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COMPARISON OF DISTANCE EDUCATION LEADERSHIP STYLES AND
FUTURE INVESTMENT IN TWO-YEAR COLLEGES

By

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Presented in partial fulfillment of the requirements of

Doctorate of Education in Educational Leadership

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May 4, 2011

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Comparison of Distance Education Leadership Styles and Future Investment in Two-Year Colleges

Chairperson: Roberta D. Evans

This foundational descriptive quantitative study examined leadership styles, traits of distance education leaders (e.g. VPs, Deans, Directors and Coordinators) and distance education program characteristics as well as funding priorities at the post-secondary level. Participants were subjected to Bass and Avolio's *Multifactor Leadership Questionnaire* (MLQ-5X), which identified leadership characteristics as transformational, transactional or passive-avoidant as manifest by nine scales as follows: Individualized Influence Attributes, Individualized Influence Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Active Management-by-Exception, Passive Management-by-Exception and Laissez-Faire. In addition, the questionnaire further assessed leadership outcomes scaled as Extra Effort, Effectiveness and Satisfaction.

There were 55 respondents from two-year colleges belonging to the American Association of Community Colleges. Findings indicated that these Distance Education Leaders scored markedly higher (and above the norm) in Transformational Leadership style scales than did past MLQ-5X testees from across all fields. Further, results indicated significant relationships between leadership style and such vitally important organizational characteristics as reporting line and levels of position. Additional statistical significance established positive correlates between Age and Effectiveness and a negative correlate between Age and Active Management-by-Exception. The Years Since Most Recent Degree correlated positively with Individualized Influence Behavior and negatively with Active Management-by-Exception. The Years at the Institution and in the Distance Education Field correlated positively with Satisfaction and negatively with Individualized Influence Attributes. The single most important and top ranked funding priority was Course Design Standards that Focus Upon Learning Outcomes.

Recommendations were directed at college, distance education leaders and for the purposes of future research. As online distance education in higher education matures, college and distance education leaders should work together to identify and develop future leaders with transformational leadership style to work in the field. This study showed that taking and teaching online courses will have a positive impact upon that goal as well pursuing an advanced degree. Also, the level of position in the organization and reporting line of the distance education leader made a difference in leadership style. Future research should focus upon further defining the best types of leaders for distance education and how to develop effective future leaders in the field.

DEDICATION

This dissertation is dedicated to my wife Kim, my sons Justin and Ian and my parents Bob and Arlene. You make me what I am and what I will be. Your unwavering love, support and encouragement throughout my educational pursuits have meant more than you know to me, my career and my life.

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John Wooden, famous UCLA basketball coach and role model once said that you cannot live a perfect day without doing something for someone who will never be able to repay you. Although I can never truly repay these people, I do have many to thank.

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created meaningful research. Your continued presence in my career will make me a better leader and researcher. To my colleague and committee member Dr. Mickey Slimp who has led distance education efforts for decades and been a role model of mine in the profession I hold dear, thank you for your input and guidance.

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To my parents, Bob and Arlene Schrenk, you have long inspired me to be the best that I can be, to finish what I start when the end is worth it and have given me all the support that I needed to succeed. Growing up, I could not have dreamt that I would be sitting here today writing acknowledgements just days before receiving a doctorate degree. One regret is that my grandparents; Earl, Mert, Adolph and Dorothy are not here to share this moment with me. I take solace in the fact that their spirit and work ethic have been instilled in me to "do a little better" and "just be nice". I can never thank you all enough for what you have done and sacrificed to make me who I am today.

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--Ryan Schrenk, Ed.D.
May 4, 2011

TABLE OF CONTENTS

CHAPTER	PAGE
I. <u>INTRODUCTION TO THE STUDY</u>	1
Introduction	1
Statement of the Problem	12
Purpose of the Study	13
Research Questions	14
Research Question One	14
Research Question Two	15
Research Question Three	15
Research Question Four	15
Research Question Five	15
Research Question Six	15
Definition of Terms	15
Delimitations	19
Limitations	19
Significance of the Study	20
Chapter Summary	22
II. <u>REVIEW OF THE LITERATURE</u>	24
Introduction	24
Coverage of Relevant Research	24
Change and How it Relates to DE Technology	24

Traits of Quality DE Programming.....	29
Transformational Leadership Study	43
Measuring the Theory	44
The MLQ and FRL model	46
Transformational Leadership	47
Transactional Leadership	49
Passive Leadership Dimensions	50
Distance Education Leadership in Community Colleges..	51
Chapter Summary	53
III. <u>METHODS AND PROCEDURES</u>	54
Introduction and Research Design	54
Variables	54
Research Questions	54
Research Question One	54
Research Question Two	55
Research Question Three	56
Research Question Four	56
Research Question Five	56
Research Question Six	56
Population and Sample	57
Data Collection Procedures	59
Design and Dissemination of Instrument	60

Generating Responses from Participants	61
Measurements and Instruments	64
Reliability	65
Internal Validity	65
Chapter Summary	65
IV. <u>FINDINGS</u>	67
Introduction	67
Analyses	68
Research Question One – Personal Traits	70
Research Question One – Leadership Styles of DE Leaders	75
Research Question Two – Leadership Style and DE Program Traits ..	77
Research Question Three – Leadership Style and DE Leader Traits ..	79
Research Question Four – Recent Changes in DE Leader Position	82
Research Question Five – Leadership Styles and Funding Priority	83
Research Question Six – Vision for Funding Priorities	86
Chapter Summary and Conclusions.....	89
V. <u>CONCLUSIONS AND RECOMMENDATIONS</u>	91
Introduction	91
Findings and Conclusions.....	91
Recommendations for College Leaders	93
How to Support and Develop DE Leaders	94

Recommendations for DE Leaders	98
Recommendations for Further Research	100
Endnotes	104
Vision One – Develop Transformational DE Leaders	104
Vision Two – Drive DE Leadership Research	105
Vision Three – Teach Teachers How to Use Technology	106
APPENDIX A: Rough Draft Outline of Two Survey Instruments	108
APPENDIX B: MLQ-5x Self-Rater Form Example.....	111
REFERENCES	112

LIST OF TABLES

TABLE	PAGE
Table 1: Gender of Participants	71
Table 2: Degree Details of Participants	72
Table 3: Degrees Held in Education, Technology and/or Leadership at all Degree Levels	73
Table 4: Number of Online Courses Taken by DE Leaders	73
Table 5: Reporting Lines of DE Leaders	75
Table 6: MLQ-5x Scale Results for DE Leaders in This Study	77
Table 7: Significant Linear Regression Results for DE Leaders	80
Table 8: Significant ANOVA Results for DE Leaders	83
Table 9: Verbiage of Future DE Funding Priorities	85
Table 10: Future DE Funding Priorities by Rank and Importance	89
Table 11: Greatest Challenges for Administrators of Distance Education Programs	89

LIST OF FIGURES

FIGURE	PAGE
Figure 1: Pyramid of Competencies for Distance Education Leaders	11
Figure 2: Effectiveness of Followers (Kelley, 1988, p. 145)	28
Figure 3: WCET Principles of Good Practice for Electronically Offered Academic Degree and Certificate Programs (1996)	30
Figure 4: IHEP Benchmarks for Success in Internet-Based Distance Education (2000)	32
Figure 5: ADEC Guiding Principles for Teaching and Learning (2003)	36
Figure 6: Sloan-C Quality Framework and the Five Pillars (2005)	38
Figure 7: Sloan-C Brief Version of the Quality Framework (2005)	40
Figure 8: Dimensions and Sample Items from MLQ-5X	47
Figure 9: Job Title of DE Leaders	74
Figure 10: Shortened Job Title of DE Leaders	75
Figure 11: Scatter Plot of Relationship between Years the Institution Offered Online DE and the LF Scale	79
Figure 12: Boxplot of DE Leaders for under Five Years	84

CHAPTER ONE

INTRODUCTION TO THE STUDY

Introduction

In a 2001 article regarding the re-invention of distance education, Greville Rumble, long-time editor of the journal *Open Learning* stated, "...the history of distance education goes back to at least 1840 when, capitalizing on the development of a cheap penny postal service in the United Kingdom, Sir Isaac Pitman first began to teach shorthand using correspondence teaching methods" (Rumble 2001a, p. 31). Some researchers have disagreed with Rumble on the precise year of inception for distance education. Others labeled or grouped the number of generations of distance education society experienced differently; however none have disagreed that educators around the world are in an unprecedented time where technology has integrated with education and society in such a way as to fundamentally change the mere definition of what, where and when a classroom exists.

In the fourth generation, as he termed it, Rumble discussed the fusion of the personal computer, World Wide Web/Internet beginning in the early 1980s combined with new Information and Communication Technologies (ICTs). Rumble (2001a) went on to define four phases of distance education history, the last of which he defined as "that of online or virtual education systems" (p. 32).

Similarly, Michael Moore, long-time editor and founder of the *American Journal of Distance Education*, and Greg Kearsley (2005), author of more than 20 books on Distance Education, (2005) referred to the fifth generation of distance education and discussed the impact of the World Wide Web (WWW) on education in their text *Distance*

Education: A Systems View, 2nd Ed. Moore and Kearsley stated that “the first graphical user interface (GUI) Web browser, called Mosaic, was originally introduced in 1993, and it was this software that gave educators a powerful new way of opening access to learning at a distance” (p. 43).

Tony Bates (2005), a founding member of the staff at the British Open University broke Distance Education historically into three generations in his text titled *Technology, E-Learning and Distance Education*. Bates grouped the third generation together by those allowing two-way DE interaction where Moore and Kearsley (2005) and Rumble (2001a) broke the generations down to finer details. Bates’ definitions served to simplify the mental model for the purposes of this study where the more detailed generations served to delineate important aspects of the evolution from correspondence to web-based DE. According to Bates, the first generation was print-based correspondence with little interaction and usually made up of a singular technology. The second, most commonly termed industrial in nature, served large numbers of students and normally comprised print and media together with mediation typically happening by a third party at the learners’ site. In his third generation, Bates described teaching and learning as taking place in a two-way exchange between the teacher who originated the lessons and the student who was remotely located. Facilitated communication also occurred between students in Bates’ definition.

To complicate matters for higher education leaders, myths and misperceptions added to the many leadership challenges that existed in higher education in the twenty-first century. Nearly 100 myths were discussed by Arthur Combs (1979) in his book *Myths in Education: beliefs that hinder progress and their alternatives*. According to

Combs, the characteristics of myths that made them “treacherous in human affairs” were that they were “generally held, often expressed as dichotomies, sometimes contain a germ of truth, justify behavior and often become institutionalized” (p. 2). Distance education critics pointed toward one such issue that could be considered a myth, when citing the “no significant difference (NSD) debate” as a reason to declare that DE was no better or worse than face-to-face delivery or any other technical delivery system. One of the primary resources for information on the NSD debate is at the WCET website titled “nosignificantdifference.org” and maintained by Thomas Russell.

The text titled *Teaching and Learning at a Distance: Foundations of Distance Education*, by Simonson, Smaldino, Albright and Zvacek (2009) discussed the effectiveness of distance education and addressed the NSD issue in chapter one. The authors stated that “the keys to successful distance education are in the design, development, and delivery of instruction, and are not related to the geography or time” (p. 9). They posited that researchers have asked the wrong questions by exploring the mode of delivery as the variable in question rather than the teaching methodologies, educational outcomes and instructional design. They later added that “90% of public universities offer online courses and about half offer degree programs online” (p. 15).

In her text *Quality in Distance Education: Focus on On-Line Learning*, Katrina Meyer (2002) also discussed the NSD and DE quality issues at length and reached the same conclusions as Smaldino, et al. did seven years later. She quoted a total of eight sources on one aspect of the NSD phenomenon that led her to conclude “...the majority of articles published on distance education, Web-based education, and quality continue to be position papers, personal experiences, and advice to others contemplating a Web-

based course” (p. 17). Meyer made the case for going beyond the mode of delivery when assessing or studying quality of online learning vs. face-to-face delivery when she made the following statement; “...it is irrelevant to speak of the effects of using the Web without understanding how it is entwined with instructional design and especially faculty choices about instructional design” (p. 19). Meyer conducted a thorough overview of the debate and cited fifteen studies between 1990 and 2001 comparing student achievement in online and face-to-face instruction. In subsequent chapters, Meyer discussed the important factors of quality online education. First for her were students. In her summary of student issues, she encouraged researchers to look beyond the mode of delivery to the student characteristics such as “...positive attitude and motivation, independence, sufficient computer skills, a predominately visual learning style and an understanding that learning is not a passive process of absorbing information” (pp. 53-54). Her next chapter on faculty concluded with suggestions that the following type of faculty do well online: “They need to love learning new things, tolerate frustration, and be willing to experiment; they are likely to be positive about this new approach to teaching and return to the online environment again and again” (p. 74). Meyer stated her overall conclusions:

...perhaps some day, it will be generally agreed that it is not so much the technology that impacts student learning but the instructional design—the learning model—and the values implicit in the activities and content chosen by the faculty that determine whether the student learns or not. (p. 100)

Conceivably the biggest change in the NSD debate occurred recently with the publication and findings in the Department of Education (2009) report titled *Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies*. In this study, the key findings were:

Students who took all or part of their class online performed better, on average, than those taking the same course through traditional face-to-face instruction. Learning outcomes for students who engaged in online learning exceeded those of students receiving face-to-face instruction, with an average effect size of +0.24 favoring online conditions. The mean difference between online and face-to-face conditions across the 51 contrasts is statistically significant at the $p < .01$ level. Interpretations of this result, however, should take into consideration the fact that online and face-to-face conditions generally differed on multiple dimensions, including the amount of time that learners spent on task. The advantages observed for online learning conditions therefore may be the product of aspects of those treatment conditions other than the instructional delivery medium per se. (p. xiv)

The above statement regarding the meta-analysis findings was seen as somewhat bold and controversial in some circles, as evidenced by the more than 50 comments to Jaschik's (2009) *Inside Higher Education* piece titled *The Evidence on Online Education* generated at the time of this research. However, both his comments and the resulting debates pointed out that the study's most important finding may have been: "studies in which learners in the online condition spent more time on task than students in face-to-face condition found a greater benefit for online learning" (p. xv). Although this statement appears to contradict past research, it echoed Meyer (2002) and Smaldino and

others (2009). In fact, the statement merely said that spending more time on task and/or more time with the content could be equated with best practice, regardless of mode of delivery. If so, what the literature and media in the future may begin to focus on will not be the online mode but rather the art or practice of teaching in ways that increase students' time on task, their time engaging with the material, with other students and with their instructor(s).

The cases made by Smaldino and others (2009) as well as Meyer (2002) and the Department of Education (2009) meta-analysis laid the foundation for this study that used the benchmarks and quality research laid forth by past researchers. However, rather than focus upon the comparison of face-to-face education to online, it focused upon the leadership styles, traits of programs and their leaders as well as how those leaders planned to prioritize future investments of resources to lead their programs through changes brought on by the second decade of the twenty-first century.

Another common myth regarding DE dealt with low individual course completion rates of online students. Current research involving two-year colleges by Lokken, Womer and Mullins (2010) with the Instructional Technology Council (ITC), stated that "completion rates have jumped to a reported 72 percent, just below the 76 rate for face-to-face classes. This marks a significant improvement from the 50 percent reported in the early years of distance education" (p. 13).

Although additional studies may be performed on the topics, this dissertation does not seek to address comparison of delivery modes for quality or exploration of completion rates. Instead, it follows Alvin Toffler's advice from the foreword to Gibson's (1999) book *Rethinking the Future* when he proffered, "the illiterate of 2000

and beyond will not be the individual who cannot read or write, but the one who cannot learn, unlearn and re-learn” (foreword). This study endeavors to take what educators know about distance education and learn, unlearn and relearn about the body of research and what Toffler (1970) also referred to as the “great growling engine of change – technology” (p. 25). He went on to state that “technological innovation consists of three stages...first...creative, feasible idea. Second, its practical application. Third, its diffusion through society” (p. 27). The popular media and current research on distance education, such as the 2009 Department of Education study regarding online education, pointed toward symptoms of what Toffler referred to as diffusion through society when dropout rates became comparable and the level of learning outcomes began to be debated in earnest.

When discussing change in education, Klein wrote in Bennis, Benne, Chin and Corey (1976) text titled *The Planning of Change* that educational leaders, “in the face of rapid social change they face the challenge of learning how to foster innovation, while at the same time finding the most constructive ways in which to act in defense of the integrity of their systems” (p. 124). Educators who continued to debate the viability of online teaching and learning in the face of online quality program research, the research of Lokken, et al. (2010), Meyer (2002) and Smaldino, et al. (2009) and the study from the Department of Ed (2009) mirrored this quote.

There is little doubt in recent years that distance educational technology has had a profound impact upon how educators and students viewed the very definition of teaching and learning. In their 2009 meta-analysis of research completed between 1996 and 2008, The Department of Education identified more than a thousand empirical studies of online

learning and found that “on average, students in online learning conditions performed better than those receiving face-to-face instruction” (p. ix). Eight years before this analysis, Rumble (2001b) discussed the demand, values and costs associated with DE in the article titled *Just How Relevant is E-education to Global Educational Needs?* He postulated that “over the last 15 or so years, technological advances have enabled distance educators to address the perceived failure of earlier forms of distance education to provide opportunities for interactive dialogue” (p. 223). Rumble, in that same article, laid the groundwork for leaders in DE to focus upon embracing all of the following when considering the costs of what he termed e-education: “1) The development of e-materials, 2) Teaching students online, 3) Administering students online, 4) Providing the infrastructure and support within which e-education can operate and 5) Planning and managing e-education” (p. 225). Rumble’s article discussed intricacies and challenges of embracing the five priorities. In order for solutions to occur, he recommended investments at the state and national level rather than solely relying upon institutions to rectify them on their own. His reasoning led him to close with a commentary on the primary “disbenefit” of DE being the trend of increasing costs to the learners in DE and three final rhetorical questions: “...just how are distance educators going to respond to the increasing global need for cheap, affordable education to meet the needs of a world population that will on current forecasts grow by over three billion in the next 50 years? Is our current concern with e-education helping or hindering us in this? Or don’t we care?” (p. 231). Rumble’s calling for a solution beyond loading costs onto the backs of students through leadership in DE and for research into prioritizing DE expenditures was foundational to the research and quest for answers in this dissertation.

With the myriad of recent issues and challenges related to distance education, educational technology and change facing higher education, the ground for research was fertile. One area that called for guidance was leading two-year college distance education efforts in a way that bridged the gap between technology, administration and the classroom while allowing for successful, high quality teaching and learning to occur in a cycle of continuous quality improvement.

Numbers supported this calling for additional research. Moore and Kearsley (2005) wrote: "In 1995, only nine percent of American adults accessed the Internet, totaling 17.5 million users and by 2002, 66 percent of American adults were going online, a total of 137 million users" (p. 43). More recently, a longitudinal study and report generated for the Sloan Consortium (Sloan-C) focused on distance education in the United States and cited that "the most recent estimate, for fall 2008, shows an increase of 17 percent over 2007 to a total of 4.6 million online students" (Allen & Seaman, 2010, p. 5). The enrollment growth tracked during the Sloan-C seven-year study further displayed growth overall from 1.6 million students in 2002 to over 4.6 million in 2008 equaling an annual growth rate of 19 percent (p. 5). Growth rates in the Sloan survey differed by type of institution and the report from 2007 stated that "two-year associate's institutions have the highest growth rates and account for over one-half of all online enrollments for the last five years" (Allen & Seaman, 2007, p. 1). Also, the thirty-seventh annual NCES projection study from 2009 put the "middle projections for total enrollment in all degree-granting institutions of higher education" for overall student body growth rate at an annual rate of around 1.5 percent from 16.6 million in Fall 2002 to 18.2 million for fall 2008 (Hussar & Bailey, p. 54). The study went on to project overall enrollment at 20.6

million for 2018 or slightly less than 1.4 percent (Husser & Bailey, p. 54). At some point, the numbers will have to flatten out for growth of DE. Postulates and indications were clear in 2010 however, that the pace of growth in DE enrollments would continue to outpace overall growth in higher education enrollment for several years to come. Research in this field could help inform college leaders both during the continued period of growth and as the curve of expansion begins to flatten out.

Theory-driven studies on leadership styles of distance education leaders and programs are needed to fill in gaps for the field of study. Exploring technology and history placed DE in context while the numbers showed demand and growth. Upon exploring the literature, the call for studying leadership in DE was unmistakable. According to two recent articles on research trends, there was a gap in the research around leadership, management and planning for DE.

In the *Handbook of Distance Education (2nd ed.)*, Lee, Driscoll and Nelson (2007) discussed research topics in distance education and showed that in the years between 1997 and 2005, only 9% of the research in the field focused on the management topic while 36% focused on theory and research and 21% on design (p. 34). The authors suggested that future research needed to focus upon theory-driven research methodology (p. 38). A second, more recent article supported the need for research in the areas of leadership and future planning for distance education. According to Zawacki-Richter, Backer and Vogt (2009), only 2.6% (18 out of 695) of published articles on Distance Education between 2000 and 2008 focused upon management and organization. Costs and benefits comprised 1.7% (12 out of 695), innovation and change were studied 1.9%

(13 times) and 5.9% (41 studies) dealt with quality assurance. Together, these topics made up 12.1% of the field of research (p. 9).

DE Leaders are tasked with increasingly complex responsibilities. Their decisions, as those of any leaders, are assessed with organizational outcomes, program functions and future vision of the institution. The effectiveness of their teams, satisfaction of their followers or constituents often determines the success of their program as well as their impact as leaders. Figure 1 represents the distance learning leader pyramid of competencies and assumes growth from the base level to the top (Simonson, Smaldino, Albright & Zvacek, 2009). Figure 1 provides a theoretical construct for this study involving leadership traits of DE Leaders. The instruments used to conduct the study gave tangible measurements of program and leader demographics as well as leadership styles and outcomes of those styles compared to visions of the DE Leaders at sample institutions.

Figure 1

Pyramid of competencies for distance education leaders



Chapter two will triangulate research on managing organizational change, quality DE program traits, measuring leadership style and leading in two-year college distance

education environments. The review will also cover past instruments used to assess leadership style. As the latest generation of DE moves into the second decade of the twenty-first century, this dissertation reports information and provides guidance for leaders about where DE, educational technology and academic leaders should focus effort in the coming years.

Statement of the Problem

There exists a defalcation of research on leadership in distance education. The problem this study helps higher education leaders address is using descriptive research to answer new questions related to who is currently leading online DE programs, who should lead them, how they need to lead and how college leaders should plan for the future of the best distance education programs possible. In order to do this, results centered on leadership styles and traits of DE Leaders, traits of the DE programs as well as the plans for future needs of those programs. The research focused upon these issues within the context of two-year colleges in the American Association of Community Colleges (AACC). This study was intended to provide a descriptive context to serve as the foundation for subsequent research in an under-researched aspect of the online DE field.

In the fifth edition of their important work titled *The American Community College*, Cohen and Brawer (2008) stated that “As the colleges have grown larger and more complex, administrators, faculty members, and trustees all have had to adjust.” The authors went on to say “The only certainty is...these adjustments will have to be made with increasing frequency” (p. 155). In fact, while recent years yielded explosive growth

in two-year educational offerings online, limited research on leadership theory or practice to inform college leaders existed regarding these distance education offering institutions.

According to the Sloan-C, schools offering associates degrees experienced the fastest growth of enrollment in online courses with enrollment growing from just over 800,000 in Fall 2002 to over 1.9 million in Fall 2006. This 24% growth rate was the fastest among all types of degree granting institutions in the U.S. over the past five years (Allen & Seaman, 2007, p. 6). One adjustment in response to this demand for DE was the creation of new DE Leadership positions in two-year colleges. Although numbers of the DE Leadership positions are not available, the fact that over 90% of public two-year institutions offer online DE courses, pointed toward a growing profession in need of guidance and research. CEO's, senior administrators and distance education leaders must understand and subscribe to the same theories as never before in order for efforts to pay off and appropriate/timely adjustments to be made.

Purpose of the Study

This study explored leadership attributes of DE Leaders. Findings foster a deeper understanding of the relationship between leadership style, the traits of DE Leaders, their vision for change and their programs. College leaders needed to know about the current leaders in DE and the type of leader needed for their DE program, what qualifications the leaders should have and where they should fit into their organization. Answers to these questions were explored.

This research was designed to guide sound investment of resources for college leaders and provided practical guidance to those grappling with prioritization of resources across the community college landscape. Parsad and Lewis (2008) displayed in their

report that “93% of public two-year institutions offered asynchronous internet-based courses” (p. 15). Therefore, gave credence to the idea that leaders in higher education no longer had a choice of whether to “go online”.

At the same time however, the complex nature of a quality DE program needed to be defined for constituents of higher education and accreditors. The literature regarding quality benchmarks and continuous quality improvement in this study displayed findings to assist leaders with the integration of DE into mission-centric, data-driven decisions that scaffold the improvement cycle mandated by accreditors. This research is designed to help guide DE Leaders through this complex milieu of accreditation, limited resources, technology, distance education and leadership.

Finding leaders who can put all of these pieces together would have been a nice luxury ten years ago. However, having a trusted DE Leader is a must in 2011 and beyond. This research also informed the higher education community about the type of leader needed for the critical endeavor of DE programming and where those DE Leaders fit into organizational structures to make the most impact.

Research Questions

For the purposes of this research, the following questions (offered in greater detail in chapter three) were investigated.

Research Question One

What were the personal traits and leadership style dimensions (as measured by the MLQ-5x) of DE Leaders at two-year colleges belonging to the AACCC?

Research Question Two

Was there a relationship between leadership style dimensions (as measured by the MLQ-5x) and DE program traits?

Research Question Three

Were there relationships among leadership style and DE Leader traits such as job title, organizational level of job, reporting structure, gender, ethnicity, age, years of experience in DE and/or higher education, years since completion of most recent degree, level of most recent degree, area of most recent degree, experience taking and/or teaching online courses?

Research Question Four

Did recent changes in job title for DE Leaders in the last five years correlate to leadership style?

Research Question Five

Was leadership dimension (MLQ measurement) related to the categorized priorities for resource allocation in DE programs?

Research Question Six

Were there differences in vision for funding priorities across Carnegie unit classifications or geographic regions for community college DE programs in AACC two-year colleges?

Definition of Terms

For the purposes of this study the following definitions will be applied:

American Association of Community Colleges (AACC. “The American Association of Community Colleges (AACC) is the primary advocacy organization for

the nation's community colleges. The association represents almost 1,200 two-year, associate degree-granting institutions and more than 11 million students" (AACC, 2011).

The Chief Executive Officer (CEO). Of the two-year campus can be referred to as the CEO, President, Chancellor, Provost or Dean. In this study, *CEO* was used regardless of official title(s).

Distance education. "Distance education (DE) is planned learning that normally occurs in a different place from teaching, requiring special course design and instruction techniques, communication through various technologies, and special organizational and administrative arrangements" (Moore & Kearsley, 2007, p. 2). Distance education differs from eLearning in that it incorporates planned learning as well as teaching strategies and pedagogy while eLearning focuses more stringently on the delivery side of the teaching and learning continuum. This study examines the latest generation of online distance education.

Distance learning leader or DE Leader. For the purpose of this study, the term *distance education leader* has been used interchangeably with *distance learning leader*, *DE Leader* or *e-learning leader*. This individual was the person in charge of the day-to-day operations and long-range strategic planning for distance education at an institution. During the review of literature it was posited that leaders of distance education initiatives on campuses held a variety of named positions. Most were directors, executive directors, deans or assistant deans. Some distance education leaders reported directly to the CEO of their institution while others had reporting lines through IT or academic channels to an administrative leadership team. According to a recent study by the ITC of 500 two-year schools, "Sixty-nine percent of respondents (distance education leaders) indicated they

reported to a vice president for academic affairs or an academic dean; this was up five percent from the previous year, and up more than 20 percent from 2005” (Lokken, Womer & Mullins, 2008).

The most comprehensive definition of a DE or distance learning leader is discussed by Simonson, in the article titled *Distance learning leaders: Who are they?* when he stated:

A distance learning leader is a visionary capable of action who guides an organization’s future, its vision, mission, goals, and objectives. The leader guides the organization and its people who have faith in the leader, and have a clear understanding and acceptance of the organization’s worthwhile and shared vision and goals. A distance learning leader has competence in knowing, designing, managing, leading, and visioning distance education. (Simonson, 2004, p. 48)

E-Learning. E-Learning refers to the use of Internet technologies to deliver a broad array of solutions that enhance knowledge and performance. The definition was based upon three fundamental criteria:

(1) It is networked, making it capable of instant updating, storage/retrieval, distribution and sharing of instruction or information; (2) it is delivered to an end-user via a computer using standard internet technology; (3) it focuses on learning solutions that go beyond traditional training paradigms (Rosenberg, 2001, pp. 28-29).

Some of the literature used eLearning, distance learning and distance education interchangeably. The key difference between distance education and eLearning for this

study was that eLearning focused more toward the learning and delivery side of the equation while distance education dealt with both the teaching and learning sides.

The Instructional Technology Council (ITC). The ITC originated as an ad hoc subcommittee on mass media in education for the American Association of Community Colleges (AACC) in 1977. The mission of ITC evolved into the following statement in 2008: ITC provides leadership, information and resources to expand access to and enhance learning through the effective use of technology (Instructional Technology Council, 2008). Most specifically, the ITC provides leadership, information and resources for its approximately 400 member institutions around North America in the area of distance education. The ITC yearly survey data was used extensively in this study.

Multifactor Leadership Questionnaire. The Multifactor Leadership Questionnaire (MLQ) is "...the most commonly employed measure of transformational and transactional leadership" (Avolio & Bass 2004, p. 1). The MLQ was used in its most recent version (Form 5X) for this study. The MLQ-5X was based upon the initial work of Bernard Bass (1985). He intended to create a scale of ten items measuring both leader and follower perceptions of transformational, transactional and laissez-faire leadership styles Bass (1990). The work morphed into development and a lifetime pursuit by Bass of research on leadership and testing for the MLQ and a model for assessment of a full range leadership (FRL) model.

Distance Education Program. A DE Program is made up of personnel, services, resources and structures to lead and support DE in a college. A full-time DE Leader, specialized staff to support students, and faculty, hardware, software and other operating

resources typically make up the DE program staff. This type of program should not be confused with an academic program made up of a collection of online courses. Moore and Kearsley (2005) referred to the DE program as a “system” made up of seven parts:

1. A source of knowledge that is to be taught and learned
2. A subsystem to structure this into materials and activities for students that we will call courses
3. Another subsystem that delivers the courses to learners
4. Teachers who interact with learners as they use these materials in making their knowledge
5. Learners in their different environments
6. A subsystem that monitors and evaluates outcomes so that interventions are possible where failures occur
7. An organization with a policy and management structure to link these different processes. (p. 11)

Delimitations

This study was delimited to DE Leaders and DE programs in two-year colleges in the United States that belonged to the AACC. The AACC comprises all of the approximately 1200 regionally or nationally accredited associates-granting two-year colleges in the United States.

Limitations

Self-reporting of DE Leaders on the MLQ could have led to inflated numbers according to Avolio and Bass (2004). However, the results were measured against existing tables of results for the MLQ Self-Rating Form. Although most colleges have

distance education programs, reporting lines, titles and contact methods for leaders were almost as varied as the number of colleges and websites in the population. Convenience sampling was the only way to gather this range of information at the time of this study. Contacting a large, mostly undefined sample from across the United States posed some response challenges as the researcher did not know the respondents personally and some individuals ignored or deleted the postcard and e-mail messages prompting them to complete the survey. Leaders may have missed the call for response if they failed to check e-mail regularly during the dissemination of the survey. Finally, the design of college websites varied and may have prevented the researcher from finding DE Leader contact information or job titles of the DE Leader if a clear organizational chart was not available.

The Mind Garden™ site required users to create an account tying their response to an e-mail address. This extra step deterred at least one prospective participant who contacted the researcher to voice their displeasure. Pilot testers warned of this limitation and it appears to have impacted the total number of collected responses. It appears that the Mind Garden™ site now allows researchers to utilize third party survey tools in 2011.

Type I (false positive findings) and Type II (false negative) research errors were possible in this sample especially as variables were split into cases. The findings will be discussed in detail during chapter five taking the possibilities of research errors into account.

Significance of the Study

Hiring a qualified DE Leader is no longer an option for CEOs of higher education institutions. Rather, it is a requirement when, according to the Sloan-C 2009 survey

“more than one in four students in the United States take at least one online course” (p. 1) and “65.7% of associates degree institutions said online education is critical to the long-term strategy of their institution” (p. 10). In the same study, respondents indicated that over 75% of institutions offering associate’s degrees felt learning outcomes for online education were the same or superior when compared to face-to-face courses. Specific numbers of cases for associates degree institutions were not available for the Sloan-C survey so the percentages reported here would extrapolate out to percentages for the approximately 1200 two-year colleges in the United States.

The complexities required to support people, select and integrate the technology and incorporate the program into the rest of the academy is one thing, doing it in such a way that quality is continuously improved, offerings are expanded, courses are profitable/responsive and resources are appropriately allocated takes a strong and knowledgeable leader. The individual must be able to communicate well with the IT support personnel, programmers, vendors and learning management system staff in one sentence, the department chairs, deans, librarians, registrars and faculty in the next. Having a misplaced leader in a position of this nature could be disastrous for an institution of higher education attempting to efficiently implement, integrate and strategically expand the DE program to compete in an increasingly global marketplace for the attention and attendance of prospective students.

Given the current economic realities and the drive toward continuous improvement processes and mission-centric/data-driven decision making required by institutions in higher education, administrators in the country cannot afford to fall behind the competition for students’ attention in the online market. Rovai, Ponton and Baker

(2008) clarified this in their text titled *Distance Learning in Higher Education* when they stated:

As colleges and universities revisit their missions and visions as part of the strategic planning process, it becomes essential that they consider ways of dealing with the expectations of both society and students and fully integrate academic and information technology planning to respond to the changing needs of learners. (p. 57)

This dissertation offers guidance to readers, especially educational leaders from two-year colleges, to allow them to make informed decisions regarding how to identify and hire the best leaders for DE programs in order to provide the best leadership, planning and visioning possible. Research also enlightens readers on funding priorities of DE initiatives. Strategic allocation of resources is a challenge for college leaders. With growth in DE projected to continue to outpace overall demand for higher education, leaders must learn more about where to invest for the livelihood of their institutions. This study provides clarity regarding allocation of resources and results in additional “on the ground” application for this research. This study provides a reference amidst a dearth of research regarding vision and leadership in DE programs in two-year colleges.

Chapter Summary

DE Leaders and distance education programs have proliferated since the advent of the web browser put connecting over the Internet a click of the mouse away. The field of Internet-based distance education, however, is less than twenty years old and begging for research that will help educational leaders understand its intricacies and lead their organizations toward effective approaches to dealing with an ever-changing world around

them. This chapter began to lay out the plan for research designed to help understand DE Leaders in two-year colleges, the programs and organizations they work in and the priorities these leaders see as most important for future investment. A gap in the body of research exists such that educational leaders do not know what type of leadership styles or traits these DE Leaders share. This study will answer these questions plus explore relationships between individual traits, organizational traits, funding priorities and leadership styles. The next chapter will clearly lay out the literature that builds the foundation for this study.

CHAPTER TWO

REVIEW OF THE LITERATURE

Introduction

This literature review examines change theory, distance education programming, leadership theory and examples of past DE Leadership studies. Triangulation and synthesis of these tracks of research provide a basis for this dissertation.

Coverage of Relevant Research

The three prongs of this literature review examine: 1) change and how it relates to distance education technology, 2) traits of quality distanced education programming and 3) transformational leadership study. The convergence of these three threads of research point toward the need for the research conducted in this study and lead directly into the methods and procedures needed to examine answers to critical research questions in the field.

Change and How It Relates to DE Technology

Perhaps two of the most constant challenges for leaders of any sort are the processes of leading during times of change and leading effective change. DE is in a constant state of change so exploring the roots of change theory is a critical first step in analyzing relevant research for this study.

During his research career that led some to name him the “Father of Social Psychology,” Kurt Lewin researched field theory. In field theory, according to Schein (1996), fields of driving and restraining forces work to keep individuals in “quasi-stationary equilibria” (p. 59). Schein went on to elaborate that:

For change to occur, this force field had to be altered under complex psychological conditions because, as was often noted, just adding a driving force toward change often produced an immediate counterforce to maintain the equilibrium. This observation led to the important insight that the equilibrium could more easily be moved if one could remove restraining forces, since there were usually already driving forces in the system. (pp. 59-60)

In 1947, Lewin's work culminated in his article titled *Frontiers in Group Dynamics* and his discussion on his model for change as a process of unfreezing, moving and freezing (usually quoted as re-freezing). Lewin's postulate was simple. People are naturally resistant to change and their ego is impacted when they do not understand it. As a result, they need help working through change. Once through the change, they tend to want to stabilize again at the new level. Once stabilized the change cycle must start over again. Lewin explored group dynamics and stated, "as long as group values are unchanged, the individual will resist changes more strongly the farther he is to depart from group standards" (p. 34). Therefore, educating the group to increase understanding and free them from resistive forces is a better approach to bring about lasting change than forcing change from above. The refreezing stage is critical if the change is to be lasting. Otherwise, the team will slide back to the old level rather than stay at the new one. Lewin stated this as:

Permanency of the new level, or permanency of a desired period, should be included in the objective. A successful change includes therefore three aspects: unfreezing (if necessary) the present level L1, moving to a new

level L2, and freezing group life on the new level. Since any level is determined by a force field, permanency implies that the new force field is made relatively secure against change. (pp. 34-35)

Undoubtedly, a leader in DE must be able to build understanding of DE both on his or her internal team, with constituents in their organization and with others outside of it. These leaders will need to be able to lead change and lead in a change environment as well as be very comfortable removing restraining fields and cultivating driving forces in their organizations.

Although he did not cite Lewin, twenty-three years later in *Future Shock*, Alvin Toffler (1970) tied Lewin's ideas to education when he stated; "by instructing students how to learn, unlearn and relearn, a powerful new dimension can be added to education" (p. 367). This process is nearly identical to the one Lewin studied in the 40s. Toffler led up to his statement by discussing life-long learning in this manner, "The rapid obsolescence of knowledge and the extension of life span make it clear that the skills learned in youth are unlikely to remain relevant by the time old age arrives" (p. 361). By increasing understanding of the importance of lifelong learning, one could argue that society would have resistive force removed and begin to pursue educational opportunities in ways and times during their lives that past generations did not have access to or foresee.

Lifelong learning and constant change are concepts that are here to stay and Toffler foreshadowed ideals of modern distance education in *Future Shock*. Keep in mind, the book was written over fourteen years before the first personal computer was widely available and over twenty years before the World Wide Web. Amazingly, some

leaders in higher education still do not have the vision and foresight that Toffler did before the technology even existed. For those who do, Toffler's words may cause some anxiety and sleepless nights. When speaking of instructional techniques needed to learn, unlearn and relearn, Toffler stated, "while still useful for limited purposes, lectures must inevitably give way to a whole battery of teaching techniques, ranging from role playing and gaming to computer-mediated seminars and the immersion of students in what we might call 'contrived experiences'" (p. 361). The twenty-first century classroom incorporating multimedia, learning objects, computer assisted instruction, cooperative group assignments, synchronous and asynchronous discussions, blogs, data feeds and access from anywhere when one can bounce a signal off a satellite, cell tower or cable/phone line is just what Toffler envisioned 40 years ago. However, change is a complex process and change in higher education is even more complex. Leaders are needed to help provide a vision for navigating toward positive change and the educational community must change their group thinking to freeze at a new level in order for lasting change to happen.

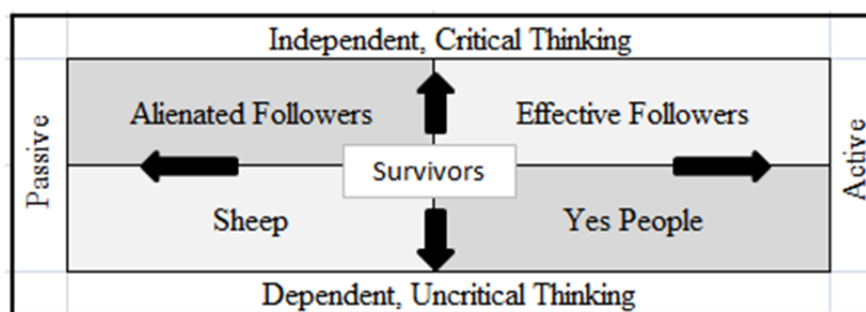
When discussing change and Lewin's theory, Schein (1996) found "contemporary theories of attitude change to be trivial and superficial when applied to some of the profound changes that (military) prisoners had undergone" (p. 59). Changes experienced by DE leaders may not be as dramatic as those experienced by military prisoners; however Schein's research called for deeper exploration of change theory through the understanding and application of force field theory. Schein went on to state that "The key...was to see that human change, whether at the individual or group level, was a profound psychological dynamic process that involved painful un-learning without loss

of ego identity and difficult relearning as one cognitively attempted to restructure one's thoughts, perceptions, feelings and attitudes" (p. 59). Schein echoed Lewin's mental model of change once again for leaders. DE Leaders simply cannot afford to ignore this model any longer. Rather, they must embrace it and begin the hard work of helping colleagues in their organizations understand how to learn, unlearn and relearn and not be afraid to unfreeze, change and (re)freeze at higher levels over and over again.

Better understanding followership can also help leaders exploring change and group dynamics. Robert Kelley (1988) defined the follower dynamics in the leader-follower relationship and pointed out how to best bring about a positive group dynamic. This ideal situation would theoretically allow for what Lewin referred to as unfreezing, or what could be referred to more simply as the first step of change. Figure 2 illustrates the follower types identified by Kelley in his work on active and passive followers in combination with their ability to think or reason independently.

Figure 2

Effectiveness of followers (Kelley, 1988, p. 145)



DE Leaders are change agents. Perhaps, higher education leaders even look to them as THE change agents for higher education in the United States. While several may wear this label as a badge of honor, most will need to become grounded in leadership and change theory to help themselves and their institutions best understand the constant drive

to change all around them. Lewin and Toffler's mental models of change and learning set the stage for theoretical framework for this study and for DE Leaders to better understand themselves. Combining their work with that of Kelley (1988) and transformational leadership will help display the challenges before DE Leaders and provide models for implementing the recommendations for continuous quality improvement and resource allocation. In order to engage and challenge people to do their best, DE Leaders should begin to internalize a mental model for leading change by removing barriers for their teams rather than forcing temporary change from above.

Traits of Quality DE Programming

In order to ask relevant questions regarding leaders' vision for DE programming, this review next examines seminal work regarding DE programming quality definitions as well as the most current and influential authors in the field. The traits discussed of quality in DE programming discussed in this literature review have been examined and displayed in past research by other authors. Meyer (2002) compared six different combinations in a table on page 84 of her text, Simonson, et al. (2009) discussed six sets of standards on pages 65-66 and dissertations from Chaney (2006), Carranza (2008) and Hummell (2008) also discussed some or all of the benchmarks or DE quality standards compiled in this review of literature.

In 1996, Krauth discussed the findings of a three-year study funded by the U.S. Department of Education's Fund for the Improvement of Postsecondary Education. The Western Cooperative for Educational Telecommunications (WCET) project titled *Balancing Quality and Access: Reducing State Policy Barriers to Electronically Delivered Higher Education Programs* identified seven benchmarks and seventeen

principles displayed in Figure 3. The larger “Institutional Context and Commitment” benchmark contains five of the sub-benchmarks in the figure below. Findings are based upon “(1) research on states’ policies for reviewing and approving higher education programs proposed for offering by out-of-state institutions, and (2) extensive reviews, discussions, and comments by higher education leaders in the West” (p. 6).

Figure 3

WCET Principles of Good Practice for Electronically Offered Academic Degree and Certificate Programs (Krauth 1996)

Benchmarks	Principles
1. Curriculum and instruction	<ul style="list-style-type: none"> • Each program of study results in learning outcomes appropriate to the rigor and breadth of the degree or certificate awarded. • An electronically offered degree or certificate program is coherent and complete. • The program provides for appropriate real-time or delayed interaction between faculty and students and among students. • Qualified faculty provide appropriate oversight of the program electronically offered.
2. Role and Mission	<ul style="list-style-type: none"> • The program is consistent with the institution’s role and mission. • Review and approval processes ensure the appropriateness of the technology being used to meet the program’s objectives.
3. Faculty Support	<ul style="list-style-type: none"> • The program provides faculty support services specifically related to teaching via an electronic system. • The program provides training for faculty who teach via the use of technology.
4. Resources for Learning	<ul style="list-style-type: none"> • The program ensures that appropriate learning resources are available to

	students.
5. Students and Student Services	<ul style="list-style-type: none"> • The program provides students with clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technological competence and skills, technical equipment requirements, availability of academic support services and financial aid resources, and costs and payment policies. • Enrolled students have reasonable and adequate access to the range of student services appropriate to support their learning. • Accepted students have the background, knowledge, and technical skills needed to undertake the program. • Advertising, recruiting, and admissions materials clearly and accurately represent the program and the services available.
6. Commitment to Support	<ul style="list-style-type: none"> • Policies for faculty evaluation include appropriate consideration of teaching and scholarly activities related to electronically offered programs. • The institution demonstrates a commitment to ongoing support, both financial and technical, and to continuation of the program for a period sufficient to enable students to complete a degree/certificate.
7. Evaluation and Assessment	<ul style="list-style-type: none"> • The institution evaluates the program's educational effectiveness, including assessments of student learning outcomes, student retention, and student and faculty satisfaction. Students have access to such program evaluation data. • The institution provides for assessment and documentation of student achievement in each course and at completion of the program.

A second benchmark study titled *Quality on the Line: Benchmarks for Success in Internet-Based Distance Education* was published by the Institute for Higher Education Policy (IHEP) in 2000. This study, supported by the National Education Association and BlackBoard consisted of three phases: 1) A comprehensive review of literature resulting in 45 benchmarks, 2) identification of institutions making substantial contributions to the DE field and 3) selection of the six participating institutions to be visited by IHEP staff (faculty, staff and students were interviewed) (p. 2). The report went on to summarize that following the interviews, 13 benchmarks were eliminated from the original list, three were added and several were combined culminating in a total of 24 benchmarks. For the purpose of consistency with Figure 3 however, the benchmarks are listed as principles.

Figure 4

IHEP Benchmarks for success in Internet-Based Distance Education (2000)

Benchmarks	Principles
1. Institutional Support Benchmarks	<ul style="list-style-type: none"> • A documented technology plan that includes electronic security measures (i.e., password protection, encryption, back-up systems) is in place and operational to ensure both quality standards and the integrity and validity of information. • The reliability of the technology delivery system is as failsafe as possible. • A centralized system provides support for building and maintaining the distance education infrastructure.
2. Course Development Benchmarks	<ul style="list-style-type: none"> • Guidelines regarding minimum standards are used for course development, design, and delivery, while learning outcomes—not the availability of existing technology—determine the technology being used to

	<p>deliver course content.</p> <ul style="list-style-type: none"> • Instructional materials are reviewed periodically to ensure they meet program standards. • Courses are designed to require students to engage themselves in analysis, synthesis, and evaluation as part of their course and program requirements.
3. Teaching/Learning Benchmarks	<ul style="list-style-type: none"> • Student interaction with faculty and other students is an essential characteristic and is facilitated through a variety of ways, including voice-mail and/or e-mail. • Feedback to student assignments and questions is constructive and provided in a timely manner. • Students are instructed in the proper methods of effective research, including assessment of the validity of resources.
4. Course Structure Benchmarks	<ul style="list-style-type: none"> • Before starting an online program, students are advised about the program to determine (1) if they possess the self-motivation and commitment to learn at a distance and (2) if they have access to the minimal technology required by the course design. • Students are provided with supplemental course information that outlines course objectives, concepts, and ideas, and learning outcomes for each course are summarized in a clearly written, straightforward statement. • Students have access to sufficient library resources that may include a “virtual library” accessible through the World Wide Web. • Faculty and students agree upon expectations regarding times for student assignment completion and faculty response.
5. Student Support Benchmarks	<ul style="list-style-type: none"> • Students receive information about programs, including admission requirements, tuition and fees, books and supplies, technical and proctoring requirements, and student support

	<p>services.</p> <ul style="list-style-type: none"> • Students are provided with hands-on training and information to aid them in securing material through electronic databases, interlibrary loans, government archives, news services, and other sources. • Throughout the duration of the course/program, students have access to technical assistance, including detailed instructions regarding the electronic media used, practice sessions prior to the beginning of the course, and convenient access to technical support staff. • Questions directed to student service personnel are answered accurately and quickly, with a structured system in place to address student complaints.
6. Faculty Support Benchmarks	<ul style="list-style-type: none"> • Technical assistance in course development is available to faculty, who are encouraged to use it. • Faculty members are assisted in the transition from classroom teaching to online instruction and are assessed during the process. • Instructor training and assistance, including peer mentoring, continues through the progression of the online course. • Faculty members are provided with written resources to deal with issues arising from student use of electronically-accessed data.
7. Evaluation and Assessment Benchmarks	<ul style="list-style-type: none"> • The program's educational effectiveness and teaching/learning process is assessed through an evaluation process that uses several methods and applies specific standards. • Data on enrollment, costs, and successful/innovative uses of technology are used to evaluate program effectiveness. • Intended learning outcomes are reviewed regularly to ensure clarity, utility, and appropriateness

Also in 2000, the Council for Regional Accrediting Agencies (CRAC) built upon the WCET (1996) guidelines previously discussed by Krauth. In their work, CRAC worked to develop a sixteen page document of best practices with the following foreword: “The *Best Practices*, however, are not new evaluative criteria. Rather they explicate how the well-established essentials of institutional quality found in regional accreditation standards are applicable to the emergent forms of learning; much of the detail of their content would find application in any learning environment” (p. 1). This summary is reflective of modern-day approaches to DE where the lines between online, face-to-face and blended courses that incorporate both have begun to focus less upon the technology and delivery mode and more upon learning outcomes, individualized teaching and learning opportunities and continuous improvement of the overall DE program.

Next, in 2003, the American Distance Education Consortium (ADEC), made up of approximately 65 state and land-grant universities collaborated to create six Guiding Principles for Distance Teaching and Learning and defined ten additional characteristics of quality web-based teaching and learning:

1. Fosters meaning-making, discourse
2. Moves from knowledge transmission to learner-controlled systems
3. Provides for reciprocal teaching
4. Is learner-centered
5. Encourages active participation, knowledge construction
6. Based on higher level thinking skills -- analysis, synthesis, and evaluation

7. Promotes active learning
8. Allows group collaboration and cooperative learning
9. Provides multiple levels of interaction
10. Focuses on real-world, problem solving. (para. 11)

Once again, the columns in Figure 5 are labeled Benchmarks and Principles to retain consistency across figures.

Figure 5

ADEC Guiding Principles for Teaching and Learning (2003)

Benchmarks	Principles
1. The learning experience must have a clear purpose with tightly focused outcomes and objectives.	<ul style="list-style-type: none"> • Web-based learning designs must consider the nature of content, specific context, desired learning outcomes and characteristics of the learner. Learner-centered strategies include modular, stand-alone units that are compatible with short bursts of learning. Learning modules may also be open, flexible and self-directing
2. The learner is actively engaged.	<ul style="list-style-type: none"> • Active, hands-on, concrete experiences are highly effective. Learning by doing, analogy and assimilation are increasingly important pedagogical forms. Where possible, learning outcomes should relate to real-life experiences through simulation and application.
3. The learning environment makes appropriate use of a variety of media.	<ul style="list-style-type: none"> • Various learning styles are best engaged by using a variety of media to achieve learning outcomes. Selection of media may also depend on nature of content, learning goals, access to technology, and the local learning environment.
4. Learning environments must include problem-based as well as knowledge-	<ul style="list-style-type: none"> • Problem-based learning involves higher order thinking skills such as analysis,

based learning.	synthesis, and evaluation while knowledge-based learning involves recall, comprehension and application.
5. Learning experiences should support interaction and the development of communities of interest.	<ul style="list-style-type: none"> • Learning is social and sensitive to context. Learning experiences based on interaction and collaboration support learning communities while building a support network to enhance learning outcomes. Multiple interactions, group collaboration and cooperative learning may provide increased levels of interaction and simulation.
6. The practice of distance learning contributes to the larger social mission of education and training in a democratic society.	<ul style="list-style-type: none"> • Changing mental models and constructing new knowledge empowers learners and encourages critical thinking. "Knowledge becomes a function of how the individual creates meaning from his or her experiences; it is not a function of what someone else says is true." (Jonassen, 1995)

Janet Moore (2005) provided the DE field with valuable guidance toward quality framework for DE programming and what she referred to as Asynchronous Learning Networks (ALN) in the report titled *The Sloan Consortium Quality Framework and the Five Pillars*. The stated purpose of the report was to “help learning organizations continually improve quality, scale and breadth according to their own distinctive missions, so that education will become a part of everyday life, accessible and affordable for anyone, anywhere, at any time, in a wide variety of disciplines” (p. 1). Moore and the Sloan Consortium defined five pillars of quality as “learning effectiveness, cost effectiveness and institutional commitment, access, faculty satisfaction and student satisfaction” (p. 2). In the field of DE, this report provided additional actionable advice for leaders beyond the previous ten years of benchmarks and principles discussed earlier

in this review of literature. For example, the Sloan report provided specific metrics for measurement and progress indices for each pillar in order to offer guidance for leaders at institutions when measuring quality or prioritizing resource allocation.

Figure 6

Sloan-C Quality Framework and the Five Pillars (2005)

Benchmark/Pillar	Principles
<p>Learning effectiveness</p> <ul style="list-style-type: none"> • The provider demonstrates that the quality of learning online is comparable to the quality of its traditional programs: 	<ul style="list-style-type: none"> • Interaction is key: with instructors, classmates, the interface, and via vicarious interaction • Online course design takes advantage of capabilities of the medium to improve learning (testing, discussion, materials) • Courses are instructor-led • Communications and community building are emphasized • Swift trust characterizes the online learning community • Distinctive characteristics of programs are highlighted to demonstrate improved learning • On-campus and online instruction achieve comparable learning outcomes, and the institution ensures the quality of learning in both modes with metrics tracking instructional methods, student constituencies and class size
<p>Cost effectiveness and institutional commitment</p> <ul style="list-style-type: none"> • Institutions continuously improve services while reducing cost 	<ul style="list-style-type: none"> • Cost effectiveness models are tuned to institutional goals • Tuition and fees reflect cost of services delivery • Scalability, if an institutional objective, can be accommodated. • Partnering and resource sharing are institutional strategies for reducing costs • Mission-based strategies for cost reduction are continuously formulated and tested • Intellectual property policies encourage cost effective strategies

<p>Access</p> <ul style="list-style-type: none"> All learners who wish to learn online have the opportunity and can achieve success 	<ul style="list-style-type: none"> Diverse learning abilities are provided for (at-risk, disabilities, expert learners) The reliability and functionality of delivery mechanisms are continuously evaluated Learner-centered courseware is provided Feedback from learners is taken seriously and used for continuous improvement Courses that students want are available when they want them Connectivity to multiple opportunities for learning and service is provided
<p>Faculty Satisfaction</p> <ul style="list-style-type: none"> Faculty achieve success with teaching online, citing appreciation and happiness 	<ul style="list-style-type: none"> Faculty satisfaction metrics show improvement over time Faculty contribute to, and benefit from online teaching Faculty are rewarded for teaching online and for conducting research about improving teaching online Sharing of faculty experiences, practices and knowledge about online learning is part of the institutional knowledge sharing structure There is a parity in workload between classroom and online teaching Significant technical support and training are provided by the institution
<p>Student Satisfaction</p> <ul style="list-style-type: none"> Students are successful in learning online and are typically pleased with their experiences. 	<ul style="list-style-type: none"> Discussion and interaction with instructors and peers is satisfactory Actual learning experiences match expectations Satisfaction with services (advising, registration, access to materials) is at least as good as on the traditional campus Orientation for how to learn online is satisfactory Outcomes are useful for career, professional and academic development

This study will utilize the measurement suggestions for continuous quality improvement around the five pillars and seminal benchmark projects in designing the instruments on program characteristics and vision for future priorities by leaders. To best give an idea of how the pillars would be used by DE Leaders, Figure 7 is a sample provided by Moore (2005) that can be adapted to an individual college and weighted appropriately depending upon mission, vision and focus of the programs involved.

Figure 7

Sloan-C Brief Version of the Quality Framework (2005, pp. 3-4)

Goal	Process/Practice	Metric (for example)	Progress Indices
Learning effectiveness The quality of learning online is demonstrated to be at least as good as the institutional norm	Academic integrity and control reside with faculty in the same way as in traditional programs at the provider institution	Faculty perception surveys or sampled interviews compare learning effectiveness in delivery modes Learner/graduate/employer focus groups or interviews measure learning gains	Faculty report online learning is equivalent or better Direct assessment of student learning is equivalent or better
Cost effectiveness and institutional commitment The institution continuously improves services while reducing costs	The institution demonstrates financial and technical commitment to its online programs Tuition rates provide a fair return to the institution and best value to learners	Institutional stakeholders show support for participation in online education Effective practices are identified and shared	The institution sustains the program, expands and scales upward as desired, strengthens and disseminates its mission and core values through online education
Access All learners who wish to learn	Program entry and support processes inform learners of	Administrative and technical infrastructure provides access to all prospective and enrolled learners	Qualitative indicators show continuous improvement in

online can access learning in a wide array of programs and courses	opportunities, and ensure that qualified, motivated learners have reliable access	Quality metrics for Information dissemination; learning resources delivery; tutoring services	growth and effectiveness rates
Faculty Satisfaction Faculty are pleased with teaching online, citing appreciation and happiness	Processes ensure faculty participation and support in online education (e.g. governance, intellectual property, royalty sharing, training, preparation, rewards, incentives and so on)	Repeat teaching of online courses by individual faculty indicates approval Addition of new faculty shows growing endorsement	Data from post-course surveys show continuous improvement: At least 90% of faculty believe the overall online teaching/learning experience is positive Willingness/desire to teach additional courses in the program: 80% positive
Student Satisfaction Students are pleased with their experiences in learning online, including interaction with instructors and peers, learning outcomes that match expectations, services, and orientation	Faculty/learner interaction is timely and substantive Adequate and fair systems assess course learning objectives; results are used for improving learning	Metrics show growing satisfaction: Surveys (see above) and/or interviews Alumni surveys, referrals, testimonials Outcomes measures Focus groups Faculty/Mentor/Advisor perceptions	Satisfaction measures show continuously increasing improvement Institutional surveys, interviews, or other metrics show satisfaction levels are at least equivalent to those of other delivery modes for the institution

That same year in their article titled *Benchmarking Quality in Online Degree Programs Status and Prospects*, Mariasingham and Hanna (2006) compiled the previous work from ADEC, IHEP, WICHE, WCET and several others. The recommendations

from that 2006 study reiterated those of Moore in 2005 when the researchers concluded “We have stated the case for the development of more comprehensive set of guidelines, criteria, and benchmarks that incorporate the need for additional perspectives, assessment at multiple levels of analysis, and a view of quality that stems from the primary purpose of assessment as continuous program improvement” (p. 6).

In conclusion, it is evident that the 18 years since the graphical user interface on the World Wide Web has given time for the field of research in DE to triangulate upon the hallmark points of quality. In a sense, researchers and practitioners have identified that DE is no longer ancillary to higher education missions and is no longer seen as inferior to the face-to-face classroom experience when properly designed, supported, evaluated and integrated into continuous improvement processes. In fact, when done well, DE practices have positively impacted the traditional classrooms. Meyer (2002) summed up her thoughts regarding quality education crossing over from online to on-campus this way: “Perhaps as the research continues to be compiled, it will be recognized that Web-based distance education can produce quality learning and that it can no longer be considered a separate entity, suspiciously different from its on-campus cousin but simply another form of, or venue for, education” (p. 99).

In order to move beyond the hallmarks of quality and triangulate upon the leadership needed to identify, support and sustain quality, research must explore leadership theory. Defining the pieces of DE in concert with change theory set the base of this literature review. Leadership theory is the final factor that will coalesce the two previous sections of this literature review dealing with change and distance education program quality.

Transformational Leadership Study

Any study on transformational leadership must start with James MacGregor Burns (1978) and his seminal work titled *Leadership*. Although he originally referred to it as transforming leadership and based his book upon the work of sociologist Weber's (1924/1947) work on charisma, Burns is the first person to conceptualize a leader as either transactional or transformational (Bass, 2006, p. 3). In 1978 Burns stated, "I define leadership as leaders inducing followers to act for certain goals that represent the values and the motivations—the wants and needs, the aspirations and expectations—*of both leaders and followers*" (p. 19).

Fifteen years later in *Leadership for the Twenty-First Century*, one of the primary charges taken on by Rost (1993) was examining and critiquing past definitions of leadership (including the definition from the Burns text) and defining leadership for the new paradigm of the twenty-first century. Rost did so by stating "Leadership is an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes" (p.102).

A little over a decade later, Calabrese (2002) closed out his book with the statement "By mastering the seven lessons of change, the leader discovers that she is part of a process whereby she becomes the catalyst for change, growth, and continuous renewal" (p. 175). Calabrese's seven lessons are (1) People are the secret to success, (2) Create healthy organizations, (3) Effective leadership is power, (4) It's all about attitude, (5) Leaders link actions and policies to change, (6) Reinvent your organization – not the wheel and (7) Renewing organizations are self-actualizing organizations. The evolution of the theory of transformational leadership is complete when one tracks from Weber's

charismatic or “great man” type of leader to one who inspires followers as Burns described then on to one who inspires others toward real intended change (as cited by Rost, 1993) and finally to a holistic leadership lesson involving the organization, the people in it, their morale, attitude and approach incorporated in the newer writings from Calabrese.

To recap, Rost (1993) set his theory of leadership for the twenty-first century apart from Burns (1978) when he observed how Burns’ definition relied upon a “successful” outcome dealing with an agreed upon goal whereas Rost’s required a leader and a follower to enter into a mutual process toward an intended change. Rost contended that Burns definition fell short if *any* success would do. To get the whole picture, one must move forward another 9 years to Calabrese (2002) where he illustrated that organizational health relies upon a complex relationship between organizational values, attitude, atmosphere, actions and policies combined with leadership (p. 163).

Measuring the theory.

While many authors from Rost, Calabrese, Wheatley, Fullan, Senge, Kouzes and Posner to Nahavandi and Yukl focused efforts on exploring and defining leadership theories and periodically looked for ways to measure it, another contemporary researcher, Bernard Bass, began researching quantifiable measurements of leadership in 1985 and created perhaps the most well-known and widely used quantitative leadership style measurement instrument in the field. The result of his efforts was the Multifactor Leadership Questionnaire (MLQ). Rather than focusing solely on transformational leadership, Bass’s theory evolved into a Full Range Leadership (FRL) model where he

hoped to measure leadership style along a continuum from passive to transactional to transformational.

Other measures of transformational leadership were discussed by Bass and Riggio (2006). The first was journaling at Virginia Military Institute (VMI) (p. 27). Although useful in understanding the context of leadership, little could be quantitatively measured through formal assessments of journaling.

Next was the most widely used paper and pencil measure outside of the MLQ; the Transformational Leadership Behavior Inventory (TLI). This inventory was created by Podsakoff, MacKenzie, Moorman and Fetter (1990) and applied to 988 petrochemical company employees assessing transformational leadership characteristics. This measure focused on the four dimensions of transformational leadership only, however, and was not the full range measure like the MLQ. Another measure was the Leadership Assessment Inventory (LAI) created by Burke (1994). “Unfortunately, this instrument is now difficult to obtain and rarely used in research” (Bass & Riggio, 2006).

A third comparative tool was the Transformational Leadership Questionnaire (TLQ) created by Alban-Metcalf and Alimo-Metcalf (2000). According to Alban-Metcalf and Alimo-Metcalf, “the TLQ was developed on the basis of eliciting constructs of leadership from managers working at different levels in two large parts of the UK public sector using a Grounded Theory approach” (p. 158). The instrument was comprised of nine factors associated with transformational leaders. According to Bass and Riggio, the TLQ “was used in a similar way to the MLQ” (p. 30).

Carless, Wearing, and Mann (2000) developed a seven-item scale to assess transformational leadership titled the Global Transformational Leadership scale (GTL)

(Bass & Riggio, 2006). Carless, Wearing and Mann ran their tests on “1440 subordinates who assessed the leader behavior of 695 branch managers in a large Australian financial organization” (p. 389). They concluded that their seven-factor test “correlated strongly with the LPI and MLQ” (p. 401).

Rafferty and Griffen (2004) created a “15-item rating scale measure(ing) the transformational leader’s vision, inspirational communication, intellectual stimulation, supportive leadership and personal recognition” (Bass & Riggio, 2006, p. 30). Rafferty and Griffen provided practical implications when they stated “results suggest that it will be useful to evaluate the different components of leadership identified in this study for the purposes such as performance appraisal, training and development and succession planning” (pp. 349-350). They went on to add that “our analysis indicates managers can have a powerful positive effect on employees by expressing positive and encouraging messages to staff. Inspirational communication seems to be particularly important when expressing a vision for the future” (p. 350).

Several other measures have been created but were mostly used in leadership development situations rather than published empirical research. The Conger Kanungo scale measured charismatic leadership, Kouzes and Posner’s Leadership Practices Inventory (LPI) and Sashkin’s Leadership Behavior Questionnaire (LBQ) measured visionary leadership (Bass & Riggio, 2006, p. 31).

The MLQ and FRL model.

Bass and Riggio (2006) pointed out that there are nine dimensions within the FRL model displayed in Figure 8, ranging from transformational to transactional and finally,

laissez-faire. The figure also mapped the nine dimensions to sample assessment items from the MLQ-5X questionnaire. Note, there are 45 total items on the actual MLQ-5x.

Figure 8

Dimensions and Sample Items from MLQ-5X (Bass & Riggio 2006, p. 21)

Dimension	Sample Assessment Item
Idealized Influence (Attributed Charisma)	My leader instills pride in me for being associated with him or her.
Idealized Influence (Behaviors)	My leader specifies the importance of having a strong sense of purpose.
Inspirational Motivation	My leader articulates a compelling vision of the future.
Intellectual Stimulation	My leader seeks differing perspectives when solving problems.
Individualized Consideration	My leader spends time teaching and coaching.
Contingent Reward	My leader makes clear what one can expect to receive when performance goals are achieved.
Management-by-Exception (Active)	My leader focuses attention on irregularities, mistakes, exceptions, and deviations from standards.
Management-by-Exception (Passive)	My leader shows that he or she is a firm believer in “If it ain’t broke, don’t fix it.”
Laissez-Faire	My leader delays responding to urgent requests.

Transformational leadership.

Transformational Leadership involves all 5 of the dimensions in the top five rows of Figure 8. Individualized Consideration (IC) is defined as a leader developing healthy relationships and getting to know the people who work for them, the people who work with them and the people they report to. In his book called *Let’s Have Lunch*, Howard (2005) says that with a strong relationship strategy “you don’t have to spend a ton of money, net returns are extremely high, it’s very predictable, benefits are long-term, and it’s not risky” (p. 41). Although he was discussing relationships in terms of charitable

giving, his lessons carry over into developing strong relationships through Individualized Consideration.

Intellectual Stimulation (IS) is a combination of working in a job one enjoys/that challenges them and being a leader/working on a team that challenges colleagues to learn something new every day. Inspirational motivation (IM) means working toward a shared vision rather than being told to do something and being micromanaged. IM also involves not just sitting back and saying "tell me what to do", but doing it because one loves to and wants to do the best possible work. Idealized Influence - Behavioral (II-B), later abbreviated IB, was closely related to the IM but involved a leader and team moving from motivation to action. This distinction is important as a leader and clearly extends from Rost's theory of "real and intended" change to the current holistic theories by bringing behavior into the leadership equation.

A leader who can act and act with conviction and ethics/morals is what sets transformational leaders apart from despots and tyrants (such as Jim Jones, Charles Manson or Hitler). Burns described this in the forward to Bass and Riggio (2006) as what he and Bass coined "'pseudotransformational' "which later informed his (Bass's) thinking on authentic vs. inauthentic transformational leadership" (p. viii). Idealized Influence – Charisma (II-C), later simply termed Idealized Attributes (IA), is similar to the self-actualization (Maslow 1943) level for a leader. It is the point where the leader no longer needs to wield power (similar to not being worried about safety, love and esteem in Maslow's hierarchy) or manage through transactional leadership. At the point when one has Idealized Attributes (charismatic idealized influence) on top of Idealized Behavior, a leader's deeds match their words and they likely have trust, respect and a

high functioning team without coercion. Little external influence is needed to modify follower behavior. Looking back to Lewin (1947), IA leaders would have little need to provide upward driving forces and their mere nature would be enough to remove resistive forces holding their team down. Leaders in the midst of constant change in a rapidly advancing world involving distance education technology would clearly benefit from being able to employ transformational leadership theory in practice.

Transactional leadership.

In the FRL and in a leader's toolbox, transactional leadership has its place as well. Contingent reward (CR) is often how a leader gets pilot programs going or temporary change to happen but the initiative or change loses steam when the reward is gone before the team can truly transform around the new effort. Leaders must move the team into transformational territory for the change to become systemic or to allow refreezing at the new level. Until others in the organization internalize their motivation rather than rely on external rewards they almost certainly are not going to be very happy doing a job or pushing forward with added work brought on by a new change.

Active Management-by-Exception (MBEA) is where many leaders spend too much time if they are not careful. However, it is also where the inner-workings of most organizations/bureaucracies function. Creating and following a procedure or policy that helps the organization run smoothly internally is a necessary function for leaders to employ. If done well and with an eye toward transformational leadership it allows the team to focus their real attention on the bigger picture vision without getting caught up in the trivial everyday fixes and issues at the MBEA level. A good mental picture of MBEA is for one to think of the handbook, procedures, policy manual and required

paperwork in their organization. All are critical to the everyday functionality of the team. However, if they become the sole focus of the team, other opportunities or changes might be temporarily overlooked or missed entirely. A transformational leader has the ability to employ transactional leadership and instinctively knows when transformational ideals need to be utilized or emphasized with their team in order to bring about real/intended changes that inspire both leaders and followers in an organization.

Passive leadership dimensions.

Passive Management-by-Exception (MBEP) and Laissez-Faire (LF) leadership styles make up the passive dimensions of the FRL. Some MBEP or LF leaders may employ the idea of “if it ain’t broke, don’t fix it” or entirely ignore issues until they are visible outside their area of influence. However, passive leadership dimensions are sometimes brought on by impression.

Unfortunately, when leaders who are normally very transformational get busy, it can sometimes appear that they are passive. It is within MBEP and LF areas where an organization develops alienated followers or co-workers, as defined by Kelley (1988) in Figure 2, and misunderstandings with superiors can happen as well. To figure out whether the leader is truly employing these traits or whether the impression is that they are; it would be useful to employ the MLQ-rater forms (where the self-rater form, subordinate, colleagues and superiors complete the questionnaire on a leader). A training program through human resources in the daily workplace using the MLQ may help the leader and organization or team become aware of the impressions they give off when busy.

Distance education leadership in community colleges.

The premise of Floyd's (2003) article titled *Distance Learning in Community Colleges: Leadership Challenges for Change and Development* amalgamated ideas regarding distance education, change, leadership and community colleges. Floyd poignantly stated "Change is difficult, and all employees may not be comfortable with technology but all have a commitment and responsibility to work to ensure access and success for all students, regardless of their social status, skills, or prior learning experience" (p. 337). He went on to make a case for the changing roles of faculty and stated: "What is clear, however, is that community colleges have expanded their modes of instructional delivery, making fundamental and far-reaching changes in the role of faculty necessary" (p. 339). His primary suggestions for future investment focused on the faculty (teaching) portion of the distance education program. Floyd suggested leaders focus upon enhancing faculty/student communication by "investing in systems that support faculty in enhancing their interaction with students" (p. 341). He also pointed to teacher training consortia and professional development programs as necessary for supporting faculty who delve into online education.

Next, Floyd (2003) cited Kouzes and Posner's 1995 version of *The Leadership Challenge*, now in its fourth edition (2007) and called for leaders in community colleges to follow what the authors now refer to as the five practices of exemplary leadership: (1) Challenging the Process, (2) Inspiring a Shared Vision, (3) Enabling Others To Act, (4) Modeling the Way and (5) Encouraging the Heart." He posed that involving faculty in the process of infusing DE technology and pedagogy was critical for leaders in community colleges and closed with this statement: "...what is clear is that strong

leadership is needed to invest in a community college's most precious resources—its faculty, staff, and leadership—and a recommitment to a value system that places access and equity above all other considerations” (p. 347).

In an article titled *From Correspondence to Cyberspace: Changes and Challenges in Distance Education*, Bower and Hardy (2004) listed the following challenges for leaders in distance education: (1) Not all stakeholders will support distance education; (2) Distance education requires changes in classroom teaching; (3) Distance education requires innovation in student support services; (4) Faculty must gain technological expertise; (5) Distance education may change institutional culture. These five challenges highlight the need for a leader possessing and applying all levels of Smaldino and others' pyramid in Figure 1.

In the same publication, Oliver (2004) stated twelve maxims for creating and sustaining a successful e-learning enterprise. Those maxims were:

Maxim one: verify centrality to mission

Maxim two: build institutional commitment

Maxim three: recognize pedagogical differences

Maxim four: invest in instructional development and training

Maxim five: establish a single point of contact

Maxim six: provide a full range of electronic services

Maxim seven: develop a robust technical infrastructure and support network

Maxim eight: engage in ongoing marketing and market research

Maxim nine: embrace accountability and ongoing quest for quality

Maxim ten: be realistic about costs

Maxim eleven: do not make it more complicated that it really is

Maxim twelve: recognize the rapid rate of change in e-learning (pp. 13-21).

Chapter Summary

The maxims above provide guidance for leaders in accordance with the leadership, change and distance education literature discussed in this review. A final article from McFarlane (2011) defined and consolidated the challenges faced by distance learning administrators as quality instruction, misuse of technology and cost effectiveness (pp. 3-4). This research will employ a survey and the leadership questionnaire to clarify research on the three challenges McFarlane describes.

Transformational leaders mindful of change theory and technology will be needed as the distance education leadership paradigm evolves in the twenty-first century. Leaders in the *mise-en-scène* of two-year college distance education must be able to recognize and embrace their roles as transforming change agents in a technologically driven/resource-constrained reality. There are few examples using the existing theory and tools in order for researchers and leaders to understand this complex social phenomenon. However, this research attempts to elucidate the theories of Lewin, Burns, Bass and Rost with the more recent findings of DE professionals to inform college leaders and inspire future researchers in this arena of study.

CHAPTER THREE METHODS AND PROCEDURES

Introduction and Research Design

This descriptive quantitative study was comprised of two questionnaires. The first contained three sections: 1) Personal traits of the DE Leader; 2) Traits of the DE Leader's program; and 3) Likert scale questions identifying priorities for future investment in order to maintain or improve the quality of the DE program. The second instrument was the MLQ-5X (self-rater form), designed to gather personal leadership style information from the DE Leader. The correlates and interactions among these instruments provided the descriptions responding to the research questions that were discussed individually in the section that follows.

Variables

Dependent variables displaying leadership style were collected through the application of the MLQ-5x Self-Rater form. Each of the nine continuous variable scales measuring leadership styles were comprised of four sample items. Three leadership outcomes were also identified and used as dependent variables as measured by the MLQ. Program traits, personal traits and recommendations for future investment were independent variables.

Research Questions

Research Question One

What were the personal traits and leadership style dimensions (as measured by the MLQ-5x) of DE Leaders at two-year colleges belonging to the AACC?

Cluster Analysis or Factor Analysis was utilized to identify patterns within the data that indicated a profile of personal traits and leadership dimensions among DE Leaders in AACC institutions.

Research Question Two

Is there a relationship between leadership style dimensions (as measured by the MLQ-5x) and DE program traits?

Although the limited literature on the topic did not allow for specific, directional hypotheses for this exploratory research, the researcher anticipated relationships between leadership style and program traits such as two-year school size and setting classifications (as measured by the Carnegie Foundation), program size, organizational structure, longevity of the program, number of offerings and learning management system used.

According to The Carnegie Foundation website, the size classifications include very small two-year (VS2) with fall enrollment FTE of fewer than 500 students, small two-year (S2) have fall FTE of 500-1,999 students, medium two-year (M2) fall FTE is 2,000-4,999, large two-year (L2) have fall FTE of 5,000-9,999 and very large two-year (VL2) are over 10,000 fall FTE. All true two-year colleges reflected in these classifications are associate granting institutions with setting classifications of either residential or non-residential. As stated on the Carnegie Foundation website, these settings are based upon “the proportion of degree-seeking undergraduates who attend full-time and the proportion living in institutionally-owned, -operated, or –affiliated housing” (Carnegie Foundation, 2010).

Research Question Three

Were there relationships among leadership style and DE Leader traits such as job title, organizational level of job, reporting structure, gender, ethnicity, age, years of experience in DE and/or higher education, years since completion of most recent degree, level of most recent degree, area of most recent degree, experience taking and/or teaching online courses?

Research Question Four

Did recent changes in job title for DE Leaders in the last five years correlate to leadership style?

If job change occurred, leadership styles and outcomes of the leaders' style were quantitatively explored.

Research Question Five

Was leadership dimension (MLQ measurement) related to the categorized priorities for resource allocation in DE programs?

Statistics displayed the possible impact of different leadership dimensions on the allocation of resources for DE within the AACC institutions.

Research Question Six

Were there differences in vision for funding priorities across Carnegie unit classifications or geographic regions for community college DE programs in AACC two-year colleges?

It was anticipated that institutions of differing size, scope and structure would have differing funding priorities relative to DE. Utilizing the literature regarding quality DE programs, a total of six questions assessed the priorities for the future of DE

programs: 1) Program and course-level evaluation and assessment, 2) Course design standards focused upon learning outcomes, 3) Faculty support and professional development, 4) Student support and student services, 5) Institutional role, mission and policies of DE, and 6) Financial support for secure, centralized delivery system and overall DE program.

Population and Sample

In the *Carnegie Classifications Data File* (2011), there are 1202 Community Colleges with national or regional accreditation defined as associates granting institutions. The sample for this study was a subset of this population and collected through purposive sampling of two-year college DE leaders. Two primary indicators of the similarities between the sample and population were size classification and geographic region of the institutions. According to Cozby (2007), purposive sampling “includes only types of individuals you are interested in” (p. 143).

In the study sample, only the smallest classification of very small 2-year schools were underrepresented by just over 11% (3.92% of the sample vs. 15.39% of the population) and the very largest classification was overrepresented by just over 11% (19.61% in the sample vs. 8.24% in the population). All other classifications were within 10% of the population. Chi-square was utilized to ascertain Goodness-of-fit for the Carnegie size classifications of the sample. The larger sample of very large schools and small sampling of very small schools increased the probability of the Chi-square to between .01 and .005 at four degrees of freedom. Although it may take additional research to know for sure, this discrepancy could be due to the fact that very small schools have fewer distance education programs or fewer staff who may pick up and

reply to survey research such as this study. As previously discussed, 93% of all 2-year colleges have DE programs. Therefore, it is likely that a larger percentage of the seven percent who do not fall in the VS2 Carnegie classification. A true random sample in future research may help bear this out.

Regional representation was very similar to overall national numbers from the Carnegie data file. In that file, the country was divided into 8 regions (New England, Mid East, Great Lakes, Plains, Southeast, Southwest, Rocky Mountains and Far West). Only the Great Lakes region was misrepresented by more than 3.58% (7.87% in the sample vs. 15.14% in the population). All other regions were equal to or less than 3.58% difference with the Far West and Mid East standing at less than 2% difference. The probability of the Chi-square Goodness-of-fit for the sample was much better in regional representation than in Carnegie classification. At seven degrees of freedom, it was between .50 and .10. This indicates that the sample was representative of the population on the dimension of geographic distribution.

The sample for this study also mirrored the larger one of the annual ITC survey from 2009 on a subset of the same population. According to Lokken, et al. (2010), 226 out of 1200 institutions responded to the yearly survey conducted by the ITC in 2009, however “a longitudinal review established a strong continuity amongst completers—70 percent of the annual submissions have come from the same campuses during the six years of the survey” (p. 1). In that study, the direct report line of DE Leaders showed similarities to this study with a CAO reporting line of 65.5% in this study vs. 74% in that study and 1.82% reporting through the library in this study vs. 1.56% in the ITC study (a trend reported as “down from 3.1% in 2008” (p. 2). Lokken, et al. also discussed the

upward trend of DE Leaders reporting directly to the President or CEO by stating that “more than six percent of respondents indicat(ing) they report directly to the president (up from four percent in 2008)” (p. 2). In this study, 12.73% of respondents reported directly to the CEO. In LMS usage, the ITC survey sample was similar to the sample in this survey. ITC found that Blackboard/Angel/WebCT (now all Blackboard products) were used by 51% of their respondents. Moodle LMS was used by around 10% of the ITC respondents while over 23% of the respondents for this study used it. This comes as little surprise to the researcher as Lokken, et al. (2009) also state that “thirty-three percent of respondents indicated they were considering switching LMS platforms in the next few years” (p. 3).

Data Collection Procedures

An online survey provider and Mind Garden™ were used to disseminate questions to the pilot study participants. The leadership questionnaire was created and combined with the standard licensed MLQ instrument in late Summer 2010. The pilot study and follow-up discussions with nine DE colleagues from around Montana were conducted before the beginning of the Fall 2010 semester.

Final changes to the instruments were made following the pilot study including minor question verbiage edits and the addition of a question asking about background and reasons why the leaders were chosen for their current job. The two instruments then went through three drafts with Mind Garden™. Following discussions with the ITC board chair and executive director, the survey was distributed immediately following pilot testing in early Fall.

Parallel processes to access the target population and secure access to the MLQ-5x were pursued immediately upon defense of the proposal. The following sections describe the processes and strategies employed to obtain data.

Design and Dissemination of Instruments

Mind Garden™ provided access to Bass and Avolio's MLQ-5x through a licensing process charging researchers for each response received. Additional questions were also added to the assessment at an increased cost. Rather than having participants navigate multiple sites, questions regarding personal traits, program traits and priorities for investment of resources were finalized and added to the MLQ.

A pilot study was conducted using the Mind Garden™ site containing the MLQ-5x. As previously discussed, the additional questions were accessed through an online survey tool so feedback could be gathered. Participants included nine individuals from around the State of Montana in the distance education community. In the e-mail sharing the links to the surveys, participants were asked to complete the survey and provide the researcher with general feedback and comments regarding the survey as well as feedback on the methods for accessing the survey, clear and concise wording of the questions, amount of time it took to complete, any repetitious questions or additions or subtractions they would suggest based upon their knowledge of the population and field. Participants were notified that the Mind Garden™ site would be used for the complete survey in the actual survey campaign.

Nine people participated in the pilot study. Four participants completed every question, submitted the survey and sent a follow-up e-mail regarding their experience. Five individuals navigated through the survey, made notes about it and returned those

notes and comments via e-mail to the researcher. Comments included several regarding the Mind Garden™ site requiring creation of an account during the process of accessing the MLQ-5x and how this would be a barrier to accessing and completing the survey. The researcher contacted the company and was informed the collection of an e-mail address for participants was the minimal amount of information needed to guarantee original responses to the survey and maintain the integrity of their service. The company also strictly controls access to their website for anyone taking the MLQ-5x so offering a version through a personal website or third-party service and less barriers was also not a possibility.

Another comment from a two-year DE Leader taking the pilot survey dealt with developing a profile of the target population. Along with an interest in knowing how he fit into the population demographics and learning what they are in general, the participant mentioned the importance of knowing how the leaders came about attaining employment in their DE positions. He was particularly aware of this issue and curious about whether previous experience inside, outside of education, with technology or experience in leading others in outside fields may impact the type or quality of leadership a person may provide. As a result of this feedback, a question was added to the survey regarding the reasons why a person was chosen for the DE Leadership at their institution. Generally, all participants gave positive feedback and displayed curiosity about the results of the research.

Generating Responses from Participants

The ITC Executive Director was contacted immediately following the defense of the proposal for this dissertation to attain access to the e-mail list previously discussed

with the researcher. Although targeted access to the membership e-mail list was not available, the researcher began discussing options with both the Executive Director and the Chair of the Board of Directors. At last, the board gave permission to include the survey link in the ITC newsletter one time and asked for the researcher to commit to presenting findings in subsequent ITC Leadership Academy in 2012. Below is a summary of the email responses (to the board), the surveys, and individual communications:

1. The findings of research studies that explore topics related to elearning would be of interest to our membership. Providing support for research studies would be in align with Strategic Issues 3 and 4 of the ITC Strategic Agenda. [sic]
2. While the ITC currently do not have a process in place to review proposed research studies and/or to support these studies, we should consider establishing processes to address future requests. This process should include an opportunity to learn more about the proposed research study as well as the research methods that will be employed. The ITC board did discuss this several years ago; however, we did not pursue this as an action. We will add this to our November agenda.
3. The ITC's email list (which currently consists of about 600 email addresses) should not be made available.
4. The majority of those who provided feedback about this request indicated that we were not in a place to provide an incentive in this current fiscal year.
5. The majority indicated that they supported including and an announcement in upcoming email blast to the members (in one of Chris's regular communications). [sic]

It is evident that we need more time to fully consider lending our support to research studies as well as to establish processes and procedures if we choose to do so. Until we can discuss this in more detail, we'll let Ryan know that we will include information about the study in the next email to the ITC membership.

As the process extended by several weeks to send out requests through the ITC, the researcher explored alternate solutions for attaining a reliable e-mail list of DE Leaders in two-year colleges and sending a postcard to all 2-year College DE Leaders through the American Association of Community Colleges (AACC). The CEO list was chosen since it was the most comprehensive list of schools. Several locations on the list were not educational institutions and were removed from the list. President names were replaced in the list with the generic term "Distance Education Director" inserted as the name on the postcard and sent out to 1274 locations on the list.

A personal e-mail was also sent on September 27, 2010 to each member of the ITC Board of Directors to either take the survey or solicit the leader at each of their schools to take it. By the end of October, the total return from the newsletter, postcard and e-mail consisted of 28 responses. A meeting between the researcher and dissertation chair determined a plan of action to increase responses from the same population of 2-year DE Leaders as were sent postcards via the AACC mailing list. With the support of a graduate assistant in the College of Education at the University of Montana, the researcher next mined the Internet for the names of each DE Leader at the 2-year colleges and sent out a personal e-mail to each of them asking for their participation. Over the months of November 2010 through February 2011 approximately 300 e-mails were sent and 26 additional complete responses were received. Ten other responses were received and had to be discarded due to incomplete surveys.

A presentation on leadership of distance education was delivered by a colleague at the ITC eLearning 2011 conference on February 21, 2011. The researcher created a handout to be distributed at that session where 10 people attended and received the

handout. One hundred copies of the handout were also distributed randomly to attendees at the conference. Only one additional response was received after the conference.

Measurements and Instruments

Data was collected using two questionnaires. The first instrument was the MLQ-5X (self-rater form), designed to gather leadership style information on the DE Leader. The MLQ is “the most commonly employed measure of transformational and transactional leadership” (Avolio & Bass 2004, p. 1). It is made up of 45 questions and yields data on nine scales across a spectrum of leadership styles and three performance outcomes. One aspect that sets the MLQ apart from other leadership inventories is that it examines what Bass and Avolio have termed the “Full Range of Leadership (FRL) model”. The model includes “...laissez-faire; the components of transactional leadership, namely, management by exception (both passive and active); and contingent reward, as well as the components of transformational leadership” (Bass & Riggio 2006, p. 19). According to the Avolio and Bass (2004), “the transformational leadership process results in associates who are more capable of leading themselves, taking responsibility for their own actions, and gaining rewards through self-reinforcement” (p. 29). They also defined the three performance outcomes of Extra Effort, Effectiveness and Satisfaction as resultant from transformational leaders and all three scales were measured in the MLQ-5x results of this study. The second instrument contained three sections: a) Traits of the DE Leader; b) Traits of their program; and c) Identified priorities for future investment in order to maintain or improve the quality of the program.

Reliability

In past research, “the MLQ scales have demonstrated good to excellent internal consistency, with alpha coefficients above the .80 level for all MLQ scales, using the most recent version of the MLQ across a large sample” (Bass & Riggio 2006, p. 22). Bass and Riggio went on to say that “the MLQ has been completed by more than 15,000 respondents and translated into many languages, ranging from German and French to Japanese and Hebrew” (p. 22).

Internal Validity

To measure the FRL model, the MLQ is made up of 45 questions. According to Bass and Riggio (2006), the current MLQ-5X “contains 36 standardized items, 4 items assessing each of the nine leadership dimensions associated with the FRL model, and the additional 9 outcome items” (p. 21). The nine additional outcome items include “ratings of the leader’s effectiveness, satisfaction with the leader, and the extent to which followers exert extra effort as a result of the leader’s performance” (p. 21). The nine dimensions were listed in Figure 8 along with a sample assessment item for each dimension. Appendix B also contains sample questions as well as the scale used to collect responses.

Chapter Summary

Efforts to attain access to the target sample for this study proved difficult for the researcher. However, visiting hundreds of two-year college websites to search out DE Leader names, titles and organizational charts the research strengthened understandings of the DE field by exposure to many of the schools making up the total population of two-year colleges. Even after initial difficulties, the sample showed Goodness-of-Fit

through Chi-Square analysis according to geographic location as well as similarities with previous research and Carnegie unit size classifications.

Access to a trademarked and copyrighted survey of leadership style allowed the researcher to focus upon collecting trait data and funding priorities. Participants who took the time and effort to complete the survey and bring enrollment data to the computer for the survey provided valuable base-line research for leadership style analysis using the MLQ for this research and follow-up studies on the same (or similar) population of DE Leaders. The findings, discussion, conclusions and recommendations display the value these participants have added to the field of study.

CHAPTER FOUR FINDINGS

Introduction

This study examined leadership styles, funding priorities, individual and institutional traits of Distance Education leaders at two-year colleges in the United States. Data was gathered and analyzed from 55 leaders representing a cross-section of two-year Colleges from all regions of the country. Descriptive trait data and a leadership style inventory helped provide a profile of DE Leaders and their institutions. Funding priority and importance projected the immediate needs at institutions.

This chapter will first define the DE Leaders based upon descriptive data and leadership styles. Next, the research questions will be examined to assess whether leadership styles correlate with any of the traits for individual leaders or their institutions. Finally, funding priorities of these leaders will be examined and tied to leadership styles where possible.

To review, the Idealized Influence Attribute from charisma (IA), Idealized Influence from behavior (IB), Inspirational Motivation (IM), Intellectual Stimulation (IS) and Individualized Consideration (IC) comprise the five elements of the transformational leadership scales. Contingent Reward (CR) and Active Management-by-Exception (MBEA) comprise the transactional leadership scales. Passive Management-by-Exception (MBEP) and Laissez-Faire (LF) make up the passive leadership scales. The Effectiveness (EFF), Extra Effort (EE) and Satisfaction (SAT) scales are not leadership styles. Rather, they are the three outcomes of Transformational Leadership measured by the MLQ. Over years of research by Bass and Avolio, these outcomes of Transformational Leadership have shown to correlate positively with transformational leadership styles and are

discussed in literature as common outcomes or identified as strengths when qualitative researchers have interviewed colleagues or subordinates of transformational leaders.

Analyses

Data yielded from the MLQ-5X showed that surveyed DE Leaders were more transformational and displayed less passive leadership style than the norm. As expected, the data fit well with the previous results of those taking the MLQ. Refer again to Figure 8 for a review of the leadership styles measured by the MLQ.

In the Manual and Sampler for the MLQ created by Bass and Avolio (2004), a percentile grid of N=3755 previous participants on the MLQ Self-Rater Form (p. 99) showed where participant data from the sample for this study fit with those who have previously taken the assessment. Numbers from this study fell in the sixtieth percentile for six of the twelve scales (IA, IM, IS, IC, EFF and SAT) and in the fiftieth percentile for two scales (IB and CR). The EE (Extra Effort) scale was well above the average in the seventieth percentile. MBEP was well below the norm in the twentieth percentile, LF was in the thirtieth, and MBEA was in the fortieth percentile. First and foremost, results showed that DE Leaders were well above the norm in relation to inspiring effectiveness (a positive correlation with transformational leadership), slightly above average in transformational leadership indicators of Idealized Influence Attributes (IA), Idealized Behavior (IB), Inspirational Motivation (IM), Intellectual Stimulation (IS), Individual Consideration (IC) as well as the scales of Satisfaction (SAT) and Effectiveness (EFF). However, they rated themselves well below the norm in relation to Passive Management-by-Exception (MBEP) and slightly below the norm in Active Management-by-Exception (MBEA) and Laissez-Faire (LF) styles.

The results of this research become immediately compelling due to the fact that all three scales (EE, EFF and SAT) were higher than the averages reported in the MLQ manual for past MLQ self-rating results. The results become even more interesting when coupled with the fact that the sample schools mirror the overall population in geographic location. Initial analysis adds immediate credence to the supposition that DE Leaders must be transformational leaders in order to lead others in the DE field. Furthermore, the early finding supports the call by researchers and professionals in the DE field for this research and answers the question without any further analysis of whether there is need for future leaders who display transformational leadership tendencies in distance education.

Cluster analyses and visual graphs and charts were used to identify patterns of leadership characteristics as measured by the MLQ. In addition, initial analysis of the data through box-plots showed differences that appeared significant and several histograms showed reasonably normal distributions. In others, scatter plots showed linear relationships and good homoscedasticity.

The response rate of 55 participants was sufficiently high to provide enough power (based upon Chi Square Goodness-of-Fit analysis) to run basic correlational tests. However, full multiple regression analyses were not possible for tests using sub-variate groups that had more than two possible responses. In those cases, cluster analysis, correlations, linear regression, determinants or t-tests were used and further research is recommended to attain larger sample sizes and even better generalizations to the population of 2-year DE Leaders. The results illustrate a clear profile of DE Leaders in

this study, lay the foundation for future study and will inform both leaders and researchers in this field for years to come.

Research Question One – Personal Traits

To set the stage for further analyses, a profile of the DE Leaders was gathered using 20 questions. Respondents listing themselves as White/Caucasian represented 92.7% or 51 out of the 55 survey takers. The remaining ethnicities represented were one Hispanic and two Asian/Pacific Islanders as well as one respondent who called themselves “American.” The gender of participants is displayed in Table 1.

Table 1

Gender of Participants

<u>Female</u>	<u>Male</u>
32 (58.2%)	23 (41.8%)

Other personal statistics about DE Leaders included the following traits: 39 (70.9%) had taken online courses, 35 (63.6%) taught online and 24 (43.6%) of respondents were currently teaching classes online at the time of the survey and 24 out of 35 (68.6%) of those who had ever taught classes online were teaching them at the time of the survey. Of the 16 (29.1%) studying for their degree, thirteen are working on their doctorate, two on their masters and one on a bachelor’s degree.

Table 2

Degree details of Participants

Currently Held/Highest Degree			
Doctorate	Masters	Bachelors	Associates
8 (14.6%)	39 (70.9%)	7 (12.7%)	1 (1.8%)

In all, 39 (70.9%) listed Masters as their highest degree earned, including several who self-identified as ABD and one EDS student who also recorded an ABD in Educational Leadership. Doctoral degree holders represented 8 (14.6%) participants; 7 (12.7%) had Bachelor's degrees.

Degrees were further broken down into the following designations at all levels: Table 3 shows that participants with the combination of Education, Technology and Leadership made up 4 (7.3%) of respondents while 12 (21.8%) had Education and Leadership or Management, 16 (29.1%) had Education only degrees, Technology only degrees were held by 5 (9.1%), Education plus Technology degrees accounted for only 2 (3.6%) and 14 (25.5%) had degrees in unrelated fields. Two respondents identified that they simply had a "PhD" giving no indication of field or focus as was asked by the survey.

Table 3

Degrees Held in Education, Technology and/or Leadership at all Degree Levels

Currently Held/Highest Degree					
<u>Ed/Tech/Lead</u>	<u>Ed/Lead</u>	<u>Ed Only</u>	<u>Tech Only</u>	<u>Ed/Tech</u>	<u>Unrelated</u>
4	12	16	5	2	14

The numbers of online courses taken by the 39 who took online courses broke down as displayed in Table 4. Over one quarter of the leaders who took online courses have taken more than fifteen of them with 33 of the participants reporting they had taken more than one online course before.

Table 4

Number of Online Courses taken by DE Leaders

<u>None</u>	<u>One</u>	<u>Two</u>	<u>3 to 5</u>	<u>6 to 10</u>	<u>11 to 15</u>	<u>15+</u>
16	6	5	9	6	3	10

Figure 9 displays the titles reported for DE Leaders at their institutions. Most identified themselves as a director, coordinator or dean.

Figure 9

Job Title of DE Leaders

		Job Title of DE Leaders			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Dean	8	14.5	14.5	14.5
	Exec Dir	3	5.5	5.5	20.0
	VP	3	5.5	5.5	25.5
	Director	24	43.6	43.6	69.1
	Chair	2	3.6	3.6	72.7
	Supervisor/Mgr	2	3.6	3.6	76.4
	Assoc Dean	1	1.8	1.8	78.2
	Ast VP	1	1.8	1.8	80.0
	Coordinator	10	18.2	18.2	98.2
	Instructor	1	1.8	1.8	100.0
	Total	55	100.0	100.0	

Analysis of these titles led to combining all executive-level positions into one scale (Dean, Executive Director, Vice President), all mid-level management positions (Director, Chair, Supervisor/Manager, Assistant VP and Associate Dean) into another and all subordinate positions (Coordinator and Instructor) into a third. Binning these titles yielded the data in Figure 10 showing that roughly 3 out of 4 DE Leader positions fell outside of the executive-level in two-year schools responding to this survey.

Figure 10

Shortened Job Title of DE Leaders

DE Leader Shortened Job Title

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Top Level	14	25.5	25.5	25.5
	Mid Level	30	54.5	54.5	80.0
	Subordinate Level	11	20.0	20.0	100.0
	Total	55	100.0	100.0	

The data pertaining to reporting lines for DE Leaders mirrored the findings of Lokken, Womer and Mullins (2008) with two out of three reporting lines going through the Chief Academic Officer (CAO) of the institution, 7 (12.7%) reporting directly to the CEO, and only four each reporting to the CIO or a Distance Education or Extended Learning Executive. Reporting lines of respondents broke down as shown in Table 5.

Table 5

Reporting Lines of DE Leaders

CAO	CIO	CFO	Library	CEO	DE Exec	StServices
36	4	1	1	7	4	2

Analyzing age and experience showed that the average age of participants was 48.3 years of age with four people in their 20s, 10 in their 30s, 15 in their 40s, 22 in their 50s and seven in their 60s. The maximum age was 67 while the minimum was 25.

Average years of experience in their current institution was 10.9, average years in distance education was 9.6 and average years in distance education leadership position at their current institution was 5.9. This shows that regardless of age, the years of experience leading DE efforts was relatively low in this sample.

When looking at experience by leaders in distance education, the first date taking distance education averaged less than 3 years before leading DE programming (8.6 years before this study) and the first date teaching distance education at less than 2 years (7.5 years before this study). Add this to the fact that 11 (20%) participants had neither taken nor taught online, one can surmise that the demographic of a DE Leader is one that is fairly new to their vocation when compared with their contemporaries in other areas of the academy.

Research Question One – Leadership Styles of DE Leaders

Table 6 shows the overall leadership questionnaire results for the 55 participants. The MLQ-5x Self-Reporting Short-Form contained 45 assessment questions and had the following answer choices: unsure (not counted in the results), not at all (counted as a zero in the results), once in a while (counted as a one), sometimes (counted as a two), fairly often (counted as a three) and frequently, if not always (counted as a 4). See the example of five MLQ assessment items in Appendix B for a visual representation of the online survey taken by participants in this study.

Each leadership characteristic listed in Table 6 combined the score of four questions on a subscale as discussed in chapter three with the exception of the Extra Effort scale which has three sub-scores and the Satisfaction scale which has two sub-scores. Table 6 displays the type of leadership characteristic, the MLQ Scale title with

abbreviation in parentheses, and the average score for participants as well as the percentile of that score as it relates to the overall results presented by Avolio and Bass (2004) in the MLQ-5x Manual on page 99 for the Self-Rater Form.

Table 6

MLQ-5x Scale Results for DE Leaders in This Study

<u>Characteristic</u>	<u>MLQ Scale</u>	<u>Score</u>	<u>Percentile</u>
Transformational	Individualized Influence Attributes (IA)	3.10	60
Transformational	Individualized Influence Behavior (IB)	3.06	50
Transformational	Inspirational Motivation (IM)	3.30	60
Transformational	Intellectual Stimulation (IS)	3.21	60
Transformational	Individual Consideration (IC)	3.39	60
Transactional	Contingent Reward (CR)	3.07	50
Transactional	Mgmt by Exception-Active (MBEA)	1.42	40
Passive Avoidant	Mgmt by Exception-Passive (MBEP)	0.748	30
Passive Avoidant	Laissez-Faire (LF)	0.47	40
Leadership Outcome	Extra Effort (EE)	3.14	70
Leadership Outcome	Effectiveness (EFF)	3.45	60
Leadership Outcome	Satisfaction (SAT)	3.39	60

Results showed that 2-year DE Leaders in this sample tended to be more transformational and less transactional and passive than the norm. This study explored the nature of the leadership scales for these leaders and made recommendations to leaders

for how the leadership tendencies can inform future budgeting and identification of leaders in distance education for two-year colleges.

Research Question Two - Leadership Style and DE Program Traits

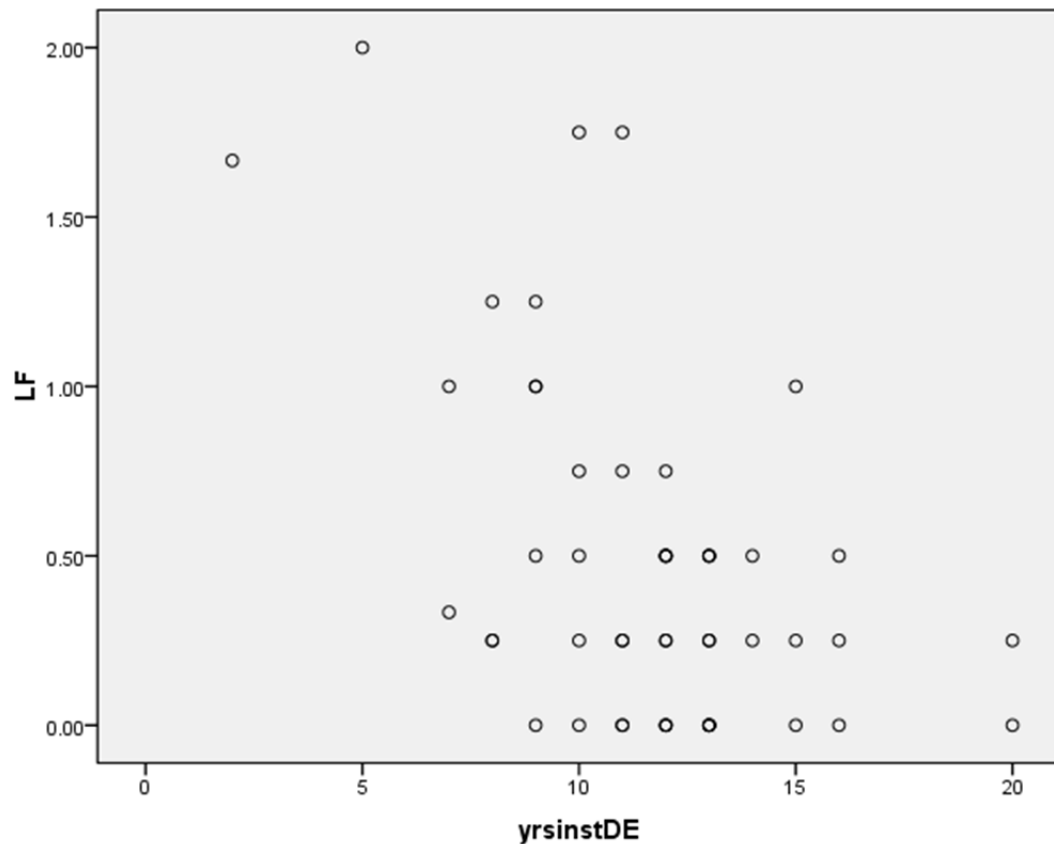
Question two examined the relationship between leadership style dimensions and DE program traits. In all, 52 out of 55 leaders answered the question about the length of time their institution had offered online distance education courses. The sample showed that the average program had offered online courses since 1999 (11.61 years) with the maximum answer from two schools who had offered them for 20 years while one school had only done so for two years.

When correlated to the MLQ scales, only one valid negative correlation appeared in relation to amount of years offered. As displayed in Figure 11, the Laissez-Faire (LF) scale displayed a correlation coefficient of $-.411$ at $.002$ significance level. Taking the linear regression of LF showed the coefficient to be -4.768 at the 95% confidence interval for B thus proving there is a negative relationship between Laissez-Faire leadership style tendency and the years of experience a school has offered online DE.

Pragmatically, this may indicate a phenomenon where passively led DE programs simply do not last as long as those led by more transformational or transactional leaders or it could be that the institution has a successful long-term program due, at least in part, to the style of their DE leader. Further research may help bear out causality and explore this relationship between the leadership style and longevity of online DE programs in finer detail.

Figure 11

Scatter Plot of Relationship between Years the Institution Offered Online DE and the LF Scale



There were no other significant findings in relationships between the MLQ scales and the number of years that an institution used a Learning Management System (LMS) or the amount of time an LMS was used at an institution. Nor were there significant findings related to the type of LMS institutions used. No significant relationship was detected for any of the MLQ traits in relationship to the FTE or relative size of an institution. Although they are somewhat related to the organization of the institution, reporting structure and job title relationships to MLQ scales will be discussed in relation to DE leader traits in the next research question.

Research Question Three - Leadership Style and DE Leader Traits

Question three examined the relationship between the 12 MLQ-5x leadership style dimensions and 21 individual DE Leader traits. Stepwise Linear Regression was used to ascertain significant relationships between the MLQ scales and the nine continuous leader trait variables. Table 7 illustrates significance and coefficients of the relationships between MLQ factors and DE Leader dependent variables in this study.

Table 7

Significant Linear Regression Results for DE Leaders

<u>Dependent Variable</u>	<u>MLQ Scale</u>	<u>Std Coeff</u>	<u>Significance</u>
Age	EFF	.410	.001
Age	MBEA	-.361	.004
Education Level	IB	-.342	.013
Yrs Since Most Recent Degree	IB	.365	.004
Yrs Since Most Recent Degree	MBEA	-.453	.001
Yrs Since Taking DE Courses	IA	-.365	.024
Yrs Since Taking DE Courses	SAT	.482	.004
Yrs Since Teaching DE	IB	.440	.005
Yrs Since Teaching DE	LF	-.357	.021
Yrs at Institution	IA	-.403	.005
Yrs at Institution	SAT	.342	.015
Yrs in DE Field	SAT	.325	.019

The first variable with a significant linear relationship, as displayed in Table 7, was age with a positive relationship at $.001$ of $.410$ with the outcome of Effectiveness (EFF) and a negative relationship with MBEA at $.004$ and $-.361$ for the standardized coefficient. In general, the leaders who were older tended to be less transactional and task-oriented than their younger counterparts in this study in Active Management-by-Exception and had an increased Effectiveness outcome when leading others and representing their team to others.

Idealized Influence related to behavior (IB) had a significant negative relationship with educational level. The negative relationship was $-.342$ at $.013$ significance level. This meant the older a participant was in this study, the lower their score was compared to leaders who successfully portrayed a sense of purpose in their leadership styles.

In the exact opposite finding of education level, the years since the most recent degree was positively related to IB ($.365/.004$) and negatively related to MBEA ($-.453/.001$). Whereas the level of the degree was inversely related, the time since those degrees passed was positively related and leaders tended to portray more of a sense of purpose and employed less of a transactional leadership style than more recent degree holders in this sample.

Of the 39 leaders who took online courses, the amount of time that had passed since taking them was negatively related to IA ($-.365/.024$) and positively related to SAT ($.482/.004$). This result showed that the leaders rated lower on the Idealized Influence Attributed to Charismatic Leadership (IA) when compared to the length of time they had been involved in DE as a student. The Satisfaction leadership outcome however, was positively related to this length of time.

The length of time since teaching DE also appears to be significantly related in a positive linear fashion to IB (.440/.005) and negatively related to LF (-.357/.021). Those who have more experience teaching online are stronger at the transformational IB leadership scale than those with less time doing so and these leaders tended to be less passive avoidant too.

The years at the institution was negatively related to the IA transformational leadership scale (-.403)/.005) and positively to SAT (.342/.015). This finding mirrored the findings of those who had taken online classes. This is possibly an indicator of stale leadership where the less charismatic leader has continued to work at an organization but has worked to keep up the satisfaction outcomes. Interestingly, SAT (.325/.019) was the only positively related variable for leaders with more years within the distance education field.

Next, one-way analysis of variance (ANOVA) tests were run between non-continuous variables with three or more levels (independent variables) and the continuous leadership scales (dependent variables). Several significant results are displayed in Table 8. The Level of Position variable showed a significant difference in the mean of .604 between the subordinate-level DE Leaders and those at the top level of their organization in relation to the CR scale and between the mid-level and top-level DE Leaders there was also a difference of .610 in relation to MBEA.

When examining reporting lines of DE Leaders, there were four significant differences in the mean when running pairwise ANOVA comparisons and the post-hoc test using Tukey HSD at a .05 significance level. First, leaders who reported through the CEO averaged over a full point higher (1.170) on the scale than the leaders reporting

through the Chief Information Officer. Leaders reporting through distance education executives also scored lower on the Effectiveness outcome scale than both their CIO and CEO reporting line counterparts. On the Extra Effort (EE) outcome scale, leaders reporting through the CIO scored lower than both those reporting through the CAO and CEO.

Table 8

Significant ANOVA Results for DE Leaders

Significant Mean Differences

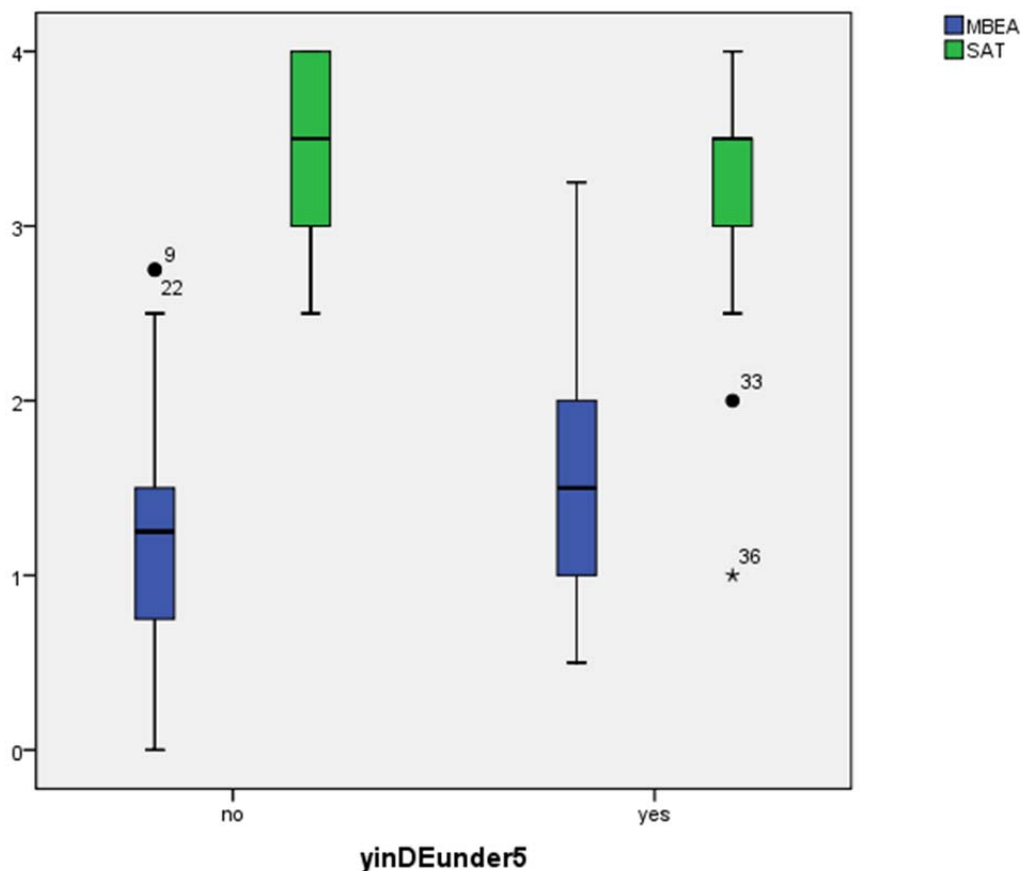
<u>Variables and Relationships</u>	<u>MLQ Scale</u>	<u>Mean Difference</u>	<u>Significance</u>
Level of Position			
Subordinate to Top Level	CR	.604	.032
Mid-Level to Top Level	MBEA	.610	.028
Reporting Line			
CIO to CEO	MBEA	1.170	.050
DE Exec to CEO	EFF	.917	.025
DE Exec to CIO	EFF	.833	.020
CIO to CAO	EE	.843	.040
CIO to CEO	EE	1.048	.029

Research Question Four - Recent Changes in DE Leader Position

Question four examined recent changes in the DE Leader's position (within the past five years). The boxplots in Figure 12 displayed visually that the leaders changing jobs within the last five years were higher on the Active Management-by-Exception (MBEA) scale and lower on the Satisfaction (SAT) leadership outcome. MBEA is the lower two boxes in Figure 12 while the upper boxes show the inverse relationship for SAT.

Figure 12

Boxplot of DE Leaders for under Five Years



When running bivariate correlation however, both of these relationships do not show significance with the MBEA showing a .062 and SAT showing .090 significance levels. This is one question related to types of leaders in new online programs that calls for future study to bear out this relationship.

Research Question Five - Leadership Styles and Funding Priority

The study next examined the relationship between leadership style dimensions and funding priorities as identified by DE Leaders in the context of question five. The importance of Funding Priority One (displayed in Table 9) showed a positive significant

linear relationship with the MLQ scale of Inspirational Motivation (IM) of .475 at a .003 significance level and Intellectual Stimulation (IS) of -.332 at .032 significance. This inverse relationship showed that leaders who support course-level evaluation using transformational leadership styles may motivate followers but could bring down the intellectual stimulation through policies that evaluated and assessed DE programs and courses. To help clarify this summary, Table 9 shows Funding Priority One and all other priorities for investment identified in this research and used in the survey of DE Leaders at two-year colleges.

Table 9

Verbiage of Future DE Funding Priorities

<u>Number</u>	<u>Funding Priority</u>
1	Program and course-level evaluation and assessment
2	Course design standards focus upon learning outcomes
3	Faculty support and professional development
4	Student support and student services
5	Institutional role in supporting overall DE prog &/or DE mission/policies
6	Secure, centralized learning management system

The importance of Funding Priority Two showed a positive linear relationship of .313 at .024 significance level with the MLQ leadership outcome of Satisfaction. This

likely proved that a leader focused on student satisfaction would support priorities focused upon learning outcomes and course design standards.

The importance of Funding Priority Three showed a positive linear relationship of .382 at .005 significance level with the MLQ scale of Contingent Reward. Leaders who tend to be higher on the CR scale than their peers would likely support initiatives of faculty support and professional development involving rewards for participation.

The importance of Funding Priority Four showed a positive linear relationship of .471 at .003 significance level with the MLQ scale of Intellectual Stimulation and a linear relationship of -.342 for Inspirational Motivation. Leaders who tend to be more IS than their peers would likely support initiatives of student services and support to engage and intellectually improve their DE experience. The inverse relationship appeared with regard to IM and could reflect less focus on the teaching and learning aspects of the program in lieu of prioritizing the importance of quality co-curricular student support programs.

The importance of Funding Priority Five did not have any significant relationships between the MLQ scales and the institutional role in supporting the overall distance education program. Perhaps this question was too broad and could be split into two questions to eliminate the possibility of a double-barreled question or researchers may decide to eliminate it altogether in future studies of this nature.

The importance of Funding Priority Six showed a positive linear relationship of .287 at .039 significance level with the MLQ scale of Idealized Influence Attributed to Charisma (IA). This relationship showed that leaders who are more IA than their peers in

this sample supported funding for the learning management system and technology infrastructure to support the DE program.

Research Question Six – Vision for Funding Priorities

Question six examined future funding priorities and the stated importance of each by DE Leaders in this study. Based upon the literature, six funding priorities were identified for DE Leaders to rank and provide the importance of. Priorities were listed in Table 9 and discussed previously in the Research Question 5 analysis summary.

During the design of the study, future resource investment priorities were categorized into the five pillar quality framework brought forth by the Sloan Consortium and discussed in the literature review. Those categories were learning effectiveness, cost effectiveness and institutional commitment, access, faculty satisfaction and student satisfaction. Specific priorities were created for each pillar with the cost-effectiveness and institutional commitment split between the mission/policies question and the technology infrastructure/LMS question.

In Table 10 the forced ranking scores show the average score when ranked from one (most important) to six (least important). The lowest score was the top ranked result as ranked by participants in this study. Note that the rank was forced so that each participant had to assign importance from one to six by picking only one rank per priority.

The relative importance of each funding priority was then ranked on a seven point Likert scale with the following rankings: (1) Not at all important, (2) Low importance, (3) Slightly important, (4) Neutral, (5) Moderately important, (6) Very Important and (7) Extremely important. The highest score was the top ranked score for importance.

Table 10

Future DE Funding Priorities by Rank and Importance

Funding Priority	Forced Ranking		Importance	
	Average	Rank	Average	Rank
Program/Course Eval	3.91	5	5.98	3
Learning Outcomes/Std's	2.93	1	6.04	1
Faculty Support/PD	3.00	2	5.93	4
Student Support/Services	3.11	3	6.00	2
Mission/Policies	3.45	4	5.47	6
LMS/Technology	4.25	6	5.55	5

Lokken, et al. (2009) found some similarities to the rankings from Table 10 as displayed in Table 11 on a similar question when conducting the yearly ITC survey on a similar sample of the same population. Interestingly, the Funding Priorities of this survey showed that quality learning standards (Priority 2) came out on top while the ITC survey had a similar Challenge item that ranked third. It was no surprise to see faculty training and professional development (Priority 3) ranked second in this research as the Challenge titled “need for more staff to train and provide technical support” consistently ranked number one with the ITC survey over the six years of that survey. The Challenge of “adequate assessment of distance education classes” ranked third in the ITC survey and fifth (Priority 1) for this survey. The only other question that was similar dealt with the LMS and technology that ranked sixth (Priority 6) in this research. The ITC Challenge

titled “operating and equipment budgets” ranked fourth out of ten items in 2009 even though it had ranked higher than that in previous years.

Table 11

Greatest Challenges for Administrators of Distance Education Programs (Lokken, et al., 2004, p. 3)

<u>Challenge</u>	<u>Rank</u>
Support staff for training/tech assistance	1
Adequate student services for DE students	2
Adequate assessment of DE classes	3
Operating and equipment budgets	4
Adequate administrative authority	5
Faculty acceptance	6
Adequate space for training and tech assistance	7
Organizational acceptance	8
Compliance with HEOA requirements for DE	9
Student acceptance	10

The differences of rankings for schools by Carnegie Unit size and geographic region showed that the very large schools (above 10,000+ FTE) and very small (below 500 FTE) were the only two size classifications to rank the same top priority overall and the Great Lakes, Southeast and Rocky Mountain regions also ranked the same top priority as the overall rankings showed. No tests were able to compare all regions or size

classifications for statistical significance of these results so the rank order scores and ratings of importance were recorded and shared.

Chapter Summary and Conclusions

Creating a profile of DE Leaders at two-year schools based upon the sample in this study was made possible by the participation of many leaders from a representative national sample. Studying the leadership profiles, personal traits, institutional traits and funding priorities added several new findings to the body of educational leadership and distance education research.

Building upon existing leadership study literature, several significant findings in the relationships between leadership styles and leadership outcomes were identified and raise compelling questions for 2-year college leaders, DE Leaders and future researchers to explore. Significant findings included results for years since teaching online, years at an institution, years in the distance education field and years since taking online classes.

Organizationally, the level of the position for the DE Leader also appears to impact the type of leadership style needed to succeed. This would appear to coincide with literature on force field theory as discussed from Lewin and Schein since subordinate and mid-level managers tended to have higher scores on the CR and MBEA scales than their executive level counterparts. Reporting lines also serve to inform college leadership. In this study, findings show that the CAO line or reporting directly to the CEO rather than through the CIO will result in less transactional leaders and leaders who will positively impact Effectiveness and Extra Effort scales as DE Leaders.

Funding priorities also appear to follow current trends in the higher education accreditation efforts since the top ranked and most important priority was Priority 2

(Program and Course-Level Evaluation). College leaders should take note that DE Leaders identified the importance of this effort. Working together with college leaders to increase funding for these efforts might be the top priority for the coming decade as the new seven-year accreditation cycle begins to take shape and mature. Chapter Five will present conclusions and findings in greater detail and make recommendations for future study for college leaders, DE Leaders and future researchers.

CHAPTER FIVE CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter includes a discussion of the findings and the appropriate conclusions to those findings. Findings in this study have implications for higher education leaders looking toward leadership in their organizations in the twenty-first century and for anyone researching leadership styles as they relate to leading distance education efforts. Specific recommendations are made for Colleges, DE Leaders and future researchers in this emerging field of research. The dissertation closes with endnotes on this study and three visions for changing the field of education.

Findings and Conclusions

Findings in this foundational study explore many new areas of research for the field of leadership in online distance education for two-year colleges. Analysis of the responses showed that the sample of 55 participants was adequate for generalizability to the population as a whole when school size and geographic location was examined using Chi-Square to check for Goodness-of-Fit. The sample size was representative of the overall population for geographic region at seven degrees of freedom between .50 and .10 and between .01 and .005 at four degrees of freedom for school size by Carnegie classification.

The lower probability or significance with the school size was very likely due to the differences between sample and population on the very highest and very lowest end of the school-size variable. More than 10% fewer than expected, in the goodness-of-fit analysis process, answered from very small schools (below 500 FTE) and over 10% more answered from very large schools (over 10,000 FTE) yet there was a consistent spread

across the country geographically. At first, the lower Chi-Square for size appeared to create problems for the sample, however upon further analysis, it is hypothesized that geographic region may have been a better measurement. The discrepancy between sample and population in regard to size classification could be a function of the size of those schools for two reasons. First, fewer very small school responses could be due to the fact that they have fewer personnel to respond to and fill out surveys. Also, there are likely fewer DE programs at smaller schools when compared to their larger counterparts. It is likely that of the 93% of public two-year schools that have DE programs; a higher number and percentage of the larger schools have programs than the very small ones so there would naturally be more responses from the larger schools and fewer from the very small colleges.

As a part of this research, a profile of DE Leaders and their programs at two-year schools in the United States is now possible. A Distance Education Leaders at the two-year schools in this study are, on average, 48 years old. The leader has been in their job an average of 5.9 years, spent 9.6 years in distance education and 10.9 years at their current institution. He or she has a Masters degree and there is about a 40% chance they are studying for their doctorate or already have it. The leader is probably a director or middle-manager reporting through the academic officer at their college and has a growing number of peers beginning to gain executive level status and report directly to the CEO/College President.

There is about a 50% chance that the person was hired in their current job due to previous experience in distance education and a 40% chance they were hired from within education for unrelated work. Just over half are female, most are Caucasian, 70% have

taken online classes and roughly 2 out of 3 have taught online classes. Less than 10% have degrees that combine education, technology and leadership while almost 50% have education or education and leadership degrees and over 25% have degrees in unrelated fields.

DE Leaders in this study were more transformational than the average past participants in the MLQ and less transactional or passive in their leadership style. Their immediate top priority for funding was *course design standards focused upon learning outcomes*. Two-thirds of their two-year institutions use the Blackboard LMS or one of the companies bought out by Blackboard in the past five years. Just under 30% used an open source solution such as Moodle. Around 8% use a different for-profit solution, all have used their current LMS for an average of just under 6 years and have offered online distance education since approximately 1999.

Recommendations for College Leaders

When exploring leadership styles in relation to the above statistics, several compelling findings for college leaders were discovered and displayed in Table 7. In general, leaders in the study who were in DE the longest employed less passive leadership styles than those who were newer to the field. Older DE Leaders also scored higher on the Effectiveness scale and lower on the Active Management-by-Exception scale. The number of years at an institution and in distance education showed a higher score on the Satisfaction scale. However, the number of years they spent at an institution had a generally negative relationship to a leader's score on the IA scale regarding the idealized influence attribute of charisma (the highest scale of transformational leadership).

What these findings suggest is that the leaders in the study who had more years at an institution generally ran efficient, rewarding programs and got quite a bit of work done. However, their styles tended to become more transactional and less transformational over time. In order to address this trend, data in Table 7 points toward a solution that involves recruiting leaders into DE with teaching experience online and ones who have degrees and experience in distance education, leadership and technology. The reason to do this is displayed in leadership styles in relation to two statistics; (1) *years since most recent degree* and (2) *years since teaching their first distance education course*. These statistics are the only ones in Table 7 that tied to positive linear relationships with transformational leadership of Idealized Behavior. This is a logical result if Idealized Behavior is equated to a leader who can model the behavior of the people they lead. If a DE leader had experience teaching and taking online courses it appears from this study that they score higher on this scale.

How to Support and Develop DE Leaders

This study, as displayed in Table 8, shows that subordinate DE Leaders employ transactional leadership styles in order to get things accomplished in their organization. Literature shows that this sort of leadership style does not allow the organization to implement long-term/systemic change. Also, when re-exploring organizational change and force field theory of Lewin (1947) and Schein (1996), transactional leadership does provide increases in driving forces to change. However, transactional leadership style does not allow the leader to remove the barriers to changes at the organizational level and change will be sporadic and temporary at best and illusionary and false at worst under

this pretense without an eye toward re-freezing at new levels in a transformational environment.

As the current DE Leaders (average age in this study was 48) continue to age, new leaders will inevitably take their place. College leaders will need to figure out how to identify or develop transformational leaders to take over their DE programs or be forced to figure out what happens if non-transformational leaders take over those positions and programs or if older leaders like the ones in this study continue to take on more transactional style in the online DE field.

One solution lies in leadership training programs at the national level. Nationally recognized leadership training programs put on by several organizations (e.g. ITC, WCET, Educause and the League for Innovation) or graduate studies in educational leadership programs that allow researchers to study distance education or educational technology applications are two other possibilities for college Leaders to consider. Training cannot be the only solution, however. Application of leadership theory is a must for any new leader to develop and learn to lead others.

Therefore, college leaders must get their younger or potential DE leaders involved in leadership decisions at the college level. Leaders must put tangible resources and plans in place to support DE programs. Saying that DE is important to the organization is simply not enough since most schools have now been in the DE business for over 11 years. Leaders must model the importance of DE in the overall strategic planning process for their colleges with more than words. In order to do so, they should place the person, position and priority for DE squarely in the middle of any initiatives where funding or improvements in metrics related to educational outcomes are involved. The

literature and research in this study shows that if DE Leaders in an institution are to succeed, they will need to gain experience with the complex nature of change, organizational leadership, technology, and the measures of quality such as the Sloan-C pillars. Therefore, it will also be important to keep new leaders plugged into the national trends, current research in the emerging field as well as regional or national organizations.

When creating an organization that encourages transformational leadership in DE, the answers are a little less clear. However, several suggestions were born out of the data. First, as displayed in Table 8, the level of the DE Leader position matters since it appears subordinate DE Leaders (those who hold coordinator or instructor status in the institution) tend to lean more toward Contingent Reward scales than DE Leaders who report directly to the CEO.

Next, also in Table 8, Active Management-by-Exception (MBEA) is also higher in mid-level DE Leaders than the top-level leaders. As is common at the mid or lower levels, there is less implied power so transactional methods are often the quickest way to bring about change with peers. By increasing the level and stature of the distance education leader, the positional power will automatically go up in organizations. To make meaningful long-term decisions and changes necessitated by colleges today and in the near future transformational leadership is required. Therefore, college leaders should search out, develop or hire transformational leaders to guide their institutions. The DE leader, as displayed in Table 1 and Table 8, must be visionary and positioned strategically in the institution to work best with all of the key figures in the change process and with the instructors in the classroom. This will require the CEO and executive management

teams to constantly re-evaluate the DE program and DE Leader position to best match the vision for their institution.

Next, college leaders need to take notice that reporting lines also matter. Also displayed in Table 8, the largest differences in leadership style were evident with regard to the DE Leaders that reported through the Chief Information Officer (CIO). A CIO-led DE Leader typically creates and maintains the technical infrastructure of an institution. In the early days of DE, it was usually the CIO who was charged with making the technology system to support DE work. However, as discussed by Lokken, et. al (2008), the DE field has matured and moved more toward the academic (educational technology instead of information technology) end of the technology spectrum and DE has gravitated toward the academic function of the institution too. Therefore, a transformational DE Leader should have a solid grounding in education, leadership and technology. This triumvirate of skills involves a complex walk of a tightrope since it takes all three to transcend the current and future paradigm switch of technology integrated distance education in the resource constrained environment of higher education.

Data displayed in Table 8 and discussed in relation to research question three showed that the CIO was more of an Active Management-by-Exception leader (by over one full rating point on a scale of 0-4) in relation to the DE Leader who reports directly to the CEO. To be clear, this CEO-reporting DE Leader would be a colleague sitting between the CIO and Chief Academic Officer (CAO) as a direct report to the CEO.

It is critical that the person running DE at a campus be more transformational in nature than CIO-driven leadership styles seem to indicate they foster in this study. Results in Table 8 regarding the Effectiveness scale showed the CIO reports scored

higher but Extra Effort was significantly lower for CIO reports than both CAO and CEO reports. Further research on these relationships, leadership styles and reporting lines would help answer many questions initially explored in this study.

Learning outcomes and course design standards are important issues for colleges going into the new accreditation process of core indicators of institutional effectiveness, measureable outcomes and proof that learning is occurring. Part of the answer to this challenge explored initially by this study is that DE Leadership can help this evolving process along by bringing technology, education and leadership together for the institution in a transformational way and by using current technology in the assessment, design and offering of learning opportunities.

Recommendations for DE Leaders

Much as college leaders need to get DE Leaders more involved in the organizational structure in impactful ways, DE Leaders also need to hone their craft, add to the field of research and become more involved with the organizational leadership teams and projects in their institutions. The flattening of organizational structures, increased accreditor scrutiny, constrained state and national budgets, evolution of technology and integration of DE programs into the educational functions of higher education institutions have jolted the stature of the DE Leader up to a critical level.

Aspiring DE Leaders should do three things. First, as displayed in Table 8, aspiring DE Leaders need to take online classes. This will provide the foundational experience for understanding the field and scaffold it with educational theory and previous practice. As this study finds, it will also increase the eventual satisfaction of the followers of that leader.

Secondly, aspirant DE Leaders should teach online. As discussed in this study, this will synthesize previous educational experience and subject matter expertise with the mechanics of teaching online and applying teaching strategies directly into an online classroom. Learning how to use the LMS, design a quality class, manage an online discussion, create engaging material and strategies to increase the engagement time with that material for students will serve any eventual DE Leader well when leading others toward the same end. This foundational experience will serve leaders well as they grow into a leadership role in DE and it will model the behavior for superiors, colleagues and direct reports as they progress in their career. As displayed again in Table 8, if a DE leader teaches online, this dissertation shows that passive leadership tendencies will go down relative to peers and the transformational leadership IB scale (modeling idealized behavior) will be higher than peers when a DE Leader teaches online.

Finally, zealous DE Leaders should pursue a terminal degree by studying educational leadership and applying the lessons directly into their vocation in order to bring about real/intended changes and climb to the executive level leadership positions. Table 8 showed the differences in executive level leadership style when compared to mid-level or subordinate leaders. Also, this study showed that the longer leaders were at institutions, the higher they were on the outcome scale for Satisfaction but the lower they were on the IA scale dealing with charismatic leadership. Perhaps the answer to turning this trend around will be studying and applying change theory so that lasting change occurs. The only way to do this is to increase the level a leader attains at their institution. Gaining advanced degrees, adding to the field of research and bringing about real

changes at the institutional level is the only way to continue to grow the importance of the DE Leader position in any organization.

As the field matures with programs being around for longer than ten years and continuing competition for students, it will be critical for transformational DE Leaders to emerge both on the ground and in the field as researchers. Current and future DE Leaders must continue to study what works and what does not work in DE. They must get involved with their contemporaries outside their organization and engage in studies to elevate their profession by adding to the body of research. Perhaps most important is to play a visible leadership role in the organization. Engage with the academic and executive leadership teams inside the college. Bring research into their organizations and apply it to bring about lasting, meaningful change.

Recommendations for Further Research

Distance Education Leaders are in a field that calls for research. However, they are harder to access than other populations due to their varied titles and a lack of cohesive national organizations that allow access to their information for research purposes. An organization interested in moving the field of research in distance education forward would be well-served by building their contact list for research and encouraging or even sponsoring research projects for their community of DE Leaders and researchers. Building upon the profile of DE Leaders developed in this study and tracking the leader characteristics over time would be possible and could inform the field of research if organizations and researchers team up to further this field of study.

Variables not found to be significant during this study should be re-explored including exploring the significant relationships displayed in Table 7 and Table 8 more

closely. Also, comparing leadership styles with institutional effects involving regions of the country and school sizes might be possible with future studies that build upon this one. With a larger overall sample size, multivariate analysis of variance (MANOVA) may be possible to examine multiple variables and relationships. Using qualitative methods may also allow researchers to explore significant relationships from this study or uncover new phenomena related to DE Leaders.

Several small changes could be made to this study that would have made it more efficient. Asking questions about geographic region specifically in the survey and asking questions that allowed participants to tell the size of their institution by Carnegie unit size rather than FTE and enrollment may have made it easier for some to fill out without finding specific institutional data numbers. It appears that the Mind Garden™ website now allows researchers to use a third party survey site to deliver surveys that are purchased through them. That option may improve future response rates when participants are able to easily leave input on more familiar interface. Using a third-party survey site was not an option at the time this survey was designed.

Researchers need to focus upon studies that continue to move the field beyond the technology of DE and the mere comparison or contrast of DE to non-DE teaching and learning effectiveness. As discussed in the literature review and in detail by authors such as Moore and Kearsley (2005) and Simonson, et al. (2009), that research has been done. Pressing issues for Higher Education Leaders and State/National Legislators include development of policy, how and who should lead DE Programs and what qualities, leadership styles or priorities DE Leaders must possess to be successful. Other possible

topics include researching effective leadership development programs both inside and outside of specific institutions and even from fields outside of education.

Christensen, Horn, Caldera and Soares discuss the impact on public universities by for-profit schools, two-year colleges and other organizations in their 2011 article titled *Disrupting College: How Disruptive Innovation Can Deliver Quality and Affordability to Postsecondary Education*. In that article they say that:

What the theory of disruptive innovation suggests is that the business model of many traditional colleges and universities is broken. Their collapse is so fundamental that it cannot be stanchied by improving the financial performance of endowment investments, tapping wealthy alumni donors more effectively, or collecting more tax dollars from the public. There needs to be a new model. The only question is whether traditional universities will undertake this replacement themselves, or whether community colleges, for-profit universities, and other entrant organizations aggressively using online learning will do it instead—and ultimately grow to replace many of today's traditional institutions. (p. 10)

Two-year colleges, for-profit institutions and newly emerging entities continue to challenge the status-quo for traditional institutions. If educators in public sectors are interested in these trends then research that closely relates to the results of this dissertation needs to be done and leaders need to step forward to answer questions such as: Who should lead DE Programming and how should an organization place it in their organizational structure? What type of education and previous experience impacts quality DE programming and does it make more transformational DE Leaders? Does

reporting to the CEO enhance resources available to DE Leaders? What type of funding priorities make the most difference in measurable outcomes of DE Programs? Where should Higher Education Leaders put their money in relation to DE Programs? Can leaders be screened for transformational leadership styles or are there observable/predictable traits that make those leaders evident?

This study looked at self-rater forms only. Conducting in-depth research using the MLQ in a 360 degree review process may ferret out additional information about leadership styles related to traits of DE Leaders, those they lead, follow or work most directly with as peers. Longitudinal studies are rare in DE. Doing research that could tap into the longest running surveys such as the Sloan-C and ITC yearly surveys may allow researchers to delve into deeper understanding of DE Leaders, online DE programs, funding priorities, policy, organizational effectiveness and a variety of underpinning studies that build upon the foundational work of this study.

Next, DE Leaders must be educators. Distance Education is not an information technology function. It is an educational technology leadership issue that often sits at the leading edge for innovation and change at a college or university. DE touches every part of the institution from IT infrastructure and new technology to student services, the registrar, library, bookstore, financial aid office, human resources office and top-level administration. Most importantly, it touches every classroom, every instructor and every student in higher education today. To keep from relegating DE to just another item that competes for attention at the budget table, transformational leaders at both the organizational and DE leadership levels will need to create a compelling vision for how

they can integrate it into organizational structures, support it and cultivate it or risk being left behind when others inside or outside public education, do so.

Endnotes

Successful DE Leaders, in the mold of Kurt Lewin and Edgar Scheins' examples, will have access to resources and the ability to remove restraining forces pushing down on those they lead. These leaders will also have to be entrepreneurial and create/pursue a vision without fear of retribution when small steps do not go perfectly along the way. This can only happen if DE Leaders are more transformational in nature and Colleges, Universities and organizations they work for are more transformational in nature. McFarlane (2011) says it well when he states that distance learning administrators "will understand and apply guidelines of exemplary leadership as they seek to inspire a shared vision within the organization, unit or department. They must model the way by being examples of effective leaders and managers, and challenge others to think and work hard" (p. 9). Looking again at Figure 1 and the DE Leadership pyramid, vision not only comes to mind, it sits on top. This study began with the pyramid of DE Leader competencies with vision on top so it appropriately ends with three visions for the future of DE in higher education based upon the literature, research and findings.

Vision One – Develop Transformational DE Leaders

The first critical vision for the field of Distance Education is the development of transformational leaders. Bass and Riggio (2006) close their book with a call for this sort of leadership study. Visionary DE Leaders need grounding in the field. This study showed how important taking online courses and teaching them are to aspiring transformational DE Leaders. However, Bass and Avolio's Full Range Leadership model

and lifetime of research have provided tools for cultivating transformational leadership. If educational leaders wish to cultivate leadership, the tools are there and they should employ them as lifelong learning opportunities for currently developing or aspiring leaders in the field.

Visionary leaders in distance education continue to be important. In a world that continues to become more complex, more connected and more technical in nature, society should expect that educational institutions both figure out how to lead distance education well and also teach students how to be transformational leaders. Technology and good leadership around that technology is the key to the world moving through the global issues of the future. Researchers and schools need to reach out flexibly and teach students to use technology and lead effectively.

Vision Two – Drive DE Leadership Research

The focus of research related to DE must evolve past questions that have already been asked and delve into new and evolving areas in order to spur and study innovation. Transformational changes in education such as those experienced in technological business include the next transformational innovation in software, social networking or in new mainstream integrated devices that become pervasive in the world. DE is this innovation for the field of education. Perhaps a University-led researcher will find this disruptive technology or perhaps it will be a for-profit school or other entity from outside academia. Christensen, Horn and Johnson (2008) call out this challenge in their book *Disrupting Class* when they say:

To graduate schools of education: Progress beyond doing descriptive research that seeks average tendencies. Study the anomalies and outliers;

that is where the richest insight can be found. Only by doing so can researchers see where we don't yet understand and the causal mechanism, and where we have not categorized the world by circumstance to understand why an action worked one time but not another. Over time, what will emerge are circumstance-based statements that will help us make much better progress in the years ahead as we learn what each individual student needs, not what works on average for students in a school. (p. 229)

In order to get better data on new phenomena, concerted efforts must be made to further the body of research and build upon studies such as this dissertation through research grants and solicitation of national organizations with the reach and reputation to recruit participants and market the efforts of researchers. Organizations such as the Sloan Consortium, WCET, AACC and ITC would be great places to start. Perhaps a jointly supported research effort between research university-based education programs, nationally recognized peer-reviewed DE journals and these organizations could make an impact on research in the DE field and on public postsecondary education.

Vision Three – Teach Teachers How to Use Technology

Not enough is being done in our institutions of higher education to teach teachers to use current technology or to apply teaching methodology into the online milieu. This research showed that DE Leaders must be transformational leaders in their field in order to provide a vision and leadership in a field of constant change and high technology. Research needs to be done to tell whether the same should be expected or required for in-service teachers. A possible hypothesis may postulate that teaching teachers to apply and

integrate technology into their practice would cause knowledge, skills and abilities to trickle down to their students and filter out into their organizations in order to bring about new learning, unfreezing and refreezing at higher levels of understanding. How could it not?

Creation of certificate programs, continuing education and professional development on a large scale has been slow to develop even though these efforts could make this vision a reality for existing teachers. However, teachers' time is at a premium once they become teachers so why are there so few required educational technology classes at Universities for aspiring teachers? Too often they sit at the periphery of the core degree and go on being ignored by traditionalists. Educational leaders who understand and have practiced the integration of technology into teaching and learning need to step up and create better educational opportunities for those teachers-in-training who are stepping into the field behind them in order to ingrain the transformative practices it takes to keep up with technology integrated teaching practices in the coming century.

Appendix A

Rough Draft Outline of Two Survey Instruments

Instrument 1 - Leader/Program Characteristics and Priorities for Investment

Non-numbered questions: Participant First Name, Last Name, e-mail address?

1. Are you Male or Female?
2. List your age (in years)
3. What is your race?
 - a. White/Caucasian
 - b. Hispanic
 - c. African-American
 - d. Asian/Pacific Islander
 - e. Native American
 - f. Other (please specify)
4. Please choose your highest level of education completed
 - a. Doctoral Degree
 - b. Masters Degree
 - c. 4-Year College Degree/Bachelor's Degree
 - d. 2-Year College Degree/Associate's Degree
 - e. Some College
 - f. High School/GED
 - g. Other (please specify)
5. List all degrees you have attained. Include degree title and type
 - a. Doctorate:
 - b. Masters:
 - c. Bachelors:
 - d. Associates:
6. How many years since your most recent degree?
7. What degree was your most recent degree? (Please list title and level of the degree)
8. Are you currently working on a degree? If so, please list title and level of the degree:
9. Have you taken online courses as a student? (If you answer no, skip to question 12)
10. How many online distance education courses have you taken as a student?
 - a. 1
 - b. 2
 - c. 3 to 5
 - d. 6 to 10

- e. 11 to 15
 - f. More than 15
11. What year did you take your first online course?
12. Have you taught online course(s)? (If you answer no, skip to question 16)
13. How many online courses have you taught?
- a. 1
 - b. 2
 - c. 3 to 5
 - d. 6 to 10
 - e. 11 to 15
 - f. More than 15
14. What year did you teach your first totally online course?
15. Are you currently teaching at least one online course?
16. Select the reason that most closely describes the way you began working in distance education:
- a. You were hired due to your experience and/or qualifications in distance education or instructional technology within the field of education
 - b. You were hired due to skills or experiences in positions outside of distance education but in education.
 - c. You were hired due to skills or experiences in positions outside of education.
 - d. You were put into the position by chance.
 - e. Other (please specify)
17. What is the Fall 2009 Semester FTE overall at your institution and in your online distance education courses?
- a. Fall 2009 FTE Overall
 - b. Fall 2009 FTE in Online Distance Education
18. What is the unduplicated headcount of your totally online distance education courses in Fall 2009 semester?
19. What is the duplicated headcount (total enrollments) of the totally online distance education courses at your institution?
20. How many years have you worked at this institution? List years and months.
(Example: 6 years and 3 months)
21. How long have you worked in distance education? List years and months.
(Example: 6 years and 3 months)
22. How long have you worked as the distance education leader at this institution?
List years and months. (Example: 6 years and 3 months)
23. What is your official job title (please include title and level such as director of distance education, dean of continuing education, vice president of extended learning, etc.)?

24. What best describes the reporting line for your position in your current institution?
 - a. CAO/Academic
 - b. CIO/IT
 - c. CFO/Business Office
 - d. PR/Marketing
 - e. Directly to CEO
 - f. Other (please specify)
25. What semester did your institution offer its first online distance education course?
 - a. Semester (Fall, Spring, Summer, Winter)
 - b. Year
26. How many Learning Management Systems does your institution currently support for delivering totally online distance education courses?
27. Please list the Learning Management System(s) your institution use(s)? List the learning management system and how many years your institution has officially used it to offer courses. Example: Moodle (4), Desire2Learn (2) and BlackBoard (13)
28. Rank the following 6 items in order of importance for increased financial investment for your current distance education programming. (1 = most important to 6 = least important).
 - a. Program and course-level evaluation and assessment
 - b. Course design standards focused upon learning outcomes
 - c. Faculty support and professional development
 - d. Student support and student services
 - e. Institutional role in supporting overall distance education program and/or distance education mission and policies
 - f. Secure, centralized learning management system
29. Use the scale below to describe the importance of each area for future financial investment by your institution.
 - a. Scale
 - i. Not at all important
 - ii. Low importance
 - iii. Slightly important
 - iv. Neutral
 - v. Moderately important
 - vi. Very important
 - vii. Extremely important

Instrument 2 - MLQ-5x

1. 45 questions (See Appendix B).

Appendix B: MLQ-5x Self-Rater Form Example

		Unsure	Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
1.	I provide others with assistance in exchange for their efforts.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
2.	I re-examine critical assumptions to question whether they are appropriate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
3.	I fail to interfere until problems become serious.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
4.	I focus attention on irregularities, mistakes, exceptions, and deviations from standards.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
5.	I avoid getting involved when important issues arise.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Please note that example in this appendix are limited to three to five sample items by Mind Garden™ policy and cannot represent a whole scale. All rights reserved © Mind Garden™ <http://www.mindgarden.com/copyright.htm>.

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