Summary

The literature on administrative leadership is very comprehensive in models and strategies but is somewhat inconclusive on prescribing what it takes to be a successful as an administrative leader in higher education. Trait theories, despite their unscientific methodology, and power and influence theories are particularly influential in works on higher education leadership. However, the literature is inconsistent on which characteristics and traits are present in effective leaders. Transformational leadership theory has received a great deal of attention in some of the most recent
studies in higher education, especially as leaders work on educational reform and prepare for a new millennium. Behavior and contingency models are rarely discussed in studies on leadership in higher education because of the many unique organizational characteristics found in a college or university setting. Additional research on how leaders learn administrative leadership from the behavioral perspective would be beneficial for directions and insights on designing leadership development training programs.

Most of the research on community college leadership has focused on the characteristics, skills, and role of the president. Most leadership studies in a community college setting are not gender or race specific but perhaps that is because so few CEOs are women or ethnic minorities. More attention is needed on leadership positions and skills throughout the organization and ways to develop emerging leaders for the future opportunities predicted in community colleges. Most studies on community college leadership still refer to the traditions and characteristics of the bureaucratic model even though many of the challenges and opportunities for the next decade require renewal and a new way of conducting everyday business and serving constituencies.

Several studies on leadership development state that current administrative leaders, such as community college presidents, need to accept a greater responsibility for training emerging leaders. Instead of leaving it to chance and the old informal methods of the past, several authors recommend a more concerted effort for developing leadership programs, especially for women and minorities. Leadership
training also needs to be more integrated into the workplace and apprenticeships, role models, and mentoring are presented as meaningful ways to supplement training programs.

While most studies on women leaders have acknowledged the progress that has been made, most authors still focus on gender discrimination and the barriers and challenges facing today’s female college administrator. Certain "feminine" characteristics are now gaining acceptance for leadership roles in contrast to how adopting a "man’s style" used to be the only way. Many significant changes are recommended to enhance the leadership opportunities available to women and to encourage men and women colleagues to be more accepting of women leaders in higher education.

While there is an extensive wealth of research on type theory and uses of the Myers-Briggs Type Indicator (MBTI), very few studies deal with using type theory for leadership development and the analysis of leaders by gender. By gender, only significant differences have been found in the general population for the Thinking/Feeling dimension of the MBTI. Studies have reported differences in the MBTI preferences of women in upper level management positions. A topic related to this study is how women may adjust or modify their preferences to fit social and environmental pressures as they pursue leadership positions. Type development is also presented for describing how women may have a greater selection of behaviors from which to draw. This translates into effective leadership through empowerment and an appreciation of individual differences within diverse groups of people.
CHAPTER III. METHODOLOGY

The methodology for each of the three data sources, the Satisfaction Perception Survey (SPS), personal semi-structured interviews, and data base of type profiles for LINC participants, is explained in this chapter. The content, sample identification, data collection, and data analysis are described for each source. The SPS section concludes with the variables used to investigate the research questions. Included in the interviews section is justification for using qualitative research methods and strategies to ensure research trustworthiness. The type profiles section includes the scoring, reliability, and validity for the Myers-Briggs Type Indicator (MBTI) and a brief explanation of the Selection Ratio Type Table (SRTT) program for analyzing MBTI profiles.

The Satisfaction and Perception Survey (SPS)

The Satisfaction and Perception Survey (SPS) was replicated using the 1992 thesis on LINC by Viana Kelly. The purpose of the SPS was to gather information on participant personal and career characteristics, to provide information of participants’ satisfaction with the programs and to provide information on program content for planning future LINC programs (Kelly, 1992, p. 27). The survey includes questions relating to the background demographics of participants and general information on their LINC experience, selection to be a participant, and career aspirations (Kelly, 1992, p. 28). The SPS was developed by Kelly (1992) with assistance provided by the LINC Director, Co-Director, and two faculty members. The
Iowa State University Human Subjects Review Committee approved the SPS in 1992 (Kelly, 1992, p. 28).

Modifications, as recommended by Kelly (1992, p. 91), were made to the SPS to gather information about the participants' leadership position at the time they were accepted into LINC and the leadership position they currently hold. An additional modification was made to the original question 23 to gather detailed information about leadership positions aspired by the participants. The response stem on question 23, now numbered as question 26, was changed to include "Other, please identify __________." as a possible response.

Questions 7, 8, 9, and 26 now read as follows:

7. Identify the level of leadership position you held when accepted into the LINC program.

   1. Level 1: Vice-President, Chief Officer, Dean, Associate Dean, Assistant Dean, Executive Director

   2. Level 2: Director, Associate Director, Assistant Director, Manager, Supervisor, Division Chair, Department Head or Chair, Librarian, Registrar, Associate Registrar, Assistant Registrar, Controller

   3. Level 3: Coordinator, Consultant, Specialist, Instructor, Counselor, Senior Advisor, Advisor, Office Manager, Board Secretary

   4. Other: (Please provide position title.) __________________________

8. Identify the level of leadership position you currently hold.

   1. Level 1: Vice President, Chief Officer, Dean, Associate Dean, Assistant Dean, Executive Director

   2. Level 2: Director, Associate Director, Assistant Director, Manager, Supervisor, Division Chair, Department Head or Chair, Librarian, Registrar, Associate Registrar, Assistant Registrar, Controller
3. Level 3: Coordinator, Consultant, Specialist, Instructor, Counselor, Senior Advisor, Advisor, Office Manager, Board Secretary

4. Other: (Please provide position title.) ________________________

5. I am no longer employed at a community college.

9. If you identified the same leadership levels for questions 7 and 8, please explain:

   1. Your position title has remained the same but your leadership responsibilities have been enhanced.
   
   2. Your position title has not changed and your leadership responsibilities have not been enhanced.
   
   3. Your position title has changed but remains within the same leadership level.
   
   4. Other: (Please describe.) ________________________

26. If you plan to continue employment at a community college, what level of employment do you wish to attain within the next five years?

   1. Community College President
   2. Position at the Vice President level
   3. Position at the Dean's level
   4. Position at the Department Chair level
   5. Other, please identify ________________________.
   6. Continue in present position
   7. Unknown

These newly inserted questions, (#7, 8 and 9), required that the remainder of the survey be renumbered. Survey revisions were reviewed by LINC staff. Once approved by the Iowa State University Human Subjects Review Committee, the SPS was mailed to all LINC participants in August 1995. The September 1994 data base of all LINC participants was used for mailing the surveys. Appendix C contains a
copy of the cover letter and SPS; Appendix A contains the Human Subjects Review Committee approval.

The 125-item survey contained questions relating to the background demographics of participants, and general information about their LINC experience and leadership aspirations. A five-point Likert scale was used to measure the participants' perception and satisfaction with all aspects of LINC. Surveys were mailed to all 96 participants and 85 were returned in August, 1995. Reminder postcards were sent to participants 10 days after the first mailing. The remaining participants were contacted by phone and a second copy of the survey was sent as a follow-up to this contact. Four of the 11 who did not respond had left their institution and a forwarding address was not available. In total, 85 of 96 participants or 88.5 percent completed the survey. Appendix D, Table D-1 provides a breakdown of the number of respondents by Leadership Level according to the survey; Table D-2 identifies the LINC Class and Leadership Level of those participants who did not respond. The SPS was analyzed using the Statistical Package for the Social Sciences (SPSS).

No hypotheses were developed for conducting the one-way ANOVAs on the SPS questions and items because this is a case study designed to describe the development and enhancement of leadership skills. The ANOVAs were included to detect any trends or differences in leadership development according to the level of leadership position held by the LINC participant. Each time the LINC program is offered its content and activities are modified to meet the needs of the participants.
and the program also varies by the availability of speakers and special learning opportunities. Participants in the six LINC classes have also had inconsistent lengths of time for experiencing leadership development and opportunities for advancement since their participation in the program. The following section describes the questions used from the Satisfaction and Perception Survey (SPS) to answer research questions 1, 2 and 5 set forth in Chapter I.

Research Question 1

In what identifiable ways have the leadership skills of LINC participants been developed or enhanced as a result of completing the program?

Data regarding the development or enhancement of leadership skills were provided by the SPS questions 14, 20, and 21 and items 28 - 70. Written comments on item 71 and at the end of the survey were also noted.

Question 14 addresses participants' expectations and reasons for participation. Question 20 is the degree that LINC was instrumental in leadership promotion(s) or advancement(s). Question 21 is a ranking of how LINC was instrumental in participants' leadership promotion(s) or advancement(s). Using SPSS, total frequencies, percents, and means are given for questions 14, 20, and 21.

Leadership skills data were also provided from SPS items 28-70 which were statements about the participants' LINC experience. A five-point Likert scale was used for these statements: 1-strongly disagree, 2-disagree, 3-not sure, 4-agree, and 5-strongly agree. Using SPSS, total frequencies, percents, and mean scores are presented for items 28-70. ANOVAs were computed for items 28-46 and 47-71 using
the analysis of variance portion of SPSS. The ANOVAs for items 28-46 reflect if participants by different leadership levels perceive their LINC experience differently. The ANOVAs for items 47-70 tell if participants in each leadership level have differing perceptions of what they have learned about the various topics of the LINC program. Also, the comments section at the end of the SPS was used for identifiable ways that the participants’ leadership skills have been developed or enhanced.

**Research Question 2**

*Is the LINC program preparing women and people of color to assume enhanced administrative leadership roles at community colleges?*

Data describing how LINC is preparing women and people of color for enhanced leadership roles were provided in SPS questions 7-9, 18 and 19, and 25 - 27. Collectively, Questions 7, 8, and 9 identify changes which have or have not occurred in the participant’s leadership level since participation in LINC. If no change in level has occurred, four options were provided in question 9 for explaining why their leadership level has remained the same. Using SPSS, the total frequencies and valid percents were computed for questions 7-9. Frequencies and percents by the three leadership levels are also presented for questions 7 and 8.

For additional information about participants achieving enhanced leadership roles, Questions 18 and 20 ask about receiving a promotion or advancement since the LINC experience. Total frequencies, percents, and frequencies by current leadership level were computed for Question 18 and 20 by the SPSS program.
Questions 25, 26, and 27 address the LINC participants' career aspirations for community college leadership. Total frequencies, percents and frequencies were computed for all three questions using SPSS. If the participant identified LINC as helpful in clarifying career aspirations in Question 25, a list of the ways was compiled. Question 26 contains these variables for the aspired level of employment: 1) Community College President, 2) position at the Vice President level, 3) position at the Dean's level, 4) position at the Department Chair level, 5) Other, (please identify), 6) continue in present position, and 7) unknown. Question 27 has two separate variables for a time frame concerning future employment at their current institution, five years and ten years from now. Additionally, the comments section at the end of the SPS was used for details on how LINC is preparing participants for enhanced administrative leadership roles at community colleges.

Research Question 5

*What are the personal and career characteristics of LINC participants?*

All personal and career characteristics variables were taken from the SPS. Personal characteristics data were provided by these SPS questions: 1) gender, 2) marital status, 3) children, 5) age as LINC participant, and 6) ethnic background. Career characteristics were from the SPS questions: 10) highest degree completed, 11) current academic status, 12) working on a degree, 13) will start a degree within five years, and 24) desire to continue community college employment. Total frequencies and percents for each question were computed with SPSS.
Personal Semi-Structured Interviews

Personal semi-structured interviews were conducted with selected LINC stakeholders; three LINC participants, three community college presidents, and three members of the LINC staff. The purpose of the interviews was to look deeper into the development of emerging leaders for the community colleges. The interview questions sought descriptions, experiences, and insights. Providing the respondents the opportunity to share their own opinions and perceptions is a suitable method for addressing these issues. The respondents provided a greater understanding into the leadership development of women and people of color.

An invitational letter, see Appendix E, was sent that informed the respondents that they would be interviewed once for approximately 60 to 90 minutes at their current place of employment. The purpose and objectives of the research were explained so each respondent could make an informed decision about participating in the study. Each respondent agreed to having the interview tape recorded and later reviewed the accuracy of the interpretations of the interview. The anonymity of each respondent was protected in preparing the final report of the study.

Purposeful sampling (Bogdan & Biklen, 1992, p. 71; Borg & Gall, 1989, p. 386) was used because these three types of stakeholders were believed to be the most knowledgeable of the LINC program and its role in leadership development. Criteria, reflective of the research purposes and structure of the LINC program, were developed and used for selecting respondents.
LINC Participants

The 96 LINC participants were categorized by Leadership Level 1, 2, or 3 according to their job titles reported in September 1994. The titles are categorized as:

Level 1: Upper-level administrative positions including Vice-President, Chief Officer, Dean, Associate Dean, Assistant Dean, Executive Director

Level 2: Mid-level administrative positions including Director, Associate Director, Manager, Supervisor, Division Chair, Department Head or Chair, Librarian, Registrar, Associate Registrar, Assistant Registrar, Controller

Level 3: Entry level administrative positions and nonadministrative positions including Coordinator, Consultant, Specialist, Instructor, Counselor, Senior Advisor, Advisor, Office Manager, Board Secretary

Table F-1 contains the matrix by current and past leadership levels for all six LINC classes. One participant for each leadership level was randomly selected and interviewed; the Level 1 participant from LINC 1 (AY '89-'90), the Level 2 participant from LINC 3 (AY '91-'92), and the Level 3 participant from LINC 5 (AY '93-'94). This approach achieved a balance of respondents by level of leadership position and by the factor of time since completion of LINC. The lapse of time since program completion is significant for application and reflecting on the leadership skills they have developed and the leadership opportunities they have encountered. Each interviewed participant had to have changed positions in their college either during or since their LINC participation. According to the most recent LINC roster, (September 1994), four participants have left the state for leadership positions at community colleges elsewhere. One participant residing in another state was included in the participant cohort interviewed to examine the effect that mobility may have on
leadership development. Participants of LINC 6 (AY '94-'95) were not considered for interviews since they have just completed the program and a minimal amount of time has elapsed for individual application and reflection.

These interviews focused on the participants’ perceptions of being prepared for leadership advancement, the ways their leadership skills have been enhanced, and the role of type theory in developing a leadership style.

Community College Presidents

All 15 of the Iowa community colleges presidents have had employees participate in LINC. Appendix G is a tabulation of the total participants for each community college.

Some of the current presidents have had limited contact with LINC since they have held their position for a short period of time and/or only a few of their employees have participated in the program during the past six years. Therefore, the three community college presidents interviewed were randomly selected from the pool of nine presidents who have been in office for at least four years and have had a minimum of four employees be LINC participants. These interviews focused on their perceptions and observations of how LINC has prepared women and people of color for leadership advancement on their campus. Interview questions also emphasized the enhancement of participants’ leadership skills and in what ways participants have contributed to leadership efforts.
LINC Staff

The Leadership Institute for a New Century (LINC) has had four staff members since its inception. One staff member, who was on the Iowa State University faculty, accepted a new position at another university out of state. Because of time and distance constraints, this individual was not considered for the LINC staff interviews. Based upon unstructured interviews with the three remaining staff members (Author, Staff Interviews, May 3 & 4, 1995), their responsibilities and qualifications are as follows.

**Director:** Works with the Co-Director to design and facilitate the program; serves as presenter for certain units of the program; manages the budget; maintains a positive working relationship with the community college presidents and the Iowa Association of Community College Trustees (IACCT); makes visits to participants’ respective campuses during the year; maintains contact with past LINC participants; views the role of Director as professional development coordinator and works to bridge the gap between theory and practice. The current Director is a Professor and Program Coordinator of Higher Education Administration at ISU; teaches certification classes for community college personnel; has served as a consultant and trainer at several of the Iowa community colleges; participates in community college conferences; stays current in the literature on community college issues; and has developed an extensive network nationally with community college researchers and practitioners.

**Co-Director:** Works with the Director to design and facilitate the program; collects and grades completed assignments from LINC participants; determines final grade for participants enrolled for graduate credit at ISU; serves as presenter for certain units of the program; and assists the Director as needed. The Co-Director ideally is a practitioner and employed at one of the Iowa community colleges. The current Co-director is the Director of Human Resources at North Iowa Area Community College; has a Ph.D. in Professional Studies/Higher Education from ISU; and has conducted research on women’s leadership issues.
It was also noted by the Director that it is important to have gender balance in staffing the positions of Director and Co-Director. Since the program is for developing women leaders, one of these two positions must be occupied by a woman (Author, Staff Interviews, May 3 & 4, 1995). Since its inception, the Director has been a male and the Co-Director a female.

Faculty Member: Presents the study of type theory and administrates and scores the Myers-Briggs Type Indicator (MBTI); facilitates the sessions on type theory for team building, conflict resolution, communication skills, and leadership styles. The faculty member maintains positive working relationships with personnel and trustees at the Iowa community colleges; and makes visits to participants’ respective campuses during the year. This faculty member currently is a University Professor and Professor of Higher Education at ISU; serves as the Chair of the Professional Studies Department in the ISU College of Education; is certified by the Center for Applications of Psychological Type, Inc. to administer the MBTI; teaches certification courses for Iowa community college personnel; has served as a consultant and trainer at several of the community colleges; stays current on the literature on community college issues; attends community college conferences; and has established an extensive national network with community college researchers and practitioners.

Graduate research assistants were not considered for interviews since they have not been involved with the program on a continuous basis for the past six years. Their LINC responsibilities have varied according to individual assignments by the directors. Interview questions for LINC staff focused on the methods used for the leadership development of participants, their perceptions of how participants have developed and enhanced their leadership styles, and the role of type theory in the program.
The Interview Process

Semi-structured interviews were conducted for obtaining comparable data from all respondents (Bogden & Biklen, 1992). This approach also allowed more flexibility for pursuing perceptions, experiences, and insights of leadership development. A specific list of questions were asked in each category of respondent; participant, community college president, and staff member. As respondents answered, new questions and issues to discuss would arise so the line of questioning may have been slightly different for each respondent in each category.

The questions asked were initially developed from the five research questions. At the end of each interview, the respondents were given the opportunity to suggest additional interview questions and to elaborate on topics we had or had not discussed. The questions asked were:

Participant Interview Questions:

Background:

1. When did you participate in the LINC program and what leadership position did you have at that time?

2. Has your leadership position changed in any way since your LINC participation?

3. How were you selected for the program?

4. Once you were identified, why were you interested in being a LINC participant?

5. Have you participated in any other leadership development programs sponsored by educational and non-educational providers, at national, state, or local levels? If so, how many programs, what was the purpose
of the program(s), who delivered the program, and was your participation before or after your participation in LINC?

6. In addition to participation in leadership development programs, what other formal and informal opportunities have you had for leadership development and enhancement of your leadership skills? Identify which opportunities or activities were initiated by your institution and which ones you have sought independently.

Leaders and Leadership:

7. As a result of your professional experience and participation in the LINC program, how do you define leadership?

8. How do you describe an effective leader? (characteristics, skills and behaviors, etc.)

9. Do you describe yourself as a leader? If so, how?

10. How does one tell if you are being effective as a leader?

11. If people on your campus were asked to describe you in a leadership context, what do you think they would say?

12. Of all your LINC experiences, what is the one experience you would not trade?

13. From your perspective, did LINC play any role in enhancing your leadership skills? Please explain.

Leadership Development in Community Colleges:

14. In your opinion, what are the three major leadership issues facing community colleges for future success?

15. In what ways have you seen emerging leaders identified and/or selected for leadership positions?

16. How has the upper-level administration at your institution supported your LINC experience and integrated it into your job responsibilities?

17. How have you developed a network of community college contacts as a result of your LINC participation?
Type Theory and Gender Differences in Leadership:

18. What is the campus climate like in Iowa for women in leadership positions?

19. In your opinion, what are the major barriers and challenges facing women and ethnic minority leaders in community colleges?

20. Have you observed a difference between men and women administrative leaders?

21. Are there gender differences that make women more effective leaders than men? Please explain your thoughts on the relationship between leadership style and gender. What is the basis for your opinions?

22. Describe how the study of the MBTI has increased your awareness of self and influenced your leadership style?

23. How has your increased knowledge of the MBTI influenced your decision making, participation in groups, and other managerial skills and processes?

24. Is there anything else you would like to say about leadership development, the LINC program, or community college leadership in general?

Community College President Interview Questions:

Background:

1. As a community college president, approximately how many employees have you nominated for participation in LINC?

2. What process did you use for selecting LINC participants?

3. Why have you had selected employees to participate in this program?

4. Have you participated directly in any of the LINC sessions? If so, how?

5. Did your perceptions of the program change at all as a result of your participation? If so, how?
6. Personally, have you participated in any formal leadership development programs during your community college career? If so, briefly describe how your participation enhanced your skills as an administrative leader.

Leaders and Leadership:

7. As a result of your professional experiences, how do you define leadership?

8. How do you describe an effective leader? (characteristics, skills and behaviors, etc.)

9. Do you describe yourself as a leader? If so, how?

10. How does one tell if you are being effective as a leader?

11. If people on your campus were asked to describe you in a leadership context, what do you think they would say?

Leadership Development in Community Colleges:

12. In your opinion, what are the three major leadership issues facing community colleges for future success?

13. In what ways have you seen emerging leaders identified and/or selected for leadership positions?

14. How has the upper-level administration at your institution supported participants’ LINC experience and integrated it into their job responsibilities?

Type Theory and Gender Differences in Leadership:

15. What is the campus climate like in Iowa for women in leadership positions?

16. In your opinion, what are the major barriers and challenges facing women and ethnic minority leaders in community colleges?

17. Have you observed a difference between men and women administrative leaders?
18. Are there gender differences that make women more effective leaders than men? Explain your thoughts on the relationship between leadership style and gender. What is the basis for your opinions?

19. Are you familiar with the Myers-Briggs Type Indicator? If so, to what extent have you personally used it or have seen it used in a community college setting?

20. How do you think the study of the MBTI can influence one’s leadership style and development as an administrative leader?

21. Is there anything else you would like to say about leadership development, the LINC program, or community college leadership in general?

LINC Staff Interview Questions:

Background:

1. How have you participated in the design and/or delivery of the LINC program?

2. What motivates you to serve on the LINC staff?

3. Have your perceptions of the program changed since it began six years ago? If so, how?

4. Personally, have you participated in any formal leadership development programs during your career? If so, briefly describe how your participation enhanced your skills for administrative leadership.

Leaders and Leadership:

5. As a result of your professional experiences, how do you define leadership?

6. How do you describe an effective leader? (characteristics, skills and behaviors, etc.)

7. Do you describe yourself as a leader? If so, how?

8. How does one tell if you are being effective as a leader?
9. If people on your campus were asked to describe you in a leadership context, what do you think they would say?

Leadership Development in Community Colleges:

10. In your opinion, what are the three major leadership issues facing community colleges for future success?

11. In what ways have you seen emerging leaders identified and/or selected for leadership positions?

12. Do you think that the sponsoring institutions of LINC participants have been supportive of the program and have integrated the LINC experience into participants’ job responsibilities? What is the basis for your opinions?

Type Theory and Gender Differences in Leadership:

13. What is the campus climate like in Iowa for women in leadership positions?

14. In your opinion, what are the major barriers and challenges facing women and ethnic minority leaders in community colleges?

15. Have you observed a difference between men and women administrative leaders?

16. Are there gender differences that make women more effective leaders than men? Explain your thoughts on the relationship between leadership style and gender. What is the basis for your opinions?

17. How do you think the study of the MBTI can influence one’s leadership style and development as an administrative leader?

18. Is there anything else you would like to say about leadership development, the LINC program, or community college leadership in general?

Transcripts were prepared from the tapes of the interviews. On the day of each interview, notes were also prepared by the interviewer to summarize responses and record interpretations and reactions. Once the transcripts were prepared, each
tape was listened to again several times to make sure that the transcripts and reflections accurately described the interviews.

Interview data were analyzed by coding the transcripts into categories of related themes or "units of data" (Bogdan & Biklen, 1992). The four themes used for organizing the data were taken from the first four research questions of the study. The themes are 1) identifiable ways the leadership skills of LINC participants have been developed or enhanced, 2) ways that LINC is preparing participants for enhanced administrative leadership roles at community colleges, 3) the role of the Myers-Briggs Type Indicator (MBTI) and type theory in leadership development programs, and 4) roles that the sponsoring institution can assume in supplementing and integrating the LINC experience.

In Chapter IV. Results, the data from the interviews will be presented by research question. Additional interview data that contributes to the body of knowledge on leadership development, styles, and issues is also included in Chapter IV.

The Use of Qualitative Methods

Qualitative methods were incorporated into this study for several reasons. The Leadership Institute for a New Century (LINC) is more than an educational program for women and people of color. It is part of a developmental process or journey that includes various formal and informal experiences which shape an individual’s leadership style. Data collected about leadership development describes people, experiences, and reflections. This data needs to be captured in detail and it cannot be analyzed by statistical procedures (Bogden & Biklen, 1992, p. 2).
Since the focus is on leadership development for women and people of color, qualitative methods are necessary to accurately describe the perspectives of the participants and to attach "meaning" is an essential concern (Bogden & Biklen, 1992, p. 31). What makes their leadership development unique and different? How have their leadership skills been enhanced from their participation in LINC? The issues of "how" and "why" are much more important than just naming leadership outcomes or products.

The insights of the sponsoring community college presidents and LINC staff can also be collected by using qualitative research. As members of the "LINC team" they should have an opportunity to tell their own stories. Their observations and opinions about leadership development, for both a short and long-term basis, are crucial for a total picture of the LINC experience.

Qualitative methods are appropriate because it is a case study or detailed examination of one particular leadership development program (Merriam, 1988). This means looking deep into leadership development specifically through the LINC program, not through a broad range of sources in order to develop generalizations.

**Ensuring Trustworthy Research**

It is necessary to ensure trustworthiness of the research so the findings and interpretations can be trusted. LINC stakeholders and researchers in leadership development will want trusted outcomes that they can use to confirm, expand, and inform in their own work (Glesne & Peshkin, 1992, p. 146).
Several strategies have been pursued to ensure trustworthiness. Time is major factor in the acquisition of trustworthy data (Glesne & Peshkin, 1992, p. 146). A considerable amount of time was spent becoming familiar with the LINC program by reviewing documents, observing the final session of the '94 - '95 program, and discussing the program with LINC staff. As a result, the stakeholders interviewed were more comfortable and comprehensive in what they shared. The triangulation of questionnaire data, interviews, and type profiles contributed to the trustworthiness. Multiple-data-collection methods help corroborate data on specific issues (Glesner & Peshkin, 1992; Borg & Gall, 1989).

Trustworthiness was demonstrated by addressing the limitations of the study in Chapter I, and through continual alertness to biases and subjectivity. Since the researcher had no prior knowledge of the LINC program before embarking on the study and was not affiliated with the sponsoring trustees and presidents, potential biases and subjectivity were minimized. The presence of bias and subjectivity on the part of LINC staff was carefully noted throughout the study.

During each interview, the respondent had the opportunity to suggest additional questions that had not been covered and also elaborate on related leadership development topics. For improved accuracy, this gave the respondent a chance to comment on topics that were incomplete or not included. Their contributions to the data and research methods increased the accuracy of the interviews. For additional trustworthiness, as suggested by Lincoln and Guba (1985), an outsider "audited" the
notes and interpretations from the interviews. An audit trail was kept to demonstrate
the credibility of the process and findings.

**Data Base of Type Profiles**

Each class of LINC participants completed Form F of the Myers-Briggs Type
Indicator (MBTI). A data base of the type profiles for the six year cohort is presented
in Table H. Instead of listing 96 type profiles, 83 profiles are recorded because some
participants had completed the instrument prior to enrolling in LINC. The content
and theory, scoring, reliability, and validity of the MBTI are included in this section;
followed by the methods of data analysis.

**Content and Theory of the MBTI**

Form F of the Myers-Briggs Type Indicator (MBTI) has 166 items in the form
of word pairs and phrase questions. Form F also contains unscored research items
since it is used for ongoing MBTI research. The MBTI is based upon Jung’s theory
of psychological types (1921/1971); its aim is to identify, from self-report of easily
recognized reactions, the basic preferences of people in regards to perception and
judgment. The effects of each preference, singularly and in combination, can be
established by research and put to practical use (Myers & McCaulley, 1985, p. 1)

The MBTI is different from most other personality instruments: a) it
implements a theory that must be understood to understand the MBTI; b) dichotomies
are postulated; c) dynamic relationships between the scales lead to sixteen "types"; d)
the theory and model of development continues throughout an individual’s life; and e)
the scope of practical application is very widespread since the scales are based on the
functions of perception and judgment that enter into almost every behavior (Myers & McCaulley, 1985, pp. 1-2).

According to Jung's theory, there are four basic indices or preferences that direct the use of perception and judgment. The theory assumes all types are valuable and necessary. Each type has its own special strengths, areas of vulnerability, and pathway for development. The Extraversion - Introversion (EI) index is designed to reflect whether a person is an extrovert or an introvert as described by Jung (1971). Jung regarded these as mutually complementary attitudes. Extraverts are oriented primarily toward the outer world and tend to focus their perception and judgment on people and objects. Introverts are oriented primarily toward the inner world and focus their perception and judgment upon concepts and ideas.

The Sensing - Intuition (SN) index reflects a person's preference between two opposite ways of perceiving; sensing (S) which reports observable facts or happenings through the senses; or one may rely more upon intuition (N), such as meanings, relationships and possibilities beyond the conscious mind (Myers & McCaulley, 1985, p. 2).

The Thinking - Feeling (TF) index reflect a person's preference between two contrasting ways of judgment. Thinking (T) makes decisions impersonally on the basis of logical consequences. Feeling (F) decides primarily on the basis of personal or social values.

The Judgment - Perception (JP) index is designed to describe the process a person uses primarily in dealing with the outer world. A judgment (J) preference
reported a preference for using the judgment process (either thinking or feeling) for
dealing with the outer world. A person preferring perception (P) has reported a
preference for using a perceptive process (either S or N) for dealing with the outer
world (Myers & McCaulley, 1985, p. 2).

Scoring

The main objective of the MBTI is to identify four basic preferences. Every
person is assumed to use both poles of each of the four indices, E/I, S/N, T/F, and
J/P, but to respond first and most often with the preferred functions or attitudes. The
MBTI items scored for each index offer forced choices between the pole of the
preference at issue. Each of the responses for a question may be weighted 0, 1, or 2
points. Responses that best predict to total type with a prediction ratio of 72 percent
or greater carry a weight of 2; items that predict type with a prediction ratio of 63 to
71 percent carry a weight of 1; overpopular responses carry a weight of zero (Myers
& McCaulley, 1985, p. 3).

The total weighted scores for each preference are called points. Persons with a
higher total of points for E than for I are classified as extraverts. The other indices
are scored and interpreted in the same way. The letters for each pair of alternatives
indicate the direction of the preference while the number indicates the strength of the
preference.

If a person prefers the extroverting function, he/she has probably spent more
time as an extravert and prefers a career and activities that require that function. If
there is a low preference score or almost equal votes for each preference pole, a
person can use both functions with equal ability. The numerical portion of a score does not necessarily imply the level of effectiveness at that function. The environment may also influence a person's preferences and the opportunity to develop certain functions (Myers & McCaulley, 1985, p. 3).

**MBTI Reliability**

During the construction of the MBTI, an important assumption was derived from observations. Persons with good command of perception and judgment, or good type development, are more likely to be clear about their own preferences and report them with more consistency. The acquisition of good judgment, designated by the Thinking - Feeling (TF) index, is postulated to be the most difficult to develop. The lowest reliabilities are expected to occur in the TF index since it expected to be particularly vulnerable to deficiencies in type development (Myers & McCaulley, 1985, p. 164).

The MBTI Manual (1985) reports split-half reliabilities of continuous scores for a number of groups. MBTI question items were selected for the X and Y halves by a logical split-half procedure. All available item statistics were taken into consideration, and items were paired that resembled each other and correlated the most highly. Consideration was given to the balancing of the halves by the expected number of responses. Samples from the Center for Applications of Psychological Type (CAPT) data bank were used. Samples were taken from different age groups, different education and achievement levels, and different students levels. Reliabilities remain stable up to 35 omissions for Form F. These cutoff points can be used to
determine the number of omissions acceptable in research studies (Myers & McCaulley, 1985, pp. 165-169).

The split-half reliability estimates are derived from product-moment correlations of X and Y continuous scores with Spearman-Brown prophecy formula correction. For example, the total Form F data bank population is 55,971 persons with correlations of .83 for the EI index, .86 for the SN index, .84 for the TF index, and .87 for the JP index. The female data bank for Form F has a total of 32,731 females with correlations of .84 for the EI index, .86 for the SN index, .80 for the TF index, and .87 for the JP index (Myers & McCaulley, 1985, p. 166).

MBTI Validity

Because the MBTI was designed to implement Jung's theory of psychological types, its validity is determined by its ability to demonstrate relationships and outcomes predicted by theory. The theory suggests persons are, or become, different types. The MBTI attempts to classify persons according to their "true" types. The theory predicts that the basic preferences for sensing or intuitive perception lead to different interests and that basic preferences for thinking or feeling judgment lead to differences in acting on those interests. The basic preferences and attitudes affect the surface indicators of values, motivation, and behaviors. If Jung's theory describes preferences that do exist, and if the MBTI adequately indicates those preferences, then surface behaviors should be in the directions predicted by the theory. Allowances are made for measurement error, stage of development, and overriding environmental
pressures that interfere with expression of type preferences. (Myers & McCaulley, 1985, p. 175).

Type tables are the basic method for presenting MBTI data on groups. Type tables provide evidence of construct validity. The MBTI Manual (Myers & McCaulley, 1985) contains several type tables of the psychological types for different distributions of interest scales and surveys, various occupations, and for several other personality, psychological, and values inventories. In order to determine the validity of the Myers-Briggs Type Inventory, correlations of MBTI scores were compared with several other scales such as the California Psychological Inventory, the Jungian Type Survey, the Minnesota Multiphasic Personality Inventory, the Kuder Occupational Interest Survey, and the Strong-Campbell Interest Inventory. Significant correlations of other scales with type preferences were: (Myers & McCaulley, 1985, pp. 206-208)

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>-.77 to -.40</td>
<td>I</td>
<td>.75 to .40</td>
</tr>
<tr>
<td>S</td>
<td>-.67 to -.40</td>
<td>N</td>
<td>.62 to .40</td>
</tr>
<tr>
<td>T</td>
<td>-.57 to -.40</td>
<td>F</td>
<td>.55 to .40</td>
</tr>
<tr>
<td>J</td>
<td>-.59 to -.40</td>
<td>P</td>
<td>.57 to .40</td>
</tr>
</tbody>
</table>

Data Analysis

The data base of type profiles for 83 LINC participants was analyzed by comparing the composite to Center for Creative Leadership data on men and women participating in their Leadership Development Programs. Statistically significant differences and similarities by gender were noted between the cohorts. Additional comparisons were made between the LINC cohort and type studies of leaders in
education. A type table using the Selection Ratio Type Table (SRTT) program, (see Appendix L), compares LINC participants to a base samples of men and women who have attended the Center for Creative Leadership Development Program from 1979 - 1983.

In a type table one can get a visual impression of the frequency distribution of that group, as well as determine more carefully the precise breakdown of the percentages and numbers of the types and type groupings (Macdaid, 1987, p. 251). One of the most common hypotheses in type research addresses when certain types are found more frequently in a given sample than would be expected in a base population. The SRTT computer software program (Granade et al., 1987) is a two-by-two contingency table analysis which produces output from 44 separate analyses on a one-page type table format. Furthermore, the SRTT program calculates a selection ratio obtained by dividing the observed frequency by the expected frequency. The SRTT scoring program accounts for cells with an N less than 5 by calculating a Fisher's exact probability. The selection ratio is equal to 1.00 when the observed and expected frequencies are the same, grows increasingly larger as the observed frequency becomes larger than the expected frequency and grows increasingly smaller as the observed frequency becomes smaller than the expected frequency (Macdaid, 1987, p. 254). The sample being compared to the base is said to have an overrepresentation of a particular characteristic if the index value is greater than 1.00 and an underrepresentation occurs if the index value is less than 1.00. The
base or reference population should have as many characteristics in common with the sample as possible (Macdaid, 1987, p. 256).

The analysis of the MBTI profiles of LINC participants was included under the heading of Research Question 3 which deals with the contributions of type theory to leadership development.
CHAPTER IV. RESULTS

This chapter presents the results of this study and is organized into five sections to correspond to each of the five research questions. In each of the five sections the results are presented according to the method of data collection used: Satisfaction and Perception Survey (SPS), personal semi-structured interviews, and type profiles and tables. Each time the SPS is used as a data source, the aggregate data is presented first followed by the comparative data. Eighty-five of the 96 participants responded to the Satisfaction and Perception survey. Only four of the 85 participants responding identified themselves in Leadership Level 4. Their current position does not fit into the categories defined as Leadership Levels 1, 2, and 3. Items 72 - 125 of the SPS are not included in the results of the study because a significant number of participants did not complete these items or if they did, they did not respond according to the five-point Likert scale as requested. This does not impact the study because those items were asking for programming recommendations for specific topics in LINC. For some SPS questions and items which have several possible responses, the tables are presented in designated appendices because of their width and length when formatted.

Research Question 1

Identifiable ways the leadership skills of LINC participants have been developed or enhanced as a result of completing the program.
Satisfaction and Perception Survey (SPS)

Survey question 14 addresses the LINC participants' expectations and reasons for participation. Their expectations of the program may influence their perceptions on how their LINC participation has helped develop or enhance their leadership skills. Question 20 is answered by those LINC participants who have received a promotion during or since their participation in the program. Question 21 asks for details on how instrumental LINC was in the participant's promotion or advancement.

Aggregate data for questions 14, 20, and 21 is presented in Appendix I. Aggregate data for items 28 - 71 is presented in Appendix J. Items 28 - 46 are perceptions that participants have about their LINC experience. Items 47 - 71 are how the participants perceive what they have learned as a result of various topics presented in the LINC program.

Aggregate data

SPS question 14 asked respondents to rank their reasons for participating in LINC. When looking deeper into the responses to question 14 (Table I-1), the responses are ranked by pooling the means and assigned rankings. Item (7), "you were asked to participate by a supervisor", and item (1), career advancement, each have a mean score of 1.4. For item (7), 38.6 percent of those assigning it a value gave it a 1 for being the most important reason. While item (1) also has a mean of 1.4, the ranks assigned are from 18.1 percent citing it as most important to 10.8 percent citing it as third in importance. Statewide contacts (item 2) and personal satisfaction (item 4) have mean values of 2.0 for respondents who assigned these
items a ranking, these two items were also analyzed beyond their means by reviewing the number of participants assigning it values of 1, 2, or 3. The remaining three reasons, professional recognition, graduate credit, and program reputation, each had at least 50 percent of the respondents not assigning it a value. Using a combination of the means and assigned rankings for SPS question 14, the top four reasons (ranked by importance) for participating in LINC are:

1. You were asked to participate by a supervisor
2. Career advancement
3. Statewide contacts
4. Personal satisfaction

Of the 34 respondents answering question 20 (Table 1-2), 44 percent stated that LINC was very or moderately instrumental in their promotion(s) or advancement(s); an additional 44 percent of the respondents indicated that LINC was somewhat instrumental.

If the participant answered favorably to question 20, they were asked in question 21 to rank the ways LINC was instrumental in the promotions or advancements. Responses to question 21 are ranked by mean (Table 1-3), but need further review for determining the most important ways that LINC was instrumental in participants' promotions or advancements. If at least 50 percent of the respondents did not assign an item a value then it was not considered for determining the most important ways that LINC was instrumental in participants' promotions. For the remaining four items to be considered, they were compared by mean, the percent assigning the item a value of 1, 2, or 3, and the number of respondents who ranked
the item with a value for importance. For example, item (5) "improved my visibility within top administration at the college" has a mean of 1.31 and item (6) "broadened my understanding of community colleges in the state" has a mean of 1.56. However, item (6) has 22 respondents of which 28.1 percent assigned it a value of 1 and 28.1 percent gave it a value of 2 or 3. In contrast, of the 19 respondents for item (5), 28.1 percent assigned it a value of 1 and 21.9 percent gave it a value of 2 or 3. Using a combination pooling of means and ranks, the four major ways (ranked by importance) that LINC was instrumental in participants' promotion(s) or advancement(s) were:

1. Broadened understanding of community colleges in the state
2. Improved visibility within top administration at the college
3. Helped develop leadership style
4. Improved self-confidence

For most of the items numbered 28 - 70, (4). "agree" on the five-point Likert scale was the modal response and several mean scores were from 3.5 to 5 which suggests that the majority of LINC participants have perceived the LINC experience and the various leadership related topics very appropriate and valuable for development and enhancement of their leadership skills. Only one participant in the study answered item 71 which asked for other topics they know more about as a result of the LINC experience. The response for item 71 was political climate. With the exception of the telenet component, survey items (45) and (46), which was not a part of each of the six LINC programs, all other items, 28 - 70, frequently had at least 80 of the 85 respondents answering each question (Appendix J).
Some of the most favorable reactions regarding the LINC experience (items 28 - 46) and what they have learned from the topics presented (items 47 - 70) are noted in these combined percentages of agree and strongly agree responses (Table 3, Tables J-1 and J-2).

Comparative data

A one-way ANOVA was conducted on items 28 - 70 by current Leadership Levels 1 - 3 (question 8). No statistically significant differences were found with the exception of items 58 and 60. On item 58, formal and informal organizational structures, participants in Leadership Level 3 rated it significantly higher than those participants currently in Leadership Level 1 (Table K-1). On item 60, interaction of the president with internal constituencies, participants in Leadership Level 2 rated it significantly higher than those in Leadership Level 1 (Table K-2).

Table 3. Participants' Perceptions Regarding the LINC Experience (Agree and Strongly Agree Percents for Selected Items of the SPS)

<table>
<thead>
<tr>
<th>Items</th>
<th>Percent Responding Agree or Strongly Agree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>28. Overall positive experience</td>
<td>99</td>
</tr>
<tr>
<td>31. Presentations valuable</td>
<td>99</td>
</tr>
<tr>
<td>36. Specific topics complete and comprehensive</td>
<td>93</td>
</tr>
<tr>
<td>47. State governance of community colleges</td>
<td>92</td>
</tr>
<tr>
<td>50. Leadership styles</td>
<td>91</td>
</tr>
<tr>
<td>48. Local governance of community colleges</td>
<td>87</td>
</tr>
<tr>
<td>51. Vision, philosophy, mission, goals, ideals</td>
<td>86</td>
</tr>
<tr>
<td>59. State and local funding</td>
<td>86</td>
</tr>
<tr>
<td>58. Formal and informal organizational structure</td>
<td>84</td>
</tr>
<tr>
<td>53. Organizational cultures</td>
<td>83</td>
</tr>
<tr>
<td>55. Fiscal resource allocation</td>
<td>75</td>
</tr>
<tr>
<td>41. Improved management skills</td>
<td>70</td>
</tr>
<tr>
<td>42. Improved communication skills</td>
<td>63</td>
</tr>
</tbody>
</table>
In the final comments section of the SPS, several participants remarked on how LINC has developed or enhanced their leadership skills. The comments are as follows:

* Increased her sense of self-worth and enhanced confidence to pursue a more responsible position
* Teaches participants a lot about top level decision making and interactions - this is hard to learn just anywhere
* Networking has never ceased since my LINC experience.
* Provided the opportunity to learn about community colleges nationally - appreciated chance to attend the AACC Convention
* Provides insight and motivation to pursue additional education
* Significantly expanded my knowledge about my own community college
* Learned from the exposure to issues and perspectives of other community colleges
* Very valuable time to focus on career objectives and learn how to get started achieving them
* Facilitated and benefited their personal and professional growth

**Personal Semi-Structured Interviews**

Analysis of data from interviews with the respondents yielded identifiable ways that leadership skills of LINC participants have been developed or enhanced as a result of completing the program. A summary of the findings and examples of respondents’ statements are given for selected LINC participants, community college presidents, and LINC staff. Qualitative research processes, such as semi-structured interviews, also lead to discussing other related topics and issues that are significant to
the study. As a result, this section includes the respondents’ insights and descriptions of effective leaders and leadership. To protect their anonymity the respondents’ names will not be used.

Participants interviewed said that their LINC experience made them more positive and supportive of the community college system. The networking and contacts made across the state were most often stated as one of the most important ways that their leadership skills had been enhanced. LINC also raised their awareness that good leaders are needed at all levels of the organization regardless of title. Exposure to a variety of leadership styles in community colleges was cited as an important part of LINC along with the opportunity to learn about the total operations of a community college. Participants think they will be more flexible in working with others because of what they learned in LINC.

Participants made the following statements about how their leadership skills have been developed and enhanced as a result of the LINC experience.

I really liked when we went out for dinner and people could just talk about what was going on at their campuses and what was going on with their own jobs. That was very valuable. I thought that the session when the presidents talked to us as a panel was very helpful. I think the more contact that the LINC participants can have with the presidents and upper level administration, I think the more valuable it is. LINC really broadened my experience with community colleges. Granted, my graduate, post-graduate classes did some of that, but there’s nothing like doing; hearing it from people who are professionals in the field.

I think LINC made me a more positive person, and certainly more supportive of the community college system. I think a lot of the things that they exposed us to, I wish I’d been exposed to when I first got into the educational field. I know some people object to the looseness of
how LINC is organized, but I felt that was a real positive because it made us make decisions; it made us get to where we were supposed to be; it made us talk about how we were going to achieve goals. It was a different way of learning than most of the things that I have been exposed to, and I thought that was good.

To be honest with you, I wasn’t really sure what it (LINC) was all about, and I guess maybe I was one of those that kind of went in there blind. But I was totally surprised when I got into it. I loved it, every minute of it. I learned more in that year during LINC about how a community college functions than in the five or six years I’ve been on campus.

When discussing why they have sent employees to participate in LINC, one of the community college president talked about how he sees the program contributing to the development of emerging leaders.

I think it (LINC) rejuvenates or helps the individual feel better about themselves and there’s definitely a learning process in there. The other thing it does is bring back to the campus some new ideas. We probably travel more and send more people to different places than any college in the state, and the reason for that is I don’t want to allow this institution to become parochial or provincial. And the way you do that, in my opinion, is get out and see what’s happening and talk to other people.

When asked about participants’ leadership skills being developed or enhanced, LINC staff members made the following comments.

I think there’s a terrific sense of satisfaction in seeing the young women that are in community colleges in Iowa come into this program as kind of quiet, capable, searching people. They participate in the program and exit it in May with a new level of confidence and assurance; they’re a greater resource to go back to their college. . . . I’m very high on the Iowa community colleges and what their future holds and in what kind of staff potential there is in those colleges, and I think it’s just a process of unlocking it and letting it go.

I think that every effort that we make is going to be beneficial in the long run. That everybody who’s participated (in LINC) and those that
have supported their participation have grown from the experience, in
some cases measurable and in other cases, more difficult to measure.

In discussing the ways that the leadership skills of LINC participants have
been enhanced or developed, interviewees were also asked to share their thoughts on
how to define leadership. According to two community college presidents
interviewed:

I've always said that there is big difference between management and
leadership, and that there are people who are visionaries that provide
leadership, and there are other people who are very well organized what
are very good managers in day-to-day operations, and there are very
few that are both. A leader, to me, is one who is best defined by
characteristics like motivator, entrepreneur, innovator, visionary, risk-
taker, but most important among all of those is probably motivator and
collaborator. Because if they can't get the grass roots involvement and
commitment for whatever their vision is, they're going to have a really,
really difficult time.

I define effective leaders as people who are tough-minded and tender-hearted.
They're tough-minded in the sense they have the ability to set goals and see
paths and help initiate structure; do plans, programs, and projects well. And
on the other hand, they are effective in considering and working with the needs
and interests and limitations of other people, and to balance out that ability to
work with and get things done with and through others, with the hard skills
of goal-setting and working plans.

One of the LINC participants shared the following definition of leadership.

I really believe that leadership is establishing an environment to
encourage others to do their best. I think that an important part of
leadership is empowering others. I really believe in that, because I
don't care how good a leader is, one person can't do it, and they need
everybody else to make it work. . . . A good leader is also a good role
model.

A LINC staff member responded with this description of leadership.

I guess I feel leadership is a visionary process, and at the same time a
community-building process. Those sometimes can be in conflict with
each other, but I think it’s a matter of empowering others as well as providing the opportunities for people to grow and develop. It’s an art as well as a science. I think it’s more art than science. . . . So I probably can’t put it (leadership) in two or three words, but it’s something out there, you know, it’s just like a flower sometimes; you know it’s beautiful, but you can’t describe it.

LINC participants, staff, and community college presidents were fairly consistent in their key concepts and phrases on the topic of effective leaders and leadership. Their most common themes are as follows.

* Having a vision and being able to articulate it; then motivate others to follow that vision through a community-building process
* Pull together the right people and have them work together to accomplish goals
* Establishing an environment to encourage others to do their best
* A combination of people skills and technical skills; the ability to initiate structure and to show consideration.
* Making tough decisions, resolving conflict, being accountable, involving perspectives other than your own
* Empowering others and providing opportunities for others to grow and develop

In summary, their definitions of leadership focused on behaviors and skills and emphasized a balance between working well with others and achieving results.

Research Question 2

*The LINC program is preparing women and people of color to assume enhanced administrative leadership roles at community colleges.*
Satisfaction and Perception Survey

Questions 7, 8, and 9 are analyzed to track the changes occurring in the leadership positions held by LINC participants. Responses to questions 7 and 8 (Table 4) show changes that have occurred in title and level of administration while responses to question 9 (Table 5) can explain advancements in responsibility and promotions within Leadership Levels. When reviewing the data in Tables 4 and 5 the element of time should be considered. Those participants who have recently completed the LINC program have had only a short period of time for leadership development and advancement opportunities. Questions 18 and 20 refer to the leadership promotions that participants have received and how instrumental the LINC experience was in the promotion or advancement. Questions 25 - 27 deal with career aspirations and specific goals in terms of leadership position and career mobility.

Aggregate Data

According to SPS questions 7 and 8, percent breakdowns by Leadership Levels for the 85 participants are as follows (Table 4).

Table 4. A Comparison of the Leadership Levels of LINC Participants by Time

<table>
<thead>
<tr>
<th>Response</th>
<th>Leadership Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>One N/(%)</td>
</tr>
<tr>
<td>When accepted into LINC</td>
<td>13 (15.3)</td>
</tr>
<tr>
<td>Current position</td>
<td>24 (28.2)</td>
</tr>
</tbody>
</table>
Table 5. Rationale for LINC Participants' with Same Leadership Level

<table>
<thead>
<tr>
<th>Response</th>
<th>N</th>
<th>%*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position title remained the same but leadership responsibilities enhanced</td>
<td>25</td>
<td>41.0</td>
</tr>
<tr>
<td>Position title remained the same and responsibilities have not been enhanced</td>
<td>23</td>
<td>37.7</td>
</tr>
<tr>
<td>Position title has changed but remains within same leadership level within same leadership level</td>
<td>9</td>
<td>14.8</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>6.6</td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Approximate percents due to rounding.

The 61 participants who answered question 9, cited the following reasons for why they have remained in the same Leadership Level (Table 5).

SPS questions 18 and 20 reveal 40 percent of the 85 participants have received a promotion or advancement in their career during or following their LINC experience. Of those 34 participants receiving a promotion (Table 6), 88.2 percent said that LINC was somewhat to very instrumental in the promotion or advancement they received (Table 7).

When asked if the LINC experience helped clarify career aspirations (question 25), 54.8 percent said "yes", 21.4 percent responded "no", and 23.8 percent were "unsure" (Table 8).
Table 6. Participants Receiving a Promotion During or Since the LINC Experience

<table>
<thead>
<tr>
<th>Response</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>34</td>
<td>40</td>
</tr>
<tr>
<td>No</td>
<td>51</td>
<td>60</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 7. Degree That LINC was Instrumental in the Promotion/Advancement

<table>
<thead>
<tr>
<th>Response</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Instrumental</td>
<td>5</td>
<td>14.7</td>
</tr>
<tr>
<td>Moderately Instrumental</td>
<td>10</td>
<td>29.4</td>
</tr>
<tr>
<td>Somewhat Instrumental</td>
<td>15</td>
<td>44.1</td>
</tr>
<tr>
<td>Minimally Instrumental</td>
<td>3</td>
<td>8.8</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>1</td>
<td>2.9</td>
</tr>
<tr>
<td>Not Applicable</td>
<td>51</td>
<td>---</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Approximate percents due to rounding.

Table 8. LINC Clarified Career Aspirations

<table>
<thead>
<tr>
<th>Response</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>46</td>
<td>54.8</td>
</tr>
<tr>
<td>No</td>
<td>18</td>
<td>21.4</td>
</tr>
<tr>
<td>Not Sure</td>
<td>20</td>
<td>23.8</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>---</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Approximate percents due to rounding.
For question 25 several participants individually commented on ways that LINC helped them clarify their career aspirations. Examples of the most frequently cited ways include the following.

* Learned that I was content at the level I am at now; realized I do like my job
* Deepened my understanding and commitment to the community college movement
* Clarified various administrative responsibilities
* Know for sure that I do not want to be a college president
* Encouraged me to pursue a doctoral degree
* Gained better understanding of community college politics and job opportunities
* Now know what positions I want to pursue and gave me the confidence to make plans on how to achieve my goals

On SPS question 26, the following positions were cited as employment goals to achieve within the next five years (Table 9).

Question 27 pertains to LINC participants' expectations in remaining at the same institution for the next five and 10 years. Sixty-one percent of the 81 participants expect to be at their current institution in five years (Table 10). In 10 years, approximately 42 percent are unsure with 39 percent expecting to be at the same institution (Table 11).
Table 9. Participant’s Aspired Level of Employment for Next Five Years

<table>
<thead>
<tr>
<th>Response</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean’s Level</td>
<td>27</td>
<td>34.2</td>
</tr>
<tr>
<td>Vice President Level</td>
<td>15</td>
<td>19.0</td>
</tr>
<tr>
<td>Present Position</td>
<td>15</td>
<td>19.0</td>
</tr>
<tr>
<td>Unknown</td>
<td>9</td>
<td>11.4</td>
</tr>
<tr>
<td>Department Chair Level</td>
<td>5</td>
<td>6.3</td>
</tr>
<tr>
<td>Community College President</td>
<td>4</td>
<td>5.1</td>
</tr>
<tr>
<td>Other Position</td>
<td>4</td>
<td>5.1</td>
</tr>
<tr>
<td>No Response</td>
<td>6</td>
<td>----</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Approximate percents due to rounding.

Table 10. Participant Expects To Be At Same Institution in Five Years

<table>
<thead>
<tr>
<th>Response</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>50</td>
<td>61.0</td>
</tr>
<tr>
<td>No</td>
<td>10</td>
<td>12.2</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>21</td>
<td>25.6</td>
</tr>
<tr>
<td>No Response</td>
<td>4</td>
<td>----</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Approximate percents due to rounding.

Table 11. Participant Expects To Be At Same Institution in Ten Years

<table>
<thead>
<tr>
<th>Response</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>25</td>
<td>39.1</td>
</tr>
<tr>
<td>No</td>
<td>10</td>
<td>15.6</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>27</td>
<td>42.2</td>
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<td>23</td>
<td>----</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Approximate percents due to rounding.
Comparative Data

In order to track the promotions between Leadership Levels, questions 7 and 8 were analyzed by Leadership Levels 1, 2, and 3 (Table 12). Of the 24 participants currently in Leadership Level 1, 12 were at that level when they enrolled in LINC and 12 have received a promotion from a Level 2 position to a Level 1 position since their LINC experience. Thirty-two of the 37 participants currently in Leadership Level 2 positions were in Level 2 before with the exception of 5 participants formerly in Level 3 positions. Of the 20 Leadership Level 3 participants in this study, 10 of them stated that their position title has remained the same but their responsibilities have been enhanced since their LINC experience (Table 13). The affect of time needs to be considered for the results in Tables 12 and 13. For example, the majority of recent LINC participants have been at Leadership Levels 2 and 3. Compared to other LINC participants, they have had a much shorter period of time for the opportunity of a promotion.

Table 12. Changes in Leadership Position by Leadership Levels

<table>
<thead>
<tr>
<th>Current Level 1 Participants: Position When Accepted</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>12</td>
<td>0</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Current Level 2 Participants: Position When Accepted</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td></td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current Level 3 Participants: Position When Accepted</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>19*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*(one participant listed other)
Table 13. Changes Within the Same Leadership Level by Current Leadership Level (N = 81)

<table>
<thead>
<tr>
<th>Response</th>
<th>Level 1 N/(%)*</th>
<th>Level 2 N/(%)*</th>
<th>Level 3 N/(%)*</th>
<th>N/response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position same/leadership responsibilities enhanced</td>
<td>3 (27.3)</td>
<td>12 (38.7)</td>
<td>10 (55.6)</td>
<td>25</td>
</tr>
<tr>
<td>Position same/no change in responsibilities</td>
<td>4 (36.4)</td>
<td>14 (45.2)</td>
<td>5 (27.8)</td>
<td>23</td>
</tr>
<tr>
<td>Position title changed/within same level</td>
<td>2 (18.2)</td>
<td>4 (12.9)</td>
<td>3 (16.7)</td>
<td>9</td>
</tr>
<tr>
<td>Other/Not applicable</td>
<td>15 (-----)</td>
<td>7 (-----)</td>
<td>2 (-----)</td>
<td>24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>24 (100)</td>
<td>37 (100)</td>
<td>20 (100)</td>
<td>81</td>
</tr>
</tbody>
</table>

*Approximate percents due to rounding.

In reviewing the breakdowns for SPS questions 18, 20, 25 - 27 no clear trends emerged by the three Leadership Levels. In the final comments section of the SPS one participant wrote that as a result of her LINC experience, she is now more inclined to be on college committees or teams including those not directly related to her position. She has "taken the leadership" in a number of instances since her LINC experience.

**Personal Semi-Structured Interviews**

In interviews with selected LINC participants, community college presidents, and LINC staff, data were shared on how LINC is preparing women and people of color to assume enhanced administrative leadership roles at community colleges.
Qualitative research methods, such as semi-structured interviews, also lead to discussing other topics and issues related to the study. As a result, in this section the respondents identify the major issues that are facing community college leaders. To protect their anonymity the respondents' names will not be used.

Participants shared the following thoughts.

As far as LINC being something that really gets you a promotion on our campus, I don't see that happening, I really don't. And I think maybe that's because a lot of people in administrative offices, including the president's, don't have a real good handle on what is accomplished in LINC.

I don't see a lot happening with the other women on our campus that have gone through this program. . . . We've got 13 women that have gone through it, and I don't think it (LINC) got another promotion for anybody else since they've been through it.

Community college presidents made the following comments on LINC preparing women and people of color for enhanced leadership roles.

When I came to Iowa, you would have an administrative staff meeting here or any place in the state and you couldn't hardly find a woman or minority in the group. I believe, and still believe, that there are a lot of high potential individuals that have a lot to offer, and that's always been confirmed whenever I've interacted with that group (LINC participants). . . . I think the proof is in the pudding in terms of people that have gone through this program (LINC), we've moved them up to more responsible positions. And it's a two-part deal. Part of it's in the selection process and the other part is in the program and in the execution and motivation that they (participants) have.

I don't know enough about the program, other than people having a good experience, being very happy they went through it, and being very excited about having this new network. I don't think they're that much of a better manager than they were. If they are, I haven't been able to see it. LINC may help them professionally but I don't think I've seen them using any new techniques. First of all, I don't think LINC has much management in it.
LINC staff made the following comments about the program preparing participants for enhanced leadership roles.

I think we've been extremely successful at providing opportunities for growth and development, upward mobility, for those who participated . . . . If you look throughout the state of Iowa, there's been movement. Some of these women have been upwardly mobile, some have chosen to stay in their own positions and have been more enhanced by the experience.

Most of the presidents are very proud of who they've sent, and speak very glowingly of them. And as we invite presidents to come and talk to the LINC group, they will often mention who the previous LINCers are from their campus and what they've done, what kind of contribution they've made.

The LINC staff cited how several LINC participants have been promoted at various institutions and those who have remained in the same position have experienced new and more challenging leadership opportunities. One staff member went on to say:

I think that this leadership program and others are pretty critical to the future of our community college system, whether they be leaders for Iowa or other states. I think we need to continue with the leadership . . . . We're in an era of cutting programs, and that takes a different style of leader. . . . And what I think we're going to have to move to is a community-based leader, one that can bring groups together . . . and that it's one who can build consensus and yet have vision.

Another staff member added:

An individual needs to figure out who they are and what they want to do and be, and then follow through and do it. There are many opportunities for leadership in many forms and several ways to display it other than position.

The glass ceiling and being place-bound by family, spouses, and job responsibilities were mentioned as having an impact on the leadership advancement of
LINC participants. The fact that Iowa still does not have a woman CEO in any of the community college districts was discussed by all stakeholders interviewed. These issues and barriers will be included with gender issues presented in the results of Research Question Three.

It was also noted that since recent LINC participants have had less of an experience base in administrative leadership, it may take longer for them to move up the leadership ranks in the community colleges. As one LINC staff member states:

The people who are in LINC now that have a ways to go before they’re in a position where they could move up to an upper level administrative position, benefit a great deal, but it’s going to take much longer for them to gain from the experience, than someone who’s obviously in a closer position.

When discussing the preparation of women and people of color for enhanced leadership roles at community colleges, the interviews also included the respondents’ identification of the major issues facing community college leaders. In all three categories of interviews, the most frequently cited issues dealt with the mission of community colleges, funding, and human relations and resources. Details of these are provided from the following respondents.

I’d say one issue is getting back to the original mission of the community college and clarifying it, and that involves serving the community and the people in it. That means moving away from the direction that we’ve been going, where there are lots of places that want to become four year institutions or want to become comprehensive, and there’s nothing wrong with that as long as they maintain their original mission of serving the community and meeting the community needs.

Community colleges will spend their life putting a product together, to get it on the market, and it may be a good product, but the reality is, if community colleges don’t get that darn thing to the market in time, it’s not worth much. If we don’t respond to the needs of our community
with some urgency, it we don’t respond to the people we work with, . . . that’s the worst part of leadership.

Funding is a real trick because we (community colleges) are so many things.

Money is going to be a critical issue. There’s a lot of competition for how the funds are used within a college, and that certainly becomes a leadership issue.

Another issue is the ability to restaff these institutions for the next decade. There’s going to be probably 60% of the staff in community colleges of Iowa won’t be here 10 years from now, and who are we going to bring in and what are we going to do to turn these institutions over to the next generation.

Changing demographics would be another major issue, because as communities change, I think the institutions need to be more reflective in their leadership and in their faculty and their culture and in every aspect of the institution.

Additional issues include restructuring how education is delivered including the use of technology, transfer and articulation policies, and the need to change from a teaching - centered philosophy to a learning - centered philosophy. Competing with other institutions for funding and for students was mentioned along with examining the principles and values that guide the way everyday business is conducted.

Research Question 3

*The role of type theory in leadership development programs including comparisons of type profiles with national samples.*

**Type Profiles and Tables**

The type table of the eighty-three women who completed the Myers-Briggs Type Indicator as part of the LINC program is found in Appendix H. The modal type of this sample is ISTJ (Introverted, Sensing, Thinking, Judging) with 18 percent
showing these preferences. ENTJs (Extroverted, Intuitive, Thinking, Judging) and ESTJs (Extroverted, Sensing, Thinking, Judging) are the next two most frequently reported types with 13 and 12 percent of the sample respectively. ISTJs, ENTJs, and ESTJs are most often attracted or nominated to participate in the LINC program since together they comprise 43 percent of the sample.

In analyzing each dimension, the frequencies on E/I and S/N are fairly equal. However, significantly more LINC participants prefer Thinking (72% T) to Feeling (28% F) and Judging (69% J) to Perceiving (31% P). Since this is a study on leadership and management styles it is important to note type dynamics through the temperament of ST, SF, NF, and NT. The most common temperaments are Sensing/Thinking (36% ST) and Intuitive/Thinking (36% NT). Although this study does not focus on learning styles, it is interesting to note the temperaments on IN, EN, IS, and ES. The most frequent is Extroverted/Intuitive (33% EN) followed by Introverted/Sensing (29% IS), Extroverted/Sensing (20% ES), and Introverted/Intuitive (18% IN).

Table L-1 shows the MBTI profiles of the 83 women in the LINC program compared to the profiles of a sample of 1051 men who have participated in the Leadership Development Program at the Center for Creative Leadership from 1979 - 1983. McCaulley found the following for those 1051 men: 51% Introvert, 56% Sensing, 86% Thinking, and 74% Judging. (McCaulley, 1992, p. 6) When compared with the LINC sample, there are statistically significant differences found at the .01 level of significance on the T(Thinking) and F(Feeling) dimensions. When comparing
the two samples, there is an underrepresentation of Ts and an overrepresentation of Fs in the LINC cohort at the .01 level of significance. No statistically significant differences were found between the two samples on the E/I and S/N scales. In reviewing the temperaments, there is an underrepresentation of STs and an overrepresentation of SFs and NFs in the LINC sample at the .05 level of significance. Additional temperaments to note in the comparison are the underrepresentation of TJs at the .05 level of significance and the overrepresentation of FJs at the .01 level of significance for the LINC participants.

Table L-2 shows a comparison of the MBTI profiles of the 83 LINC participants to a sample of 181 women who have participated in the 1979-1983 Leadership Development Programs at the Center for Creative Leadership. McCaulley (1992, p. 6) found the following among the base sample of 181 women: 64% Extrovert, 70% Intuitive, 64% Thinking, and 54% Judging. When compared to the LINC sample, there are many more differences to note between the two groups of women than when comparing the LINC cohort of women to the sample of men. At the .01 level of significance, there is an overrepresentation of Ss (Sensing) compared to an underrepresentation of Ns (Intuitive) in the LINC cohort. An overrepresentation of Js (Judging) and an underrepresentation of Ps (Perceiving) exist in the LINC sample at the .05 level of significance.

Several temperaments were significantly different between the women in LINC and the women at the Center for Creative Leadership. An overrepresentation of IJs (Introverted/Judging), STs (Sensing/Thinking), and TJs (Thinking/Judging) are present
at the .05 level of significance. SJs (Sensing/Judging) and ISs (Introverted/Sensing) are overrepresented at the .01 level of significance. Underrepresentation of EPs (Extroverted/Perceiving), NPs (Intuitive/Perceiving), and ENs (Extroverted/Intuitive) exist in the LINC sample at the .05 level of significance.

**Personal Semi-Structured Interviews**

During the interviews with LINC participants, community college presidents, and LINC staff, questions and topics were discussed related to the use of the Myers-Briggs Type Indicator (MBTI) for leadership development. When studying type theory and its application for leadership development, differences between male and female leaders are often presented. Therefore, this section of results includes respondents' perceptions of male and female leaders and some of the barriers and challenges facing women leaders. To protect their anonymity, the respondents' names will not be used.

LINC participants had the following things to say about using the MBTI for leadership development.

It helped me understand that because I have these traits and somebody else has other ones, that it's okay, and if you know what traits this person that you're having to work with has, you can kind of put the puzzle together. . . . You need to reaffirm that frequently, and see if you've changed.

I think the value of it (MBTI) lies in the awareness of what the different types are and the characteristics of them, and how, as a leader, it's a good idea to have an understanding of it because it can impact your effectiveness in working with people.

I had done the testing (MBTI) before, and so I was familiar with what we were going to do and what was going to happen, but I had never
had as good of an interpretation as we had. And it makes you say, "oh, yeah, that’s why I have so much problems working with this person." And I think it’s a good guide, but I don’t think it should be gospel. It’s a guide just like all other assessments are, that just because you’re something doesn’t mean that you can’t change.

Participants interviewed said that the MBTI reaffirmed what they already knew about themselves and increased their awareness of self. It helped them understand their relationships with others and increased their awareness and appreciation for different leadership styles. They view it as an effective tool in working with students, co-workers, and supervisors.

The presidents interviewed were familiar with the MBTI and perhaps had used it in the past. One president said that maybe it was time to look at doing something like a session on the MBTI and type theory again with the administrative team of his institution. None of the presidents had used the MBTI recently but they did respond that it was one way to assess why people behave the way they do.

LINC staff were much stronger in their opinions about the MBTI; perhaps this is due to their consistent use of it as part of the LINC program. Staff insights on using the MBTI for leadership development are as follows.

I think it (MBTI) can ground them in theory, give them a common language or a focus that’s more positive in nature about human behavior, and the way they value differences. I like type because of its diversity and its valuing individual differences. It gives a person a foundation of being able to do a lot of things... .To deal with issues of social desirability where, for example, the very first LINC class of 19 women, all admit to adapting. That was the only group of 19 that believe they all had preferences for Thinking and had talked openly about how they would be different if it was safe enough to do that, but Feelers had to adapt their style consistent with their institution and the people who are working.
I think it (MBTI) helps you understand your own leadership style in the context of a team. It helps you realize where your blind spots are. It also, good or bad, makes you somewhat more predictable. I think they come out knowing a little more about themselves, maybe a confirmation of what they maybe already thought, but now they have letters to put with it. I think they come out knowing that all this has significance, but I don’t think they’re anywhere near knowing what to do with it.

In discussing the application of type theory for leadership development, gender differences as they relate to the management and leadership styles of men and women are included in the theoretical framework. Therefore, the perceived differences between men and women leaders as recorded from the interviews were included in the results for this research question on type theory. Barriers and challenges facing women leaders are also discussed.

When talking about the perceived differences between men and women leaders, respondents had the following comments.

I think women are better listeners. I think that they do a lot of networking, perceiving, feeling. I think that they are nurturing (LINC Staff member).

All administrative leaders are different. I find, on the average, men tend to look at win-lose. Women tend to look at win-win. Men tend to like to play along. Women are more comfortable collaborating (Community College President).

So it’s still going to be a skill thing, and really, gender shouldn’t have anything to do with it, or your style shouldn’t have anything to do with it. It’s how you relate to people and how you can lead (LINC Participant).

I think women can be just as good and can be just as bad as men. I don’t think there’s anything genetic about it at all (LINC Staff member).
Several of the respondents referred to sort of an adapting process or the effect of the environment on the leadership styles of men and women.

One big difference is that the culture, the environment, in my opinion, isn’t really safe enough, nor is there a critical mass of women, for example, that would feel safe enough in being themselves and adapting their own leadership style. But what you find for the most part is an adaptation where many of the women that have been upwardly mobile have assumed a lot of the characteristics of the people that are supportive of them, at the expense of their own style. . . .In order to survive, I think they’ve adapted (LINC Staff member).

I think if we get more women into leadership roles, they won’t all try to be men. They’ll let themselves be women and society will allow them to do some different kinds of decision-making (LINC participant).

Unfortunately, people expect us to play out leadership roles, given our gender, and that’s very unfair. I think there are—you know, it reminds me of those old cartoons about men being, if they’re soft and if they’re caring, then they have no ability to be a leader, but a woman, unless she’s tough, she has no ability to be a leader. I think, given institutions, and a person’s ability to build a climate, either will work. That’s not true in every instance. In some cases there are just cultures that can’t change that quickly (LINC Staff member).

Several interview respondents said an androgynous approach to leadership is preferred since both traditional female and male characteristics are needed for today’s leadership challenges and issues. Some still perceive that women leaders tend to be more nurturing, value the process, are good listeners, and seek win - win approaches in daily problem solving and decision making. However, this generalization is not true for all women and some women leaders who are very masculine in their approach have a negative image among their peers and staff.

The community college presidents were especially vocal about not finding any differences between male and female leaders in terms of intellect, work ethic,
emotional stability, and the ability to make tough decisions. The majority of LINC staff and the college presidents stated that leadership styles are not gender or genetically driven but are more of a product of the environment.

The most frequently named barrier for women leaders in Iowa’s community colleges was the mindset of community college boards of trustees. Two community college presidents shared the following perceptions of the problem.

We desperately need a woman president at the CEO level in Iowa. It’s not enough to get it done on a campus level, it’s got to be a CEO level. What’s sad is that in the last year and a half, I’ve turned out three female CEOs outside the state, none of them here. And that’s crazy because we’ve had the openings. . . . I just don’t think the boards are ready for it. They’re good boards, they’re good people. But we desperately need to break that barrier. . . . We probably don’t have enough women and minorities on boards. That may be something we need to look at.

In Iowa, we have very conservative boards of trustees that are pretty male-dominated, and we haven’t broken through with even one woman president yet out of 15 community colleges, and I think that’s kind of sad. . . . I don’t think it’s any particular prejudice, I just, I don’t know, it’s not a high enough priority, I guess, with some of the governance bodies. . . . And I think it’s the conservative Iowa—and it’s the people that are in leadership roles, it’s too male-dominated.

Participants, presidents, and staff all referred to the "old boys’ network" and how many boards still think that women are not ready to become a community college president. They also think that the boards often want to continue with tradition and hire someone very similar to the former president. Until more women leaders serve on the college boards and attitudes begin to change, Iowa will continue to lack women leaders at the top, especially for a community college presidency.
Interview respondents in all three groups feel that the campus climate for women is getting better but can still be quite chilly at times. Women leaders have a tough balancing act to handle in terms of leadership style and handling personal and professional responsibilities. A double standard still exists at times and women need to cautiously display their confidence in their abilities. A couple of the LINC participants expressed it this way.

And I think oftentimes like in our case here... they've been stung once or twice by a female, poor female administrator, not that they don't have poor male administrators... "Well, we're not going to do that again" is the attitude... And I think a woman doesn't have as much confidence as a man when they go into a job or are applying for a job, and if they do have a lot of confidence for it, it comes off as a bad omen or a bad vibe, or "my God, she's pushy", or whatever. That same old thing, what's good for the goose, is not good for the gander.

I guess one of the things that upsets me so much, it seems like if a woman screws up, and that's not a good word to use, but if they mess up in a leadership position in a college, community college, whatever, the media makes a big thing of it. But you don't hear that much when men mess up. I think what that has done is still raise a lot of questions and doubts in people's minds whether women can do the job.

**Research Question 4**

*Roles the sponsoring institution can assume in supplementing and integrating the participant's LINC experience.*

**Personal Semi-Structured Interviews**

Analysis of data from the interviews with the respondents yielded suggestions for the role that sponsoring institutions can assume in supplementing and integrating the participants' LINC experience. A summary of the findings and examples of responses from selected LINC participants, community college presidents, and LINC
staff are included. To protect their anonymity, the respondents’ names will not be used.

Participants had the following comments about the integration of their LINC experience:

I think in my case, they’ve done a lot with me. They’ve given me a lot of responsibilities, in fact, they’ve even let me just take on a leadership role. My biggest problem is that often they don’t trust my judgment — that’s not what I want to say, but I feel like I’m being checked upon a lot, you know, and I think it’s more of a micro-management problem on the part of the leadership.

I don’t think LINC has been considered as far as my job responsibilities go. We’ve had to really ask for support from the administration for it (LINC) because the year after I went, . . . the cabinet made a decision that they would not support LINC because it didn’t serve both men and women, and because it was too expensive. . . After we did some pretty heavy lobbying, they did revote and it has been supported since.

The "good old boy" network was also frequently mentioned as one of the most common barriers to the integration of the LINC experience and the overall advancement of emerging women leaders. As one participant stated:

We’ve had a lot of changes on our campus and that’s what I can related to most. We’ve had some really qualified people and the definitions are set down for each job, and I don’t think they were followed. I think we move back to the "good old boy" network again. And I guess it’s a trust thing, you get so you don’t trust the administration anymore. And I think they’re going to find that particularly with women anymore, is that they’re not going to go ahead and apply for the job, which is too bad. You need to be working at it, keep bumping that ceiling.

Several respondents suggested that more mentoring and role models are needed to encourage LINC participants to pursue leadership opportunities. All participants interviewed said they appreciated their institution’s support for participating in LINC
but nothing specifically had been done as a follow-up for LINC participants on their campus.

One community college president gave an example of how the LINC experience is supplemented on his campus by offering leadership retreats for all administrative staff twice each year. Some community colleges in Iowa are also involved with the League for Innovation. League meetings and retreats often focus on leadership activities and leadership development. Community college presidents interviewed all responded that they probably have not done anything specifically to supplement and integrate the participants’ LINC experience. As one community college president replied:

I'm not sure we've done anything specifically. And that's something we ought to do, and that's something they (LINC participants) ought to initiate. They ought to come and ask to be able to do it.

Staff of the LINC program said that the integration of LINC has varied by institution and some have done a good job of it. A couple of the community college presidents have asked LINC staff to do some type of program as the "next step" for LINC participants. Staff members also told of how they hear about LINC participants taking on significant projects for their institutions. One LINC staff member had the following response.

I would say, for the most part, they have, that the presidents have been extremely good about trying to provide opportunities for the participants, that on campus, they seem to consistently report that they know more, they have a different kind of relationship, that they're involved more. So I think the experience has been integrated for some, in fact, the majority of them, and they all, I think, have reported that the biggest thing that they've gained is the closeness to the president
and being able to spend some time and interact and discuss and talk and become more aware of, and I think all those things are working for the most part.

One LINC staff member thinks there needs to be a better pipeline for participants to get promotions and advancements. He shared the following suggestions in the interview.

I think that the level of commitment for an institution beyond providing financial support, should be one of contract where there’s upward mobility that’s more of an intentional guarantee for the individual that’s participated in that, and there would be some preferencing, although that would irritate some people. . . . For positions that would become available within the institution, that it would be the LINC participants that you would move to first because you know and trust their experiences, you’ve contributed and supported their experiences, and that when those opportunities become available, they should be the first ones that they’re offered to. . . . Only if you slip a qualifier in there for those that are ready, you know, without using that to exclude rather than include. I just think there needs to be more of an intentional nature to it.

Research Question 5

*The personal and career characteristics of LINC participants.*

**Satisfaction and Perception Survey**

Survey questions 1 - 3, 5, and 6 identify the personal characteristics and questions 10 - 13, and 24 pertain to the career characteristics of the 85 LINC participants in this study. Table 14 presents the aggregate data for questions 1 - 3, 5, and 6. Aggregate data for questions 10 - 13, and 24 are found in Table 15.

**Aggregate Data**

All of the 85 respondents to the SPS were female. Eighty-two percent were married and 82 percent have children. Most respondents were between 36 and 45
Table 14. Personal Characteristics of LINC Participants as Reported on the Satisfaction and Perception Survey (SPS):

<table>
<thead>
<tr>
<th>Personal Characteristics</th>
<th>Number</th>
<th>Percent*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>85</td>
<td>100.0</td>
</tr>
<tr>
<td>Male</td>
<td>0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>4</td>
<td>4.7</td>
</tr>
<tr>
<td>Married</td>
<td>66</td>
<td>77.6</td>
</tr>
<tr>
<td>Divorced</td>
<td>14</td>
<td>16.5</td>
</tr>
<tr>
<td>Widowed</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Children</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>70</td>
<td>82.4</td>
</tr>
<tr>
<td>No</td>
<td>14</td>
<td>16.5</td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Age when in LINC</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 - 24</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>25 - 30</td>
<td>4</td>
<td>4.7</td>
</tr>
<tr>
<td>31 - 35</td>
<td>10</td>
<td>11.8</td>
</tr>
<tr>
<td>36 - 40</td>
<td>20</td>
<td>23.5</td>
</tr>
<tr>
<td>41 - 45</td>
<td>23</td>
<td>27.1</td>
</tr>
<tr>
<td>46 - 50</td>
<td>18</td>
<td>21.2</td>
</tr>
<tr>
<td>51 - 55</td>
<td>7</td>
<td>8.2</td>
</tr>
<tr>
<td>56 - 60</td>
<td>2</td>
<td>2.4</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Ethnic Background</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>African American (Black)</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Caucasian</td>
<td>83</td>
<td>97.6</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* Approximate percents due to rounding.
Table 15. Career Characteristics of LINC participants as reported on the Satisfaction and Perception Survey (SPS):

<table>
<thead>
<tr>
<th>Career Characteristics</th>
<th>Number</th>
<th>Percent*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest Degree Completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate's</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Bachelor's</td>
<td>20</td>
<td>23.8</td>
</tr>
<tr>
<td>Master's</td>
<td>54</td>
<td>63.5</td>
</tr>
<tr>
<td>Doctoral</td>
<td>9</td>
<td>10.7</td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
<td>----</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0</td>
</tr>
<tr>
<td>Working on a Degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>26</td>
<td>30.6</td>
</tr>
<tr>
<td>No</td>
<td>59</td>
<td>69.4</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0</td>
</tr>
<tr>
<td>Enrolled in Degree Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate's</td>
<td>1</td>
<td>3.8</td>
</tr>
<tr>
<td>Master's</td>
<td>10</td>
<td>38.5</td>
</tr>
<tr>
<td>Doctoral</td>
<td>15</td>
<td>57.6</td>
</tr>
<tr>
<td>Not applicable</td>
<td>59</td>
<td>----</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0</td>
</tr>
<tr>
<td>Plan to Begin Degree Program Within 5 Yrs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>17</td>
<td>30.4</td>
</tr>
<tr>
<td>No</td>
<td>22</td>
<td>39.3</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>17</td>
<td>30.4</td>
</tr>
<tr>
<td>Not Applicable</td>
<td>26</td>
<td>----</td>
</tr>
<tr>
<td>No Response</td>
<td>3</td>
<td>----</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0</td>
</tr>
<tr>
<td>Wish to Continue Employment At Community College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>76</td>
<td>91.6</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>2.4</td>
</tr>
<tr>
<td>Not Sure</td>
<td>5</td>
<td>6.0</td>
</tr>
<tr>
<td>No response</td>
<td>2</td>
<td>----</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* Approximate percents due to rounding.
years of age when they participated in LINC; many were also 46 - 50 years of age as a participant. Of the 85 respondents there was one Asian, and one African American. A majority of the participants (63.5 percent) have completed a master’s degree and 30 percent of the cohort are currently working on a degree. Of those enrolled in a degree program, 57.6 percent are pursuing a doctoral degree and 38.5 are working on a master’s degree. Of those participants not enrolled in a degree program, 30 percent plan to begin one within the next five years. Approximately 92 percent of the participants wish to continue employment at a community college.

When reviewing the characteristics by Leadership Level, no clear trends or significant differences emerged between the three groups for comparative purposes.
CHAPTER V. CONCLUSIONS AND RECOMMENDATIONS

The purpose of this descriptive study was to provide information on the role of the Leadership Institute for a New Century (LINC) for leadership development of women and people of color. This case study of selected LINC stakeholders has focused on leadership development, the enhancement of leadership skills, and the use of type theory in leadership development. The conclusions and recommendations of this chapter are presented in five sections which correspond to each of the five research questions. The sixth and final section is an overview of the recommendations including suggestions for future study and research.

Research Question 1

Identifiable ways the leadership skills of LINC participants have been developed or enhanced as a result of completing the program.

The majority of LINC respondents were in the institute because their supervisor asked them to participate. Career advancement, the opportunity to make statewide contacts, and personal satisfaction were also frequently cited as reasons for participating in LINC. Of the 34 respondents who reported receiving a leadership promotion or advancement since their LINC experience, 88 percent said that LINC was somewhat to very instrumental in their promotion. These 34 participants stated LINC was instrumental in those promotions by broadening their understanding of community colleges, improving the participants' visibility with top administration, helping develop their leadership style, and improving the participants' self-confidence.
Participants responded very favorably about their perceptions of the LINC experience. More than 90 percent of the respondents gave high marks for the overall experience, the value of the presentations, and the topics of state governance of community colleges and leadership styles. Local governance of community colleges, planning components such as vision, philosophy, mission, and goals, state and local funding, and organizational structures and cultures were also perceived in a positive manner. Furthermore, the majority of LINC participants learned valuable information about fiscal resource allocation and also perceived the program as helpful in improving their management and communication skills. These results support the literature claiming effective leadership skills can be taught and learned (Roueche, Baker & Rose, 1989; Gardner, 1990; Bennet & Shayner, 1988; March, 1980).

Overall, it appears that LINC is meeting the expectations of the participants and the program has been very instrumental in developing and enhancing the leadership skills of LINC participants. In terms of leadership advancement, the program has been significantly instrumental in several promotions of women at Iowa community colleges. LINC has enhanced the participants' leadership skills in a personal sense such as individual leadership style development and improved self-confidence. Participants have also reported that their knowledge base of leadership related topics and skills has been enhanced in the areas of governance, fiscal management, planning, organizational design, and management and communication skills. Like other formal leadership development program on a national level (McDade, 1991), the LINC program is taking participants beyond their functional
areas to consider management and leadership of the whole institution and the larger system of community colleges in the nation.

Significant differences by Leadership Levels include the fact that Level 3 participants rated the topic of formal and informal organizations significantly higher than Level 1, perhaps because of their more limited or narrow experience base. Participants who have achieved Level 1 positions have learned about organizational structures through their expanded responsibilities and the political realities of upper-level administration. Level 2 participants rated the interaction of the president with internal constituencies higher than Level 1 participants; due to perceptions and observations they have from being in middle management compared to those in upper-level administrative positions who would have more contact with the president on a daily basis.

Networking with professionals from all of the Iowa community colleges, interaction with community college presidents, and the exposure to the "big picture" of community college operations were frequently cited as ways that leadership skills have been enhanced. Consistent with the surveys, those participants interviewed also discussed how LINC has improved their self-confidence, goal-setting abilities, and given them an opportunity to consider advanced leadership opportunities. As proposed by Stokes (1984) and Ausejo (1993), women administrators need to be comfortable with themselves and their values, have opportunities to assess their personal skills and abilities, and be encouraged to develop life and career objectives.
In summary, it appears that LINC plays a very important role in the development and enhancement of the participants' leadership skills. Of course, as one LINC staff member explained, "Some cases of leadership development are measurable and in other cases, it is more difficult to measure."

Definitions of leadership shared in the interviews focused on several of the components of the LINC program; including both management and leadership tasks and skills. A strong theme in defining leadership was the ability to work well with others and create a collaborative and caring environment for members of the organization. As Jago (1984) stated, leadership is both a process and a property of the individual. Several theories of leadership were reviewed in Chapter II of this study and the LINC stakeholders cited elements of the behaviors and skills approach with some additional references to the situational and transformational leadership theories. Several stakeholders defined leadership by the skills needed for decision making, introspection, conflict resolution, and working with peers (Bennis, 1989). Others interviewed described leadership as creating a vision, motivating others, building coalitions, and the persistence to take risks and stay on course; with the long term goal of transforming the organization and what it can accomplish (Hesburgh, 1988; Kouzes & Posner, 1987; Whetten & Cameron, 1985; Burns, 1978; Nanus, 1992). Several respondents described leadership using the mediator and team leader styles (Guskin & Bassis, 1985), and referred to the role of the environment for achieving effective leadership (Roueche et al., 1989). The consistency of leadership definitions among LINC stakeholders is important for the continued development and
enhancement of the participants' leadership skills. For continued success, all the LINC stakeholders need to have some sort of consensus about what it takes to be an effective leader and the results of this study demonstrate that consistency of focus and purpose. These definitions and descriptions can also be used as a guide for future leadership training programs and the development of values, attitudes, and behaviors in future community college leaders (Roe, 1992).

Research Question 2

The LINC program is preparing women and people of color to assume enhanced administrative leadership roles at community colleges.

Forty percent of the 85 survey respondents have received a promotion during or since their LINC experience (Table 6) and most of the leadership advancements have been to positions in Leadership Levels 1 and 2 (Tables 4 and 12). Discrepancies occur between tables 4 and 12 because of the attrition of employees at the community colleges, some participants classified themselves in Level 4 positions, and due to the inconsistencies within the self-reported data. In contrast to these noted promotions, two of the participants interviewed discussed how they have not seen any relationship between LINC participation and women being promoted on their respective campuses. Of course, the element of time should be considered when analyzing these results and the fact that the most recent LINC participants have been in Level 3 positions. As mentioned earlier in the limitations of this study, the definitions of these leadership positions are not known. Furthermore, it is possible that a participant can experience a significant advancement in title and or responsibilities and still remain within the
same Leadership Level. These categories of leadership positions were determined by the researcher for this study, and they were only intended as a tool for tracking leadership advancements.

It is important to note that higher education has a pyramidal structure and women are often clustered at the bottom (Tinsley, 1984). While the advancement of women is evident in these LINC statistics, the reality is that most women leaders are still found in middle and entry-level leadership positions at Iowa’s community colleges (Iowa Department of Education, 1995). It would also be worthwhile to investigate the academic and administrative areas represented in the positions held by LINC participants within all three Leadership Levels. Jones (1986) refers to how women are often assigned job responsibilities that reflect the sexual stereotypes associated with the traditional female management model. He states that women are three times more likely than men to hold administrative positions in "people oriented" areas like student services and academic support services (Jones, 1986, p. 119). With additional research it may be found that many of the LINC participants are in people-oriented or caretaking positions such as in student services. According to Jones (1986) men are often stereotyped for task oriented positions such as in financial and academic affairs.

"Everybody who’s participated (in LINC) and those that have supported their participation have grown from the experience, in some cases measurable and in other cases, more difficult to measure," responded a LINC staff member. In addition to recognizing the promotions received by LINC participants, 41 percent of 61
respondents said that their leadership responsibilities have been enhanced while their position title has remained the same since their LINC experience (Tables 5 and 13). This was also confirmed in the interviews of community college presidents who not only spoke of those participants they have promoted but also of those who have made significant contributions in their current position. As one LINC staff member said, "There are many opportunities for leadership in many forms and several ways to display it other than position." Especially in this era of budget reductions and the restructuring of organizations, leadership development and enhancement for those remaining in the same position will become more prevalent and crucial for the future success of community colleges. The right combination of management and leadership talents, knowledge, and skills (Roe & Baker, 1991) are needed to lead these institutions through the challenges of the twenty-first century.

Approximately 55 percent of the LINC participants in this study responded that LINC helped them clarify their career aspirations (Table 8), and the majority want to become a community college dean or vice president within the next five years (Table 9). Nineteen percent wish to stay in their current position and only four respondents wish to become a community college president during the next five years. At first glance, there is concern that only four of the LINC participants aspire to be a community college president. However, before a participant realistically has the presidency as a goal for the next five years, she needs to currently hold a leadership position such as a vice president or dean. As stated earlier, many of the LINC participants are in middle or entry-level leadership positions. Five years is also a
relatively short period of time for achieving a college presidency if the participant recently assumed a vice president or dean's level position. Sixty-one percent of the participants expect to be at the same institution in five years; within the next ten years, 39 percent will probably be at the same institution and 42 percent are not sure at this point in time. These results indicate that the LINC program is accomplishing its purpose (Appendix B) and additional leadership development opportunities are needed to help develop and retain emerging leaders at Iowa's community colleges. In the Building Communities Report (AACJC, 1988), the Commission on the Future of Community Colleges endorsed and encouraged universities to conduct creative leadership development programs for emerging community college leaders. The LINC program is meeting that challenge but there is more work to be done. In terms of emerging women leaders, the investment needs to continue for preparing more women to become community college deans and vice presidents in Iowa. Leadership training is needed at all levels of community college leadership (Roe, 1992) and it is time that community colleges assume a greater responsibility for the development and training of emerging leaders (Hall & Alfred, 1985; Parrish, 1988; AACJC, 1988). Since only three LINC participants have been people of color and only two responded to the Satisfaction and Perception Survey, no accurate conclusions can be made about the development of ethnic minority leaders.

When discussing the preparation of women and people of color for enhanced leadership roles at community colleges, the interviews also included the respondents' identification of the major issues facing community college leaders. During the next
decade, community colleges will continue to search for a sense of renewal (Twombly & Amey, 1991). Similar to the literature reviewed (Twombly & Amey, 1991; Roe & Baker, 1991), the stakeholders identified the community college leadership issues as achievement of the mission, funding in relation to diminishing resources, and diversity issues among students, staff, and administration. Additional issues identified include dealing with organizational change in how education is delivered, the complexities of changing technology, competing for students and funding, and examining the principles and values that determine how college business is conducted. Community college leaders in the 1990’s are challenged to be environmental scanners, political persuaders, developers of master plans, and also need to be skillful in establishing greater participation and coalition building among constituents (Twombly & Amey, 1991). To maintain the vitality of the community college, the appropriate roles for leaders need to be determined (Twombly & Amey, 1991). Leadership development programming, such as LINC, should include these topics and skills as desirable outcomes for the best leadership preparation possible. A participant and a community college president interviewed referred to presidents not being familiar with the content or desired outcomes of the LINC program. The leadership skills and issues identified in this study could be used to help facilitate a discussion among all community college presidents to collect additional input and enhance the presidents’ involvement in the development of emerging leaders.
Research Question 3

The role of type theory in leadership development programs including comparisons of type profiles with national samples.

Leadership Institute for a New Century (LINC) participants prefer Thinking (72%) and Judging (69%) according to their preferences on the Myers-Briggs Type Indicator (MBTI). The most common temperaments, relevant to leadership and management styles, are Sensing/Thinking (36% ST) and Intuitive/Thinking (36% NT). ISTJs, ENTJs, and ESTJs are the most frequent types attracted or nominated to participate in LINC (Appendix H). The most frequent types for male participants at the Center for Creative Leadership were ISTJ and ESTJ; for female participants, ENFP and ENTJ. The most frequently named type among the sample of males, ISTJ, is also the most frequently named type among LINC participants (18%). Most of the women in the national sample were ENTJs and that was the second most frequent type in LINC (13%).

When compared to the participants in leadership development programs at the Center for Creative Leadership (McCaulley, 1992), the LINC cohort had fewer Ts (thinking), more Fs (feeling) and more sensing/feeling (SF) and intuitive/feeling (NF) types than in the sample of men. The LINC cohort had more tough-minded, practical types women present, such as IJs, STs, and TJs, than in the Center for Creative Leadership sample of women (Tables L-1 and L-2). No statistically significant differences were found between the LINC participants and the sample of men on the E/I and S/N scales.
In terms of leadership styles, the LINC cohort has strong preference for intuitive/thinking (NT) and sensing/judging (SJ). The NT leadership style is rational and visionary; preferring to create new theories and structures for organizing ideas. The SJ leadership style is described as a guardian and traditionalist which pays careful attention to maintaining standards and dealing with problems in a practical and sensible way (Kiersey & Bates, 1978). Stokes (1987) reports that one of the androgynous leadership types is ESTJ, which is also one of the three most dominant profiles in the LINC sample. This implies that several of the LINC women, who are ESTJs, will exhibit both traditional male and traditional female leadership characteristics in their leadership style. However, according to several studies, (Hesburgh, 1988; Kouzes & Posner, 1987; Guskin & Bassis, 1985; Twombly & Amey, 1991; and Hall & Alfred, 1985), the type of style preferred for leadership effectiveness at community colleges today is more typical of an ENTJ. The strong presence of ENTJ profile is also consistent with Lueder (1986) who noted an overrepresentation of ENTJs when studying the types of 100 top executive educators in North America and the "rising stars" in educational administration. In Robertson's study (1990) of participants at the Center for Creative Leadership, he reported that the majority of men and women in upper level administration positions had a stronger preference for intuition than sensing. More than 50 percent of both upper level women and upper level men were ENTJs (Robertson, 1990). Carskadon (1992) reported that most leaders tend to be thinking/judging (TJ); with STJs more suited for
concrete, close to the product levels of leadership and NTJs more suited for higher, strategic levels of administration.

Overall it appears that the LINC participants are fairly consistent in type with other participants in leadership development programs, such as those at the Center for Creative Leadership. However, the LINC participants appear to more introverted and also show more preferences typical of male leaders than those of female leaders. This could be explained by the adaptation process that was frequently mentioned in the literature (Noddings, 1984; McCaulley, Winter 1994) whereby women adjust their behaviors and type preferences to "fit" or survive professionally in an organization or chosen career. Especially in Iowa where community college administration and governing boards are largely dominated by white males, this conclusion is to be expected. As Rosener (1990) concludes, new leadership styles can be effective in an organization only if it is accepting of it. Additionally, since STJs and NTJs were dominant types in the LINC cohort it can be concluded that the institute is preparing leaders suited for both upper and middle management positions (Carskadon, 1992).

Throughout the interviews, all the LINC stakeholders told of how type theory can be useful in leadership development. Their comments about the value of type theory are very consistent with the literature such as using type for team building (Richardson and Rideout, 1989), decision making and problem solving models (Huitt, 1992), and valuing individual differences (Pearman, 1992; Hanson et al. 1992). Like each of the types, all leadership styles have their strengths, liabilities, and blind spots. Consistent with the majority of the interview respondents, Pearman (1992) concurs
how an increased awareness of one's type leads to being more effective with others and helps the leader achieve balance and value the contributions of others.

Interview respondents often described women administrative leaders as operating from the "voice" of attachment and care through nurturing, supportive and collaborative behaviors (Desjardins, 1989). Phrases like "women are better listeners. . . they do a lot of networking, perceiving, and feeling". . ."women tend to look at win-win" were used in their responses while some stakeholders were quick to reply that they perceive no differences between men and women leaders. Several characteristics of the Desjardins (1989) model for women leaders are cited as necessary skills and a preferred leadership style to meet the challenges facing community college leadership (Twombly & Amey, 1991; Hall & Alfred, 1985). As presented in the interviews, sexual identification lone does not guarantee a unique leadership approach. Some women, but not all, provide leadership perspectives and experiences that men lack (Cadwell, 1992; Roueche, Baker & Rose, 1989). Desjardins (1989) concurred that the moral "voice" is gender-related but not gender determined.

The most frequently named barrier for women leaders in Iowa's community colleges was the mindset of community college boards of trustees. This can be attributed to selection processes where boards favor candidates by their "fit" in a male dominated environment, their tendency to favor candidates most like themselves, and the stereotypical male images they still have about leaders and effective leadership (Pfeffer, 1977; Taylor, 1989; Twombly & Amey, 1991). As shared in the stakeholder interviews, women candidates and leaders are also expected to meet every
criteria to perfection, are forgiven less for their mistakes, and generally are not taken seriously as forceful leaders (Sandler, 1986; Vaughan, 1989a; Josefowitz, 1982; McCallister, 1994; Hirsch, 1994). Self-selection and organizational selection practices impact women advancing into leadership positions because of the messages and images present in the organization; they may discourage them from even applying for an advanced leadership position (Pfeffer, 1977).

While it is perceived that progress has been achieved by women in community college leadership, the state still does not have a woman CEO at any of the community colleges. The recent appointment of a woman to serve as the president of the University of Iowa (Bullard, 1995) may help raise the awareness of women being suited for a college presidency. More women and ethnic minorities need to serve on community college boards of trustees. These women and minorities need to be assertive and competent leaders who can help change the mindset and traditions of boards. When the message to hire and develop more women and ethnic minority leaders comes from the top, more improvements in this area should also occur at other levels of leadership throughout the organization.

Research Question 4

*Roles the sponsoring institution can assume in supplementing and integrating the participant's LINC experience.*

One community college president suggested that "something should be done" for LINC participants and "that's something they ought to initiate." A LINC staff member interviewed believes that informally the college presidents have continued to
interact with LINC participants after their participation in the program. Additional recommendations shared in the interviews include a more intentional process for promoting LINC participants and additional leadership training programs. Current community college presidents should assume responsibility for the development of future leaders (Roe, 1992; Roe & Baker, 1991; Bennett & Shayner, 1988; and Parrish, 1988). Even with their work load, presidents should make this a high priority and be directly involved in the identification, training, and nurturing of high quality future community college leaders (Roe, 1992). Without planning and training, the potential of many excellent emerging leaders will be underdeveloped or completely lost (Roe & Baker, 1991). Hopefully, the presidents will not view the leadership training of LINC as a one time commitment to the participants they have sponsored. Likewise, the participants need to continue to build on that experience by pursuing additional formal and informal leadership development opportunities. Consistent with several of the interview responses, more role models and mentors are also needed for the leadership development of women and people of color (Twombly & Amey, 1991; Josefowitz, 1982; Vaughan, 1989a). In addition to experienced male and female leaders throughout the Iowa community college system, LINC participants can also serve as role models and mentors to future LINC participants and other women and ethnic minorities interested in leadership development.

Research Question 5

The personal and career characteristics of LINC participants.

In terms of personal characteristics, it was noted that most of the participants
were between 36 and 45 years of age when they were involved in LINC. The next largest group of participants were between 46 and 50 years of age. Special effort should be made to identify and nominate LINC participants who are younger in age yet still prepared personally and professionally to participate in this type of leadership development program. Younger participants could also provide a better opportunity to sponsoring institutions to realize a return on their investment in these talented individuals with leadership potential.

The career characteristics of the LINC cohort show that several participants are currently pursuing an advanced degree (26) or plan to begin a degree program within five years (17). This exemplifies a positive attitude toward lifelong learning and professional development which is important for continued development and enhancement of leadership skills. Perhaps this is also related to 55 percent of the respondents who said LINC helped clarify their career aspirations; advanced degrees and credentials may be required to achieve those career aspirations. The last career characteristic to highlight is 91.6 percent of the participants wish to continue their employment at a community college. Iowa’s community colleges should view this as a testimony to the professional opportunities and the positive working environment they provide. It clearly communicates that the community colleges should continue their investment in these emerging leaders.

Recommendations

The following recommendations are based on implications that the results of this study have for leadership development, the enhancement of leadership skills, and
the use of type theory in leadership development. Specific recommendations are also included for the Leadership Institute for a New Century (LINC) and suggestions for future research related to this study are provided.

1. Leadership development programs, such as LINC, need to include topics and skills for effective management and leadership in a community college setting. Strategies are needed for developing and enhancing both people skills and task skills of emerging leaders. The presidents of the community colleges should be consulted and involved through focus groups to collect their input on topics and outcomes for the program. Once the topics and outcomes are determined, it should be investigated as to which topics are best learned in this type of setting and which ones are learned more effectively from apprenticeships, mentoring, and other learning opportunities. This could lead to the presidents assuming a more direct role in developing emerging leaders as well as raise the awareness for why leadership development should be a top priority of an institution. Presidents directly involved in developing emerging leadership talent will have the opportunity make a distinct impact on their institution and also stay current and rejuvenated as they work with emerging, talented leaders.

2. For tracking the leadership development of participants in an institute, such as LINC, the career aspirations and scope of current leadership responsibilities should be assessed at the beginning of the program. In order to assess and describe the leadership development process, it would be helpful to know more about where participants begin in terms of goals and experiences. More
emphasis should also be placed on the specific responsibilities and authority associated with leadership positions instead of the titles which are often misleading.

3. Community college administrators should search for ways to provide opportunities for leadership development other than a promotion or advancement in position. Beyond the LINC program, formal and informal opportunities are needed to continue the much needed development of women and ethnic minority leaders. For example, LINC participants can be assigned to serve as team leaders or committee chairs for special projects or standing committees on campus. Personalized professional development plans should also be prepared and monitored by the LINC participant and her immediate supervisor. These plans should outline goals, competencies, and learning experiences to further the enhancement of the participant’s leadership skills.

4. More women and ethnic minority leaders need to serve on the boards of trustees for Iowa’s community colleges. Their leadership and service on these boards can begin the process to change attitudes, hiring processes, and other behaviors which favor traditional, male leadership styles. Board leadership can also set an example and send the message to college administration that they need to improve the environment and opportunities for diverse leaders at all levels of the organization. Iowa is known nationally as a leader in education; it is time that its community college leadership is more diverse, open and caring in its style,
and effective in building coalitions to meet the changing needs of students and communities.

5. Type theory should continue to be used as a tool for leadership development programs, such as LINC. Additional attention should be devoted to its application for leadership styles and how the pressures of the environment and a chosen profession can influence one's type. It may also be helpful to use type theory and analyze the learning styles of participants in an institute, such as LINC, for enhanced leadership development training.

6. Additional national samples should be made available for comparing type profiles of leadership program participants. The Center for Creative Leadership samples are from 1979 - 1983; time and the environment may account for some of the differences between the base sample and those samples compiled from leaders in this decade.

7. Iowa's community colleges need to take advantage of the opportunity to "grow its own" leaders for all levels of the organization. It would also be beneficial to devise intentional strategies for promoting women and ethnic minority leaders instead of experiencing an outmigration of these leaders to institutions in other states.

8. Participants in leadership development programs, such as LINC, need to accept responsibility for their own learning and development by pursuing advanced degrees, attending additional leadership institutes and seminars, and becoming more involved on campus.
9. For program evaluation, a shorter survey should be completed by LINC participants and focus groups conducted to gather their insights and feedback about the effectiveness of the program. Additional feedback and continued development of the LINC network may also be enhanced by a one or two day seminar or symposium designed for all LINC participants; held annually or every other year at one of the community college campuses.

10. LINC program planners and sponsors should carefully review the results of this study and use it for determining the future direction of the program. Results from the Satisfaction and Perception Survey (SPS) and the interviews provide several worthwhile suggestions for program improvements.

Recommendations for Further Study

The results of this study suggest the following related topics for further study.

1. How many of the LINC participants have attended additional leadership development programs since their LINC experience? Determine how those programs have been similar or different from the LINC experience.

2. Conduct additional studies on leadership development for community colleges, aimed at positions other than the presidency.

3. Develop a system for more reliable and consistent reporting of personnel statistics regarding the employees of Iowa’s community colleges. It would also be helpful if there was a method for defining administrative leadership positions according to their titles.
4. Investigate the challenges and perceived barriers experienced by those Leadership Level 1 participants who aspire to be a community college president, yet have not achieved that goal.

5. Survey LINC participants about the goal of achieving a college presidency in 10 years, which is a more realistic time frame than five years. It would also be helpful to determine how many Level 1 participants possess a doctoral degree which is commonly required for becoming a college president.

6. Investigate the selection processes used by community colleges for hiring administrative leaders at all levels of the organization.

7. In the next study of the LINC program, involve the direct supervisors of participants to gather their perceptions on leadership development and the role of LINC in preparing women and ethnic minority leaders for Iowa’s community colleges. All community college presidents should also be surveyed for their perceptions of LINC participants and the role of the program.

8. Conduct a study on the models and approaches used for developing emerging leaders. Determine if programs, such as LINC, are the best method for leadership training.

9. In future studies about leadership development for women, investigate the effects of organizational, social, and economic pressures. Related pressures and issues include tokenism in the workplace, the "glass ceiling," the "superwoman" perceptions, family responsibilities while pursuing a career, employer support for
women leaders with young children, employer support for pursuing an advanced degree, and the economic realities facing dual-career couples and single parents.
REFERENCES


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Iowa Association of Community College Trustees (IACCT) & the Iowa Association of Community College Presidents (IACCP) (1995). Iowa's community colleges: Building communities one mind at a time. Des Moines, IA: IACCT & IACCP.


McCaulley, M. H. (1993b, March). Leadership in a time of change: Challenges for the MBTI. Paper presented at Type & Leadership, a special topic symposium of the Association for Psychological Type, Crystal City, VA.


State Board of Education for State of Iowa & Iowa Department of Education (1990). *Strengthening community college linkages: Recommendations on strengthening relationships between the state board of education, the department of education, and the area colleges*. Des Moines, IA: State of Iowa Department of Education.


APPENDIX A

IOWA STATE UNIVERSITY HUMAN SUBJECTS COMMITTEE
APPROVAL FORM
Checklist for Attachments and Time Schedule

The following are attached (please check):

12. [ ] Letter or written statement to subjects indicating clearly:
   a) purpose of the research
   b) the use of any identifier codes (names, #’s), how they will be used, and when they will be removed (see Item 17)
   c) an estimate of time needed for participation in the research and the place
   d) if applicable, location of the research activity
   e) how you will ensure confidentiality
   f) in a longitudinal study, note when and how you will contact subjects later
   g) participation is voluntary; nonparticipation will not affect evaluations of the subject

13. [ ] Consent form (if applicable)

14. [ ] Letter of approval for research from cooperating organizations or institutions (if applicable)

15. [X] Data-gathering instruments

16. Anticipated dates for contact with subjects:

   First Contact

   August 1, 1995
   Month / Day / Year

   Last Contact

   August 15, 1995
   Month / Day / Year

17. If applicable: anticipated date that identifiers will be removed from completed survey instruments and/or audio or visual tapes will be erased:

   August 15, 1995
   Month / Day / Year

18. Signature of Departmental Executive Officer

   [Signature]

   Date

   Department or Administrative Unit

   [July 4th, 1995]

   DEC

19. Decision of the University Human Subjects Review Committee:

   [X] Project Approved
   [ ] Project Not Approved
   [ ] No Action Required

   Patricia M. Keith
   Name of Committee Chairperson

   [July 30, 1995]

   [Signature]

   Date

   Signature of Committee Chairperson

GC: 1/90
APPENDIX B

LEADERSHIP INSTITUTE FOR A NEW CENTURY PROGRAM BROCHURE
Leadership Institute for a New Century

Institute Format
LINC seminars are held for 1 1/2 days each month beginning in September and ending in May. Meetings are usually held in Des Moines at the same time the IACCP/IACCT meet, which is the first Thursday and Friday of each month. Tuition and fees for the seminar, travel and lodging is covered by the sponsors. (Tuition and fees for internships is the responsibility of the participants.)

As a part of the seminar, LINC participants learn from nationally recognized community college educational leaders through conferences and sessions. Previous speakers have included: Martha Smith, President, Anne Arundel Community College; Geraldine Evans, Executive Director, Illinois Community College Board; Beverly Simone, President, Madison Area Technical College; Wayne Newton, community college consultant; David Pierce, President, American Association of Community Colleges; Carol Spencer, President, Cedar Valley Community College; and John Roueche, S.W. Richardson Chair for the University of Texas (at Austin) Community College Leadership Institute. Included are campus site visits, attendance at the Way-Up Conference and interaction with Iowa community college presidents, state leaders, and Iowa Department of Education personnel.

Leadership Institute for a New Century

Sponsored by:
Iowa State University
College of Education
Professional Studies in Education
Higher Education Program

The Iowa Association of Community College Trustees

The Iowa Association of Community College Presidents

For more information please contact:
Dr. Larry H. Ebbers
Iowa State University
College of Education
Professional Studies
N226 Lagomarcino Hall
Ames, IA 50011-3105
(515)294-8067
internet: lebbers@iastate.edu

Leadership Institute for a New Century

Diversifying Community College Leadership for Today and Tomorrow
Goal

The purpose of the Leadership Institute for a New Century (LINC) is to provide academic and internship opportunities to encourage the advancement of women and people of color into administrative leadership roles at Iowa community colleges.

Objectives

LINC is designed to encourage and prepare women and people of color for leadership roles. Networking opportunities are provided to increase diversity of participation in the leadership of Iowa community colleges into the next century. Emphasis is placed on enhancing abilities to:

- Communicate and analyze state and local governance and funding.
- Examine the interaction of the president with the constellation of internal and external constituencies of the community college.
- Understand the theoretical and practical dynamics of community colleges as organizations.
- Improve management and communication skills.

Institute Activities

Fall Seminar
(Hg Ed 580H; 2 credits or audit)

Topics include:
- Public Policy
- The Political Process
- State and Local Governance Issues
- Board of Directors Profiles
- Presidential Decision-Making
- Leadership Styles
- Vision
- Educational Ethics
- Workplace Values Clarification
- Organizational Culture Identification
- Community College Philosophy, Mission, Goals, Ideals
- Institutional Policies and Procedures
- Strategic Planning
- Fiscal, Capital, and Human Resource Allocation
- Formal and Informal Organizational Structures

Spring Seminar
(Hg Ed 580H; 2 credits or audit)

Topics include:
- Legislative and Public Policy Decision-Making Processes
- The Iowa Community College Funding Formula
- Budgeting Processes
- Conflict Resolution
- Negotiation Skills
- Resume Writing and Interview Techniques
- Campus Visitations
- Community College Current Issues

Internships
(Hg Ed 591 (Optional); 1-2 credits or audit)

Opportunities are available for supervised field experience with an individual president or other administrators, the Iowa Department of Education and/or the Iowa Association of Community College Trustees.

Special Features

- Participants are nominated by their institutions.
- LINC seminars are part of the currently approved curriculum for certification of community college administrators.
- Observation of statewide IACCP/IACCT meetings is a component of the program.
- The community college presidents offer consultation and guidance to the program.
- Participation in LINC is limited to 20 individuals each year.

Participants are nominated by their institutions.

LINC seminars are part of the currently approved curriculum for certification of community college administrators.

Observation of statewide IACCP/IACCT meetings is a component of the program.

The community college presidents offer consultation and guidance to the program.

 Participation in LINC is limited to 20 individuals each year.
APPENDIX C

SURVEY COVER LETTER AND SATISFACTION
AND PERCEPTION SURVEY (SPS)
August 1, 1995

Dear (Interviewee title/name as appropriate):

The Leadership Institute for a New Century (LINC) completed its sixth year at the end of the 1994-95 academic year. It has been three years since all LINC participants were surveyed for their opinions and perceptions of the program. Although the LINC staff has received many positive comments about the program, we would like to survey participants to obtain more formal feedback. The data collected from this questionnaire will be used to provide further insight into leadership development of women and ethnic minorities based upon LINC, to explain and promote the effectiveness of the LINC program, to document the perceptions and attitudes of participants toward the program, to provide suggestions for program improvements, as well as to provide a collection of data for preparing papers and journal articles.

As a former LINC participant, we would like you to share your feelings about your LINC experience. This survey should take approximately 20 minutes of your time. You are encouraged to make additional comments and suggestions at the end of the questionnaire.

All survey responses remain anonymous and survey coding is for inventory purposes only. The coding will be removed once the survey is received. Procedures for this study have been approved by the Iowa State University Committee on the Use of Human Subjects in Research.

After completing the questionnaire, please mail it in the self-addressed, stamped envelope provided. Let us know if you are interested in receiving a summary of the results. Because we want to complete this information before the next session of LINC this fall, please return this form by August 15th, 1995. If you do not wish to participate, please return the blank form.

If you have any questions, please call (712)274-7882 or (515)294-9550. Thank you for your participation and assistance.

Sincerely,

Glenda Gallisath
Ph.D. Candidate

Larry H. Ebbers
LINC Director
Satisfaction and Perception Survey

Participant Background information

Please record the appropriate number answer in the space to the left of the question.

____ 1. Sex: 1. Female 2. Male

4. Separated 5. Widow/Widower

____ 3. Do you have children? 1. Yes 2. No

____ 4. If you answered yes to question 3, please indicate the exact number of children you have in each of the age categories below.

_____ 1-5 years
_____ 6-10 years
_____ 11-15
_____ 16-20
_____ 20+

____ 5. What was your age when you were accepted into the LINC program?

1. 21-24 5. 41-45
2. 25-30 6. 46-50
3. 31-35 7. 51-55
4. 36-40 8. 56-60
9. 60+

____ 6. Ethnic Background

1. American Indian
2. Asian
3. Black
4. Caucasian
5. Hispanic

____ 7. Identify the level of leadership position you held when accepted into the LINC program.

1. Level 1: Vice-President, Chief Officer, Dean, Associate Dean, Assistant Dean, Executive Director
2. Level 2: Director, Associate Director, Assistant Director, Manager, Supervisor, Division Chair, Department Head or Chair, Librarian, Registrar, Associate Registrar, Assistant Registrar, Controller
3. Level 3: Coordinator, Consultant, Specialist, Instructor, Counselor, Senior Advisor, Advisor, Office Manager, Board Secretary
4. Other: (Please provide position title) __________________________________________

(over)
8. Identify the level of leadership position you currently hold.

1. Level 1: Vice-President, Chief Officer, Dean, Associate Dean, Assistant Dean, Executive Director

2. Level 2: Director, Associate Director, Assistant Director, Manager, Supervisor, Division Chair, Department Head or Chair, Librarian, Registrar, Associate Registrar, Assistant Registrar, Controller

3. Level 3: Coordinator, Consultant, Specialist, Instructor, Counselor, Senior Advisor, Advisor, Office Manager, Board Secretary

4. Other: (Please provide position title) ____________________________

9. If you identified the same leadership levels for questions 7 and 8, please explain:

1. Your position title has remained the same but your leadership responsibilities have been enhanced.
2. Your position title has not changed and your leadership responsibilities have not been enhanced.
3. Your position title has changed but remains within the same leadership level.
4. Other: (Please describe.) ____________________________

10. Highest Degree Completed

1. Associate’s Degree
2. Bachelor’s Degree
3. Master’s Degree
4. Doctoral Degree

11. Are you currently working on a degree? 1. Yes 2. No

12. If you answered yes to question 11, which degree are you working toward?

1. Associate’s Degree
2. Bachelor’s Degree
3. Master’s Degree
4. Doctoral Degree

Please indicate your field of study in the space below. ____________________________

13. If you answer no to number 11, do you plan to begin work on a degree within the next five years?

1. Yes 2. No 3. Don’t Know
14. Please indicate all of your reasons for participating in the LINC program. If more than one reason applies, rank order your responses, using 1 as most important.

1. Career advancement
2. Statewide contacts
3. Professional recognition
4. Personal satisfaction
5. Graduate-level course credit
6. The reputation of the program
7. You were asked to participate by a supervisor
8. Other (Please comment)

15. At the time you were nominated for LINC, were the nominees on your campus asked to submit an application to be considered for participation in LINC?

1. Yes  
2. No  
3. Don’t Know

16. At the time you were chosen for participation, who made the final selection of the participants from your campus?

1. The President from recommendations made by a committee.
2. The President from recommendations made by college administrators.
3. The President from applications received.
4. The President with no formal input from the campus.
5. A selection committee with faculty and administrator representation.
6. A selection committee of administrators.
7. One administrator (not the president).
8. Don’t know.
9. Other process (please describe)

17. Has the selection process changed since you were nominated?

1. Yes  
2. No  
3. Don’t Know

If so, in what ways?

18. Did you receive a promotion or advancement in your career during or following your LINC experience?

1. Yes  
2. No

19. If you answered yes to question 18, please list below the promotion(s) you have received.

1. 
2. 
3. 

(over)
20. If you answered yes to question 18, to what degree do you feel that your LINC experience was instrumental in your promotion(s) or advancement(s)?

1. very Please elaborate here ____________________________
2. somewhat
3. moderately ____________________________
4. minimally ____________________________
5. not at all ____________________________
6. don't know ____________________________

21. If you answered yes to 20, why do you feel LINC was instrumental? If more than one answer applies, please rank order your responses using 1 as the most important.

1. LINC improved my self-confidence
2. LINC helped me develop my leadership style
3. LINC helped me improve my management skills
4. LINC helped me improve my communication skills
5. LINC improved my visibility within top administration at the college
6. LINC broadened my understanding of community colleges in the state
7. LINC broadened my understanding of my institution
8. LINC increased my state-wide contacts
9. Other (Please specify) ____________________________

22. Did you ever ride to the LINC meetings with your college president or trustees?

1. Yes 2. No

23. If you did ride with your president or trustee, how often? Mark your response below.

1. 1 time
2. 2-3 times
3. 4-5 times
4. more than 5 times

24. Do you wish to continue to be employed by a community college?

1. Yes 2. No 3. Not sure

Please elaborate ____________________________

25. Did your LINC experience help you clarify your career aspirations?

1. Yes 2. No 3. Not sure

If so, in what ways? ____________________________
26. If you plan to continue employment at a community college, what level of employment do you wish to attain within the next five years?

1. Community College President
2. Position at the Vice President level
3. Position at the Dean’s level
4. Position at the Department Chair level
5. Other, please identify ___________________________
6. Continue in present position
7. Unknown

27. Do you think that you will be with the same institution?

<table>
<thead>
<tr>
<th>Five years from now?</th>
<th>1. Yes</th>
<th>2. No</th>
<th>3. Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ten years from now?</td>
<td>4. Yes</td>
<td>5. No</td>
<td>6. Don’t Know</td>
</tr>
</tbody>
</table>

Please respond to the following statements by writing the number of the correct response to the left of the question. Use the following five point scale:

1. Strongly disagree
2. Disagree
3. Not sure
4. Agree
5. Strongly agree

If a question does not apply to your experience (for instance, telenet sessions were not held the first year), please indicate that it does not apply by placing a 0 in the space provided.

28. My overall LINC experience was positive.
29. My networking opportunities and skills improved because of my LINC experience.
30. Overall, the presentations during monthly meetings were interesting.
31. Overall, the presentations during monthly meetings were valuable.
32. The campus visits by LINC staff are valuable.
33. Overall, the LINC program is effectively administered.
34. The time for discussing campus issues is sufficient.
35. The social time during dinner one evening each month is important.
36. Overall, the specific topics covered during sessions were complete and comprehensive.
37. Before my LINC experience, I had little or no contact with my college’s trustees.
38. Following my LINC experience, I feel that my college’s trustees now know me.
39. Before my LINC experience, I had little contact with my college’s president.
40. Following my LINC experience, I feel that the president is more accessible to me.
41. LINC helped me improve my management skills.
42. LINC helped me improve my communication skills.
43. Before my LINC experience, I had not attended a meeting of the Iowa Association of Community College Trustees.
44. Before my LINC experience, I had not attended a meeting of the Iowa Association of Community College Presidents.
45. Overall, the telenet sessions were interesting.
46. Overall, the telenet sessions were valuable.

(over)
Please respond to the following statements by writing the number of the correct response to the left of the question. Use the following five point scale:

1. Strongly disagree
2. Disagree
3. Not sure
4. Agree
5. Strongly agree

Statement: Following my LINC experience, I know more about

50. Leadership styles
51. Vision, philosophy, mission, goals, ideals
52. Educational ethics
53. Organizational cultures
54. Strategic planning
55. Fiscal resource allocation
56. Capital resource allocation
57. Human resource allocation
58. Formal and informal organizational structures
59. State and local funding of community colleges
60. The interaction of the president with internal constituencies
61. The interaction of the president with external constituencies

Statement: Following my LINC experience, I know more about

62. The role of the board of directors of community colleges
63. Legislative and public policy decision-making processes
64. Collective bargaining
65. Conflict resolution
66. Negotiation skills
67. The Iowa Association of Community College Presidents
68. The Iowa Association of Community College Trustees
69. Resume writing
70. Interview techniques
71. Other (Please specify)

Please respond to the following statements by writing the number of the correct response to the left of the question. Use the following responses:

1. Strongly disagree
2. Disagree
3. Not sure
4. Agree
5. Strongly agree
Statement: LINC should place more emphasis on the following topics:

72. State governance of community colleges
73. Local governance of community colleges
74. Presidential decision-making roles
75. Leadership styles
76. Vision, philosophy, mission, goals, ideals
77. Educational ethics
78. Organizational cultures
79. Strategic planning
80. Fiscal resource allocation
81. Capital resource allocation
82. Human resource allocation
83. Formal and informal organizational structures
84. State and local funding of community colleges
85. The interaction of the president with internal constituencies
86. The interaction of the president with external constituencies
87. The role of the board of directors
88. Legislative and public policy decision-making processes
89. Collective bargaining
90. Conflict resolution
91. Negotiation skills
92. The Iowa Association of Community College Presidents
93. The Iowa Association of Community College Trustees
94. Resume writing
95. Interview techniques
96. Networking
97. Campus Issues
98. Other (Please specify)

Statement: LINC should place less emphasis on the following topics:

99. State governance
100. Local Governance
101. Presidential decision-making
102. Leadership styles
103. Vision, philosophy, mission, goals, ideals
104. Educational ethics
105. Organizational ethics
106. Strategic planning
107. Fiscal resource allocation
108. Capital resource allocation
109. Human resource allocation
110. Formal and informal organizational structures

(over)
Please respond to the following statements by writing the number of the correct response to the left of the question. Use the following responses:

1. Strongly disagree
2. Disagree
3. Not sure
4. Agree
5. Strongly agree

Statement: LINC should place less emphasis on:

- 111. State and Local funding
- 112. The interaction of the president with internal constituencies
- 113. The interaction of the president with external constituencies
- 114. The role of the board of directors
- 115. Legislative and public policy decision-making processes
- 116. Collective bargaining
- 117. Conflict resolution
- 118. Negotiation skills
- 119. The Iowa Association of Community College Presidents
- 120. The Iowa Association of Community College Trustees
- 121. Resume writing
- 122. Interview techniques
- 123. Networking
- 124. Campus issues
- 125. Other (please specify)

Please use the following space to provide any additional information you think may help us in planning future LINC programs. Feel free to suggest anything, including: speakers, topics, ways to involve past LINC participants, scheduling improvements. Thank you for your time and involvement.
APPENDIX D

LINC PARTICIPANTS WHO DID/DID NOT COMPLETE THE SPS
Table D-1. LINC Participants who Completed the SPS

This table presents the 85 LINC participants who completed the Satisfaction and Perception Survey (SPS) by Leadership Levels 1, 2, and 3. Their responses to questions 7 and 8 on the survey provide the information for the level of leadership position they held as a participant in the program and the level of their current leadership position. If their past or current positions were not included in the three leadership levels, survey respondents listed their individual title. These are accounted for under the category of "Other". Position titles are categorized on the SPS as:

- **Level 1**: Upper-level administrative positions including Vice-President, Chief Officer, Dean, Associate Dean, Assistant Dean, Executive Director
- **Level 2**: Mid-level administrative positions including Director, Associate Director, Manager, Supervisor, Division Chair, Department Head or Chair, Librarian, Registrar, Associate Registrar, Assistant Registrar, Controller
- **Level 3**: Entry level administrative positions and nonadministrative positions including Coordinator, Consultant, Specialist, Instructor, Counselor, Senior Advisor, Advisor, Office Manager, Board Secretary

<table>
<thead>
<tr>
<th>Level</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Other</th>
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<td>Leadership Level at time of participation</td>
<td>13</td>
<td>46</td>
<td>25</td>
<td>1</td>
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<tr>
<td>Current Leadership Level</td>
<td>24</td>
<td>37</td>
<td>20</td>
<td>4</td>
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N = 85
Table D-2. LINC Participants Who Did Not Complete the SPS

This table presents the 11 LINC participants who did not complete the Satisfaction and Perception Survey (SPS) according to LINC class and by the position title listed on the September 1994 roster of LINC participants. Each of the 6 groups of LINC participants are called a class and are identified by the academic year of participation. The position titles are categorized as:

| Level 1: Upper-level administrative positions including Vice-President, Chief Officer, Dean, Associate Dean, Assistant Dean, Executive Director |
| Level 2: Mid-level administrative positions including Director, Associate Director, Manager, Supervisor, Division Chair, Department Head or Chair, Librarian, Registrar, Associate Registrar, Assistant Registrar, Controller |
| Level 3: Entry level administrative positions and nonadministrative positions including Coordinator, Consultant, Specialist, Instructor, Counselor, Senior Advisor, Advisor, Office Manager, Board Secretary |

<table>
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<tr>
<th>LINC CLASS</th>
<th>LEVEL 1</th>
<th>LEVEL 2</th>
<th>LEVEL 3</th>
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<tr>
<td>1. (AY '89 - '90)</td>
<td>1</td>
<td>1</td>
<td>0</td>
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<tr>
<td>2. (AY '90 - '91)</td>
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<td>1</td>
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<tr>
<td>3. (AY '91 - '92)</td>
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<td>0</td>
</tr>
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<td>6. (AY '94 - '95)</td>
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<td>Totals</td>
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<td>5</td>
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N = 11
APPENDIX E

INVITATIONAL LETTER FOR PERSONAL SEMI-STRUCTURED INTERVIEWS
July 29, 1995

Dear (Interviewee title/name as appropriate):

The Leadership Institute for a New Century (LINC) completed its sixth year at the end of the 1994-95 academic year. Although the LINC staff has received many positive comments about the program, we would like to obtain more formal feedback. We would like to conduct personal semi-structured interviews with randomly selected stakeholders of the program. The LINC stakeholders are women and ethnic minority participants, the community college presidents who support their employees’ participation in LINC, and the LINC staff who have designed and delivered the program. The data collected from the interviews will be used to provide further insight into leadership development of women and ethnic minorities based upon LINC, to document the perceptions and attitudes of stakeholders toward the program, to explain and promote the effectiveness of the LINC program, to provide suggestions for program improvements, as well as to provide a collection of data for preparing papers and journal articles.

As a LINC stakeholder, we would like you to share your perceptions about leadership development and the LINC experience. You will be contacted by phone in the next few days to arrange an interview at a time and place that is convenient for you. Your participation is voluntary and if you do not wish to be interviewed please decline when you are called.

The interview will take approximately 60 to 90 minutes of your time and will be tape recorded in audio format. You will be given the opportunity to review a transcript of the interview to ensure the accuracy of your responses. All interview responses will remain anonymous and the tapes will be erased once the data has been evaluated. Procedures for this study have been approved by the Iowa State University Committee on the Use of Human Subjects in Research.

Because we want to compile this information before the next session of LINC this fall, we would like to have the interviews conducted between August 1st and the 15th, 1995, if at all possible. If you have any questions, please call (712) 274-7882 or (515) 294-9550. Thank you for your participation and assistance.

Sincerely,

Glenda Gallisath
Ph.D. Candidate

Larry H. Ebbers
LINC Director
APPENDIX F

LEADERSHIP INSTITUTE FOR A NEW CENTURY (LINC) PARTICIPANTS BY CURRENT LEADERSHIP LEVEL AND LEADERSHIP LEVEL DURING PARTICIPATION IN THE PROGRAM
Table F-1. Leadership Institute for a New Century (LINC) Participants By Current Leadership Level and Leadership Level During Participation in the Program

This table presents the 96 LINC participants by Leadership Levels 1, 2, and 3. They are categorized by LINC class and by the position title listed on the September 1994 roster of LINC participants. For each LINC class, they are also categorized by the position title held during their year of participation. Each of the 6 groups of LINC participants are called a class and are identified by the academic year of participation. The position titles are categorized as:

Level 1: Upper-level administrative positions including Vice-President, Chief Officer, Dean, Associate Dean, Assistant Dean, Executive Director

Level 2: Mid-level administrative positions including Director, Associate Director, Manager, Supervisor, Division Chair, Department Head or Chair, Librarian, Registrar, Associate Registrar, Assistant Registrar, Controller

Level 3: Entry level administrative positions and nonadministrative positions including Coordinator, Consultant, Specialist, Instructor, Counselor, Senior Advisor, Advisor, Office Manager, Board Secretary

<table>
<thead>
<tr>
<th>LINC CLASS</th>
<th>LEVEL 1</th>
<th>LEVEL 2</th>
<th>LEVEL 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. (AY '89 - '90) N = 20*</td>
<td>13 (5)</td>
<td>3 (12)</td>
<td>2 (3)</td>
</tr>
<tr>
<td>2. (AY '90 - '91) N = 14</td>
<td>3 (1)</td>
<td>9 (9)</td>
<td>2 (4)</td>
</tr>
<tr>
<td>3. (AY '91 - '92) N = 14</td>
<td>6 (5)</td>
<td>4 (3)</td>
<td>4 (6)</td>
</tr>
<tr>
<td>4. (AY '92 - '93) N = 15</td>
<td>2 (1)</td>
<td>5 (6)</td>
<td>8 (8)</td>
</tr>
<tr>
<td>5. (AY '93 - '94) N = 16</td>
<td>1 (1)</td>
<td>8 (7)</td>
<td>7 (8)</td>
</tr>
<tr>
<td>6. (AY '94 - '95) N = 17</td>
<td>2 (2)</td>
<td>10 (10)</td>
<td>5 (5)</td>
</tr>
<tr>
<td>Totals</td>
<td>27 (15)</td>
<td>39 (47)</td>
<td>28 (34)</td>
</tr>
</tbody>
</table>

* Two participants from LINC 1 (AY '89 - '90) are no longer employed at a community college.

( ) = number of participants in each category while participating in LINC
APPENDIX G

NUMBER OF LINC PARTICIPANTS BY COMMUNITY COLLEGE
1989 - 1995
Number of LINC Participants by Community College  
1989 - 1995

Listed below are the number of LINC participants from each Iowa community college who completed the program. This tabulation accounts for all 96 participants according to their sponsoring community college at the time they enrolled in LINC. Information for this table was taken from the original rosters of participants for each LINC Class. The community college division of the Iowa Department of Education has also sponsored one LINC participant.

Des Moines Area Community College 11
Western Iowa Tech Community College 11
Eastern Iowa Community College District 10
Kirkwood Community College 8
North Iowa Area Community College 7
Southeastern Community College 7
Indian Hills Community College 6
Iowa Lakes Community College 6
Iowa Central Community College 6
Iowa Western Community College 6
Northeast Iowa Community College 6
Hawkeye Community College 5
Northwest Iowa Community College 4
Iowa Valley Community College District 1
Iowa Department of Education - Community College Division 1
Southwestern Community College 1
APPENDIX H

MYERS-BRIGGS TYPE INDICATOR (MBTI)
PROFILES OF LINC PARTICIPANTS
# LINC Participants 89-95

## N = 83

<table>
<thead>
<tr>
<th>Type</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISTJ</td>
<td>15</td>
<td>18.07</td>
</tr>
<tr>
<td>ISFJ</td>
<td>4</td>
<td>4.82</td>
</tr>
<tr>
<td>INFJ</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>INTJ</td>
<td>8</td>
<td>9.64</td>
</tr>
<tr>
<td>ISTP</td>
<td>4</td>
<td>4.82</td>
</tr>
<tr>
<td>ISFP</td>
<td>1</td>
<td>1.20</td>
</tr>
<tr>
<td>INFP</td>
<td>3</td>
<td>3.61</td>
</tr>
<tr>
<td>INTP</td>
<td>4</td>
<td>4.82</td>
</tr>
<tr>
<td>ESTP</td>
<td>1</td>
<td>1.20</td>
</tr>
<tr>
<td>ESFP</td>
<td>1</td>
<td>1.20</td>
</tr>
<tr>
<td>ENFP</td>
<td>5</td>
<td>6.02</td>
</tr>
<tr>
<td>ENTP</td>
<td>7</td>
<td>8.43</td>
</tr>
<tr>
<td>ESTJ</td>
<td>10</td>
<td>12.05</td>
</tr>
<tr>
<td>ESFJ</td>
<td>5</td>
<td>6.02</td>
</tr>
<tr>
<td>ENFJ</td>
<td>4</td>
<td>4.82</td>
</tr>
<tr>
<td>ENTJ</td>
<td>11</td>
<td>13.25</td>
</tr>
</tbody>
</table>

Note: ? = 1 person.

Print date: 9/22/95
APPENDIX I

RESPONSES TO QUESTIONS 14, 20, AND 21
Table I-1. Question 14--Reasons for Participating in LINC

<table>
<thead>
<tr>
<th>Response</th>
<th>Ranked by importance (1 = most important)</th>
<th>T/3%</th>
<th>NA</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Career Advancement</td>
<td>15(18.1)</td>
<td>10(12.0)</td>
<td>9(10.8)</td>
<td>3(3.6)</td>
</tr>
<tr>
<td>Asked to participate by supervisor</td>
<td>32(38.6)</td>
<td>7(8.4)</td>
<td>5(6.0)</td>
<td>2(2.4)</td>
</tr>
<tr>
<td>Professional recognition</td>
<td>8(9.6)</td>
<td>5(6.0)</td>
<td>6(7.2)</td>
<td>8(9.6)</td>
</tr>
<tr>
<td>Reputation of program</td>
<td>4(4.8)</td>
<td>10(12.0)</td>
<td>9(10.8)</td>
<td>6(7.2)</td>
</tr>
<tr>
<td>Graduate level course credit</td>
<td>2(2.4)</td>
<td>9(10.8)</td>
<td>13(15.7)</td>
<td>5(6.0)</td>
</tr>
<tr>
<td>Statewide contacts</td>
<td>15(18.1)</td>
<td>17(20.5)</td>
<td>9(10.8)</td>
<td>9(10.8)</td>
</tr>
<tr>
<td>Personal satisfaction</td>
<td>17(20.5)</td>
<td>11(13.3)</td>
<td>15(18.1)</td>
<td>17(20.5)</td>
</tr>
<tr>
<td>Other reason</td>
<td>2(2.4)</td>
<td>--</td>
<td>1(1.2)</td>
<td>--</td>
</tr>
</tbody>
</table>

Ranked by mean

T/3% = total percentage of respondents assigning a rank of 1, 2, or 3 to the item

N = 83

NA = number not ranked, no response

N = frequency

( ) = %
Table I-2. Question 20--The Degree LINC was Instrumental in Promotion(s)/Advancement(s)

<table>
<thead>
<tr>
<th>Response</th>
<th>N</th>
<th>%</th>
<th>Mean</th>
<th>St. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Instrumental</td>
<td>5</td>
<td>14.7</td>
<td>2.44</td>
<td>1.05</td>
</tr>
<tr>
<td>Somewhat Instrumental</td>
<td>15</td>
<td>44.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderately Instrumental</td>
<td>10</td>
<td>29.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimally Instrumental</td>
<td>3</td>
<td>8.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Don’t Know</td>
<td>1</td>
<td>2.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Applicable</td>
<td>51</td>
<td></td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = 83
Table 1-3. Question 21—Why LINC was Instrumental in Promotion(s)

<table>
<thead>
<tr>
<th>Response</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>T/3%</th>
<th>NA</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased statewide contacts</td>
<td>1(3.1)</td>
<td>5(15.6)</td>
<td>2(6.3)</td>
<td>3(9.4)</td>
<td>1(3.1)</td>
<td>--</td>
<td>2(6.3)</td>
<td>2(6.3)</td>
<td>25.0</td>
<td>69</td>
<td>1.00</td>
</tr>
<tr>
<td>Broadened understanding of own institution</td>
<td>--</td>
<td>3(9.4)</td>
<td>4(12.5)</td>
<td>2(6.3)</td>
<td>--</td>
<td>--</td>
<td>2(6.3)</td>
<td>--</td>
<td>21.9</td>
<td>74</td>
<td>1.25</td>
</tr>
<tr>
<td>Improved visibility with administrators</td>
<td>9(28.1)</td>
<td>5(15.6)</td>
<td>2(6.3)</td>
<td>1(3.1)</td>
<td>1(3.1)</td>
<td>--</td>
<td>--</td>
<td>1(3.1)</td>
<td>50.0</td>
<td>66</td>
<td>1.31</td>
</tr>
<tr>
<td>Improved management skills</td>
<td>1(3.1)</td>
<td>2(6.3)</td>
<td>3(9.4)</td>
<td>3(9.4)</td>
<td>1(3.1)</td>
<td>2(6.3)</td>
<td>--</td>
<td>--</td>
<td>18.8</td>
<td>73</td>
<td>1.34</td>
</tr>
<tr>
<td>Broadened understanding of community college</td>
<td>9(28.1)</td>
<td>4(12.5)</td>
<td>5(15.6)</td>
<td>3(9.4)</td>
<td>--</td>
<td>1(3.1)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>63</td>
<td>1.56</td>
</tr>
<tr>
<td>Improved self-confidence</td>
<td>6(18.8)</td>
<td>4(12.5)</td>
<td>3(9.4)</td>
<td>2(6.3)</td>
<td>2(6.3)</td>
<td>1(3.1)</td>
<td>--</td>
<td>1(3.1)</td>
<td>40.7</td>
<td>66</td>
<td>1.72</td>
</tr>
<tr>
<td>Developed leadership style</td>
<td>5(15.6)</td>
<td>6(18.8)</td>
<td>5(15.6)</td>
<td>1(3.1)</td>
<td>3(9.4)</td>
<td>1(3.1)</td>
<td>--</td>
<td>--</td>
<td>50.0</td>
<td>64</td>
<td>1.74</td>
</tr>
<tr>
<td>Improved communication skills</td>
<td>--</td>
<td>1(3.1)</td>
<td>2(6.3)</td>
<td>3(9.4)</td>
<td>1(3.1)</td>
<td>2(6.3)</td>
<td>2(6.3)</td>
<td>1(3.1)</td>
<td>9.4</td>
<td>73</td>
<td>1.84</td>
</tr>
<tr>
<td>Other</td>
<td>2(6.3)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>6.3</td>
<td>83</td>
<td>.06</td>
</tr>
</tbody>
</table>

Ranked by mean

T/3% = total percentage of respondents assigning a rank of 1, 2, or 3 to the item

N = 32

NA = number not ranked, no response

N = frequency

( ) = %
APPENDIX J

RESPONSES TO SPS ITEMS 28 - 70
Table J-1. Items 28-46: Perceptions about the LINC Experience

<table>
<thead>
<tr>
<th>Item</th>
<th>SD</th>
<th>D</th>
<th>NS</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall LINC experience was positive</td>
<td>1(1.2)</td>
<td>--</td>
<td>--</td>
<td>21(24.7)</td>
<td>63(74.1)</td>
<td>4.71</td>
<td>.59</td>
</tr>
<tr>
<td>Presentations interesting</td>
<td>--</td>
<td>1(1.2)</td>
<td>--</td>
<td>49(57.6)</td>
<td>35(41.2)</td>
<td>4.39</td>
<td>.56</td>
</tr>
<tr>
<td>Program effectively administered</td>
<td>--</td>
<td>1(1.2)</td>
<td>5(5.9)</td>
<td>42(49.4)</td>
<td>37(43.5)</td>
<td>4.35</td>
<td>.65</td>
</tr>
<tr>
<td>Social time one evening a month important</td>
<td>--</td>
<td>1(1.2)</td>
<td>3(3.5)</td>
<td>46(54.1)</td>
<td>35(41.2)</td>
<td>4.35</td>
<td>.61</td>
</tr>
<tr>
<td>Presentations valuable</td>
<td>--</td>
<td>2(2.4)</td>
<td>3(3.5)</td>
<td>46(54.1)</td>
<td>34(40.0)</td>
<td>4.32</td>
<td>.66</td>
</tr>
<tr>
<td>Before had not attended IACCT meetings</td>
<td>2(2.4)</td>
<td>8(9.5)</td>
<td>--</td>
<td>30(35.7)</td>
<td>44(52.4)</td>
<td>4.26</td>
<td>1.03</td>
</tr>
<tr>
<td>Before had not attended IACCP meetings</td>
<td>2(2.4)</td>
<td>8(9.5)</td>
<td>--</td>
<td>30(35.7)</td>
<td>44(52.4)</td>
<td>4.26</td>
<td>1.03</td>
</tr>
<tr>
<td>Networking opportunities/skills improved</td>
<td>--</td>
<td>1(1.2)</td>
<td>11(12.9)</td>
<td>40(47.1)</td>
<td>33(38.8)</td>
<td>4.24</td>
<td>.72</td>
</tr>
<tr>
<td>Specific topics complete and comprehensive</td>
<td>--</td>
<td>3(3.6)</td>
<td>3(3.6)</td>
<td>53(63.1)</td>
<td>25(29.8)</td>
<td>4.19</td>
<td>.67</td>
</tr>
<tr>
<td>Time discussing campus issues sufficient</td>
<td>--</td>
<td>10(12.0)</td>
<td>10(12.0)</td>
<td>45(54.2)</td>
<td>18(25.2)</td>
<td>3.86</td>
<td>.90</td>
</tr>
<tr>
<td>Campus visits by LINC staff valuable</td>
<td>1(1.4)</td>
<td>4(5.4)</td>
<td>19(25.7)</td>
<td>31(41.9)</td>
<td>19(25.7)</td>
<td>3.85</td>
<td>.92</td>
</tr>
<tr>
<td>Helped improve management skills</td>
<td>--</td>
<td>10(11.9)</td>
<td>16(19.0)</td>
<td>45(53.6)</td>
<td>13(15.5)</td>
<td>3.73</td>
<td>.87</td>
</tr>
<tr>
<td>Helped improve communication skills</td>
<td>--</td>
<td>12(14.1)</td>
<td>19(22.4)</td>
<td>41(48.2)</td>
<td>13(15.3)</td>
<td>3.65</td>
<td>.91</td>
</tr>
<tr>
<td>College trustees now know me</td>
<td>2(2.6)</td>
<td>11(14.5)</td>
<td>19(25.0)</td>
<td>28(36.8)</td>
<td>16(21.1)</td>
<td>3.59</td>
<td>1.06</td>
</tr>
<tr>
<td>Telenet sessions were interesting</td>
<td>1(2.0)</td>
<td>9(18.4)</td>
<td>14(28.6)</td>
<td>19(38.8)</td>
<td>6(12.2)</td>
<td>3.41</td>
<td>1.00</td>
</tr>
<tr>
<td>Telenet sessions were valuable</td>
<td>1(2.0)</td>
<td>8(16.3)</td>
<td>18(36.7)</td>
<td>16(32.7)</td>
<td>6(12.2)</td>
<td>3.37</td>
<td>.97</td>
</tr>
<tr>
<td>Little or no contact with college trustees before</td>
<td>10(12.0)</td>
<td>26(31.3)</td>
<td>2(2.4)</td>
<td>24(28.9)</td>
<td>21(25.3)</td>
<td>3.24</td>
<td>1.44</td>
</tr>
</tbody>
</table>
Table J-1 (continued)

<table>
<thead>
<tr>
<th></th>
<th>SD</th>
<th>D</th>
<th>NS</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>President is now more accessible</td>
<td>6(8.8)</td>
<td>19(27.9)</td>
<td>13(19.1)</td>
<td>20(29.4)</td>
<td>10(14.7)</td>
<td>3.13</td>
<td>1.23</td>
</tr>
<tr>
<td>Had little contact with college president</td>
<td>18(22.8)</td>
<td>36(45.6)</td>
<td>1(1.3)</td>
<td>14(17.7)</td>
<td>10(12.7)</td>
<td>2.52</td>
<td>1.36</td>
</tr>
</tbody>
</table>

Ranked by mean

N = frequency

( ) = %

Legend:
1 = Strongly disagree
2 = Disagree
3 = Not sure
4 = Agree
5 = Strongly agree
Table J-2. Items 47-70: How They Perceived what was Learned from Topics

<table>
<thead>
<tr>
<th>Following my LINC experience, I know more about:</th>
<th>SD</th>
<th>D</th>
<th>NS</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>State governance of community colleges</td>
<td>--</td>
<td>4(4.8)</td>
<td>3(3.6)</td>
<td>42(50.0)</td>
<td>35(41.7)</td>
<td>4.29</td>
<td>.75</td>
</tr>
<tr>
<td>Iowa Association of Community College Presidents</td>
<td>--</td>
<td>1(1.2)</td>
<td>2(2.4)</td>
<td>51(62.2)</td>
<td>28(34.1)</td>
<td>4.29</td>
<td>.58</td>
</tr>
<tr>
<td>Role of board of directors of community colleges</td>
<td>--</td>
<td>4(4.9)</td>
<td>3(3.7)</td>
<td>47(57.3)</td>
<td>28(34.1)</td>
<td>4.21</td>
<td>.73</td>
</tr>
<tr>
<td>Leadership styles</td>
<td>1(1.2)</td>
<td>4(4.8)</td>
<td>2(2.4)</td>
<td>47(56.0)</td>
<td>30(35.7)</td>
<td>4.20</td>
<td>.80</td>
</tr>
<tr>
<td>Iowa Association of Community College Trustees</td>
<td>--</td>
<td>4(4.8)</td>
<td>2(2.4)</td>
<td>52(62.7)</td>
<td>25(30.1)</td>
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<td>Local governance of community colleges</td>
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<td>5(6.0)</td>
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<td>31(36.9)</td>
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<td>.91</td>
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<td>3(3.7)</td>
<td>6(7.3)</td>
<td>50(61.0)</td>
<td>23(28.0)</td>
<td>4.13</td>
<td>.70</td>
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<tr>
<td>State and local funding of community colleges</td>
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<td>5(6.0)</td>
<td>7(8.3)</td>
<td>48(57.1)</td>
<td>24(28.6)</td>
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<td>7(8.3)</td>
<td>5(6.0)</td>
<td>45(53.6)</td>
<td>25(29.8)</td>
<td>4.00</td>
<td>.96</td>
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<tr>
<td>Vision, philosophy, mission, goals, ideas</td>
<td>--</td>
<td>5(6.0)</td>
<td>7(8.3)</td>
<td>55(65.5)</td>
<td>17(20.2)</td>
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<tr>
<td>President interaction with external constituencies</td>
<td>1(1.2)</td>
<td>4(4.8)</td>
<td>8(9.6)</td>
<td>54(65.1)</td>
<td>16(19.3)</td>
<td>3.96</td>
<td>.77</td>
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<tr>
<td>Organizational cultures</td>
<td>--</td>
<td>7(8.3)</td>
<td>7(8.3)</td>
<td>53(63.1)</td>
<td>17(20.2)</td>
<td>3.95</td>
<td>.79</td>
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<tr>
<td>Presidential decision-making</td>
<td>--</td>
<td>6(7.1)</td>
<td>15(17.9)</td>
<td>43(51.2)</td>
<td>20(23.8)</td>
<td>3.92</td>
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<td>President interaction with internal constituencies</td>
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<td>9(10.8)</td>
<td>48(57.8)</td>
<td>18(21.7)</td>
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<td>7(8.3)</td>
<td>11(13.1)</td>
<td>49(58.3)</td>
<td>14(16.7)</td>
<td>3.76</td>
<td>.95</td>
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<tr>
<td>Capital resource allocation</td>
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<td>15(17.9)</td>
<td>45(53.6)</td>
<td>11(13.1)</td>
<td>3.62</td>
<td>.96</td>
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<tr>
<td>Human resource allocation</td>
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<td>13(15.5)</td>
<td>19(22.6)</td>
<td>37(44.0)</td>
<td>14(16.7)</td>
<td>3.60</td>
<td>.98</td>
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<td>Educational ethics</td>
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<td>9(10.7)</td>
<td>25(29.8)</td>
<td>40(47.6)</td>
<td>9(10.7)</td>
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<td>Conflict resolution</td>
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<td>12(14.8)</td>
<td>20(24.7)</td>
<td>40(49.4)</td>
<td>8(9.9)</td>
<td>3.52</td>
<td>.91</td>
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Table J-2 (continued)

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<th>SD</th>
<th>D</th>
<th>NS</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std Dev.</th>
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<td>Following my LINC experience, I know about:</td>
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<td>Strategic planning</td>
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<td>14(16.7)</td>
<td>23(27.4)</td>
<td>37(44.0)</td>
<td>8(9.5)</td>
<td>3.43</td>
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<td>Collective bargaining</td>
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<td>16(19.8)</td>
<td>20(24.7)</td>
<td>32(39.5)</td>
<td>10(12.3)</td>
<td>3.37</td>
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<td>Negotiation skills</td>
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<td>14(17.3)</td>
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<td>Resume writing</td>
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<td>Interview techniques</td>
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</table>

Ranked by mean
N = frequency
( ) = %

Legend:
1 = Strongly disagree
2 = Disagree
3 = Not sure
4 = Agree
5 = Strongly agree
APPENDIX K

ONE-WAY ANOVA TABLES, ITEM 58 AND 60
Table K-1. One-way ANOVA--Item 58--Formal and Informal Organizational Structures by Question 8
Current Leadership Level

<table>
<thead>
<tr>
<th>Item 58</th>
<th>Count</th>
<th>Mean</th>
<th>Stand. Dev.</th>
<th>F Ratio</th>
<th>F Prob.</th>
<th>Scheffe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>23</td>
<td>3.65</td>
<td>1.07</td>
<td>4.24</td>
<td>.02</td>
<td>1&lt;2, 2&lt;3</td>
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<tr>
<td>Level 2</td>
<td>37</td>
<td>4.19</td>
<td>.81</td>
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<td></td>
<td></td>
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<tr>
<td>Level 3</td>
<td>20</td>
<td>4.35</td>
<td>.59</td>
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N = 80

Table K-2. One-way ANOVA--Item 60--Interaction of President with Internal Constituencies by Question 8
Current Leadership Level

<table>
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<th>Count</th>
<th>Mean</th>
<th>Stand. Dev.</th>
<th>F Ratio</th>
<th>F Prob.</th>
<th>Scheffe</th>
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</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>23</td>
<td>3.65</td>
<td>.98</td>
<td>3.63</td>
<td>.03</td>
<td>1&lt;3, 3&lt;2</td>
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<tr>
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<td>.64</td>
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<td>Level 3</td>
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<td>.85</td>
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N = 79
### LINC Participants 89-95

**compared with**

Females in Leadership Development Program

N = 83

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<th>Type</th>
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<th>I</th>
<th>U</th>
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<th>SJ</th>
<th>10.04</th>
<th>IN</th>
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<td>0.47</td>
<td>0.55</td>
<td>0.00</td>
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<td>0.97</td>
<td>1.00</td>
<td>0.00</td>
<td>0.59</td>
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<td>0.31</td>
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<tr>
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<td>0.76</td>
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</tbody>
</table>

Note: *I* = 1 person. Groups are independent.

Base total N = 181. Groups are independent.

Calculated values of Chi Square or Fisher's exact probability (underlined).

Type Table Significance

<table>
<thead>
<tr>
<th>Type</th>
<th>E</th>
<th>I</th>
<th>U</th>
<th>4.08</th>
<th>SJ</th>
<th>10.04</th>
<th>IN</th>
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<tbody>
<tr>
<td>ESTP</td>
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<td>0.47</td>
<td>0.55</td>
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Print date: 9/22/95

* < .05, ** < .01, *** < .001