

**Student Perceptions of a Doctorate in Educational Leadership Program (2006-2014)**

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Submitted to the Graduate Department and Faculty  
of the School of Education of Baker University  
in partial fulfillment of the requirements for the degree

Doctor of Education  
in  
Educational Leadership

April 24, 2015

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## Abstract

The purpose of this study was to determine doctoral candidates' perceptions of the university's Doctor of Educational Leadership program. Data was collected from the first thirteen cohorts enrolled in the program. The research design methodology used in this study was descriptive and included hypothesis testing, frequency tables, measures of central tendency, and variability. In order to address the research questions, 42 hypotheses were tested utilizing one-sample *t* tests, two-sample *t* tests, one-factor ANOVAs, and a two-factor ANOVA. The population consisted of 296 candidates enrolled in thirteen unique cohorts beginning in February 2006 through December 2014.

Results revealed that on average candidates agreed or strongly agreed the cohort model, program design and schedule, curriculum content, advising, and instruction contributed to their learning during the coursework portion of their program. There were no differences in candidates' perception of the program based on gender, age range, administrator experience, and current position. However, cohort group membership significantly affected the extent that candidates perceived the program design and schedule, curriculum content, advising, and instruction contributed to their learning during the coursework portion of their program.

On average, candidates agreed or strongly agreed they would recommend the program to others. There were no differences in candidates' recommendations of the program based on gender, age range, or administrator experience. The higher ed candidates from cohorts 10-13 rated their recommendation of the program significantly higher than did the PK-12 candidates from cohorts 10-13.

## **Dedication**

I dedicate my dissertation to my family who have supported, encouraged, and endured throughout the dissertation process. I thank my mother, Judith Pepper, and father, Dean Hachenberger, for their continued support and encouragement. I appreciate them nurturing my will to continuously improve. Heartfelt thanks is extended to my stepfathers, Larry Orme and Tom Randel, my grandmother, Erma Pepper, and my first grade teacher, Leota Rollman for always believing in me.

I also dedicate this work to my loving husband, Brad Warner, for his unwavering support, encouragement, and patience. Without his support, I would not have completed this process. I am forever grateful to my wonderful children, Rob and Ashley Warner for their love and understanding. Special thanks also goes to our extended families as well as Sasha and Molly for being by my side every step of the way.

## **Acknowledgements**

I would like to take this opportunity to acknowledge my doctoral committee for helping me prepare and complete my dissertation. I express my gratitude to my dissertation advisor, Dr. Susan Rogers, who has supported and guided me throughout my studies. Her willingness to meet, provide constructive feedback, gather data across all the cohorts, and push me to dig deeper has resulted in the completion of this dissertation. I am grateful to my data advisor, Peg Waterman, for helping me to prepare the data and develop a better understanding of the research process while having a few laughs along the way. Sincere thanks to Dr. Tes Mehring and Dr. Sheri Barrett for serving on my doctoral committee.

I am truly grateful to the executive leadership and administrative computing services team members at Johnson County Community College for their unwavering support and encouragement throughout this entire process. I also extend my sincere appreciation to Dr. Barbara Larson, Dr. Dana Grove, Denise Moore, Dr. Wayne Brown, Dr. Ruth Randall, Leslie Quinn, Keith Krieger, Susan Rider, and Rochelle Boyd for their inspiration to complete this journey.

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## **Chapter One**

### **Introduction**

Doctor of Education in Educational Leadership programs play a vital role in preparing PK-12 and higher education leaders. A national survey conducted by Hammons and Miller “revealed that 92% of nearly 400 community college presidents surveyed had a graduate degree in higher education, and 45% of them specifically graduated from a community college leadership program” (as cited in Li, Friedel, & Rusche, 2011, pp. 3-4). Similarly, in PK-12 education, “88% of all principals have studied largely in departments of educational administration/leadership” (Levine, 2005, p. 71). The University Council for Educational Administration (UCEA) (2012) noted, “There exists a growing base of empirical research that links quality leadership preparation to effective leadership practice as well as research that identifies program features strongly correlated to effective practice” (p. 1). The UCEA article identified the formal and informal use of candidate assessments for continuous quality improvement as one of the key elements of a quality program.

Naysayers have contended that a consumer mentality of convenience dominates educational administration programs, as they tend to serve as “cash cows” (Levine, 2005, p. 24) to their institutions. Levine described the Ed.D. program curriculum problem this way: “Educational administration programs around the country lack rigor and fail to focus on the core business of the schools—learning and teaching” (p. 30). However, when graduate students in these programs were asked the question of whether their curriculum lacked rigor needed, “their responses indicated that students feel the coursework is not lightweight, and the [Ed.D.] program is sufficiently demanding in

terms of coursework and quality” (Mariani, 2007, p. 98). Stallone (2003) found a high rate of attrition in doctoral educational leadership programs in particular due to Ed.D. candidates’ tendency to hold full time leadership positions while pursuing the degree. The completion rates for Ed.D. programs vary by institution and format. Professional doctoral program completion rates range between 40-60%, similar to Ph.D. completion rates in the United States (Bair & Haworth, 1999). “Doctoral degrees in education take longer, and students are often older than in the other degrees of study” (Stallone, 2003, p. 2). In his study of characteristics that facilitate or impede completion of a doctorate, Emerson (1998) reported perseverance, time management, organizational skills, and family support as the “characteristics program completers considered most influential to their success” (p. 54). The numerous barriers to doctoral student success have been the centerpiece of study as colleges and universities work to identify and implement solutions.

## **Background**

A small private university located in the Midwest initiated a new doctoral program in February 2006. Decision makers observed an opportunity in the marketplace to offer a doctoral program that focused on practical application for individuals preparing for positions in the field of educational leadership. Frye (personal communication, August 1, 2013) indicated that at the time of the program’s inception, the founders knew of no other private university in the state that had such a degree or a doctoral degree of any kind. Frye stated,

The primary motivation behind the Doctor of Education (Ed.D.) program was based on demographic data that showed the ages of superintendents and the

likelihood of 75% retiring within 5 years. In addition to demographic data, focus groups consisting of school district superintendents and other district leaders were also used to provide feedback, and validate the demand. The program's target market was licensed building-level professionals, but the program quickly attracted teachers and higher education candidates (personal communication, August 1, 2013).

Frye (personal communication, August 1, 2013) described how the structure of the new Ed.D. program (including an accelerated class schedule and the selection/assignment of cohort learning groups) was based on an existing framework being used in a highly successful school leadership master's program at the university. Research conducted by the university's School of Professional and Graduate Studies, examining over 50 existing doctoral programs, indicated that the selected program structure would appeal to adults engaged in full-time, professional careers. From the earliest discussions, the program focused on educational leadership and heavy consideration was placed on student input and removing barriers to doctoral student success (personal communication, August 1, 2013).

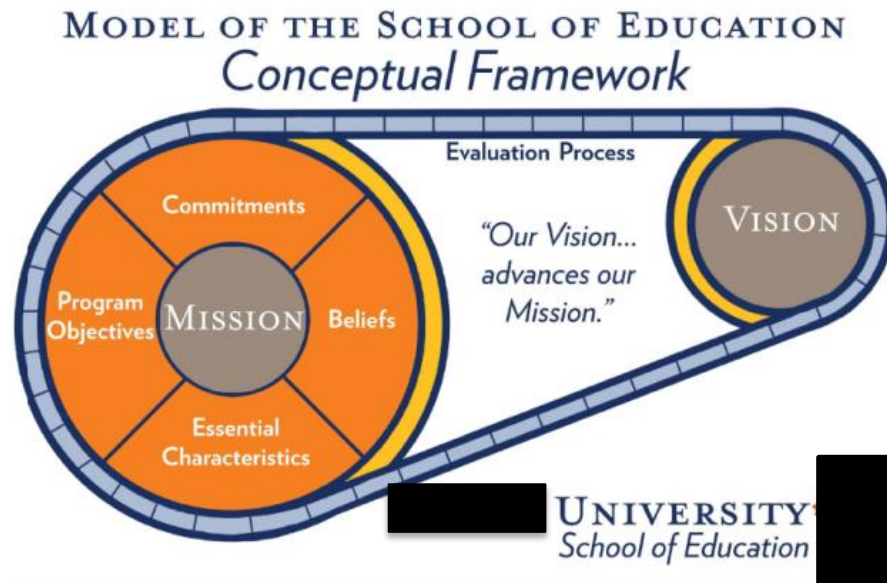
Admission to the Ed.D. program has been competitive and the program has been approved by the Higher Learning Commission (HLC) of North Central Association of Colleges and Schools, Kansas State Department of Education (KSDE), and National Council of Accreditation of Teacher Education (NCATE). Frye (personal communication, August 1, 2013) emphasized the two student-friendly differences that set this Ed.D. program apart from the competition: a) a comprehensive portfolio approach rather than comprehensive examinations (comps), which translates into actively enrolled

students being considered candidates from the start rather than after successfully passing comps; and b) assessments for admission that were designed to measure critical thinking and writing ability as founders did not consider the GRE to be a reliable predictor for success.

Candidates accepted into the program are required to take 59 hours of program study, including two directed field experiences (DFEs), authoring and presenting a comprehensive portfolio, and successfully completing and defending a dissertation (see Appendices A, B, and C). Program courses are seven weeks in duration and are conducted one night a week during the hours of 6:00 p.m. until 10:00 p.m. The two-wheeled model of the School of Education (see Figure 1) represents how the university's Ed.D./District Level Licensure (DLL) mission and vision are related to the evaluation process. As described in the 2013 Doctorate of Education Leadership Policy and Programs Handbook, the conceptual framework serves as a dynamic guide for sustaining educational programs. Represented by the larger revolving wheel composed of four elements, these educational programs are energized by the evaluation process and a smaller wheel containing the vision. The four outer components in the larger wheel, include: a) Beliefs, b) Program Objectives, c) Essential Characteristics, and d) Commitments, and rotate around the program mission. This model illustrates the never-ending relationship that the four outer components of the first wheel have to one another and to the program mission. The evaluation belt, which connects to the second wheel, provides the basis for future growth and continuous quality improvement (CQI). "The model represents the dynamic and systematic process used to develop and sustain



educational programs committed to learning and the development of confident and competent educational leaders” (University School of Education, 2013, p. 5).



*Figure 1.* Model of the School of Education Conceptual Framework. Adapted from *The Policy and Programs Handbook*, by the Graduate School of Education, 2013.

Frye (personal communication, August 1, 2013) provided specific examples of changes made to the program based on the student and faculty feedback CQI process, including:

- a) the Clinical Research Study (CRS) renaming to a dissertation (for dissertation requirements, see Appendix C),
- b) the development of a path for Building Leadership Licensure (see Appendix D) for those candidates who were not licensed prior to beginning the doctoral program,
- c) the formation of a separate higher education track (see Appendix B), and
- d) the addition of an innovative distance learning (IDL) room to include Wichita students in the classroom.

The total number of candidates accepted into the Ed.D. program increased due to the creation of the higher education track (see Table 1). As of December 2014, cohort tracking information reflected 311 candidates enrolled in the first 13 cohorts of the Ed.D.

program. Based on the information stated in the table below, the first four cohorts of the Ed.D. program show above average completion rates, with 100% of students finishing coursework, 92% of students successfully defending their portfolios, and 71% successfully going on to defend their dissertations and graduate as of December 15, 2014. These numbers suggest the principles Frye described earlier having a positive impact. Frye credited much of the program's success to the founders' commitment to removing barriers to student success through what he considers the core elements of the Ed.D. program: a) cohort model, b) seven-week course format, c) two dissertation development courses, d) comprehensive portfolio, e) two field experiences, f) advisory component, and g) dissertation (H. Frye, personal communication, August 1, 2013).

Table 1

*Cohort Tracking Information as of December 15, 2014*

Cohort (start date)	Initial Enrollment	No longer enrolled	Leave Of Absence	Completed Coursework	Defended Portfolio (ABD)	Graduated
1 (2/06)	24	3	0	24	3	18
2 (8/06)	23	2	0	23	0	21
3 (8/07)	22	2 <sup>a</sup>	0	22	10 <sup>a</sup>	11
4 (1/08)	10	0	0	10	4	6
5 (8/08)	26	3 <sup>b</sup>	0	25	8	10
6 (8/09)	20	2	1	18	4	9
7 (8/09)	20	1	0	20	5	11
8 (8/10)	25	2	1	22	10	9
9 (8/11)	33	5	0	28	15	3
10 (8/12)	43	3	2	38	16	1
11 <sup>d</sup> (8/12)	14	0	0	14	1	0
12 <sup>c</sup> (8/13)	33	2	0	0	0	0
13 <sup>cd</sup> (8/13)	18	2	0	0	0	0

*Note:* Data adapted from personal communication with Program Coordinator on December 15, 2014.

<sup>a</sup>One candidate died prior to graduating. <sup>b</sup>One candidate died prior to completing the last course.

<sup>c</sup>Cohorts 12 and 13 have not completed coursework. <sup>d</sup>Cohorts 11 and 13 are enrolled in the higher education track.

The number of interested higher education candidates increased to the point where Cohort 11, who started the program in August 2012, enrolled in a separate higher education track with an enrollment of 14 cohort members. The higher education track was designed for those candidates pursuing administrative roles specific to higher

education. Meanwhile, enrollment in cohort 10 increased to 43 initially enrolled in the program during the same timeframe due to the introduction of the IDL room. The IDL classroom makes it possible for students located in Overland Park, KS and Wichita, KS to collaborate and receive instruction as a single cohort. Starting with cohort 15, an IDL room was added in Hays, KS.

### **Statement of the Problem**

The university, in an attempt to stay current with the ever-changing set of demands placed upon education leaders, is seeking to understand the perceptions of students enrolled in the first thirteen cohorts of the Doctor of Educational Leadership Ed.D. program. Considering the scrutiny facing (Ed.D.) programs, the university needs to demonstrate its ability to develop highly qualified educational leaders. The UCEA (2012) identified the use of candidate assessments for continuous quality improvement (CQI) purposes as one of the key indicators of a quality program. The Ed.D. program has a rich history of using a CQI approach to gather student feedback to enrich the program (H. Frye, personal communication, August 1, 2013). However, as of spring 2014, no study had been undertaken since Sumner (2008) to determine candidates' perceptions of the program. Strategies such as the development of a path for Building Leadership Licensure for those candidates who were not licensed prior to beginning the doctoral program, the addition of a separate higher education track, and implementation of the IDL room have expanded the program as well as the spectrum of available options for candidates. Meanwhile, modifications such as the Clinical Research Study (CRS) transitioning to a dissertation and the revamping of the colloquium courses to dissertation development courses in cohorts 4, 9, and 10 demonstrate maturity of the program through

process improvement. The current research was designed to study doctoral students' perceptions as many changes to the program have been implemented, demonstrating the School of Education Conceptual Framework in motion.

### **Purpose Statement**

The purpose of this study was to identify through a survey the collective perceptions of graduate students of the university doctoral program and better understand the influence of a variety of factors on students' perceptions. The perceptions data were then studied to determine whether demographic factors had any impact on students' perceptions of the cohort model, program design and schedule, curriculum content, advising, or instruction. Demographic factors taken into consideration as part of this study included: gender, age range, cohort group membership, administrator experience, current professional position, and higher education track.

### **Significance of the Study**

Assessment is a critical component of any viable program preparing PK-12 and higher education leaders. Shulman, Golde, Bueschel, & Garabedian (2006) noted that, "of the disciplines that were part of the Carnegie Initiative on the Doctorate, education is the only one in which no disciplinary society has conducted a study of doctoral programs and doctorate recipients in the last decade" (p. 31). This study enlarged the body of research reviewing an education doctoral program and the associated doctorate candidates. The results of the current study may be used to guide the university's efforts in continuous program improvement and to provide a framework for how doctoral programs in education can be designed to respond more effectively to issues related to

student perceptions. This study serves as a formal assessment to provide candidate feedback for program improvement.

### **Delimitations**

“Delimitations are self-imposed boundaries set by the researcher on the purpose and scope of the study” (Lunenburg & Irby, 2008, p. 134). The delimitations used in this study clearly set the boundaries associated with gathering perceptions of the doctoral candidates of the Ed.D. in Educational Leadership program. The delimitations of the study were as follows:

1. The sample for this study was limited to doctoral students enrolled in the first thirteen cohorts (2006 through 2014) of the university’s Ed.D. in Educational Leadership program.
2. Student cohorts 2, 12, and 13 had completed approximately half the coursework when members completed the survey. All other student cohorts completed the survey at the end of coursework.

### **Assumptions**

“Assumptions are postulates, premises, and propositions that are accepted as operational for purposes of the research” (Lunenburg & Irby, 2008, p. 135). The following assumptions were made for the purpose of this study:

1. Participants understood and responded honestly to survey items.
2. Participant recollections were accurate.
3. It is possible to obtain accurate conclusions from the data gathered.

## Research Questions

“A research question is a clear, focused, concise, complex, and arguable question around which you center your research” (The Writing Center at George Mason University, 2012). The following research questions were posed for the purpose of this study:

1. What are the personal and professional characteristics of program candidates in the university’s Ed.D. cohorts 1-13?
2. To what extent do the university’s Ed.D. candidates perceive that the cohort model contributed to their academic and social experience during the coursework portion of their program?
3. To what extent do the university’s Ed.D. candidates perceive that the program design and schedule contributed to their learning during the coursework portion of their program?
4. To what extent do the university’s Ed.D. candidates perceive that the curriculum content contributed to their learning during the coursework portion of their program?
5. To what extent do the university’s Ed.D. candidates perceive that advising contributed to their learning during the coursework portion of their program?
6. To what extent do the university’s Ed.D. candidates perceive that instruction contributed to their learning during the coursework portion of their program?
7. To what extent are there differences in candidates’ perceptions of the elements of the program based on any of the following: gender, age range, cohort group

membership, administrator experience, current professional position, and higher education track?

8. To what extent do the university's Ed.D. candidates agree they would recommend the Ed.D. program to other professionals?
9. To what extent are there differences in the candidates' recommendation of the program based on any of the following: gender, age range, cohort group membership, administrator experience, current professional position, and higher education track?

### **Definition of Terms**

To help the reader better understand the key terms used in the current study, definitions are provided. This section lists the definitions of the terms used in this study:

**Academic advising.** Academic advising refers to “situations in which an institutional representative gives insight or direction to a college student about an academic, social, or personal matter” (Gordon, Habley, & Grites, 2011, p. 3).

**Cohort model.** A cohort program is “a group of people banded together or treated as a group in a degree program or course of study. A simple way to view a cohort program is as a group of classmates” (Colorado Christian University, 2014, p. 1).

**Curriculum content.** Curriculum content refers to “the knowledge, skills, and attitudes imparted by learning areas/subjects, crosscutting approaches, and extra-curricular activities is a main source of systematic and comprehensive learning” (United Nations Educational, Scientific, and Cultural Organization, 2014).

**Ed.D. degree.** The Doctor of Education degree “prepares managerial and administrative leadership in education. Therefore, the focus is on preparing practitioners



who can use the existing knowledge about the field to solve complex educational problems” (Carnegie Initiative on the Doctorate, 2014, p. 5).

**Hybrid course.** A hybrid course “blends online and face-to-face delivery. Substantial proportion of the content is delivered online, typically uses online discussions, and typically has a reduced number of face-to-face meetings” (Allen & Seaman. 2011, p. 7).

**Innovative Distance Learning (IDL).** The IDL is a form of distance education, which provides “two-way, synchronous tele-learning using audio or video-conferencing” (Bates, 2008, p. 1).

**Perception.** According to Cherry (2013), perception is our sensory experience of the world around us and involves both the recognition of environmental stimuli and actions in response to these stimuli. Through the perceptual process, we gain information about properties and elements of the environment that are critical to our survival. Perception creates our experience of the world around us; it allows us to act within our environment. (p. 1)

**Program design and schedule.** A program design is defined as “a fusion of all of its various elements: resources, leaders, methods, schedule, sequence, social reinforcement, individualization, roles and relationships, criteria of evaluation, and clarity of design in terms of the situation in which the education occurs” (Houle, 1996, pp. 61-63).

## **Overview of the Methodology**

The survey research methodology used in this study was descriptive and included frequency tables and measures of central tendency and variability. Sumner (2008) developed the survey in cooperation with the university Ed.D. program faculty members and is based on an instrument used in a 1995 study at the University of Kansas (pp. 44-45). The sample for the current study included candidates who had completed at least twelve months of the university Ed.D. coursework. Nine research questions were formulated to understand candidate perceptions of the coursework portion of their program. In order to address the research questions, one-sample *t* tests, independent samples *t* tests, one-factor ANOVAs and a two-factor ANOVA were conducted.

## **Organization of the Study**

This study consists of five chapters. The first chapter provided an introduction, background information, and a statement of the problem. Chapter one also contained the purpose statement and significance of the study as well as the delimitations, assumptions, research questions associated with the study, definition of terms, and overview of the methodology. Chapter two includes a review of literature starting with the history of educational leadership programs, including the evolution of Ed.D. programs and the changing landscape of education and perceptions of usefulness of Ed.D. vs Ph.D. for practitioners. Featured next are the elements of successful educational leadership preparation programs, student retention and attrition, research related to successful educational leadership preparation programs and research on student perceptions of their doctoral programs. Chapter three describes the methods used in conducting the study and addresses the process of collecting data and the methods used in analyzing collected data.

Sections include research design, population and sample, and the sampling procedures.

The instrumentation section covers measurement, validity and reliability, followed by the data collection procedures. The details of the survey instrument used in data analysis and hypothesis testing are also included as are limitations of the study. Chapter four presents the results of the study. Chapter five provides a study summary, findings related to the research, recommendations for research and implications for action.

## **Chapter Two**

### **Review of the Literature**

Chapter two provides a review of the literature related to educational leadership programs. The first section includes an overview of the history of educational leadership programs, including background information and the evolution of the Ed.D. Next, the elements of successful educational leadership preparation programs are examined. This section focuses on schools of thought and a review of research related to successful educational leadership preparation programs. Finally, the research on student perceptions of their doctoral program is reviewed as is satisfaction with Ed.D. preparation programs.

### **History of Educational Leadership Programs**

The institution of higher education was established during the colonial period for the purpose of training religious leaders and followed the patterns of two influential universities in Britain: Cambridge University founded in 1284 and Oxford University founded in 1167. In America, the opening of Harvard College at Boston, Massachusetts in 1636 marked the first institution of higher learning, followed by the College of William and Mary in 1693, the College of New Jersey in 1742 and Princeton in 1746 (Mungazi, 1999, pp. 110-111). After the American Revolution, the curriculum of modern colleges broadened to include physical and social sciences. Meanwhile, numerous protestant organizations founded colleges to train religious leaders for service in all aspects of their communities. These “denominational schools” were founded based on differences of pedagogy and theology. According to Mungazi (1999), some of the denominations were Catholics, Baptists, Lutherans, Methodists, Congregationalists, Presbyterians, Episcopalians, Quakers, and Mormons. Nondenominational private

colleges began during this time also, which provided an alternative secular education that did not emphasize religion (Mungazi, 1999). Like the earliest higher education institutions, the primary purpose for the denominational colleges was to educate the faithful who were committed to serving the church and community. However, they also sought to prepare students as teachers of secondary students (Mungazi, 1999).

During the colonial period, the qualifications and selection process for teachers varied greatly. Henry Edwin Dwight was an authority on the teaching profession and an advocate for formal teacher training. Normal schools developed as part of this movement and began as private schools in the early 1800s. The term "normal school" was synonymous with teacher training (Mungazi, 1999, p. 119). Teacher training eventually matured into departments of education at colleges and universities (Mungazi, 1999). Many of these departments of education with their teacher colleges absorbed the normal schools (Mungazi, 1999). By 1950, according to Mungazi (1999), "the success of colleges of education at the undergraduate level led to the next higher step, the evolution of the graduate college of education" (p. 120).

Andrew Traper, superintendent of New York in 1890, argued that those in the teaching profession should "excel in their endeavor," which he defined as conducting research, writing dissertations, and becoming members of professional organizations. These practices serve as the foundation of today's leadership in education (Ed.D.) programs (as cited in Mungazi, 1999). During this same time, G. Stanley Hall served as president of Clark University and developed three courses in higher education studies. These courses were the precursor to his 16-course specialization that evolved into the Ph.D. program in education at Clark University (Freeman Jr. & Kochan, 2012).

**The evolution of Ed.D. programs.** Jean-Marie and Normore (2010) credited Murphy with having documented the framework for how educational leadership preparation programs evolved in the United States. Four broad eras have emerged over time: the era of ideology (pre-1900); the prescriptive era (1900-1945); the era of professionalism/behavioral science (1946-1985); and the emerging dialectic era (1985-the present). The era of ideology (pre-1900), precedes any formal educational administration preparation program as very little had been written on the topic. Early schools were simplistic in nature and attracted philosopher educators to the position. Administrators obtained training through performing the job itself (Jean-Marie & Normore, 2010).

The prescriptive era began in 1900 with no institutions offering formal study in the area of school management. “Fueled by the success of the high school, where enrollments nearly quadrupled and teachers almost quintupled during this period, graduate education for school administrators took off” (Powell, 1976, p. 6). Demand and expectations continued to grow as the nation entered the industrial age. Private groups provided financial assistance, which fueled the increase in the number of colleges and universities providing doctoral programs in educational administration (Hoyle & Torres, 2008). “By the end of World War II, 125 institutions were actively engaged in preparing school administrators” (Murphy, 2006, p. 4). This change was brought about by the widespread acceptance of “modern business methods” and “efficiencies” as the solution to eliminating waste and a foundation for school reform (Callahan, 1962). These programs would later be criticized for focusing solely on preparing administrators for the job as it was rather than what could be done differently.

The era of professionalism/behavioral science (1946-1985), along with several educational leadership organizations, emerged as “the prescriptive framework of the first 50 years of preparation programs were coming under increasing scrutiny” (Jean-Marie & Normore, 2010, p. 12). A series of educational leadership organizations were formed in the 1950s and 1960s to advance the quality of preparation programs, including the National Council of Professors of Educational Administration (NCPEA), the Cooperative Project in Educational Administration (CPEA), and the UCEA. “This was a period of rapid growth in educational administration. In 1946, approximately 125 institutions were in the business of preparing school leaders, 40 years later, over 500 were involved” (UCEA, 1987).

By 2004, the overall number of educational leadership programs available was at 371, with 211 of them offering a doctorate. The civil rights movement had dramatically changed hiring practices. In 1983, the school reform movement was introduced with the publication of *A Nation at Risk*. This comprehensive report “put a spotlight on school leadership, highlighted its importance for school success, made student achievement the measure of school performance, and demanded accountability from leaders for results” (Levine, 2005, p. 17). The dialectic, or post-scientific, era (1985-present) has been “fueled by devastating attacks on the state of preparation programs, critical analyses of practicing school administrators, and references to alternative visions of what programs should become” (Murphy, 2006, p. 11). In their 2008 review of highly ranked doctoral programs, Hoyle and Torres identified the development of the American Association of School Administrators *Guidelines for Preparation of School Administrators* as a “major shift from a somewhat idiosyncratic model of leadership preparation to one emphasizing

a set body of skills and competencies that programs could adhere to nationally” (p. 6). Hoyle and Torres (2008) credited benchmark initiatives such as NCATE and Interstate School Leaders Licensure Consortium (ISLLC) for having incorporated these guidelines thus creating a recognizable set of standards that the states could adopt. Despite the quality improvements adoption of standards has provided, “some scholars argued the standards fell short of squarely addressing social challenges related to race, poverty, culture, and other societal phenomena” (Hoyle & Torres, 2008, pp. 6-7). These challenges highlighted the need for change in education and the opportunity for those prepared to embrace the future. To address the need for change in higher education, a number of universities in the early 2000s established higher education doctoral programs focused on preparing leaders for four-year colleges and universities as well as community colleges. New higher education programs focus specifically on developing leaders for minority serving institutions. (Freeman Jr., 2012)

**The changing landscape of education.** As demonstrated throughout history and highlighted above, education has responded positively to calls for change. For example, in the mid-1800s normal schools transitioned into research producing discipline-specific departments. In the mid-1900s, higher education successfully scaled to meet the growing demand for access. “Since the 1980s a similar chorus has been calling for another change, a change in how students learn and especially in what they learn” (Fink, 2013, p. 15). Paul and Elder (2002) pointed out “the problems we now face are more complex, more adaptable, and more sensitive to divergent points of view” (p. 4). He described how the rate of change shortens the lifespan of our decisions, requiring that we continually “relearn” and “regularly reevaluate the way we work and live” (p. 4). Paul and Elder



(2002) contended the increased rate of change must also be factored into the way we educate. UCEA researchers have associated the commitment to data-driven decision making with increased performance and complexity in education, “expanding the necessary skill set for leadership considerably” (Tucker, Young, & Koschoreck, 2012, p. 155).

Meanwhile, the availability of new technologies both inside and outside the classroom has contributed to disruptive change happening once again in education and threatening the age-old education practice of traditional lecture. Fink (2013) pointed to an expanding study of liberal arts education by Blaich and Wise currently involving over seventeen thousand students in 49 institutions. “They are studying seven outcomes: critical thinking, need for cognition, interest in diversity, attitudes toward diversity, moral reasoning, leadership, and well-being” (Fink, 2013, p. 3). He reported that early indications from this study are showing that a “majority of seniors actually graduate with less academic motivation and openness to diversity than when they started” (p. 3). Traditional lecture format is thought to be much to blame for the decline in learner motivation and engagement. In particular, Fink (2013) suggested

a long history of research indicates lecturing has limited effectiveness in helping students 1) retain information after a course is over, 2) develop an ability to transfer knowledge to novel situations, 3) develop skill in thinking or problem-solving, or 4) achieve affective outcomes, such as motivation for additional learning or change in attitude. (pp. 3-4)

Each of these characteristics indicates low levels of student engagement, now considered a critical component of any academic program. Fink (2013) identified the characteristics

of significant learning experiences as “engaging, high energy, able to produce lasting change, and value in life” (p. 8). He said, “In higher education, colleges need to assemble good curricula, good instruction, and good faculty who can interact well with students. If any one of these is not done well, the quality of the educational experience suffers significantly” (Fink, 2013, p. 9).

Technological advancements also promise to be disruptive for leadership education programs. In his article, “Future of the Executive Education: Unbundled MBA”, Byrne (2014) cited Richard Lyons, dean of the University of California, Berkeley’s Haas School of Business, as having “boldly predicted that half of the business schools in the U.S. could be out of business in as little as five years or as many as 10” (p. 1). This anticipated disruption is due to the growing amount of readily available high quality online content and learning opportunities known as massive open online courses (MOOCs). Laurie Pickard, a former teacher, is possibly the first person to pursue a complete master’s degree in business education through a series of MOOCs. She started “No Pay MBA,” a blog that shares her progress. The table below features the transformation under way as education moves from the industrial age to the information age.

Table 2

*Higher Education in the Industrial Age and Information Age*

<b>Industrial Age</b>	<b>Information Age</b>
Teaching franchise	Learning franchise
Provider-driven, a set time for learning	Individualized learning
Information infrastructure as a support tool	Information infrastructure as the fundamental instrument of transformation
Individual technologies	Technology synergies
Time out for education	Just-in-time learning
Continuing education	Perpetual learning
Separate learning systems	Fused learning systems
Traditional courses, degrees, and academic calendars	Unbundled learning experiences based on learner needs
Teaching and certification of mastery are combined	Learning and certification of mastery are related, yet separable, issues
Front-end, lump-sum payment based on length of academic process	Point-of-access payment for exchange of intellectual property based on value added
Collections of fragmented, narrow, and proprietary systems	Seamless, integrated, comprehensive and open systems
Bureaucratic systems	Self-informing, self-correcting systems
Rigid, predesigned processes	Families of transactions customizable to the needs of learners, faculty, and staff
Technology push	Learning vision pull

*Note:* Adapted from *Transforming higher education: A vision for learning in the 21st century*. M. G.

Dolence, D. M. Norris, & M. Arbor (1995). Ann Arbor, MI: Society for College and University Planning

The leadership skills required in the information age include an increased understanding of data and an evolved systems environment designed to track and promote student success. Marzano and Waters (2009) demonstrated the causal relationship between

effective leadership and student achievement. In their book, *District Leadership That Works*, Marzano and Waters (2009) reiterated, “that principal leadership has a correlation of .25 with average student achievement in a school” (p. 2). They identified the specific actions district leaders must take in order to affect positive change: “1) ensuring collaborative goal setting; 2) establishing nonnegotiable goals for achievement and instruction; 3) creating board alignment with goals; 4) monitoring achievement and instruction goals; 5) allocating resources to support the goals for achievement and instruction” (Marzano & Waters, 2009, p. 6).

Similarly, leadership characteristics that can meet these evolving demands are needed in order to ensure high-performing schools. Bottoms (2003) recommended implementing “a system that identifies, recruits and develops people who have proven records of raising student performance and closing achievement gaps” (p. 1). A combination of theory and practical knowledge is needed for these leaders to thrive in today’s changing educational environments, placing increased demands on doctoral programs.

In their book, *Educational Leadership Preparation*, Jean-Marie and Normore (2010) described the evolution of Ed.D. doctoral programs as new program designs and redesigns are developed and implemented. A governance and structure was needed to assess and strengthen programs, and enhance the capacity to address the professional practice of “leaders of learning” (Jean-Marie & Normore, 2010, p. 23). A well-prepared “learning leader” was described as having the ability to effectively communicate the role of education technology, and understand the “distinctive impact of increasing poverty and significant demographic change” (Jean-Marie & Normore, 2010, p. 24). Meanwhile, the

rapidly changing higher education landscape has many asking how best to prepare those leaders in the field and whether the Ed.D. or Ph.D. is the right fit for practitioners.

**Perceptions of the usefulness of the Ed.D. vs Ph.D. for practitioners.** The Ed.D. has struggled from the beginning to gain respect from the academic community due to lack of clarity surrounding its purpose. In particular, the confusion has hovered around the debate over whether the Ed.D. was intended to be a research or practitioner degree. Not perceiving the need for practitioners to earn a doctorate, Levine (2005) advocated doing away with the Ed.D. all together in favor of an MBA equivalent for education. The Masters in Educational Administration (MEA) would be best suited for those aspiring to PK-20 leadership positions (Levine, 2005). He recommended that “subsequent professional development would come in the form of short-term programs geared to an administrator’s career stage, organizational needs, and developments in the field” (p. 66). Levine’s (2005) final recommendation was to do away with the Ed.D. and reserve the Ph.D. for preparing researchers.

The Carnegie Initiative on the Doctorate (CID) was a five year project active from 2001-2005 amongst doctoral-granting departments committed to examining and restructuring their programs. Among the major CID findings was the need for “graduate schools of education to resolve the confusion over the degree titles Ph.D. and Ed.D.” (Shulman, Golde, Bueschel, & Garabedian, 2006). Also a concern is “the assertion that current Ed.D. degrees often fail to provide leaders in K-12 and higher education with practical knowledge and the capacity for expert leadership” (Perry & Imig, 2008, p. 44).

The Carnegie Project on the Education Doctorate (CPED), a consortium made up of twenty-five schools and colleges of education, was formed in 2007 to establish

guidelines, curriculum, and best practices for program development to make the Ed.D. the degree of choice for the advanced preparation of PK-20 education practitioners and professional staff. In her 2007 article, *Envisioning a New Ed.D.*, Redden interviewed a number of scholars directly involved in this three-year project designed to distinguish the Ed.D. from the Ph.D. Redden (2007) reported the focus of the initiative as “re-evaluating capstone experiences, re-imagining the Ed.D. dissertation, crafting coherent and distinct admissions policies for both degree paths and rethinking everything from the basic course requirements to the oral examinations” (p. 2). A professor of practice at the University of Maryland at College Park and CPED coordinator, Imig was also quoted by Redden regarding how Ph.D. candidates would continue to generate their own data and hypothesis testing. Meanwhile, the Ed.D. dissertation experience would be collaborative in nature and involve the analysis of data collected by others. Through the analysis of a central pool of data, individual dissertations covering different aspects of a topic would be brought together in the end to offer a “comprehensive solution to a real-world problem” (Redden, 2007, p. 2). CPED contended that Leadership in Education Programs need to

- a) differentiate between the outcomes and expectations for doctoral candidates – those who choose to become professional practitioners (Ed.D.) and those who want to do research and teach in academic institutions (Ph.D.), and b) develop preparation programs for those who wish to become leading scholarly practitioners with skills that better align with the needs of PreK-20 schools. (as cited in Perry, 2012, pp. 42-43)

CPED members used six principles to guide the design of these new programs rather than a one-size fits all approach.

These principles state that professional preparation for the education doctorate is:

- 1) Is framed around questions of equity, ethics, and social justice to bring about solutions to complex problems of practice;
- 2) Prepares leaders who can construct and apply knowledge to make a positive difference in the lives of individuals, families, organizations, and communities;
- 3) Provides opportunities for candidates to develop and demonstrate collaboration and communication skills to work with diverse communities and to build partnerships;
- 4) Provides field-based opportunities to analyze problems of practice and use multiple frames to develop meaningful solutions;
- 5) Is grounded in and develops a professional knowledgebase that integrates both practical and research knowledge, that links theory with systemic and systematic inquiry; and
- 6) Emphasizes the generation, transformation, and use of professional knowledge and practice. (as cited in Perry, 2012, p. 43)

In his Harvard Educational Review article, *Rebooting the Ed.D.*, Wergin (2011) advocated for a “new” Ed.D., “one that recasts decades-old wisdom in a twenty-first century context” (p. 121). Wergin (2011) cited Kirk, University of Edinburgh, as having summarized the ideal state of the Ph.D. and Ed.D. in this way, “the Ph.D. is to understand

the world. The Ed.D. is to change the world” (p. 119). Wergin outlined the following four principles for a “rebooted” Ed.D.:

- Education at all levels has an important emancipating, rather than indoctrinating, function and thus is a powerful tool for social change.
- Doctoral-level expertise in education is useful for all professionals with significant pedagogical responsibilities, not just those in education settings.
- An Ed.D. is distinguished from a master’s degree by its emphasis on continued scholarship into professional practice, not just proficiency in practice.
- The Ed.D. is not an offshoot or a modification of the Ph.D. but, rather, a course of study having distinct purposes and learning outcomes, culminating in a capstone assessment that reflects practical expertise. (p. 121)

Despite the publishing of Wergin’s *Harvard Education Review* article, Harvard announced the decision to eliminate its Ed.D. and replace it with a Ph.D. program. In an interview following the announcement, Perry, co-director of the CPED, commented that the Carnegie Project “had worked with more than 50 schools of education to create frameworks for Ed.D. programs, or professional practice doctorates” (as cited in Basu, 2012, p. 2). Schools participating in the CPED initiative offering both the Ed.D. and Ph.D. reported improved clarity in the admissions process (Aiken & Gerstl-Pepin, 2013). The creation of the framework was meant to also aid in vindicating the Ph.D., which is not exempt from criticism for its perceived disconnect and failure to contribute toward



solving real-world problems. “For these critics, the type of knowledge generated by a Ph.D. is not consistent with what is needed by people, organizations, industries, and societies to excel in the knowledge economy” (Banerjee & Morley, 2013, p. 175). As a result of the scrutiny Ed.D. preparation programs have incurred throughout history, a growing emphasis has been placed on standards and results as well as a better understanding about what makes an educational leadership program successful.

### **Elements of Successful Educational Leadership Preparation Programs**

The definition of what constitutes a successful educational leadership preparation program has evolved over time. Forsyth and Danisiewicz (1985) pointed to professionalism as the backbone of fields such as education and medicine, based on the work being perceived as “essential, exclusive, and complex” (p. 60). This concept was reinforced by Shön (1987) when he referred to the competence leaders develop working in the field of education as “professional artistry” (p. 22). Meanwhile, the UCEA (1987) published *Leaders for America’s Schools*, criticizing leadership preparation programs for the following set of deficiencies:

- lack of a definition of good educational leadership
- lack of leader recruitment programs in the schools
- lack of collaboration between school districts and universities
- the discouraging lack of minorities and women in the field
- lack of systematic professional development for school administrators
- lack of quality candidates for preparation programs
- lack of preparation programs relevant to the job demands of school administrators
- lack of sequence, modern content, and clinical experience in preparation programs

- lack of licensure systems that promote excellence
- lack of a national sense of cooperation in preparing school leaders (pp. 13-14)

The report also provided a narrative of what a future vision of education would look like without these deficiencies from a variety of perspectives, including public schools and universities, professional organizations, federal and state policy makers, and the private sector. The authors of the report envisioned various contributors collaborating to implement eight major recommendations and bring about positive change.

Recommendations included “redefining educational leadership, public schools becoming full partners in the preparation of school administrators, and at least 300 universities and colleges ceasing to prepare educational administrators” (p. 11).

Levine (2005) offered a nine-point template for judging the quality of educational leadership programs:

- 1) Purpose: The program’s purpose is explicit, focusing on the education of practicing PreK-20 leaders;
- 2) Curricular coherence: The curriculum mirrors program purpose and goals;
- 3) Curricular balance: The curriculum integrates the theory and practice of administration, balancing study in university classrooms and work in colleges and schools with successful practitioners;
- 4) Faculty composition: The faculty includes academics and practitioners, ideally the same individuals, who are experts in school leadership, up to date in their field, intellectually productive, and firmly rooted in both the academy and the schools;
- 5) Admissions: Admissions criteria are designed to recruit candidates with the capacity and motivation to become successful leaders;
- 6) Degrees: Graduation standards are high and the degrees awarded are appropriate to the profession;
- 7)

Research: Research carried out in the program is of high quality, driven by practice, and useful to practitioners and/or policy makers; 8) Finances: Resources are adequate to support the program; 9) Assessment: The program engages in continuing self-assessment and improvement of its performance. A model or exemplary program is one that substantially meets all nine criteria. A strong program is one that substantially satisfies most of the criteria. An inadequate program is defined as one that fails to achieve most of the criteria or has a fatal flaw such as an incompetent faculty. (p. 13)

Unfortunately, Levine's (2005) study did not reveal any "model" programs. The closest entity he felt was deserving of this title was England's National College for School Leadership (NCSL), which excelled in six of the nine areas.

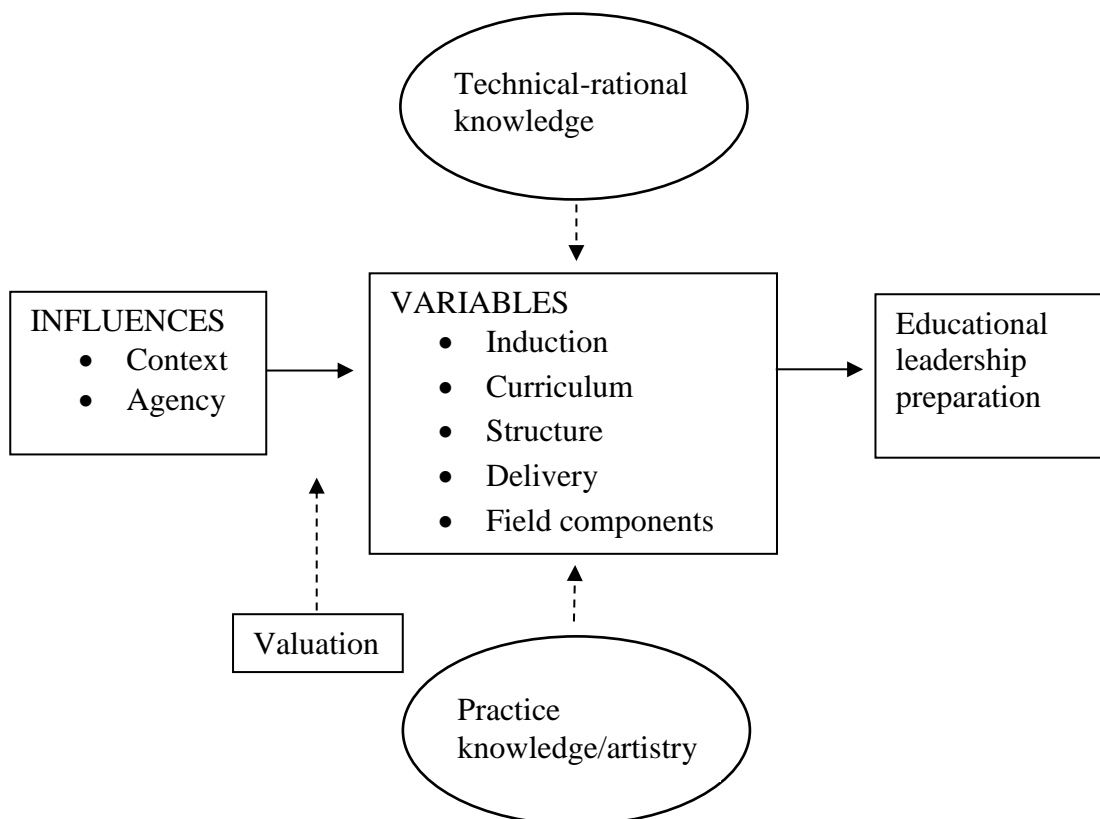
Murphy (2006) reported the educational leadership field historically lacked "conceptual unity" (p. 31). There was much agreement on what needed to change, but no consensus on how to go about solving the shortcomings and no governing body to define standards.

Specifically, critics have uncovered serious problems in (a) the ways students are recruited and selected into training programs; (b) the education they receive once there, including the content emphasized and the pedagogical strategies employed; (c) the methods used to assess academic fitness; and (d) the procedures developed to certify and select principals and superintendents. (p. 34)

These areas of concern have motivated reform efforts as the focused attention of accrediting agencies, research, publications, standards, and professional organizations are starting to take effect. Murphy described "administration as an applied science" and "the

belief that there was a single best approach to educating prospective school leaders” (p. 38) were prevalent throughout the behavioral science era. Murphy explained a separation between administration and instruction had formed, which also created distance between education administration graduates and the instructional program. Hills described the typical education administration graduate as a “mere spectator in relation to the instructional program” (as cited in Murphy, 2006, p. 39). Not only did this create significant knowledge gaps, “missing was consideration of the diversity of perspectives that informed scholarship and practice” (Murphy, 2006, p. 38).

In chapter two of the *Handbook of Research on the Education of School Leaders*, technical knowledge, practice knowledge, altruism, and a code of ethics were featured as necessary ingredients of educational leadership preparation (McCarthy & Forsyth, 2010, p. 86). They illustrated these “primary building blocks for producing competent practitioners” (p. 88) in the following diagram.



*Figure 2 Model of educational leadership preparation formation*

*Note:* Young, M. D., Crow, G. M., Murphy, J., & Ogawa, R. T. (Eds.). (2010). *Handbook of research on the education of school leaders*. New York, NY: Routledge.

This model serves as the foundation for most PK-12 educational administration and leadership programs. The UCEA reinforced many of the previously mentioned elements by emphasizing the importance of teaching and learning experiences within complex educational environments, including internships and student mentoring to promote student engagement. UCEA (2012) identified nine links between quality leadership preparation programs and effective leadership practice:

1. Recruitment and selection address prior leadership experience and initial leadership aspirations;

2. Program is coherently organized to support the development of learning focused leadership;
3. Curriculum is tightly integrated with fieldwork;
4. Learning strategies are active and student centered;
5. Assessments of candidate learning support student growth and program improvement.
6. Supportive organizational structures facilitate retention, engagement and growth;
7. Internships;
8. Appropriately qualified faculty; and
9. Preparation partnerships with districts. (p. 1)

While each of these Ed.D. scholars and UCEA have established formulas for Ed.D. program success, the following table outlines those characteristics their recommendations have in common.

Table 3

*Ed.D. Program Characteristics Critical to Success*

Ed.D. Program Characteristics Critical to Success	Levine	Murphy	UCEA
Admissions: high quality criteria and selection process	X	X	X
Assessment: program continuously works to improve	X	X	X
Curriculum: provides a balance of theory and practice	X	X	X
Faculty Composition: academics and practitioners	X	X	X
Finances: resources to support engagement and growth	X		X
Partnerships: collaboration with colleges and districts		X	X
Purpose: commitment to developing educational leaders	X		X

With increasing financial and accountability pressures, higher education leaders need a broad range of professional experiences as well as forward-looking classroom instruction. Freeman (2012) suggested, “One of the most important ways that higher education preparation programs can enhance their curriculum is including rigorous field-based experiences” (p. 3). Internships, apprenticeships, and mentoring programs are several of the approaches Freeman recommended achieving a balance between theory and practice. Consistency and flexibility are needed in order to leverage existing structures while meeting the evolving need for skill sets such as fundraising and crisis management (Freeman, 2012). He discussed assessment and accountability, “how to demonstrate positive student learning outcomes and fiscal responsibility” (p. 4). These characteristics are not only recommended to produce high quality programs, but are also needed to attract and retain successful candidates.

**Student retention and attrition.** While hundreds of Ed.D. programs have emerged since 1920, a common challenge among programs has high attrition rates. Taylor (1984) found locus of control to be a predictor of success with adult learners. Those with an internal locus of control were “likely to believe in their own potential to change their world” (p. 235) and were better able to overcome obstacles both inside and outside the classroom. Meanwhile, those learners with the general belief that their circumstances were outside their control tended to not complete (Taylor, 1984). The study conducted by Mariano (1993) reinforced that those candidates who viewed the dissertation completion process as being their responsibility and within their control were more likely to finish (Mariano, 1993).

Sigafus (1998) also found locus of control to be a factor, especially during the dissertation phase of doctoral programs. She described the transition from structured coursework to the unstructured act of doing a dissertation a “turning point.” Sigafus (1998) proposed that contact with colleagues diminishes greatly after the coursework phase. Meanwhile, students engage with faculty based on their interactions during the coursework phase. In the end, students may complete coursework and any additional requirements, placing them in an all but dissertation (ABD) phase, but struggle to write the dissertation itself (Sigafus, 1998).

Completion rates for Ed.D. programs range between 40-60% in the United States (Bair & Haworth, 1999). Burnett (1999), pointed to the dissertation model itself as a contributing factor to the low completion rates. The traditional model of dissertation supervision is the Apprentice Master Model (AMM). When using the AMM the doctoral candidate acts as the apprentice, dependent solely on the advisor. The Collaborative Cohort Model (CCM) has been used to aide ABD candidates in the completion of their dissertations and incorporates a cohort faculty member and meetings into the dissertation process. Doctoral candidates are still assigned an individual advisor, but also have a faculty member to organize meetings, develop the agenda, produce newsletters, establish a communication mechanism, and teach editing skills (Burnett, 1999).

Bair and Haworth (2004) also found a relationship between successful degree completion and the “quality of contact between a doctoral student and her or his advisor(s). Simply put, where positive relationships between students and their advisors or faculty members were present, students were significantly more likely to complete their doctoral degrees” (Bair & Haworth, 2004, p. 495). This finding was reinforced in a



study of 172 students participating in seven programs offering doctoral programs at Mississippi State University. Boulder (2010) found that overall doctoral support and services were considered appropriate. However, multiple regression analysis revealed predictor variables of academic status, race, and college had significant effects on doctoral students' perceptions. Doctoral students from the College of Education provided a significantly less positive endorsement of doctoral support and services. This sentiment was also supported by the narrative responses (Boulder, 2010).

In a study conducted for the Rossier Doctoral Support Center (DSC), Jimenez y West, Gokalp, Pena, Fischer, and Gupton (2011) noted,

It becomes apparent that students experience graduate school in two distinct stages: 1) taking coursework, which is structured and familiar, and 2) dissertation writing, which is an unstructured process, that is often unfamiliar to students.

This distinction is important. Historically, studies have attributed attrition and lengthy time-to-degree completion to a deficiency in students. (p. 312)

These studies provided important insights as colleges and universities work to assess and continuously improve doctoral programs.

#### **Research related to successful educational leadership preparation programs.**

As noted previously, the definition of a successful educational leadership preparation program has evolved over time, especially once Ed.D. standards started to emerge. The Council of Chief State School Officers (CCSSO), led by Shipman and Murphy, developed the Interstate School Leaders Licensure Consortium (ISLLC) Standards in 1996 to elevate the quality of education and educational leadership. "Starting in January 2008, National Policy Board for Educational Administration (NPBEA) began updating

the Educational Leadership Constituent Council (ELCC) Program Standards, which are used by the National Council for Accreditation of Teacher Education (NCATE) to review preparation programs in education leadership” (CCSSO, 2008, p. 8). The ISLLC standards were revised in 2008 and again most recently in 2014. Examples of educational leadership preparation programs incorporating a mix of standards and research have started to emerge. Best practices and data help inform and minimize the “variables” of induction such as, curriculum, structure, delivery, and field components.

Higher Education is faced with a growing percentage of minority, veteran, and workforce development students, requiring personalized, remedial, and digital resources (Institute for Higher Education Policy, 2014). Amongst the leadership challenges are providing improved access for first generation, low-income students alongside those with ample resources. Access to Financial Aid is a critical ingredient to many students seeking education.

The Council for Advancement of Standards in Higher Education (CAS) was founded in 1979 “for the ultimate purpose of fostering and enhancing student learning, development, and achievement and in general to promote good citizenship” (CAS, 2011, p. 1). The CAS Board of Directors adopted six “domains” pertaining to student learning and development outcomes. The six broad categories are “knowledge acquisition, construction, integration and application; cognitive complexity; intrapersonal development; interpersonal competence; humanitarianism and civic engagement; and practical competence” (p. 3). The 2008 CAS Standards revision also addressed the growing use of technology in the classroom by creating a new dedicated section as well as standards covering “sustainability practices, emergency and crisis response, and

prevention efforts” (p. 3). The 2011 revisions covered the pervasiveness of distance learning not only in the classroom, but also in all the services needed to support these students properly.

In 2001, sixteen states of the Southern Regional Education Board (SREB) responded to ongoing concerns of quality and labor pool in education by reviewing research and direct experience with schools, universities, and state agencies. Six strategies emerged for use in developing highly qualified principals: “single out high performers; recalibrate preparation programs; emphasize real-world training, link principal licensure to performance, move accomplished teachers into school leadership positions, and use state academies to cultivate leadership teams in middle-tier schools” (Bottoms, O’Neill, Fry, & Hill, 2003, pp. 2-3). Bottoms et al. were careful to make the distinction between *certified* professionals and those *qualified* to lead today’s schools to excellence. “SREB has now established a network of 11 universities that have redesigned education leadership preparation and development programs using these strategies and continue to collect data from these nontraditional administrative preparation programs” (Miller, Devin, & Shoop, 2007, p. 9).

Collaboration between universities and public schools is considered a vital element to addressing the deficiencies identified by Ed.D. program critics. “These collaborative partnerships present an opportunity for the two organizations to reconnect and revitalize leadership preparation and school leadership itself” (Miller et al., 2007, p. 45). Another benefit of this type of collaboration is the opportunity for a greater balance of classroom instruction and field experience being built into the curriculum. “In

partnership academies for leaders, both theory and practice are integral parts of the preparation program” (Miller et al., 2007, p. 54).

Elmore (2008) pointed out the need for education to scale beyond artistry or person-dependent leadership to systems based on performance measures and accountability. His *Principles of Leadership Preparation*, emphasized the importance of “locating the learning as close as possible to the work” (Elmore, 2008, p. 63). The process of leadership preparation was described as “(a) managing the conditions under which people learn new practices; (b) creating organizations that are supportive, coherent environments for successful practice; and (c) developing the leadership skills and practices of others” (p. 64).

In 2005, the California State University system was authorized by Senate Bill 724 to offer the Doctor of Education (Ed.D.) degree (California State University Chancellor’s Office, 2006). The program was created through a collaborative process to “explicitly focus on creating educational leaders who are sensitive to cultural issues and who understand the impediments experienced by diverse learners in urban settings” (Jean-Marie & Normore, 2010, p. 134). This approach modeled Elmore’s process of leadership preparation by managing the conditions of the learning environment, as does the following example.

Glasman et al. suggested we must build learning communities within our programs in order to prepare leaders who can do likewise in the field. An element of being part of a learning community is continually to seek to learn about what is working and what is not and to use that information in a continuous improvement process. In this model, the program becomes a public case study, around which

continuous improvement efforts operate (as cited in Kochan & Locke, 2010, p. 444).

In the book, *The Formation of Scholars: Rethinking Doctoral Education for the Twenty-First Century*, the authors suggested no single answer or remedy exists that can “effect the kinds of changes required to take doctoral education productively into the future” (Walker, Golde, Jones, Bueschel, & Hutchings, 2008, p. 8). Instead, they recommend joining forces and applying “purposeful action on many fronts by a full range of actors” in order to move the enterprise forward (p. 8).

The UCEA, a consortium of 77 institutions with educational leadership programs that have competitive membership standards, reported a “growing base of empirical research that links quality leadership preparation to effective leadership practice” (UCEA, 2013, p. 1). Among the criteria for entry into this network are recruitment and admissions plans and programmatic evaluation. The UCEA article identified the formal and informal use of candidate assessments for continuous quality improvement as one of the key indicators of a quality program. These student perceptions provided insight into whether improvements are relevant to students.

**Research on student perceptions of their doctoral program.** Capturing student perceptions is a relatively new area of study. In 2003, Browne-Ferrigno reported finding only one published study that captured participants’ perspectives on their learning at that time. However, there are now a growing number of authors publishing their results of studies using a variety of methodologies. In a study of 52 current students, 25 graduates, and five program directors from six universities in Texas, the support aspects of the cohort experience was the positive attribute that resulted in the most responses from both

current students and alumni (Miller, 2003, p. 40). The three recommendations for cohort program improvements were: a) improvement to structure/content, b) improvement to selection process, and c) more opportunities for socialization.

In a study of 30 students preparing for principal leadership, top suggestions for revising principal preparation programs included: smaller class sizes, legislation updates, more hands-on work and critical problem-solving with critical analysis, program-long field experience, connect theory and practice, work pro bono at a school, work with a leadership team, and more exposure to conferences (Salinas, 2005). Top suggestions include those where more than 92.8% of survey participants agreed. This list features some of the alignment that exists between the previously mentioned higher education leadership reform efforts, including a much-needed balance between theory and practice, mentoring time with a leadership team, and focused attention on student achievement.

In their 2008 study of the six top-ranked doctoral programs in leadership preparation (Harvard, Stanford, Columbia, Ohio State, Penn State, and Wisconsin), Hoyle and Torres found “full-time students reported issues with regard to access to faculty and were exposed less to practical content, students in cohorts generally praised the balance of theory and practice in course content and advising and support they receive from faculty” (p. 9). They concluded,

It is apparent that graduates and full-time students attending top-ranked doctoral programs in leadership preparation are very satisfied with their experiences. Most important, their satisfaction is found in their successful performance in improving schools for all students. In a time of easy access to doctoral programs on-line or on-campus to acquire a diploma for public school administrative positions, the

students in this study are proud of the rigor and quality of their doctoral programs.  
(Hoyle & Torres, 2008, p. 10)

As co-authors of Chapter 5 of the *Handbook of Research on the Education of School Leaders*, Browne-Ferrigno and Muth (2010) expressed concern over dissertation research not being readily available and recommended that dissertation work be converted into publically available papers and presented at professional meetings. Walker et al. (2008) advised students to take ownership of their learning by advocating they “become involved in, and help lead, a process of self-study and deliberation about the doctoral program you are a part of: how it works, how well, and how it must change” (p. 8)

### **Summary**

Educational leadership programs have evolved over time to meet the changing needs of education, business and industry, and the many stakeholders involved. With the numerous reform efforts and accountability measures starting to take effect, doctoral programs are focused on improving outcomes such as retention and completion rates. Concerted efforts are going toward creating a “pipeline” of qualified candidates through established partnerships between school districts, colleges, and universities. The changing landscape of education and disruptive technologies are also fueling the need for high-performance leaders and educators as well as engaging curriculum delivery. Support appears to be growing for reserving the Ph.D. for those planning to pursue a career in research and the Ed.D. for those practicing in the field. Chapter three contains a description of the methodology that was used in order to gather student perceptions of the university’s Ed.D. in Educational Leadership program.

## **Chapter Three**

### **Methods**

The purpose of this study was to identify the collective perceptions of graduate students of the university doctoral program and better understand the influence of a variety of factors on students' perceptions. Chapter three includes an explanation the research methodology used for this study. Specifically, the chapter provides a description of the research design, population and sample, sampling procedures, instrumentation (including measurement and validity and reliability) data collection procedures, data analysis and hypothesis testing, and limitations.

#### **Research Design**

The design methodology used in this study was descriptive survey research and included the construction of tables and measures of central tendency as well as the conduct of hypothesis tests. Descriptive research involves accurately determining the characteristics of a particular sample through interviews, questionnaires, or tests (Gall, Gall, & Borg, 2003). Creswell (2009) stated, "Survey design provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population" (p. 145). The dependent variables in this study were candidates' perceptions of the various aspects of the Ed.D. program. The independent variables were gender, age range, cohort group membership, administrator experience, current professional position, and higher education track.

#### **Population and Sample**

The population for this study included all candidates enrolled in the university's Ed.D. program. The population consisted of 296 candidates enrolled in thirteen unique



cohorts beginning in February 2006 through December 2014. The sample for this study included candidates who had completed at least twelve months of the university Ed.D. coursework when they were surveyed and chose to complete the survey.

### **Sampling Procedures**

“Purposive sampling involves selecting a sample based on the researcher’s experience or knowledge of the group to be sampled” (Lunenburg & Irby, 2008, p. 134). The sampling method was purposive because the candidates surveyed possessed a particular experience or set of characteristics. The candidates chosen for this study had completed coursework or were enrolled in the university Ed.D. program twelve months or longer.

### **Instrumentation**

The End of Program Survey was adapted from a survey used in a 1995 study at the University of Kansas by Sumner in 2008. The survey (see Appendix F) consists of seven major sections: 1) introduction, 2) background information, 3) collegiality, 4) program design/schedule, 5) curriculum content, 6) advising and instruction, and 7) recommendation and open comments. The introduction provided background information for the survey, states its purpose, and associated participant protections. The background section included six multiple-choice questions pertaining to demographic information. Candidates were asked to select their gender, age range, cohort group, whether they have served as an administrator, current professional position, and up to three of the primary reasons participants chose the university’s Ed.D. program. Each of the following sections uses a five-point Likert scale ranging from *Strongly Disagree* to *Strongly Agree* to gather participant perceptions. The collegiality section is comprised of

ten survey items that gather participant perceptions of the cohort model, while the program design/schedule section used eight items to gather candidate feedback pertaining to the way courses are sequenced and scheduled. In section five, curriculum content contains ten items to understand the perceived value of the curriculum content and the way it is presented. The advising and instruction section is comprised of ten statements designed to measure the perceived value of the major advisor and program instructors. The single item in the final section gauges to what degree the participant would recommend the program and provides a dialog box for comments.

**Measurement.** The researcher posed research question one to understand the personal and professional characteristics of the participants including gender, age range, cohort number, previous work experience, current professional position, higher education track, and primary reason for choosing the program. This question was addressed by the demographic items in the background information section of the survey.

Research question two addressed candidates' perceptions of the cohort model during the coursework portion of the program. This variable was measured in the collegiality section of the survey, which contained ten items. Because of the negative content in items C, F, G, and J, the scale on these items was reversed: 1 = 5, 2 = 4, 3 = 3, 4 = 2, and 5 = 1. After the responses for these four items were reverse scored, the ten items were averaged to create a score that measured perceptions of the cohort model.

Research question three asked to what extent candidates perceived the program design and schedule contributed to their learning. This question was addressed in the program design/schedule portion of the survey, which contained eight items. Because of the negative content in items B, C, and F, the scale on these items was reversed: 1 = 5, 2

= 4, 3 = 3, 4 = 2, and 5 = 1. After the responses for these three items were reverse scored, the eight items were averaged to create a score that measured perceptions of the program design/schedule.

Research question four was used to collect candidates' perceptions of the curriculum's contribution to learning. This variable was measured by the curriculum content section, which contained ten items. Because of the negative content in items B, E, F, and H, the scale on these items was reversed: 1 = 5, 2 = 4, 3 = 3, 4 = 2, and 5 = 1. After the responses for these four items were reverse scored, the ten items were averaged to create a score that measured perceptions of the curriculum's contribution to learning.

Research question five addressed to what extent candidates perceived advising contributed to their learning. This variable was measured in the first six items of the advising and instruction section of the survey. Because of the negative content in items C and D, they were reverse coded: 1 = 5, 2 = 4, 3 = 3, 4 = 2, and 5 = 1. After the responses for these two items were reverse scored, the six items were averaged to create a score that measured perceptions of whether advising contributed to learning.

Research question six addressed to what extent candidates perceived instruction contributed to their learning. The variable in this question covered in the advising and instruction section of the survey. Items G-J in the advising and instruction section pertained to instruction. Because of the negative content in item I, the scale was reversed: 1 = 5, 2 = 4, 3 = 3, 4 = 2, and 5 = 1. To create a score that measured perceptions of instruction's contribution to learning, the four items were averaged.

Research question eight posed the question of whether candidates would recommend the program. The content for this question was covered as the final question in the advising and instruction section of the survey.

Research questions seven and nine involved candidates' responses to perceptions of the components of the program based on personal and professional characteristics. In order to address research questions seven and nine the personal and professional characteristics of the candidates were measured in the first section of the survey. The characteristics are as follows: gender (male/female), age range (25-32, 33-40, 41-49, 50-56, 57+), cohort group membership (1-13), administrator experience (Yes / No), and current professional position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other). Cohort group membership and current professional position were used to measure higher education track. Higher education students were divided into two groups: those who were part of a mixed cohort and those who participated in a separate higher education track cohort. Survey respondents from cohorts 1 through 9 who indicated their current professional position is higher education teacher or higher education administrator were included in the mixed cohort. Survey respondents from cohorts 11 and 13 participated in a separate higher education track cohort.

**Validity and reliability.** Sumner (2008) worked with university faculty to establish the validity of the survey and to determine whether the 1995 Kansas University survey instrument would be appropriate for data collection in his study. Since each of the dimensions of curriculum quality (Collegiality, Program Schedules, Curriculum Content and Advising and Instruction) were measured by more than one survey item, internal

consistency reliability for each of these subscales was computed. Cronbach's alpha, which measures the extent to which items within a set are inter-correlated (Nunnally, 1967) was computed on each set of items that measure the same dimension. High values of Cronbach's alpha suggest that all items are highly correlated, which suggests that they are measuring the same construct, thus providing evidence for internal consistency reliability of a scale. This coefficient varies from 0 to 1. "Reliability coefficients in the University of Kansas study for the overall scale and all sub-scales ranged from 0.68 through 0.85, suggesting that the instrument exhibited adequate internal consistency reliability" (Sumner, 2008, p. 45).

### **Data Collection Procedures**

To initiate the data collection process, the Institutional Review Board (IRB) request was completed which outlined the purpose and approach for the study (see Appendix E). Approval was obtained upon completion of the IRB request process (see Appendix G). Cohorts 1, 3, 4, 5, 6, 7, 8, 9, 10, 11 were surveyed at the final session of coursework. Cohorts 2, 12, and 13 were surveyed at approximately 12-14 months into the program.

The survey was administered by Sumner to the first two cohorts using paper and pencil. The Ed.D. Program Coordinator used SurveyMonkey to gather feedback from cohorts 3 through 13. The data collection procedures for this study consisted of obtaining an archive of survey data stored in an Excel file format from the program coordinator. The data were then imported to IBM® SPSS® Statistics Faculty Pack 22 for Windows for analysis.

## Data Analysis and Hypothesis Testing

The following section includes the nine research questions and the 42 associated hypotheses. Descriptive statistics were calculated for RQ1 to describe the personal and professional characteristics of program candidates in the university's Ed.D. cohorts 1-13. Each of the research hypotheses for questions 2 through 6 was tested using a one-sample *t* test to evaluate candidate perceptions of the coursework portion of their program. Independent samples *t* tests, one-factor ANOVAs, and a two-factor ANOVA were also conducted. Based on the objectives of the study, the following research questions were addressed:

**RQ1.** What are the personal and professional characteristics of program candidates in the university's Ed.D. cohorts 1-13?

Descriptive statistics were calculated to describe the personal and professional characteristics of the sample. Frequency tables were constructed to present the data for gender, age range, cohort group membership, administrator experience, current professional position, and higher education track.

**RQ2.** To what extent do the university's Ed.D. candidates perceive that the cohort model contributed to their academic and social experience during the coursework portion of their program?

**H1.** The university's Ed.D. candidates perceive that the cohort model contributed to their academic and social experience during the coursework portion of their program.

A one-sample *t* test was conducted to test H1. The average of the cohort model responses was tested against a null value of 3. The level of significance was set at .05.

**RQ3.** To what extent do the university's Ed.D. candidates perceive that the program design and schedule contributed to their learning during the coursework portion of their program?

**H2.** The university's Ed.D. candidates perceive that the program design and schedule contributed to their learning during the coursework portion of their program.

A one-sample *t* test was conducted to test H2. An average of the program design and schedule responses was tested against a null value of 3. The level of significance was set at .05.

**RQ4.** To what extent do the university's Ed.D. candidates perceive that the curriculum content contributed to their learning during the coursework portion of their program?

**H3.** The university's Ed.D. candidates perceive that the curriculum content contributed to their learning during the coursework portion of their program.

A one-sample *t* test was conducted to test H3. An average of the curriculum content responses was tested against a null value of 3. The level of significance was set at .05.

**RQ5.** To what extent do the university's Ed.D. candidates perceive that advising contributed to their learning during the coursework portion of their program?

**H4.** The university's Ed.D. candidates perceive that advising contributed to their learning during the coursework portion of their program.

A one-sample *t* test was conducted to test H4. An average of the advising responses was tested against a null value of 3. The level of significance was set at .05.

**RQ6.** To what extent do the university's Ed.D. candidates perceive that instruction contributed to their learning during the coursework portion of their program?

**H5.** The university's Ed.D. candidates perceive that instruction contributed to their learning during the coursework portion of their program.

A one-sample *t* test was conducted to test H5. An average of the instruction responses was tested against a null value of 3. The level of significance was set at .05.

**RQ7.** To what extent are there differences in candidates' perceptions of the elements of the program based on any of the following: gender, age range, cohort group membership, administrator experience, current professional position, and higher education track?

**H6.** There are differences in candidates' perceptions of the cohort model based on gender (Male/Female).

A two-sample *t* test was conducted to test H6. The average response for male candidates was compared with average response for female candidates. The level of significance was set at .05.

**H7.** There are differences in candidates' perceptions of the program design and schedule based on gender (Male/Female).

A two-sample *t* test was conducted to test H7. The average response for male candidates was compared with the average response for female candidates. The level of significance was set at .05.

**H8.** There are differences in candidates' perceptions of the curriculum content based on gender (Male/Female).



A two-sample  $t$  test was conducted to test H8. The average response for male candidates was compared with the average response for female candidates. The level of significance was set at .05.

**H9.** There are differences in candidates' perceptions of advising based on gender (Male/Female).

A two-sample  $t$  test was conducted to test H9. The average response for male candidates was compared with the average response for female candidates. The level of significance was set at .05.

**H10.** There are differences in candidates' perceptions of instruction based on gender (Male/Female).

A two-sample  $t$  test was conducted to test H10. The average response for male candidates was compared with the average response for female candidates. The level of significance was set at .05.

**H11.** There are differences in candidates' perceptions of the cohort model based on age (25-32, 33-40, 41-49, 50-56, 57+).

A one-factor ANOVA test was conducted to test H11. The categorical variable used to group the dependent variable, perceptions of the cohort model, was age (25-32, 33-40, 41-49, 50-56, 57+). The level of significance was set at .05.

**H12.** There are differences in candidates' perceptions of the program design and schedule based on age (25-32, 33-40, 41-49, 50-56, 57+).

A one-factor ANOVA was conducted to test H12. The categorical variable used to group the dependent variable, perceptions of the cohort model, was age (25-32, 33-40, 41-49, 50-56, 57+). The level of significance was set at .05.

**H13.** There are differences in candidates' perceptions of the curriculum content based on age (25-32, 33-40, 41-49, 50-56, 57+).

A one-factor ANOVA was conducted to test H13. The categorical variable used to group the dependent variable, perceptions of the curriculum content, was age (25-32, 33-40, 41-49, 50-56, 57+). The level of significance was set at .05.

**H14.** There are differences in candidates' perceptions of advising based on age (25-32, 33-40, 41-49, 50-56, 57+).

A one-factor ANOVA was conducted to test H14. The categorical variable used to group the dependent variable, perceptions of advising, was age (25-32, 33-40, 41-49, 50-56, 57+). The level of significance was set at .05.

**H15.** There are differences in candidates' perceptions of the program instruction based on age (25-32, 33-40, 41-49, 50-56, 57+).

A one-factor ANOVA was conducted to test H15. The categorical variable used to group the dependent variable, perceptions of program instruction, was age (25-32, 33-40, 41-49, 50-56, 57+). The level of significance was set at .05.

**H16.** There are differences in candidates' perceptions of the cohort model based on cohort number (Cohort 1-Cohort 13).

A one-factor ANOVA was conducted to test H16. The categorical variable used to group the dependent variable, perceptions of the cohort model, was cohort number (Cohort 1 – Cohort 13). The level of significance was set at .05.

**H17.** There are differences in candidates' perceptions of the program design and schedule based on cohort number (Cohort 1-Cohort 13).

A one-factor ANOVA was conducted to test H17. The categorical variable used to group the dependent variable, perceptions of the program design, was cohort number (Cohort 1-Cohort 13). The level of significance was set at .05.

**H18.** There are differences in candidates' perceptions of the curriculum content based on cohort number (Cohort 1-Cohort 13).

A one-factor ANOVA was conducted to test H18. The categorical variable used to group the dependent variable, perceptions of the curriculum content, was cohort number (Cohort 1-Cohort 13). The level of significance was set at .05.

**H19.** There are differences in candidates' perceptions of advising based on cohort number (Cohort 1-Cohort 13).

A one-factor ANOVA was conducted to test H19. The categorical variable used to group the dependent variable, perceptions of advising, was cohort number (Cohort 1-Cohort 13). The level of significance was set at .05.

**H20.** There are differences in candidates' perceptions of instruction based on cohort number (Cohort 1-Cohort 13).

A one-factor ANOVA was conducted to test H20. The categorical variable used to group the dependent variable, perceptions of instruction, was cohort number (Cohort 1-Cohort 13). The level of significance was set at .05.

**H21.** There are differences in candidates' perceptions of the cohort model based on administrator experience (Yes/No).

A two-sample *t* test was conducted to test H21. The average response of candidates with administrator experience was compared to the average response of candidates with no administrator experience. The level of significance was set at .05.

**H22.** There are differences in candidates' perceptions of the program design and schedule based on administrator experience (Yes/No).

A two-sample *t* test was conducted to test H22. The average response of candidates with administrator experience was compared to the average response of candidates with no administrator experience. The level of significance was set at .05.

**H23.** There are differences in candidates' perceptions of the curriculum content based on administrator experience (Yes/No).

A two-sample *t* test was conducted to test H23. The average response of candidates with administrator experience was compared to the average response of candidates with no administrator experience. The level of significance was set at .05.

**H24.** There are differences in candidates' perceptions of advising based on administrator experience (Yes/No).

A two-sample *t* test was conducted to test H24. The average response of candidates with administrator experience was compared to the average response of candidates with no administrator experience. The level of significance was set at .05.

**H25.** There are differences in candidates' perceptions of instruction based on administrator experience (Yes/No).

A two-sample *t* test was conducted to test H25. The average response of candidates with administrator experience was compared to the average response of candidates with no administrator experience. The level of significance was set at .05.

**H26.** There are differences in candidates' perceptions of the cohort model based on current professional position (K-12 Teacher, Higher Education Teacher, K-12

Building Administrator, K-12 District Administrator, Higher Education Administrator, Other).

A one-factor ANOVA was conducted to test H26. The categorical variable used to group the dependent, perceptions of the cohort model, was position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other). The level of significance was set at .05.

**H27.** There are differences in candidates' perceptions of the program design and schedule based on current professional position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other).

A one-factor ANOVA was conducted to test H27. The categorical variable used to group the dependent variable, perceptions of the program design and schedule, was position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other). The level of significance was set at .05.

**H28.** There are differences in candidates' perceptions of the curriculum content based on current professional position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other).

A one-factor ANOVA was conducted to test H28. The categorical variable used to group the dependent variable, perceptions of the curriculum content, was position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District

Administrator, Higher Education Administrator, Other). The level of significance was set at .05.

**H29.** There are differences in candidates' perceptions of advising based on current professional position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other).

A one-factor ANOVA was conducted to test H29. The categorical variable used to group the dependent variable, perceptions of advising, was position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other). The level of significance was set at .05.

**H30.** There are differences in candidates' perceptions of instruction based on current professional position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other).

A one-factor ANOVA was conducted to test H30. The categorical variable used to group the dependent variable, perceptions of instruction, was position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other). The level of significance was set at .05.

**H31.** There are differences in candidates' perceptions of the cohort model based on participation in the higher education track.

A two-factor ANOVA was conducted to test H31. Cohorts 1 through 9 were converted into a new variable category, "1-9" and cohorts 10 through 13 were converted into the variable category "10-13." The category labels K-12 Building Administrator K-12 District Administrator, and K-12 Teacher were combined into a "K-12" variable category. The category labels Higher Education Administrator and Higher Education

Teacher were combined into a single variable category, "Higher Ed." The two categorical variables used to group the dependent variable, perceptions of the cohort model, were Cohort Category and Position Category. The two-factor ANOVA can be used to test three hypotheses including a main effect for Cohort Category, a main effect for Position Category, and a two-way interaction effect (Cohort Category x Position Category). The interaction effect for Cohort Category by Position Category was used to test H31. The level of significance was set at .05.

**H32.** There are differences in candidates' perceptions of the program design and schedule based on participation in the higher education track.

A two-factor ANOVA was conducted to test H32. Cohorts 1 through 9 were converted into a new variable category, "1-9" and cohorts 10 through 13 were converted into the variable category "10-13." The category labels K-12 Building Administrator K-12 District Administrator, and K-12 Teacher were combined into a "K-12" variable category. The category labels Higher Education Administrator and Higher Education Teacher were combined into a single variable category, "Higher Ed." The two categorical variables used to group the dependent variable, perceptions of the cohort model, were Cohort Category and Position Category. The two-factor ANOVA can be used to test three hypotheses including a main effect for Cohort Category, a main effect for Position Category, and a two-way interaction effect (Cohort Category x Position Category). The interaction effect for Cohort Category by Position Category was used to test H32. The level of significance was set at .05.

**H33.** There are differences in candidates' perceptions of the curriculum content based on participation in the higher education track.

A two-factor ANOVA was conducted to test H33. Cohorts 1 through 9 were converted into a new variable category, “1-9” and cohorts 10 through 13 were converted into the variable category “10-13.” The category labels K-12 Building Administrator K-12 District Administrator, and K-12 Teacher were combined into a “K-12” variable category. The category labels Higher Education Administrator and Higher Education Teacher were combined into a single variable category, “Higher Ed.” The two categorical variables used to group the dependent variable, perceptions of the cohort model, were Cohort Category and Position Category. The two-factor ANOVA can be used to test three hypotheses including a main effect for Cohort Category, a main effect for Position Category, and a two-way interaction effect (Cohort Category x Position Category). The interaction effect for Cohort Category by Position Category was used to test H33. The level of significance was set at .05.

*H34.* There are differences in candidates’ perceptions of advising based on participation in the higher education track.

A two-factor ANOVA was conducted to test H34. Cohorts 1 through 9 were converted into a new variable category, “1-9” and cohorts 10 through 13 were converted into the variable category “10-13.” The category labels K-12 Building Administrator K-12 District Administrator, and K-12 Teacher were combined into a “K-12” variable category. The category labels Higher Education Administrator and Higher Education Teacher were combined into a single variable category, “Higher Ed.” The two categorical variables used to group the dependent variable, perceptions of the cohort model, were Cohort Category and Position Category. The two-factor ANOVA can be used to test three hypotheses including a main effect for Cohort Category, a main effect



for Position Category, and a two-way interaction effect (Cohort Category x Position Category). The interaction effect for Cohort Category by Position Category was used to test H34. The level of significance was set at .05.

**H35.** There are differences in candidates' perceptions of instruction based on participation in the higher education track.

A two-factor ANOVA was conducted to test H35. Cohorts 1 through 9 were converted into a new variable category, "1-9" and cohorts 10 through 13 were converted into the variable category "10-13." The category labels K-12 Building Administrator K-12 District Administrator, and K-12 Teacher were combined into a "K-12" variable category. The category labels Higher Education Administrator and Higher Education Teacher were combined into a single variable category, "Higher Ed." The two categorical variables used to group the dependent variable, perceptions of the cohort model, were Cohort Category and Position Category. The two-factor ANOVA can be used to test three hypotheses including a main effect for Cohort Category, a main effect for Position Category, and a two-way interaction effect (Cohort Category x Position Category). The interaction effect for Cohort Category by Position Category was used to test H35. The level of significance was set at .05.

**RQ8.** To what extent do the university's Ed.D. candidates agree they would recommend the Ed.D. program to other professionals?

**H36.** The university's Ed.D. candidates agree they would recommend the Ed.D. program to other professionals (Yes / No).

A one-sample *t* test was conducted to test H36. The average response about recommending the program was tested against a null value of 3. The level of significance was set at .05.

**RQ9.** To what extent are there differences in the candidates' recommendation of the program based on any of the following: gender, age range, cohort group membership, administrator experience, current professional position, and higher education track?

**H37.** There are differences in candidates' recommendations of the program based on gender.

A two-sample *t* test was conducted to test H37. The average response for male candidates was compared with the average response for female candidates. The level of significance was set at .05.

**H38.** There are differences in candidates' recommendations of the program based on age range (25-32, 33-40, 41-49, 50-56, 57+).

A one-factor ANOVA was conducted to test H38. The categorical variable used to group the dependent variable, candidates' recommendations of the program, was age (25-32, 33-40, 41-49, 50-56, 57+). The level of significance was set at .05.

**H39.** There are differences in candidates' recommendations of the program based on cohort group membership (Cohort 1-Cohort 13).

A one-factor ANOVA was conducted to test H39. The categorical variable used to group the dependent variable, candidates' recommendations of the program, was cohort group membership (Cohort 1-Cohort 13). The level of significance was set at .05.

**H40.** There are differences in candidates' recommendations of the program based on administrator experience (Yes/No).

A two-sample *t* test was conducted to test H40. The average response of candidates with administrator experience was compared to the average response of candidates with no administrator experience. The level of significance was set at .05.

**H41.** There are differences in candidates' recommendations of the program based on current professional position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other).

A one-factor ANOVA was conducted to test H41. The categorical variable used to group the dependent variable, candidates' recommendations of the program, was current professional position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other). The level of significance was set at .05.

**H42.** There are differences in candidates' recommendations of the program based on participation in the higher education track.

A two-sample *t* test was conducted to test H42. The average response for PK-12 candidates was compared with the average response for higher education candidates. The level of significance was set at .05.

### **Limitations**

Limitations are those factors that may have an effect on the interpretation of the findings or on the generalizability of the results that are not under the control of the researcher (Lunenburg & Irby, 2008, p. 133). This study has the following limitations:

1. Some participants in this study completed the survey prior to completing the program.

2. Some of the participants may not have had the opportunity to forge a relationship with their dissertation advisors at the time they completed the survey.
3. Not all cohorts were instructed or advised by the same faculty members.

### **Summary**

The research design that was used in this study was descriptive and included frequency tables and measures of central tendency and variability. The population for this study included all candidates enrolled in the university Ed.D. program. The End of Program Survey, developed by Sumner in 2008, was used to measure participant satisfaction with the university's Ed. D. program. Chapter three included an explanation the research design, population and sample, sampling procedures, and instrumentation utilized in the study. Measurement, validity and reliability, data collection procedures, data analysis and hypothesis testing as well as limitations were also described. Chapter four presents the results of the hypothesis testing.

## **Chapter Four**

### **Results**

The main purpose of this study was to identify candidate perceptions of the university doctoral program. Of particular importance was to gain a better understanding the influence of a variety of factors on candidates' perceptions, including their gender, age range, cohort number, whether they have served as an administrator, and current professional position. Chapter four presents the descriptive statistics and the results of the hypothesis testing.

#### **Descriptive Statistics**

Descriptive statistics were used to provide quantitative descriptions of the data in this study. In particular, summaries about RQ1 addressed the personal and professional characteristics of the sample.

**RQ1.** What are the personal and professional characteristics of program candidates in the university's Ed.D. cohorts 1-13?

Descriptive statistics were calculated to describe the personal and professional characteristics of the sample. Frequency tables (see below) were constructed to present the data for gender, age range, cohort group membership, administrator experience, current professional position, and higher education track. A frequency table was created for gender. A total of 105 males and 187 females participated in the survey. The percentage of males and females enrolled in the individual cohorts mirrored the percentages of those completing the survey.

Table 4

*Gender Frequency Table*

Gender	<i>N</i>	%
Male	105	36.0
Female	187	64.0

A frequency table was created for age range. The original age ranges were defined as 25-32, 33-40, 41-49, 50-56, and 57+. In an effort to distribute the candidates evenly, the last two age ranges were collapsed. As a result, 63 candidates participating in the survey reported their age between 25 and 32, 109 between 33-40, 81 between 41 and 49, and 39 at or above the age of 50. The highest percentage of the candidates enrolled in the program and who responded to the survey reported 33-40 as their age range.

Table 5

*Age Range Frequency Table*

Age Range	<i>N</i>	%
25-32	63	21.6
33-40	109	37.3
41-49	81	27.7
50+	39	13.3

A frequency table was created for cohort group membership. Survey participants represent 13 cohorts, ranging in size from 10 to 38. Cohorts 6 and 7 started simultaneously in the Fall of 2009 due to an initial enrollment of 40 candidates. Cohorts

11 and 13, enrolled as a separate higher education concentration cohort with enrollments of 14 and 15.

Table 6

*Cohort Group Membership Frequency Table*

Cohort Group	<i>N</i>	%
1	24	8.2
2	22	7.5
3	22	7.5
4	10	3.4
5	24	8.2
6	19	6.5
7	19	6.5
8	23	7.9
9	29	9.9
10	38	13.0
11	14	4.8
12	33	11.3
13	15	5.1

A frequency table was created for administrator experience. One hundred twenty-two participants reported having no administrator experience. One hundred seventy participants reported having administrator experience.

Table 7

*Administrator Experience Frequency Table*

Administrator Experience	<i>N</i>	%
No	122	41.8
Yes	170	58.2

A frequency table was created for current professional position. Survey professional position categories included two positions specific to higher education, three positions specific to K-12, and Other. The highest number of candidates reported their professional position as K-12 District Administrator or Other.

Table 8

*Current Professional Position Frequency Table*

Current Professional Position	<i>N</i>	%
Higher Education Administrator	12	4.1
Higher Education Teacher	20	6.8
K-12 Building Administrator	13	4.5
K-12 District Administrator	91	31.2
K-12 Teacher	33	11.3
Other (please specify)	82	28.1

A frequency table was created for position and cohort categories. Position categories included higher education and K-12, while cohort categories were split between cohorts 1-9 and 10-13. The highest number of candidates belonged to the K-12 position category and were members of cohorts 1-9. Eighty-two candidates reported their



professional position as Other. Examples of professional positions represented in the Other category include counselor, speech language pathologist, early childhood professional, and retired.

Table 9

*Position and Cohort Category Frequency Table*

Position Category	Cohort Category		Total
	1-9	10-13	
Higher Ed	24	21	45
K-12	143	63	206
Total	167	84	251

Frequency tables provided an overview of the personal and professional characteristics of those completing the survey. Overall, the largest proportion of the sample was female. A large proportion was under the age of 50, and had K-12 administrator experience. Cohorts 1-9 ranged in size between 19 and 24 while cohorts 10-13 included two of the largest cohorts.

### **Hypothesis Testing**

Forty-two hypotheses were tested based on nine research questions. Candidates were asked to what extent they perceived that the cohort model, program design and schedule, curriculum content, advising, and instruction contributed to their learning during the coursework portion of their program. Candidate personal and professional characteristics were analyzed to determine whether they made a statistically significant difference on candidates' perception of the various aspects of the program. Hypotheses were also tested to determine whether personal and professional characteristics had any

influence on whether candidates would recommend the program. To analyze these differences, one-sample  $t$  tests, two-sample  $t$  tests, and one-way analysis of variance (ANOVAs) were conducted to examine differences in program components based on the demographic factors.

**RQ2.** To what extent do the university's Ed.D. candidates perceive that the cohort model contributed to their academic and social experience during the coursework portion of their program?

**H1.** The university's Ed.D. candidates perceive that the cohort model contributed to their academic and social experience during the coursework portion of their program.

A one-sample  $t$  test was conducted to test H1. The average of the cohort model responses was tested against a null value of 3. The level of significance was set at .05. The results of the one-sample  $t$  test indicated a statistically significant difference between the two values,  $t = 33.113$ ,  $df = 289$ ,  $p = .000$ . The sample mean ( $M = 4.09$ ,  $SD = .56$ ) was higher than the null value (3). On average, candidates agreed or strongly agreed that the cohort model contributed to their academic and social experience during the coursework portion of their program.

**RQ3.** To what extent do the university's Ed.D. candidates perceive that the program design and schedule contributed to their learning during the coursework portion of their program?

**H2.** The university's Ed.D. candidates perceive that the program design and schedule contributed to their learning during the coursework portion of their program.

A one-sample  $t$  test was conducted to test H2. An average of the program design and schedule responses was tested against a null value of 3. The level of significance

was set at .05. The results of the one-sample  $t$  test indicated a statistically significant difference between the two values,  $t = 14.379$ ,  $df = 290$ ,  $p = .000$ . The sample mean ( $M = 3.48$ ,  $SD = .57$ ) was higher than the null value (3). On average, candidates were neutral or agreed that the program design and schedule contributed to their learning during the coursework portion of their program.

**RQ4.** To what extent do the university's Ed.D. candidates perceive that the curriculum content contributed to their learning during the coursework portion of their program?

**H3.** The university's Ed.D. candidates perceive that the curriculum content contributed to their learning during the coursework portion of their program.

A one-sample  $t$  test was conducted to test H3. An average of the curriculum content responses was tested against a null value of 3. The level of significance was set at .05. The results of the one-sample  $t$  test indicated a statistically significant difference between the two values,  $t = 20.040$ ,  $df = 289$ ,  $p = .000$ . The sample mean ( $M = 3.63$ ,  $SD = .53$ ) was higher than the null value (3). On average, candidates were neutral or agreed that the curriculum content contributed to their learning during the coursework portion of their program.

**RQ5.** To what extent do the university's Ed.D. candidates perceive that advising contributed to their learning during the coursework portion of their program?

**H4.** The university's Ed.D. candidates perceive that advising contributed to their learning during the coursework portion of their program.

A one-sample  $t$  test was conducted to test H4. An average of the advising responses was tested against a null value of 3. The level of significance was set at .05.

The results of the one-sample  $t$  test indicated a statistically significant difference between the two values,  $t = 11.954$ ,  $df = 289$ ,  $p = .000$ . The sample mean ( $M = 3.56$ ,  $SD = .80$ ) was higher than the null value (3). On average, candidates were neutral or agreed that advising contributed to their learning during the coursework portion of their program.

**RQ6.** To what extent do the university's Ed.D. candidates perceive that instruction contributed to their learning during the coursework portion of their program?

**H5.** The university's Ed.D. candidates perceive that instruction contributed to their learning during the coursework portion of their program.

A one-sample  $t$  test was conducted to test H5. An average of the instruction responses was tested against a null value of 3. The level of significance was set at .05. The results of the one-sample  $t$  test indicated a statistically significant difference between the two values,  $t = 18.323$ ,  $df = 287$ ,  $p = .000$ . The sample mean ( $M = 3.70$ ,  $SD = .65$ ) was higher than the null value (3). On average, candidates were neutral or agreed that instruction contributed to their learning during the coursework portion of their program.

**RQ7.** To what extent are there differences in candidates' perceptions of the elements of the program based on any of the following: gender, age range, cohort group membership, administrator experience, current professional position, and higher education track?

**H6.** There are differences in candidates' perceptions of the cohort model based on gender (Male/Female).

A two-sample  $t$  test was conducted to test H6. The average response for male candidates was compared the average response for female candidates. The level of significance was set at .05. The results of the two-sample  $t$  test indicated no statistically

significant difference between the two values,  $t = -.447$ ,  $df = 288$ ,  $p = .656$ . The sample mean for males ( $M = 4.07$ ,  $SD = 0.58$ ) was not statistically different from the sample mean for females ( $M = 4.10$ ,  $SD = 0.55$ ). On average, both male and female candidates agreed or strongly agreed the cohort model contributed to their learning during the coursework portion of their program.

**H7.** There are differences in candidates' perceptions of the program design and schedule based on gender (Male/Female).

A two-sample  $t$  test was conducted to test H7. The average response for male candidates was compared with the average response for female candidates. The level of significance was set at .05. The results of the two-sample  $t$  test indicated no statistically significant difference between the two values,  $t = -.568$ ,  $df = 289$ ,  $p = .570$ . The sample mean for males ( $M = 3.45$ ,  $SD = 0.59$ ) was not statistically different from the sample mean for females ( $M = 3.49$ ,  $SD = 0.56$ ). On average both male and female candidates were neutral or agreed that the program design and schedule contributed to their learning during the coursework portion of their program.

**H8.** There are differences in candidates' perceptions of the curriculum content based on gender (Male/Female).

A two-sample  $t$  test was conducted to test H8. The average response for male candidates was compared with the average response for female candidates. The level of significance was set at .05. The results of the two-sample  $t$  test indicated no statistically significant difference between the two values,  $t = -1.219$ ,  $df = 287$ ,  $p = .224$ . The sample mean for males ( $M = 3.58$ ,  $SD = 0.58$ ) was not statistically different from the sample mean for females ( $M = 3.66$ ,  $SD = 0.51$ ). On average, both male and female candidates were

neutral or agreed that the curriculum content contributed to their learning during the coursework portion of their program.

**H9.** There are differences in candidates' perceptions of advising based on gender (Male/Female).

A two-sample *t* test was conducted to test H9. The average response for male candidates was compared with the average response for female candidates. The level of significance was set at .05. The results of the two-sample *t* test indicated no statistically significant difference between the two values,  $t = -1.161$ ,  $df = 287$ ,  $p = .247$ . The sample mean for males ( $M = 3.49$ ,  $SD = 0.79$ ) was not statistically different from the sample mean for females ( $M = 3.60$ ,  $SD = 0.80$ ). On average, both male and female candidates were neutral or agreed that advising contributed to their learning during the coursework portion of their program.

**H10.** There are differences in candidates' perceptions of instruction based on gender (Male/Female).

A two-sample *t* test was conducted to test H10. The average response for male candidates was compared with the average response for female candidates. The level of significance was set at .05. The results of the two-sample *t* test indicated no statistically significant difference between the two values,  $t = -.441$ ,  $df = 286$ ,  $p = .659$ . The sample mean for males ( $M = 3.67$ ,  $SD = 0.74$ ) was not statistically different from the sample mean for females ( $M = 3.71$ ,  $SD = 0.59$ ). On average, both male and female candidates were neutral or agreed that instruction contributed to their learning during the coursework portion of their program.

**H11.** There are differences in candidates' perceptions of the cohort model based on age range (25-32, 33-40, 41-49, 50+).

A one-factor ANOVA was conducted to test H11. The categorical variable used to group the dependent variable, perceptions of the cohort model, was age range (25-32, 33-40, 41-49, 50+). The level of significance was set at .05. The results of the analysis indicated there was not a statistically significant difference between at least two of the means,  $F = .525$ ,  $df = 3, 286$ ,  $p = .665$ . On average, candidates in all age ranges agreed or strongly agreed that the cohort model contributed to their learning during the coursework portion of their program. See Table 10 for the means and standard deviations for this analysis. A follow up post hoc was not warranted.

Table 10

*Descriptive Statistics for Perceptions of the Cohort Model Disaggregated by Age Range*

Age Range	<i>M</i>	<i>SD</i>	<i>N</i>
25-32	4.06	.55	61
33-40	4.14	.56	109
41-49	4.10	.55	81
50+	4.02	.64	39

**H12.** There are differences in candidates' perceptions of the program design and schedule based on age range (25-32, 33-40, 41-49, 50+).

A one-factor ANOVA was conducted to test H12. The categorical variable used to group the dependent variable, perceptions of the program design and schedule, was age range (25-32, 33-40, 41-49, 50+). The level of significance was set at .05. The results of the analysis indicated there was not a statistically significant difference between at least

two of the means,  $F = .010$ ,  $df = 3, 287$ ,  $p = .999$ . On average, candidates in all age ranges were neutral or agreed that the program design and schedule contributed to their learning during the coursework portion of their program. See Table 11 for the means and standard deviations for this analysis. A follow up post hoc was not warranted.

Table 11

*Descriptive Statistics for Perceptions of the Program Design and Schedule  
Disaggregated by Age Range*

Age Range	<i>M</i>	<i>SD</i>	<i>N</i>
25-32	3.48	.60	62
33-40	3.48	.55	109
41-49	3.48	.56	81
50+	3.46	.61	39

**H13.** There are differences in candidates' perceptions of the curriculum content based on age range (25-32, 33-40, 41-49, 50+).

A one factor ANOVA was conducted to test H13. The categorical variable used to group the dependent variable, perceptions of the curriculum content, was age range (25-32, 33-40, 41-49, 50+). The level of significance was set at .05. The results of the analysis indicated there was not a statistically significant difference between at least two of the means,  $F = 1.275$ ,  $df = 3, 285$ ,  $p = .283$ . On average, candidates in all age ranges were neutral or agreed that the curriculum content contributed to their learning during the coursework portion of their program. See Table 12 for the means and standard deviations for this analysis. A follow up post hoc was not warranted.



Table 12

*Descriptive Statistics for Perceptions of the Curriculum Content Disaggregated by Age**Range*

Age Range	<i>M</i>	<i>SD</i>	<i>N</i>
25-32	3.69	.47	61
33-40	3.59	.55	109
41-49	3.59	.62	80
50+	3.74	.38	39

**H14.** There are differences in candidates' perceptions of advising based on age range (25-32, 33-40, 41-49, 50+).

A one-factor ANOVA was conducted to test H14. The categorical variable used to group the dependent variable, perceptions of advising, was age range (25-32, 33-40, 41-49, 50+). The level of significance was set at .05. The results of the analysis indicated there was not a statistically significant difference between at least two of the means,  $F = 1.822$ ,  $df = 3, 285$ ,  $p = .143$ . On average, candidates in all age ranges were neutral or agreed that advising contributed to their learning during the coursework portion of their program. See Table 13 for the means and standard deviations for this analysis. A follow up post hoc was not warranted.

Table 13

*Descriptive Statistics for Perceptions of Advising Disaggregated by Age Range*

Age Range	<i>M</i>	<i>SD</i>	<i>N</i>
25-32	3.45	.75	62
33-40	3.50	.84	109
41-49	3.61	.78	80
50+	3.80	.73	38

**H15.** There are differences in candidates' perceptions of the program instruction based on age range (25-32, 33-40, 41-49, 50+).

A one-factor ANOVA was conducted to test H15. The categorical variable used to group the dependent variable, perceptions of instruction, was age range (25-32, 33-40, 41-49, 50+). The level of significance was set at .05. The results of the analysis indicated there was not a statistically significant difference between at least two of the means,  $F = .258$ ,  $df = 3, 284$ ,  $p = .856$ . On average, candidates in all age ranges were neutral or agreed that the program instruction contributed to their learning during the coursework portion of their program. See Table 14 for the means and standard deviations for this analysis. A follow up post hoc was not warranted.

Table 14

*Descriptive Statistics for Perceptions of Instruction Disaggregated by Age Range*

Age Range	<i>M</i>	<i>SD</i>	<i>N</i>
25-32	3.76	.58	62
33-40	3.67	.62	109
41-49	3.70	.68	79
50+	3.68	.75	38

**H16.** There are differences in candidates' perceptions of the cohort model based on cohort number (Cohort 1 – Cohort 13).

A one-factor ANOVA was conducted to test H16. The categorical variable used to group the dependent variable, perceptions of the cohort model, was cohort number (Cohort 1 – Cohort 13). The level of significance was set at .05. The results of the analysis indicated there was a statistically significant difference between at least two of the means,  $F = 2.341$ ,  $df = 12, 277$ ,  $p = .007$ . See Table 15 for the means and standard deviations for this analysis. A follow up post hoc, a Tukey's Honestly Significant Difference (HSD), was conducted to determine which means were different.

The results of the post hoc analysis indicated that the average rating of the perceived extent to which the cohort model contributed to their social and academic experience during the coursework portion of their program for cohort 6 ( $M = 3.66$ ,  $SD = .59$ ) was significantly lower than the average rating for cohort 8 ( $M = 4.33$ ,  $SD = .31$ ) and the average rating for cohort 11 ( $M = 4.44$ ,  $SD = .15$ ). On average, candidates from cohort 6 were significantly less positive that the cohort model contributed to their social

and academic learning during the coursework portion of their program than cohort 8 and cohort 11.

Table 15

*Descriptive Statistics for Perceptions of the Cohort Model Disaggregated by Cohort Number*

Cohort Number	<i>M</i>	<i>SD</i>	<i>N</i>
1	4.22	.40	23
2	4.13	.55	22
3	4.05	.72	22
4	3.99	.55	10
5	4.12	.56	24
6	3.66	.59	19
7	4.15	.64	19
8	4.33	.31	23
9	4.04	.46	29
10	4.04	.63	38
11	4.44	.37	14
12	3.96	.59	32
13	4.27	.49	15

**H17.** There are differences in candidates' perceptions of the program design and schedule based on cohort number (Cohort 1 – Cohort 13).

A one-factor ANOVA was conducted to test H17. The categorical variable used to group the dependent variable, perceptions of the program design and schedule, was

cohort number (Cohort 1 – Cohort 13). The level of significance was set at .05. The results of the analysis indicated there was a statistically significant difference between at least two of the means,  $F = 5.893$ ,  $df = 12, 278$ ,  $p = .000$ . See Table 16 for the means and standard deviations for this analysis. A follow up post hoc, a Tukey's HSD, was conducted to determine which means were different.

The results of the post hoc analysis indicated that the average rating of the perceived extent to which the program design and schedule contributed to their learning during the coursework portion of their program for cohort 12 ( $M = 2.89$ ,  $SD = .52$ ) was significantly lower than cohort 1 ( $M = 4.49$ ,  $SD = .64$ ), cohort 2 ( $M = 3.69$ ,  $SD = .42$ ), cohort 4 ( $M = 3.66$ ,  $SD = .69$ ), cohort 5 ( $M = 3.53$ ,  $SD = .27$ ), cohort 6 ( $M = 3.86$ ,  $SD = .40$ ), cohort 7 ( $M = 3.67$ ,  $SD = .59$ ), cohort 8 ( $M = 3.70$ ,  $SD = .49$ ), cohort 9 ( $M = 3.47$ ,  $SD = .47$ ), cohort 10 ( $M = 3.37$ ,  $SD = .63$ ), cohort 11 ( $M = 3.48$ ,  $SD = .53$ ), and cohort 13 ( $M = 3.70$ ,  $SD = .48$ ). On average, candidates from cohort 12 were significantly less positive that program design and schedule contributed to their learning during the coursework portion of their program than all other cohorts except cohort 3.

Table 16

*Descriptive Statistics for Perceptions of the Program Design and Schedule**Disaggregated by Cohort Number*

Cohort Number	<i>M</i>	<i>SD</i>	<i>N</i>
1	3.49	.64	24
2	3.69	.42	22
3	3.30	.45	22
4	3.66	.69	10
5	3.53	.27	24
6	3.86	.40	19
7	3.67	.59	19
8	3.70	.49	23
9	3.47	.47	29
10	3.37	.63	38
11	3.48	.53	14
12	2.89	.52	32
13	3.70	.48	15

**H18.** There are differences in candidates' perceptions of the curriculum content based on cohort number (Cohort 1 – Cohort 13).

A one-factor ANOVA was conducted to test H18. The categorical variable used to group the dependent variable, perceptions of the curriculum content, was cohort number (Cohort 1 – Cohort 13). The level of significance was set at .05. The results of the analysis indicated there was a statistically significant difference between at least two of the means,  $F = 12.26$ ,  $df = 12, 276$ ,  $p = .000$ . See Table 17 for the means and standard

deviations for this analysis. A follow up post hoc, a Tukey's HSD, was conducted to determine which means were different.

Table 17

*Descriptive Statistics for Perceptions of the Curriculum Content Disaggregated by Cohort Number*

Cohort Number	<i>M</i>	<i>SD</i>	<i>N</i>
1	3.89	.50	24
2	3.90	.49	22
3	3.71	.45	22
4	3.85	.53	10
5	3.92	.26	24
6	3.10	.39	19
7	2.95	.34	19
8	3.70	.51	23
9	3.80	.32	28
10	3.53	.61	37
11	3.91	.28	14
12	3.35	.40	32
13	3.92	.40	15

The results of the post hoc analysis indicated that the average rating of the perceived extent to which the curriculum content contributed to their learning during the coursework portion of their program for cohort 6 ( $M = 3.10$ ,  $SD = .39$ ) was statistically lower than the average rating for all of the other cohorts except cohorts 7 and 12. See

Table 18 for the means for this analysis. On average, candidates from cohort 6 were significantly less positive that the curriculum content contributed to their learning during the coursework portion of their program than all other cohorts except cohorts 7 and 12.

Table 18

*Means that Differ Significantly from Cohort 6's Mean ( $M = 3.10$ ) for Perceptions of Curriculum Content*

Cohort Number	$M$	$p$
1	3.90	.000
2	3.90	.000
3	3.71	.000
4	3.85	.000
5	3.92	.000
8	3.70	.000
9	3.80	.000
10	3.53	.002
11	3.91	.000
13	3.93	.000

The results of the post hoc analysis indicated that the average rating of the perceived extent to which the curriculum content contributed to their learning during the coursework portion of their program for cohort 7 ( $M = 2.95$ ,  $SD = .34$ ) was statistically lower than the average rating for all of the other cohorts except cohorts 6 and 12. See Table 19 for the means for this analysis. On average, candidates from cohort 7 were



significantly less positive that the curriculum content contributed to their learning during the coursework portion of their program than all other cohorts except cohorts 6 and 12.

Table 19

*Means that Differ Significantly from Cohort 7's Mean ( $M = 2.95$ ) for Perceptions of Curriculum Content*

Cohort Number	$M$	$p$
1	3.89	.000
2	3.90	.000
3	3.71	.000
4	3.85	.000
5	3.92	.000
8	3.70	.000
9	3.80	.000
10	3.53	.000
11	3.91	.000
13	3.93	.000

In addition to these differences, Cohort 12's rating of the perceived extent to which the curriculum content contributed to their learning during the coursework portion of their program ( $M = 3.35$ ,  $SD = .40$ ) was significantly lower than cohorts 1's rating ( $M = 3.89$ ,  $SD = .50$ ), cohort 2's rating ( $M = 3.90$ ,  $SD = .49$ ), cohort 5's rating ( $M = 3.92$ ,  $SD = .26$ ), cohort 9's rating ( $M = 3.80$ ,  $SD = .32$ ), cohort 11's rating ( $M = 3.91$ ,  $SD = .28$ ), cohort 13's rating ( $M = 3.93$ ,  $SD = .40$ ). On average, candidates from cohort 12 were

significantly less positive that the curriculum content contributed to their learning during the coursework portion of their program than cohorts 1, 2, 5, 9, 11, and 13.

**H19.** There are differences in candidates' perceptions of advising based on cohort number (Cohort 1 – Cohort 13).

A one-factor ANOVA was conducted to test H19. The categorical variable used to group the dependent variable, perceptions of advising, was cohort number (Cohort 1 – Cohort 13). The level of significance was set at .05. The results of the analysis indicated there was a statistically significant difference between at least two of the means,  $F = 2.189$ ,  $df = 12, 276$ ,  $p = .012$ . See Table 20 for the means and standard deviations for this analysis. A follow up post hoc, a Tukey's HSD, was conducted to determine which means were different.

The results of the post hoc analysis indicated that cohort 2's rating of the perceived extent to which advising contributed to their learning during the coursework portion of their program ( $M = 3.05$ ,  $SD = .97$ ) was significantly lower than cohort 13's rating ( $M = 3.96$ ,  $SD = .72$ ). On average, candidates were neutral or agreed that advising contributed to their learning during the coursework portion of their program.

Table 20

*Descriptive Statistics for Perceptions of Advising Disaggregated by Cohort Number*

Cohort Number	<i>M</i>	<i>SD</i>	<i>N</i>
1	3.17	1.00	23
2	3.05	.97	22
3	3.39	.85	22
4	3.64	.91	10
5	3.63	.50	24
6	3.61	.29	19
7	3.47	.48	18
8	3.55	.81	23
9	3.68	.74	29
10	3.68	.91	38
11	3.93	.62	14
12	3.65	.77	32
13	3.96	.72	15

**H20.** There are differences in candidates' perceptions of instruction based on cohort number (Cohort 1 – Cohort 13).

A one-factor ANOVA was conducted to test H20. The categorical variable used to group the dependent variable, perceptions of instruction, was cohort number (Cohort 1 – Cohort 13). The level of significance was set at .05. The results of the analysis indicated there was a statistically significant difference between at least two of the means,  $F = 2.976$ ,  $df = 12, 275$ ,  $p = .001$ . See Table 21 for the means and standard deviations for

this analysis. A follow up post hoc, a Tukey's HSD, was conducted to determine which means were different.

The results of the post hoc analysis indicated that cohort 3's rating of the perceived extent to which instruction contributed to their learning during the coursework portion of their program ( $M = 3.25$ ,  $SD = .86$ ) was significantly lower than cohort 2's rating ( $M = 3.90$ ,  $SD = .60$ ), cohort 5's rating ( $M = 3.90$ ,  $SD = .42$ ), cohort 8's rating ( $M = 3.97$ ,  $SD = .53$ ), cohort 9's rating ( $M = 3.86$ ,  $SD = .37$ ). On average, candidates from cohort 3 were significantly less positive that instruction contributed to their learning during the coursework portion of their program than cohorts 2, 5, 8 and 9.

Table 21

*Descriptive Statistics for Perceptions of Instruction Disaggregated by Cohort Number*

Cohort Number	<i>M</i>	<i>SD</i>	<i>N</i>
1	3.67	.76	23
2	3.90	.60	21
3	3.25	.86	22
4	3.76	.78	10
5	3.90	.42	24
6	3.38	.56	19
7	3.37	.38	18
8	3.97	.53	23
9	3.86	.37	29
10	3.71	.73	38
11	3.94	.47	14
12	3.59	.63	32
13	3.77	.76	15

**H21.** There are differences in candidates' perceptions of the cohort model based on administrator experience (Yes / No).

A two-sample *t* test was conducted to test H21. The average response of candidates with administrator experience was compared to the average response of candidates with no administrator experience. The level of significance was set at .05. The results of the two-sample *t* test indicated no statistically significant difference between the two values,  $t = 1.152$ ,  $df = 288$ ,  $p = .250$ . The sample mean for those with

administrator experience ( $M = 4.13$ ,  $SD = 0.53$ ) was not statistically different from the sample mean for those without administrator experience ( $M = 4.05$ ,  $SD = 0.61$ ). On average, candidates with and without administrator experience agreed or strongly agreed that the cohort model contributed to their learning during the coursework portion of their program.

**H22.** There are differences in candidates' perceptions of the program design and schedule based on administrator experience (Yes / No).

A two-sample  $t$  test was conducted to test H22. The average response of candidates with administrator experience was compared to the average response of candidates with no administrator experience. The level of significance was set at .05. The results of the two-sample  $t$  test indicated no statistically significant difference between the two values,  $t = .890$ ,  $df = 289$ ,  $p = .374$ . The sample mean for those with administrator experience ( $M = 3.50$ ,  $SD = 0.56$ ) was not statistically different from the sample mean for those without administrator experience ( $M = 3.44$ ,  $SD = 0.57$ ). On average, candidates with and without administrator experience were neutral or agreed that the program design and schedule contributed to their learning during the coursework portion of their program.

**H23.** There are differences in candidates' perceptions of the curriculum content based on administrator experience (Yes/No).

A two-sample  $t$  test was conducted to test H23. The average response of candidates with administrator experience was compared to the average response of candidates with no administrator experience. The level of significance was set at .05. The results of the two-sample  $t$  test indicated no statistically significant difference

between the two values,  $t = -1.954$ ,  $df = 287$ ,  $p = .052$ . The sample mean for those with administrator experience ( $M = 3.58$ ,  $SD = 0.56$ ) was not statistically different from the sample mean for those without administrator experience ( $M = 3.70$ ,  $SD = 0.49$ ). On average, candidates with and without administrator experience were neutral or agreed that the curriculum content contributed to their learning during the coursework portion of their program.

**H24.** There are differences in candidates' perceptions of advising based on administrator experience (Yes/No).

A two-sample  $t$  test was conducted to test H24. The average response of candidates with administrator experience was compared to the average response of candidates with no administrator experience. The level of significance was set at .05. The results of the two-sample  $t$  test indicated no statistically significant difference between the two values,  $t = -1.778$ ,  $df = 287$ ,  $p = .076$ . The sample mean for those with administrator experience ( $M = 3.49$ ,  $SD = 0.82$ ) was not statistically different from the sample mean for those without administrator experience ( $M = 3.66$ ,  $SD = 0.75$ ). On average, candidates with and without administrator experience were neutral or agreed that advising contributed to their learning during the coursework portion of their program.

**H25.** There are differences in candidates' perceptions of instruction based on administrator experience (Yes/No).

A two-sample  $t$  test was conducted to test H25. The average response of candidates with administrator experience was compared to the average response of candidates with no administrator experience. The level of significance was set at .05. The results of the two-sample  $t$  test indicated no statistically significant difference

between the two values,  $t = -1.901$ ,  $df = 286$ ,  $p = .058$ . The sample mean for those with administrator experience ( $M = 3.64$ ,  $SD = 0.68$ ) was not statistically different from the sample mean for those without administrator experience ( $M = 3.78$ ,  $SD = 0.59$ ). On average, candidates with and without administrator experience were neutral or agreed that instruction contributed to their learning during the coursework portion of their program.

**H26.** There are differences in candidates' perceptions of the cohort model based on current professional position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other).

A one-factor ANOVA was conducted to test H26. The categorical variable used to group the dependent variable, perceptions of the cohort model, was current professional position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other). The level of significance was set at .05. The results of the analysis indicated there was not a statistically significant difference between at least two of the means,  $F = 1.500$ ,  $df = 5$ ,  $284$ ,  $p = .190$ . On average, candidates in all current professional positions agreed or strongly agreed that cohort model contributed to their learning during the coursework portion of their program. See Table 22 for the means and standard deviations for this analysis. A follow up post hoc was not warranted.



Table 22

*Descriptive Statistics for Perceptions of Program Cohort Model Disaggregated by Current Professional Position*

Current Professional Position	<i>M</i>	<i>SD</i>	<i>N</i>
Higher Education Administrator	4.13	.57	32
Higher Education Teacher	4.30	.47	13
K-12 Building Administrator	4.12	.54	91
K-12 District Administrator	4.25	.49	32
K-12 Teacher	4.01	.60	81
Other (please specify)	3.99	.58	41

**H27.** There are differences in candidates' perceptions of the program design and schedule based on current professional position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other).

A one-factor ANOVA was conducted to test H27. The categorical variable used to group the dependent variable, perceptions of the program design, was current professional position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other). The level of significance was set at .05. The results of the analysis indicated there was not a statistically significant difference between at least two of the means,  $F = .833$ ,  $df = 5, 285$ ,  $p = .527$ . On average, candidates in all current professional positions were neutral or agreed that program design and schedule contributed to their learning during the

coursework portion of their program. See Table 23 for the means and standard deviations for this analysis. A follow up post hoc was not warranted.

Table 23

*Descriptive Statistics for Perceptions of Program Design and Schedule Disaggregated by Current Professional Position*

Current Professional Position	<i>M</i>	<i>SD</i>	<i>N</i>
Higher Education Administrator	3.54	.57	32
Higher Education Teacher	3.59	.35	13
K-12 Building Administrator	3.49	.53	91
K-12 District Administrator	3.59	.69	33
K-12 Teacher	3.39	.58	81
Other (please specify)	3.45	.58	41

**H28.** There are differences in candidates' perceptions of the curriculum content based on current professional position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other).

A one-factor ANOVA was conducted to test H28. The categorical variable used to group the dependent variable, perceptions of the curriculum content, was current professional position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other). The level of significance was set at .05. The results of the analysis indicated there was a statistically significant difference between at least two of the means,  $F = 2.629$ ,  $df = 5$ ,  $283$ ,  $p = .024$ . See Table 24 for the means and standard deviations for this analysis. A

follow up post hoc, the Tukey's HSD, was conducted to determine which pairs of means were different ( $\alpha = .05$ ).

The results of the post hoc analysis indicated that Higher Ed Administrators' rating of the perceived extent to which the curriculum content contributed to their learning during the coursework portion of their program ( $M = 3.79$ ,  $SD = .39$ ) was significantly higher than K-12 Building Administrator's rating ( $M = 3.49$ ,  $SD = .58$ ). On average, candidates currently serving in Higher Ed Administrator positions agreed more strongly that curriculum content contributed to their learning during the coursework portion of their program than their K-12 Building Administrator counterparts.

Table 24

*Descriptive Statistics for Perceptions of Curriculum Content Disaggregated by Current Professional Position*

Current Professional Position	<i>M</i>	<i>SD</i>	<i>N</i>
Higher Education Administrator	3.79	.39	32
Higher Education Teacher	3.86	.32	13
K-12 Building Administrator	3.49	.58	90
K-12 District Administrator	3.65	.65	33
K-12 Teacher	3.69	.49	80
Other (please specify)	3.61	.51	41

**H29.** There are differences in candidates' perceptions of advising based on current professional position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other).

A one-factor ANOVA was conducted to test H29. The categorical variable used to group the dependent variable, perceptions of advising, was current professional position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other). The level of significance was set at .05. The results of the analysis indicated there was not a statistically significant difference between at least two of the means,  $F = .492$ ,  $df = 5$ ,  $283$ ,  $p = .782$ . On average, candidates in all current professional positions were neutral or agreed that advising contributed to their learning during the coursework portion of their program. See Table 25 for the means and standard deviations for this analysis. A follow up post hoc was not warranted.

Table 25

*Descriptive Statistics for Perceptions of Advising Disaggregated by Current Professional Position*

Current Professional Position	<i>M</i>	<i>SD</i>	<i>N</i>
Higher Education Administrator	3.70	.81	32
Higher Education Teacher	3.49	.77	13
K-12 Building Administrator	3.50	.80	91
K-12 District Administrator	3.48	.92	33
K-12 Teacher	3.57	.75	80
Other (please specify)	3.65	.77	40

**H30.** There are differences in candidates' perceptions of instruction based on current professional position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other).

A one-factor ANOVA was conducted to test H30. The categorical variable used to group the dependent variable, perceptions of instruction, was current professional position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other). The level of significance was set at .05. The results of the analysis indicated there was not a statistically significant difference between at least two of the means,  $F = 1.887$ ,  $df = 5$ ,  $282$ ,  $p = .097$ . On average, candidates in all current professional positions were neutral or agreed that instruction contributed to their learning during the coursework portion of their program. See Table 26 for the means and standard deviations for this analysis. A follow up post hoc was not warranted.

Table 26

*Descriptive Statistics for Perceptions of Instruction Disaggregated by Current Professional Position*

Current Professional Position	<i>M</i>	<i>SD</i>	<i>N</i>
Higher Education Administrator	3.61	.73	32
Higher Education Teacher	3.63	.42	13
K-12 Building Administrator	3.57	.71	90
K-12 District Administrator	3.84	.72	32
K-12 Teacher	3.83	.54	81
Other (please specify)	3.69	.57	40

**H31.** There are differences in candidates' perceptions of the cohort model based on participation in the higher education track.

A two-factor ANOVA was conducted to test H31. Prior to the analysis, cohort numbers 1 through 9 were combined into a new variable category, “1-9,” and cohorts 10 through 13 were converted into a variable category, “10-13.” The category labels K-12 Building Administrator, K-12 District Administrator, and K-12 Teacher were combined into a “K-12” variable category. The category labels Higher Education Administrator and Higher Education Teacher were combined into a single variable category, “Higher Ed.” The two categorical variables used to group the dependent variable, perceptions of the cohort model, were cohort category and position category. The two-factor ANOVA can be used to test three hypotheses including a main effect for cohort category, a main effect for position category, and a two-way interaction effect (cohort category x position category). The interaction effect for cohort category by position category was used to test H31. The level of significance was set at .05.

The results of the analysis indicated a statistically significant difference between at least two of the means,  $F = 5.89$ ,  $df = 1, 245$ ,  $p = .016$ . See Table 27 for the means and standard deviations for this analysis. A follow up post hoc was conducted to determine which pairs of means were different. The Tukey’s HSD critical value was .337. The differences between the means had to be greater than this value to be considered significantly different ( $\alpha = .05$ ). One of the differences was greater than this value. The mean for Higher Ed candidates from cohorts 10-13 ( $M = 4.34$ ,  $SD = .47$ ) was significantly higher than the mean for PK-12 candidates from cohorts 10-13 ( $M = 4.00$ ,  $SD = .63$ ). On average, candidates Higher Ed candidates from cohorts 10-13 were more positive that the cohort model contributed to their learning during the coursework portion of their program than the PK-12 candidates from cohorts 10-13.

Table 27

*Descriptive Statistics for Perceptions of the Cohort Model Based on Cohort Category and Position Category*

Cohort Category	Position Category	<i>M</i>	<i>SD</i>	<i>N</i>
1-9	Higher Ed	4.03	.57	24
	K-12	4.14	.53	142
10-13	Higher Ed	4.34	.47	21
	K-12	4.00	.63	62

**H32.** There are differences in candidates' perceptions of the program design and schedule based on participation in the higher education track.

A second two-factor ANOVA was conducted to test H32. The two categorical variables used to group the dependent variable, perceptions of the program design, were Cohort Category and Position Category. The two-factor ANOVA can be used to test three hypotheses including a main effect for Cohort Category, a main effect for Position Category, and a two-way interaction effect (Cohort Category x Position Category). The interaction effect for Cohort Category by Position Category was used to test H32. The level of significance was set at .05.

The results of the analysis indicated a statistically significant difference between at least two of the means,  $F = 13.39$ ,  $df = 1, 246$ ,  $p = .000$ . See Table 28 for the means and standard deviations for this analysis. A follow up post hoc was conducted to determine which pairs of means were different. The Tukey's HSD critical value was .325. The differences between the means had to be greater than this value to be considered significantly different ( $\alpha = .05$ ). Two of the differences were greater than this

value. The mean for PK-12 candidates from cohorts 1-9 ( $M = 3.61$ ,  $SD = .50$ ) was significantly higher than the mean for PK-12 candidates from cohorts 10-13 ( $M = 3.15$ ,  $SD = .61$ ). On average, the candidates in the PK-12 cohorts' 1-9 perceptions of the program design and schedule were more positive than were their PK-12 counterparts in cohorts 10-13. The mean for Higher Ed candidates from cohorts 10-13 ( $M = 3.65$ ,  $SD = .56$ ) was significantly higher than the mean for PK-12 candidates from cohorts 10-13 ( $M = 3.15$ ,  $SD = .61$ ). On average, Higher Ed candidates from cohorts 10-13 were more positive that the program design and schedule contributed to their learning during the coursework portion of their program than PK-12 candidates from cohorts 10-13.

Table 28

*Descriptive Statistics for the Results of the Test for H32*

Cohort Category	Position Category	$M$	$SD$	$N$
1-9	Higher Ed	3.46	.46	24
	K-12	3.61	.50	143
10-13	Higher Ed	3.65	.56	21
	K-12	3.15	.61	62

**H33.** There are differences in candidates' perceptions of the curriculum content based on participation in the higher education track.

A third two-factor ANOVA was conducted to test H33. The two categorical variables used to group the dependent variable, perceptions of the curriculum content, were Cohort Category and Position Category. The two-factor ANOVA can be used to test three hypotheses including a main effect for Cohort Category, a main effect for Position Category, and a two-way interaction effect (Cohort Category x Position



Category). The interaction effect for Cohort Category by Position Category was used to test H33. The level of significance was set at .05.

The results of the analysis indicated a statistically significant difference between at least two of the means,  $F = 5.39$ ,  $df = 1, 244$ ,  $p = .021$ . See Table 29 for the means and standard deviations for this analysis. A follow up post hoc was conducted to determine which pairs of means were different. The Tukey's HSD critical value was .321. The differences between the means had to be greater than this value to be considered significantly different ( $\alpha = .05$ ). One of the differences was greater than this value. The mean for Higher Ed candidates from cohorts 10-13 ( $M = 3.91$ ,  $SD = .37$ ) was significantly higher than the mean for K-12 candidates from cohorts 10-13 ( $M = 3.44$ ,  $SD = .53$ ). On average, cohort 10-13 candidates in the Higher Ed position category were more positive that the curriculum content contributed to their learning during the coursework portion of their program than cohort 10-13 candidates in the K-12 position category.

Table 29

*Descriptive Statistics for the Results of the Test for H33*

Cohort Category	Position Category	<i>M</i>	<i>SD</i>	<i>N</i>
1-9	Higher Ed	3.73	.36	24
	K-12	3.66	.56	142
10-13	Higher Ed	3.91	.37	21
	K-12	3.44	.53	61

**H34.** There are differences in candidates' perceptions of advising based on participation in the higher education track.

A fourth two-factor ANOVA was conducted to test H34. The two categorical variables used to group the dependent variable, perceptions of advising, were Cohort Category and Position Category. The two-factor ANOVA can be used to test three hypotheses including a main effect for Cohort Category, a main effect for Position Category, and a two-way interaction effect (Cohort Category x Position Category). The interaction effect for Cohort Category by Position Category was used to test H34. The level of significance was set at .05.

The results of the analysis indicated there was not a statistically significant difference between at least two of the means,  $F = .08$ ,  $df = 1, 245$ ,  $p = .779$ . See Table 30 for the means and standard deviations for this analysis. A follow up post hoc was not warranted. On average, candidates from all four cohort categories were neutral or agreed that advising contributed to their learning during the coursework portion of their program regardless of their position category.

Table 30

*Descriptive Statistics for the Results of the Test for H34*

Cohort Category	Position Category	<i>M</i>	<i>SD</i>	<i>N</i>
1-9	Higher Ed	3.49	.78	24
	K-12	3.45	.78	142
10-13	Higher Ed	3.81	.80	21
	K-12	3.69	.84	62

**H35.** There are differences in candidates' perceptions of instruction based on participation in the higher education track.

A fifth two-factor ANOVA was conducted to test H35. The two categorical variables used to group the dependent variable, perceptions of instruction, were Cohort Category and Position Category. The two-factor ANOVA can be used to test three hypotheses including a main effect for Cohort Category, a main effect for Position Category, and a two-way interaction effect (Cohort Category x Position Category). The interaction effect for Cohort Category by Position Category was used to test H35. The level of significance was set at .05.

The results of the analysis indicated there was not a statistically significant difference between at least two of the means,  $F = 2.98$ ,  $df = 1, 244$ ,  $p = .085$ . See Table 31 for the means and standard deviations for this analysis. A follow up post hoc was not warranted. On average, candidates from all four cohort categories were neutral or agreed that instruction contributed to their learning during the coursework portion of their program regardless of their position category.

Table 31

*Descriptive Statistics for the Results of the Test for H35*

Cohort Category	Position Category	<i>M</i>	<i>SD</i>	<i>N</i>
1-9	Higher Ed	3.48	.63	24
	K-12	3.74	.64	141
10-13	Higher Ed	3.78	.66	21
	K-12	3.66	.71	62

**RQ8.** To what extent do the university's Ed.D. candidates agree they would recommend the Ed.D. program to other professionals?

**H36.** The university's Ed.D. candidates agree they would recommend the Ed.D. program to other professionals.

A one-sample  $t$  test was conducted to test H36. The average response about recommending the program was tested against a null value of 3. The level of significance was set at .05. The results of the one-sample  $t$  test indicated a statistically significant difference between the two values,  $t = 20.096$ ,  $df = 289$ ,  $p = .000$ . The sample mean ( $M = 4.09$ ,  $SD = .92$ ) was higher than the null value (3). On average, candidates agreed or strongly agreed they would recommend the Ed.D program to others.

**RQ9.** To what extent are there differences in the candidates' recommendation of the program based on any of the following: gender, age range, cohort group membership, administrator experience, current professional position, and higher education track?

**H37.** There are differences in candidates' recommendations of the program based on gender (Male/Female).

A two-sample  $t$  test was conducted to test H37. The average response for male candidates was compared with the average response for female candidates. The level of significance was set at .05. The results of the two-sample  $t$  test indicated no statistically significant difference between the two values,  $t = -.917$ ,  $df = 288$ ,  $p = .360$ . The sample mean for males ( $M = 4.02$ ,  $SD = 0.98$ ) was not statistically different from the sample mean for females ( $M = 4.12$ ,  $SD = 0.89$ ). On average, both male and female candidates agreed or strongly agreed they would recommend the program.

**H38.** There are differences in candidates' recommendations of the program based on age range (25-32, 33-40, 41-49, 50-56, 57+).

A one-factor ANOVA was conducted to test H38. The categorical variable used to group the dependent variable name was age (25-32, 33-40, 41-49, 50-56, 57+). The level of significance was set at .05. The results of the analysis indicated there was not a statistically significant difference between at least two of the means,  $F = .633$ ,  $df = 3$ ,  $286$ ,  $p = .594$ . On average, candidates in all age ranges agreed or strongly agreed they would recommend the program. See Table 32 for the means and standard deviations for this analysis. A follow up post hoc was not warranted.

Table 32

*Descriptive Statistics for Recommendation of the Program Disaggregated by Age*

Age Range	<i>M</i>	<i>SD</i>	<i>N</i>
25-32	4.08	.98	62
33-40	4.00	.90	109
41-49	4.17	.83	81
50+	4.16	1.05	38

**H39.** There are differences in candidates' recommendations of the program based on cohort group membership (Cohort 1-Cohort 13).

A one-factor ANOVA was conducted to test H39. The categorical variable used to group the dependent variable, recommendations of the program, was cohort group membership (Cohort 1 – Cohort 13). The level of significance was set at .05. The results of the analysis indicated there was a statistically significant difference between at least two of the means,  $F = 2.912$ ,  $df = 12$ ,  $277$ ,  $p = .001$ . See Table 33 for the means and standard deviations for this analysis. A follow up post hoc, the Tukey's HSD, was conducted to determine which pairs of means were different ( $\alpha = .05$ ). The mean for

cohort 3 ( $M = 3.59$ ,  $SD = 1.14$ ) was significantly lower than the mean for cohort 9 ( $M = 4.48$ ,  $SD = .63$ ), cohort 11 ( $M = 4.64$ ,  $SD = .50$ ), and cohort 13 ( $M = 4.67$ ,  $SD = .82$ ). The mean for cohort 12 ( $M = 3.72$ ,  $SD = 1.14$ ) was significantly lower than the mean for cohort 9 ( $M = 4.48$ ,  $SD = .63$ ) and cohort 13 ( $M = 4.67$ ,  $SD = .82$ ). On average, the cohort 3 candidates did not agree as strongly that they would recommend the program compared to their cohort 9, cohort 11, and cohort 13 counterparts. On average, the cohort 12 candidates agreed less strongly that they would recommend the program compared to their cohort 9 and cohort 13 counterparts.

Table 33

*Descriptive Statistics for Perceptions of Instruction Disaggregated by Cohort*

Cohort Group	$M$	$SD$	$N$
1	3.96	.86	24
2	4.09	1.15	22
3	3.59	1.14	22
4	4.20	.92	10
5	4.25	.53	24
6	3.95	.62	19
7	4.00	.77	18
8	4.26	.75	23
9	4.48	.63	29
10	3.89	1.01	38
11	4.64	.50	14
12	3.72	1.14	32
13	4.67	.82	15

**H40.** There are differences in candidates' recommendations of the program based on administrator experience (Yes/No).

A two-sample  $t$  test was conducted to test H40. The average response of candidates with administrator experience was compared to the average response of candidates with no administrator experience. The level of significance was set at .05. The results of the two-sample  $t$  test indicated no statistically significant difference between the two values,  $t = -1.893$ ,  $df = 288$ ,  $p = .059$ . The sample mean for those with administrator experience ( $M = 4.00$ ,  $SD = 0.91$ ) was not statistically different from the sample mean for those without administrator experience ( $M = 4.21$ ,  $SD = 0.92$ ). On average, both candidates with and without administrator experience agreed or strongly agreed they would recommend the program.

**H41.** There are differences in candidates' recommendations of the program based on current professional position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other).

A one-factor ANOVA was conducted to test H41. The categorical variable used to group the dependent variable was current professional position (K-12 Teacher, Higher Education Teacher, K-12 Building Administrator, K-12 District Administrator, Higher Education Administrator, Other). The level of significance was set at .05. The results of the analysis indicated there was not a statistically significant difference between at least two of the means,  $F = .891$ ,  $df = 5, 284$ ,  $p = .488$ . On average, candidates in all current professional positions agreed or strongly agreed they would recommend the program.

See Table 34 for the means and standard deviations for this analysis. A follow up post hoc was not warranted.

Table 34

*Descriptive Statistics for Recommendations of the Program Disaggregated by Current Professional Position*

Current Professional Position	<i>M</i>	<i>SD</i>	<i>N</i>
Higher Education Administrator	4.16	1.11	32
Higher Education Teacher	4.08	1.32	13
K-12 Building Administrator	3.95	.89	91
K-12 District Administrator	4.06	.86	33
K-12 Teacher	4.23	.84	81
Other (please specify)	4.08	.89	40

**H42.** There are differences in candidates' recommendations of the program based on participation in the higher education track.

A two-factor ANOVA was conducted to test H42. The two categorical variables used to group the dependent variable, recommendations of the program, were Cohort Category and Position Category. The two-factor ANOVA can be used to test three hypotheses including a main effect for Cohort Category, a main effect for Position Category, and a two-way interaction effect (Cohort Category x Position Category). The interaction effect for Cohort Category by Position Category was used to test H42. The level of significance was set at .05.

The results of the analysis indicated there was a statistically significant difference between at least two of the means,  $F = 22.346$ ,  $df = 1, 246$ ,  $p = .000$ . See Table 35 for the



means and standard deviations for this analysis. A follow up post hoc was conducted to determine which pairs of means were different. The Tukey's HSD critical value was .542. The differences between the means had to be greater than this value to be considered significantly different ( $\alpha = .05$ ). One of the differences was greater than this value. The Higher Ed candidates from cohorts 10-13 ( $M = 4.67, SD = .73$ ) rated their recommendation of the program significantly higher than the K-12 candidates from cohorts 10-13 ( $M = 3.79, SD = 1.10$ ). On average, Higher Ed candidates from 10-13 agreed or strongly agreed they would recommend the program while their K-12 counterparts from 10-13 were neutral or agreed they would recommend the program.

Table 35

*Descriptive Statistics for the Results of the Test for H42*

Cohort Category	Position Category	<i>M</i>	<i>SD</i>	<i>N</i>
1-9	Higher Ed	3.67	1.27	24
	K-12	4.20	.72	143
10-13	Higher Ed	4.67	.73	21
	K-12	3.79	1.10	62

Hypothesis testing provided some valuable insights into candidate perceptions of various aspects of the university's Ed.D. program based on their gender, age range, cohort number, whether they have served as an administrator, their current professional position and if they participated in the higher education track.

### **Summary**

Chapter four began with a summarization of the descriptive statistics used to describe the personal and professional characteristics of the sample. Included was the

gender, age range, cohort number, whether the candidate has served as an administrator, and current professional position. Results related to the research questions revealed that the cohort model, program design and schedule, curriculum content, advising, and instruction contributed to candidates' learning during the coursework portion of their program. There were no significant differences in candidate perceptions of the program based on gender, age range, and administrator experience. However, cohort group membership did make a statistically significant difference in how strongly candidates perceived program design and schedule, curriculum content, advising, and instruction contributed to their learning experience during the coursework portion of their program. Candidates with a current position of Higher Ed Administrators rated the curriculum content significantly higher than those candidates that identified K-12 Building Administrator as their current position. Higher ed candidates from cohorts 10-13 rated the cohort model, program design and schedule, and content curriculum significantly higher than the K-12 candidates did from cohorts 10-13. On average, candidates agreed or strongly agreed they would recommend the program to others. Cohort group membership affected how strongly candidates agreed they would recommend the program as did participation in the higher ed track. There were no significant differences in candidates' recommendations of the program based on gender, age range, administrator experience, or current professional position.

Chapter five presents the interpretations of the findings and the recommendations for future research. This chapter covers the study summary including the overview of the problem, the purpose statement and research questions, the review of methodology, and the major findings. A discussion of the findings related to the literature follows the study

summary. The chapter concludes with implications for action, recommendations for future research, and concluding remarks.

## Chapter Five

### Interpretation and Recommendations

Chapter five presents a summary of the study by restating the overview of the problem, the purpose statement and research questions, the methodology, and the major findings of the study. A discussion of the findings related to the literature is also included. The chapter concludes with implications for action by the university followed by recommendations for future research designed to complement or extend this study. Concluding remarks serve as the final section of this chapter.

#### Study Summary

The following section provides a summary of the current study. The summary contains an overview of the problem concerning the study of student perceptions to determine whether improvements to the university Ed.D. program have been successful. The next section states the purpose of the study and the research questions. The summary concludes with a review of the methodology and the study's major findings. This study expanded the body of research analyzing doctoral candidates' perceptions of various aspects of their Ed.D. program and the contribution to their learning during the coursework portion of their program.

**Overview of the problem.** The university, in an attempt to stay current with the ever-changing set of demands placed upon education leaders, is seeking to understand the perceptions of students enrolled in the first thirteen cohorts of the Doctor of Educational Leadership Ed.D. program. Considering the scrutiny facing (Ed.D.) programs, the university needs to demonstrate its ability to develop highly qualified educational leaders. The UCEA (2012) identified the use of candidate assessments for continuous quality

improvement (CQI) purposes as one of the key indicators of a quality program. As of spring 2014, no study had been undertaken since Sumner's (2008) study to measure the perceived value of the quality improvements made to the program.

The education landscape is rapidly changing, as accountability has become more of a factor for all levels of education (Levine, 2005; Murphy, 2006). Assessment and learning outcomes are critical to the future success of those providing and receiving education (Dolence, Norris, & Arbor, 1995; Freeman, 2012; Levine, 2005; Murphy, 2006; UCEA, 2012). Disruptive technology forces are also at work, creating uncertainty for programs with a local base and opportunity for those in a position to implement innovation first (Byrne, 2014; Fink, 2013). However, the body of research studying education doctoral programs and doctorate recipients is weak (Shulman et al., 2006).

**Purpose statement and research questions.** This study was conducted to assist the university to understand student perceptions of the first thirteen cohorts enrolled in the Doctor of Educational Leadership Ed.D. program. Nine research questions were posed. The purpose of this study was to identify the collective perceptions of graduate students of the university doctoral program and better understand the influence of a variety of factors on students' perceptions. Demographic factors taken into consideration as part of this study included: gender, age range, cohort group membership, administrator experience, current professional position, and higher education track. The perceptions data were then studied to determine whether demographic factors had any impact on students' perceptions of the cohort model, program design and schedule, curriculum content, advising, or instruction.

**Review of the methodology.** The sample for the current study included candidates who had completed at least twelve months of the university Ed.D. coursework. The survey research methodology used in this study was descriptive and included hypothesis testing, frequency tables, measures of central tendency, and variability. In order to address the research questions, 42 hypotheses were tested utilizing one-sample *t* tests, two-sample *t* tests, one-factor ANOVAs, and two-factor ANOVAs.

**Major findings.** Analysis of the survey responses revealed that the cohort model, program design and schedule, curriculum content, advising, and instruction contributed to candidates' learning during the coursework portion of their program. There were no differences in candidates' perceptions of the program based on gender, age range, administrator experience, and current position. However, the cohort group membership significantly influenced the extent to which candidates perceived that the program design and schedule, curriculum content, advising, and instruction contributed to their learning during the coursework portion of their program. Appendix H shows cohort member ratings alongside coursework and degree completion tracking information.

Participation in the higher ed track was shown to affect perceptions. Cohorts 11 and 13, enrolled as separate higher education concentration cohorts. Higher Ed candidates from cohorts 10-13 rated the cohort model, program design and schedule, and content curriculum significantly higher than their PK-12 counterparts did from cohorts 10-13. In particular, cohort 12 rated the program design and schedule significantly lower than 11 of the other cohorts. Higher Ed candidates from cohorts 10-13 also rated their recommendation of the program significantly higher than the PK-12 candidates did from cohorts 10-13. Interestingly, the PK-12 candidates from cohorts 1-9 also rated the

program design and schedule significantly higher than the PK-12 candidates did from cohorts 10-13.

On average, candidates agreed or strongly agreed they would recommend the program to others. There were no differences in candidates' recommendations of the program based on gender, age range, or administrator experience. However, cohort 3 and cohort 12 rated their recommendation of the program significantly lower than a number of the other cohorts. Candidates with a current position of Higher Ed Administrators rated the curriculum content significantly higher than those candidates that identified PK-12 Building Administrator as their current position. Those candidates participating in the higher ed track, or Higher Ed candidates from cohorts 10-13, rated their recommendation of the program significantly higher than the PK-12 candidates did from cohorts 10-13.

### **Findings Related to the Literature**

This study expanded the body of research analyzing doctoral candidates' perceptions of various aspects of their Ed.D. program and the contribution to their learning during the coursework portion of their program. Results of this study show that 78% of candidates participating in the survey reported their age as being over 33 with 86% candidates reported having a current position. These findings support Stallone's 2003 study that showed Ed.D. candidates' tendency to be older than those in other degrees of study and hold full time positions while pursuing the degree.

This study replicated the Sumner (2008) study with a larger sample, comparing results of the first thirteen cohorts to enroll in the university's Ed.D. program. Similar to the Sumner study, the cohort model received the strongest ratings of any of the program characteristics studied. This study also supports findings from Miller (2003) which

reported the cohort experience was the attribute that received the most positive responses from both enrolled doctoral students and alumni.

The findings from the current study are consistent with the research findings of Hoyle and Torres (2008), who reported “students in cohorts generally praised the balance of theory and practice in course content and advising and support they receive from faculty” (p. 9). Candidates in this study also belonged to a cohort and on average were neutral or agreed that curricular content, advising, and instruction contributed to their learning during the coursework portion of their program.

Furthermore, Sumner (2008) recommended administration put efforts toward making improvements in the area of student advising. Cohort 2 rated advising statistically lower than did cohort 13, suggesting administration has made continuous improvements to advising. However, the results from this study are in contrast to the research findings of Bair & Haworth (2004), who found students with strong advisor relationships were significantly more likely to complete their doctoral degrees. In fact, cohorts 1 and 2, the cohorts who rated advising the lowest, hold the highest completion rates as of December 2014. However, the comparison of students who are still within their allotted time to graduate with students from earlier cohorts may not be valid since the window for degree completion has officially closed for cohorts 1 and 2.

This study found significant differences in candidates’ perceptions of the elements of the program based on cohort group membership, demonstrating the impact the cohort experience itself has on perceptions of the program. The results of this study supports Miller (2003) who studied the perceptions of participants in doctoral cohorts in educational leadership. When he requested comments from his participants, he found



personality conflicts among cohort members to be the second-largest number of responses he received.

## **Conclusions**

This section provided conclusions drawn from the current study of student perceptions to determine whether improvements to the university Ed.D. program have been successful. Implications for action and recommendations for further research are included. Concluding remarks complete this section.

**Implications for action.** The results of this study have implications for continuous quality improvement of the university's Ed.D. program. Due to program design and schedule, curriculum content, advising, and instruction ratings being significantly impacted by cohort group membership, review of the teaching environment is needed. Administration should evaluate whether instructional resource constraints exist and consider limiting cohort size based on faculty input. Administration may also want to consider continuously modernizing the technology in this space as the IDL could provide a graceful growth strategy for the program.

The study specifically addressed the addition of a Higher Ed track. Based on the positive results of this study, the university should continue to offer the Higher Ed track. The study also addressed the impact on PK-12 candidates by separating the higher education candidates into a separate cohort. The PK-12 candidates from cohorts 10-13 rated the program design and schedule significantly lower than the PK-12 candidates did from cohorts 1-9. Study results indicated administration might want to consider reviewing the K-12 program design and schedule. Exploring the use of the IDL for PK-12 candidates is recommended in an effort to create flexibility as needed within the

cohort model. Developing and offering a MOOC course may also attract potential candidates from outside the region.

Lastly, many changes have been implemented to the university Ed.D. program since Sumner (2008). The changing education landscape requires more frequent analysis. The university should consider establishing performance targets for each of the survey items then formalizing this process using Key Performance Indicators (KPIs) and conducting an analysis on an annual basis.

**Recommendations for future research.** This study expanded the body of research analyzing doctoral candidates' perceptions of various aspects of their Ed.D. program. Statistically significantly lower ratings among candidates from certain cohort numbers, including their recommendation of the program, suggests further research is needed to determine the role cohort group dynamics play in influencing candidate perception of the impact on learning and overall perception of the program. In particular, replicating the study using feedback from the remote students to better understand any differences in the experience of the remote candidate compared to the local classroom candidate is recommended.

Other opportunities for future research include replicating this study for retention and completion purposes. The university could collect feedback pertaining to program duration as well as perceived barriers to completion and possible solutions. Also of interest to the university could be a qualitative study for candidates who never completed the program.

Another option would be to conduct the study at the time of graduation rather than at the time of completing coursework. Gathering perceptions of the program a few years

after completion may help improve understanding of how the degree affected the career path of graduates. Career path data would provide the program additional insight into the range of positions graduates have obtained and inform further study of any program offerings that may be needed to support leadership positions in the future. Of particular interest is whether an Ed.D. credential is still required for executive level positions in PK-12 and higher education.

With all the recent focus around reinventing the Ed.D., a comparison study between programs may be of interest. Of special interest would be comparing the current program to a pure online or hybrid program. This type of study could provide an opportunity for collaboration and possible benchmarking.

**Concluding remarks.** The purpose of this study was for the university to understand student perceptions of the first thirteen cohorts enrolled in the Doctor of Educational Leadership Ed.D. program. Despite the rapidly changing education landscape, the results of this study confirmed that student perceptions of the program are positive. On average, candidates agreed or strongly agreed they would recommend the program to others. In other words, candidates' perceived the core elements of the Ed.D. program: a) cohort model, b) seven-week course format, c) two dissertation development courses, d) comprehensive portfolio, e) two field experiences, f) advisory component, and g) dissertation to be of value.

This study enlarged the body of research reviewing an education doctoral program and the associated doctorate candidates. The results of the current study may be used to guide the university's efforts in continuous program improvement. Additionally, the results of the current study provide a framework for how doctoral programs in

education can be designed to respond more effectively to issues related to student perceptions.

## References

- Aiken, J. A., & Gerstl-Pepin, C. (2013). Envisioning the Ed.D. and Ph.D. as a partnership for change. *Planning & Changing, 44*(3/4), p. 162-180.
- Allen, I. E., & Seaman, J. (2011). *Going the distance: Online education in the United States, 2011*. Sloan Consortium. PO Box 1238, Newburyport, MA 01950.
- Bair, C. R., & Haworth, J. G. (1999). *Doctoral student attrition and persistence: A meta-synthesis of research*. Paper presented at the ASHE Annual Meeting, San Antonio, TX.
- Banerjee, S., & Morley, C. (2013). Professional doctorates in management: Toward a practice-based approach to doctoral education. *Academy Of Management Learning & Education, 12*(2), 173-193.
- Basu, K. (March 29, 2012). Ending the first Ed.D. program. *Inside Higher Ed, 3*(12) n.p.
- Bates, T. (2008). *What is distance education?* <http://www.tonybates.ca/2008/07/07/what-is-distance-education/>
- Bottoms, G., O'Neill, K., Fry, B., & Hill, D. (2003). *Good principals are the key to successful schools: Six strategies to prepare more good principals*. Atlanta, GA: Southern Regional Education Board. Retrieved from: <http://www.wallacefoundation.org/knowledge-center/school-leadership/principal-training/Documents/Six-Strategies-to-Prepare-More-Good-Principals.pdf>
- Boulder, J. (2010) *A study of doctoral students perceptions of the doctoral support and services offered by their academic institution*. Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3412646)

- Browne-Ferrigno, T. (2003). Becoming a principal: Role conception, initial socialization, role-identity transformation, purposeful engagement. *Educational Administration Quarterly*, 39(4), 468-503
- Browne-Ferrigno, T. & Muth, R. (2010) Candidates in Educational Leadership Graduate Programs in Young, M. D., Crow, G. M., Murphy, J., & Ogawa, R. T. (Eds.). *Handbook of research on the education of school leaders*. New York, NY: Routledge.
- Burnett, P. C. (1999). The supervision of doctoral dissertations using a collaborative cohort model. *Counselor Education and Supervision*, 39(1), 46-52.
- Byrne, J. (2014, September 14). Future of executive education: Unbundled MBA. *USA Today*. Retrieved from <http://www.usatoday.com/story/money/personalfinance/2014/09/14/cnbc-unbundled-mba-degree/15462785/>
- Callahan, R. E. (1962). *Education and the cult of efficiency; A study of the social forces that have shaped the administration of the public schools*. Chicago, IL: University of Chicago Press.
- Carnegie Initiative on the Doctorate (2014). Carnegie initiative on the doctorate (CID) collection. Retrieved from <http://gallery.carnegiefoundation.org/cid/>
- Cherry, K. (2013). *What is perception - perception and the perceptual process?* <http://psychology.about.com/od/sensationandperception/ss/perceptproc.htm>
- Colorado Christian University. (2014). *What is a cohort program?* Retrieved from <http://www.ccu.edu/blogs/cags/2011/08/what-is-a-cohort-program/>
- Council for the Advancement of Standards in Higher Education (2011). *CAS general standards*. Retrieved from <http://www.cas.edu/generalstandards>

- Council of Chief State School Officers. (2008). *Interstate School Leaders Licensure Consortium (ISLLC): Standards for school leaders*. Retrieved from [http://www.ccsso.org/Documents/2008/Educational\\_Leadership\\_Policy\\_Standards\\_2008.pdf](http://www.ccsso.org/Documents/2008/Educational_Leadership_Policy_Standards_2008.pdf)
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications.
- Dolence, M. G., Norris, D. M., & Arbor, M. (1995). *Transforming higher education: A vision for learning in the 21st century*. Ann Arbor, MI: Society for College and University Planning.
- Elmore, R. (2008). Leadership as the practice of improvement. In B. Pont, D. Nusche, & D. Hopkins (Eds.), *Improving school leadership volume 2: case studies on system leadership*, (pp. 37-68). Retrieved from [www.sourceoecd.org/education/9789264044678](http://www.sourceoecd.org/education/9789264044678)
- Emerson, J. (1998). *An investigation of the characteristics that facilitate or impede completion of inquiry, a nontraditionally organized doctoral program in Educational Administration*. Retrieved from ProQuest dissertations and Theses database. (UMI No. 9839061)
- California State University Chancellor's Office. (2006). Executive Order No. 991, Doctor of education degree programs. Retrieved from <http://www.calstate.edu/app/EdD>.
- Fink, L. D. (2013). *Creating significant learning experiences, revised and updated: an integrated approach to designing college courses*. San Francisco, CA: Jossey-Bass.

- Forsyth, P. B., & Danisiewicz, T. J. (1985). Toward a theory of professionalization. *Work and Occupations, 12*(1), 59-76.
- Freeman Jr, S. (2012). The future of higher education preparation programs: Implications for policy and practice. *Journal of Education Policy*, Fall 2012. Retrieved from <http://nau.edu/uploadedFiles/Academic/COE/About/Projects/The%20Future%20of%20Higher%20Education%20Preparation%20Programs.pdf>
- Freeman, S., Jr., & Kochan, F. K. (2012). Academic pathways to university leadership: presidents' descriptions of their doctoral education. *International Journal of Doctoral Studies, 7*, 93+. Retrieved from [http://go.galegroup.com.ezproxy.jccc.edu/ps/i.do?id=GALE%7CA302402990&v=2.1&u=jcl\\_jccc&it=r&p=AONE&sw=w&asid=22d39ac18c7551baf54f0fddfa52a84](http://go.galegroup.com.ezproxy.jccc.edu/ps/i.do?id=GALE%7CA302402990&v=2.1&u=jcl_jccc&it=r&p=AONE&sw=w&asid=22d39ac18c7551baf54f0fddfa52a84)
- Gordon, V. N., Habley, W. R. & Grites, T. J. (Eds.). (2011). *Academic advising: A comprehensive handbook*. (2nd ed.). Hoboken, NJ: John Wiley & Sons
- Graduate School of Education (2013). *Doctorate of education in education educational leadership: Policy and programs handbook*.
- Hammons, J. O., & Miller, M. T. (2006). Presidential perceptions about graduate-preparation programs for community colleges. *Community College Journal of Research and Practice, 30*(4), 373-381.
- Houle, C. O. (1996). *The design of education* (2nd ed.). San Francisco: Jossey-Bass.
- Hoyle, J. R., & Torres, Jr, M. S. (2008). Students' reflections on the relevance and quality of highly ranked doctoral programs in educational administration: Beacons of leadership preparation? *AASA Journal of Scholarship and Practice, 5*(2), 5-13.



- Institute for Higher Education Policy (2014). *Degrees of hope: Redefining access for 21<sup>st</sup> century students*, Retrieved from: <http://www.ihep.org/video/degrees-hope-redefining-access-21st-century-students-full-film>
- Jean-Marie, G., & Normore, A. (2010). *Educational leadership preparation: Innovation and interdisciplinary approaches to the Ed.D. and graduate education*. New York, NY: Palgrave Macmillan.
- Jimenez y West, I. J., Gokalp, G., Pena, E. V., Fischer, L., & Gupton, J. (2011). Exploring effective support practices for doctoral students' degree completion. *College Student Journal*, 45, 310-323.
- Kochan, F.K., & Locke, D. L. (2010). Student Assessment in Educational Leadership Preparation Programs. In M. D. Young, G. M. Crow, J. Murphy, & R. T. Ogawa (Eds.), *Handbook of research on the education of school leaders*. New York, NY: Routledge.
- Levine, A. (March 2005). *Educating school leaders* (Report 1). Retrieved from [http://www.edschools.org/reports\\_leaders.htm](http://www.edschools.org/reports_leaders.htm)
- Li, J., Friedel, J., & Rusche, P. (2011). Examining practical relevance of the coursework of doctoral leadership programs. *Community College Journal of Research and Practice*, 35(1), 3-17.
- Lunenburg, F. C., & Irby, B. J. (2008). *Writing a successful thesis or dissertation: Tips and strategies for students in the social and behavioral sciences*. Thousand Oaks, CA: Corwin Press.

Mariani, W. J. (2007). *An evaluation of a doctoral program in educational leadership and its success in providing training to K-12 and higher education leadership.*

Buffalo, NY: D'Youville College.

Mariano, C. M. (1993). *A Study of the Ed. Ds, Ph. Ds and ABDs in educational administration.* Retrieved from ProQuest Dissertations and Theses database.

(UMI No. 9329287)

Marzano, R. J., & Waters, T. (2009). *District leadership that works: Striking the right balance.* Alexandria, VA: ASCD.

McCarthy, M. M. & Forsyth, P. B. (2010). Research and Development Activities Pertaining to the Preparation of School Leaders in Young, M. D., Crow, G. M., Murphy, J., & Ogawa, R. T. (Eds.). *Handbook of research on the education of school leaders.* New York, NY: Routledge.

Miller, T. N., Devin, M., & Shoop, R. (2007). *Closing the leadership gap: how district and university partnerships shape effective school leaders.* Thousand Oaks, CA: Corwin Press.

Miller, W. D. (2003). *An inquiry related to students', recent graduates', and program directors' experiences and perceptions as participants in doctoral cohorts in educational leadership programs.* Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3098502)

Mungazi, D. A. (1999). *The evolution of educational theory in the United States.*

Westport, CT: Praeger.

Murphy, J. (2006). *Preparing school leaders: Defining a research and action agenda.*

Lanham, MD: Rowman & Littlefield Education.

- Nunnally, J. C. (1967). *Psychometric theory*. McGraw Hill. New York, NY
- Paul, R., & Elder, L. (2002). *Critical thinking: Tools for taking charge of your professional and personal life*. Upper Saddle River, NJ: Financial Times/Prentice Hall.
- Perry, J. A. (2012). To Ed. D. or not to Ed. D.?. *Phi Delta Kappan*, 94(1), 41-44.
- Perry, J. A., & Imig, D. G. (2008). A stewardship of practice in education. *Change: The Magazine of Higher Learning*, 40(6), 42-49.
- Powell, A. G. (1976). University schools of education in the twentieth century. *Peabody Journal of Education*, 54, 3-20.
- Redden, E. (2007). Envisioning a new Ed. D. *Inside Higher Ed*, 4(10).
- Salinas, C. (2005). A student suggested redesign of a principal preparation program. *Journal of Border Educational Research*, 4(1), 71-77.
- Shön, D. A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco, CA: Jossey-Bass.
- Shulman, L., Golde, C., Bueschel, A., & Garabedian, K. (2006). Reclaiming education's doctorates: A critique and a proposal. *Educational Researcher*, 35, 25-32.
- Sigafus, B. (1998). The creation of ABDs: *A turning point in educational doctoral programs?* AERA Annual Meeting Paper (1-28).
- Stallone, M. N. (2003). *Factors associated with student attrition and retention in an educational leadership doctoral program*. Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3111386)

- Sumner, D. A. (2008). *A measurement of student satisfaction levels as a means of program evaluation: An examination of Baker University's educational leadership doctoral program*. █████ University. Retrieved from [http://www.████.edu/images/pdf/SOE/EdD\\_Theses/Sumner\\_Douglas.pdf](http://www.████.edu/images/pdf/SOE/EdD_Theses/Sumner_Douglas.pdf)
- Taylor, M. C. (1984, April). Locus of control and course completion of adult basic education literacy program participants. *Proceedings of the Adult Education Research Conference*, 25(232-236). Retrieved from <http://files.eric.ed.gov/fulltext/ED269554.pdf>
- The Writing Center at George Mason University. (2012). *How to write a research question*. Retrieved from <http://writingcenter.gmu.edu/?p=307>
- Tucker, P., Young, M, & Koschoreck, J. (2012). Leading research-based change in educational leadership preparation: An introduction. *Journal of Research on Leadership Education*, 7(2), 155-171
- United Nations Educational, Scientific, and Cultural Organization. *Defining curriculum content*. Retrieved from <http://www.unesco.org/new/en/education/themes/strengthening-education-systems/quality-framework/technical-notes/defining-curriculum-content/>
- University Council for Educational Administration. (1987). *Leaders for America's schools*. Retrieved from <http://eric.ed.gov/?id=ED286265>
- University Council for Educational Administration (2012). *A guide for examining leadership preparation from UCEA*. Retrieved from <http://ucea.org/>

- Walker, G., Golde, C. M., Jones, L., Conklin Bueschel, A., & Hutchings, P. (2008). *The formation of scholars: Rethinking doctoral education for the twenty-first century*. San Francisco, CA: Jossey-Bass.
- Wergin, J. (2011). Rebooting the EdD. *Harvard Educational Review*, 81(1), 119-151.
- Young, M. D., Crow, G. M., Murphy, J., & Ogawa, R. T. (Eds.). (2010). *Handbook of research on the education of school leaders*. New York, NY: Routledge.

## Appendices

**Appendix A: Curriculum Requirements for Ed.D. in Educational Leadership**

**CURRICULUM REQUIREMENT for the DOCTOR OF EDUCATION (Ed.D.) IN  
EDUCATIONAL LEADERSHIP (Cohorts 1-9)**

**Common Program Strands**

- Leadership Practices
- Critical Thinking and Problem Solving
- Communication and Collaboration
- Beliefs, Values and Ethical Issues
- Enriching through Diversity

**Ed.D. Degree Curriculum**

<b>Course Title</b>	<b>Credit Hours</b>
1. DED 9000 Foundations of Organizational Leadership	3
2. DED 9001 Communication and Collaboration in Leadership	3
3. DED 9002 Leading Special and Diverse Populations	3
4. DED 9003 Developing Professional Learning Communities	3
5. DED 9004 Curriculum, Learning, and Instruction	3
6. DED 9005 Legal, Policy, and Ethical Issues in Leadership	3
7. DED 9006 Human Resources Management	3
8. DED 9007 Management of Finances, Facilities, and Resources	3
9. DED 9008 Program Planning and Evaluation	3
10. DED 9010 Statistical Analysis	3
11. DED 9011 Methods of Inquiry and Research	3
12. DED 9020 Professional Inquiry Colloquium I	2
13. DED 9021 Professional Inquiry Colloquium II	2
14. DED 9900 Clinical Research Development	6
15. DED 9902 Dissertation Completion and Presentation	10+
16. DED 9030 Field Experience I	2
17. DED 9031 Field Experience II	2
18. DED 9032 Portfolio Presentation	2
<b>TOTAL REQUIRED HOURS for the Ed.D.</b>	<b>59+</b>



**CURRICULUM REQUIREMENT for the DOCTOR OF EDUCATION (Ed.D.) IN  
EDUCATIONAL LEADERSHIP for PK-12 CANDIDATES (Cohorts 10 and 12)**

**Ed.D. Degree Curriculum**

<u>Course Title</u>	<u>Credit Hours</u>
1. DED 9000 Foundations of Educational Leadership	3
2. DED 9001 Communication and Collaboration in Leadership	3
3. DED 9002 Leading Special and Diverse Populations	3
4. DED 9004 Curriculum, Learning, and Instruction	3
5. DED 9005 Legal, Policy, and Ethical Issues in Leadership	3
6. DED 9006 Human Resources Management	3
7. DED 9007 Management of Finances, Facilities, and Resources	3
8. DED 9009 Systemic School Improvement and Evaluation	3
9. DED 9010 Statistical Analysis	3
10. DED 9011 Methods of Inquiry and Research	3
11. DED 9013 The Ethics of District Leadership	3
12. DED 9900 Dissertation Development 1, 2, 3, & 4	12
13. DED 9902 Dissertation Completion and Presentation	8+
14. DED 9030 Field Experience I	2
15. DED 9031 Field Experience II	2
16. DED 9032 Portfolio Presentation	2
<b>TOTAL REQUIRED HOURS for the Ed.D.</b>	<b>59+</b>

**Appendix B: Curriculum Requirement for Ed.D. Higher Education Track**

**CURRICULUM REQUIREMENT for the DOCTOR OF EDUCATION (Ed.D.) IN  
EDUCATIONAL LEADERSHIP for HIGHER EDUCATION TRACK  
CANDIDATES**

**Common Program Strands**

- Leadership Practices
- Critical Thinking and Problem Solving
- Communication and Collaboration
- Beliefs, Values and Ethical Issues
- Enriching through Diversity

**Ed.D. Degree Curriculum**

<b><u>Hours</u></b>	<b><u>Course Title</u></b>	<b><u>Credit</u></b>
	DED 9000 Foundations of Educational Leadership	3
	DED 9001 Communication and Collaboration in Leadership	3
	DED 9003 Developing Professional Learning Communities	3
	DED 9004 Curriculum, Learning, and Instruction	3
	DED 9006 Human Resources Management	3
	DED 9008 Program Planning and Evaluation	3
	DED 9010 Statistical Analysis	3
	DED 9011 Methods of Inquiry and Research	3
	DED 9012 Student Affairs and Enrollment Management in Higher Education	3
	DED 9015 Administration, Governance, & Accreditation in HE	3
	DED 9017 Finance, Policy, Legal & Ethical Issues in HE	3
	DED 9900 Dissertation Development 1, 2, 3, & 4	12
	DED 9902 Dissertation Completion and Presentation	8+
	DED 9030 Field Experience I	2
	DED 9031 Field Experience II	2
	DED 9032 Portfolio Presentation	2
	<b>TOTAL REQUIRED HOURS for the Ed.D.</b>	<b>59+</b>

## **Appendix C: Dissertation Requirements**

## **DISSERTATION REQUIREMENTS**

The doctoral dissertation research study is conducted in accordance with guidelines established for doctoral candidates of the university. The doctoral study follows recommendations found in “The Role and Nature of the Doctoral Dissertation: A Policy Statement,” Council of Graduate Schools.

### **Purpose**

The doctoral dissertation is a clinical research study that

1. Reveals the candidate’s ability to analyze, interpret and synthesize information;
2. Demonstrates the candidate’s knowledge of the literature relating to the project or at least acknowledge prior scholarship on which the study is built;
3. Describes the methods and procedures used;
4. Presents results in a sequential and logical manner; and
5. Displays the candidate’s ability to discuss fully and coherently the meaning of the results; and
6. Informs the field and improves practice.

The dissertation is the beginning of the candidate’s scholarly work, not the culmination. Clinical research is expected to provide the candidate with hands-on, directed experience in the primary research methods of the discipline and should provide for the type of research that is expected after the Doctor of Education degree is awarded.

### **Process**

Once a candidate has entered the program, he or she receives a full description of the process to be used for completing the study, including the following:

- Clinical research proposal development and approval.
- Clinical research style guide.
- Dissertation Resources Moodle site.
- Statement on originality.
- Format and publication of the research document.
- Adviser-Advisee relationship.
- Administrative and faculty support.
- Study presentation process.
- Deadline to complete the research project.

The candidate is expected to successfully complete phase one of the research study through enrollment in “Methods and Inquiry of Research, Clinical Research Development (2hrs.), Statistical Analysis, and Professional Inquiry Colloquium I.” The second phase of the research project includes enrollment in ten-plus (10+) credit hours. Once the first three chapters have been presented and approved by the candidate’s dissertation Major Advisor, Research Analyst, and University committee member, a

passing grade for DED 9900 CR Development is recorded on the transcript and the candidate is immediately enrolled in DED 9902.

At the completion of the third year in the program, if the dissertation is not successfully completed, defended, and approved by the candidate's dissertation committee, the candidate is expected to participate in continuous enrollment of one credit-hour per semester (at the current rate per credit hour) until the research study is successfully completed, presented, and approved by the candidate's research committee.

Once the candidate has successfully defended his/her dissertation, the document is edited, prepared for the publication, and a letter grade for DED 9902 is entered on the transcript.

### **General Content**

Following approval of the study proposal by the candidate's major advisor and committee, the candidate will submit the study to include the following:

- Chapter 1: Introduction and Rationale – A description of the study including the purpose and research questions.
- Chapter 2: Review of the literature – A logical link of data to the proposition.
- Chapter 3: Methodology – The hypothesis(es) and a description of the unit or units of analysis to be used.
- Chapter 4: Results – A description of the findings.
- Chapter 5: Discussion – A description of the interpretations made from the results, including the criteria for interpreting the findings and the applications to future studies.

### **Defense of the Dissertation**

1. The candidate defends the dissertation before the Dissertation Committee. The major advisor is responsible for scheduling the examination after receiving assurances from the committee members that they are fully satisfied that the dissertation is acceptable. The candidate is responsible for distributing unbound copies of the dissertation in a timely manner.
2. The Dissertation Committee is responsible for conducting the defense and asks the candidate questions pertinent to the dissertation. The major advisor prepares the candidate prior to the examination by reviewing the candidate's responsibilities for presenting the dissertation. The major advisor provides a brief introductory opening. The candidate is responsible for preparing and conducting a presentation of the dissertation, including a review of the research questions / hypotheses and explanation of the instruments and analysis, followed by a concise presentation of the findings. The Dissertation Committee may then pose questions for the candidate. Other faculty members, program candidates, and

personal guests invited by the candidate may attend but may not ask questions of the candidate.

3. When the Dissertation Committee has posed all necessary questions for the candidate to respond in defense of his/her dissertation, the major advisor excuses the candidate and conducts a discussion among the committee to determine the candidate's success in completing the dissertation. If the candidate's defense is successful, he/she is congratulated, requested to make any minor or major edits prior to publication, and recommended for graduation from the Ed.D. program. If the candidate's defense is not of sufficient quality, the Advisory Committee may request the candidate continue the oral defense or to make requested revisions and reschedule a follow-up defense of the candidate's dissertation or deny approval of the study.
4. When all members of the Dissertation Committee are satisfied, the candidate (or advisor) submits the final electronic copy of the dissertation to the Graduate Department Chair for printing. The candidate obtains at least three bound copies of the dissertation. The candidate secures signatures of the major advisor and Advisory Committee members on all copies. One copy each is distributed to the candidate, Collins Library, and School of Education Graduate Department. Candidates may order additional copies at their own expense.
5. The major advisor files a grade report with Academic Records for the number of credit hours earned for DED 9902 Dissertation Completion and Presentation. The candidate completes all required forms for graduation.

**Appendix D: Required Curriculum for District Leadership Licensure**



## CURRICULUM REQUIRED FOR DISTRICT LEADERSHIP LICENSURE

### Common Program Strands

- Leadership Practices
- Critical Thinking and Problem Solving
- Communication and Collaboration
- Beliefs, Values and Ethical Issues
- Enrichment through Diversity

Course Title	Credit Hours
1) DED 9000 Foundations of Educational Leadership	3
2) DED 9001 Collaborative Leadership in a Community Context	3
3) DED 9002 Leading Special and Diverse Populations	3
4) DED 9003 Developing Professional Learning Communities	3
5) DED 9004 Curriculum, Learning, and Instruction	3
6) DED 9005 Legal, Policy, and Ethical Issues in Leadership	3
7) DED 9006 Human Resources Management	3
8) DED 9007 Management of Finances, Facilities, and Resources	3
9) DED 9008 Program Planning and Evaluation	3
10) DED 9010 Statistical Analysis	3
11) DED 9011 Methods of Inquiry and Research	3
12) DED 9020 Professional Inquiry Colloquium I	2
13) DED 9021 Professional Inquiry Colloquium II	2
14) DED 9030 Field Experience I	2
15) DED 9031 Field Experience II	2
16) DED 9032 Portfolio Presentation	2
<b>TOTAL REQUIRED HOURS for DISTRICT LICENSURE ONLY</b>	<b>43</b>

**Appendix E: University IRB**

 UNIVERSITY  
SCHOOL OF EDUCATION  
GRADUATE DEPARTMENT

Date: \_\_\_\_\_  
IRB PROTOCOL NUMBER \_\_\_\_\_  
(IRB USE ONLY)

**IRB REQUEST**  
**Proposal for Research**  
**Submitted to the [REDACTED] University Institutional Review Board**

**I. Research Investigator(s)** (Students must list faculty sponsor first)

**Department(s)**            **School of Education Graduate Department**

Name	Signature	
1. Dr. Susan Rogers	_____	Major Advisor
2. Margaret Waterman	_____	Research Analyst
3. Dr. Tes Mehring		University Committee Member
4.		External Committee Member

Principal Investigator: Sandra Warner \_\_\_\_\_  
Phone: (913) 991-8229  
Email: swarner@jccc.edu  
Mailing address: 14301 Connell  
Overland Park, KS 66221

Faculty sponsor:  
Phone:  
Email:

Expected Category of Review: \_\_\_ Exempt    Expedited   \_\_\_ Full

**II: Protocol: (Type the title of your study)**

**Student Perceptions of the Doctor of Education in Educational Leadership Program**  
**at [REDACTED] University (2006-2013)**

## Summary

**In a sentence or two, please describe the background and purpose of the research.**

█████ University, in an attempt to stay current with the ever-changing set of demands placed upon education leaders, is seeking to understand the perceptions of students enrolled in the first eleven cohorts of the Doctor of Educational Leadership (Ed.D.) program. The purpose of this study is to identify the collective perceptions of graduate students of the █████ University doctoral program and better understand the influence a variety of factors have on students' perceptions. Students were surveyed to collect and analyze their perceptions of cohort model, program design, curriculum content, advisement, and instruction. Demographic factors taken into consideration as part of this study included gender, current professional position, cohort membership, administrator experience, and age of cohort members. Research was needed to capture doctoral students' perceptions since the changes to the program had been implemented.

**Briefly describe each condition or manipulation to be included within the study.**

There are no conditions or manipulations included within this study.

**What measures or observations will be taken in the study? If any questionnaire or other instruments are used, provide a brief description and attach a copy. Will the subjects encounter the risk of psychological, social, physical or legal risk? If so, please describe the nature of the risk and any measures designed to mitigate that risk.**

The █████ University Ed.D. End of Program Survey will be the instrument used. The survey consists of seven major sections: 1) Introduction, 2) Background Information, 3) Collegiality, 4) Program Design/Schedule, 5) Curriculum Content, 6) Advising and Instruction, and 7) Recommendation and Open Comments. The introduction provides background information for the survey, states its purpose, and associated participant protections. The background section includes six multiple choice questions pertaining to demographic information. Candidates are asked to select their gender, age range, cohort group, whether they have served as an administrator, current professional position, and up to three of the primary reasons participants chose the █████ University Ed.D. program. Each of the following sections uses a five-point Likert scale ranging from Strongly Disagree to Strongly Agree to gather participant feedback. The collegiality section is comprised of ten survey items that gather participant feedback on his/her perceptions of the cohort format, while section four focuses on the ways courses are sequenced and scheduled. Curriculum content is covered by ten items in section five to better understand perceptions of the value of the curriculum content and the way it is covered. The advising and instruction section uses ten statements which evaluate the perceived value of the major advisor and program instructors. The final section gages to what

degree the participant would recommend the program and provides a dialog box for comments. The survey is attached to this form.

**Will any stress to subjects be involved? If so, please describe.**

The study will not involve any stress to the subjects.

**Will the subjects be deceived or misled in any way? If so, include an outline or script of the debriefing.**

The study will not deceive or mislead the subjects in any way.

**Will there be a request for information which subjects might consider to be personal or sensitive? If so, please include a description.**

No personal or sensitive information is requested as part of this study.

**Will the subjects be presented with materials which might be considered to be offensive, threatening, or degrading? If so, please describe.**

No offensive, threatening, or degrading materials will be presented in support of this study.

**Approximately how much time will be demanded of each subject?**

Subjects are asked to take approximately 20 minutes to complete the [REDACTED] University Ed.D. End of Program Survey.

**Who will be the subjects in this study? How will they be solicited or contacted? Provide an outline or script of the information which will be provided to subjects prior to their volunteering to participate. Include a copy of any written solicitation as well as an outline of any oral solicitation.**

The population for this study includes all candidates enrolled in the [REDACTED] University Ed.D. program. The End of Program Survey is a survey that all candidates are asked to complete at the end of their coursework. The population consists of 260 candidates enrolled in eleven unique cohorts beginning in February 2006 through August 2012. See the Introduction section of the attached survey for the written solicitation.

**What steps will be taken to insure that each subject's participation is voluntary? What if any inducements will be offered to the subjects for their participation?**

Subjects are made aware of their protections and the voluntary confidential nature of the survey. The following language is included in the Introduction section of the survey:

More specifically this survey has been designed to investigate student satisfaction levels during participation in the [REDACTED] University Educational Leadership Doctoral program. The survey should take no more than 20 minutes to complete and there are no right or wrong responses. All information will remain confidential and no individual respondent will be identified when results are published. Only summary information will be reported.

Protections for Participants: [REDACTED] University supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study.

Your participation is solicited, although strictly voluntary. Your name will not be associated in any way with the research findings. Completion of the survey indicates your willingness to participate in this project and that you are over the age of eighteen. If you have any additional questions about your rights as a research participant, you may contact Peg Waterman at [pwateman@\[REDACTED\].edu](mailto:pwateman@[REDACTED].edu) or Dr. Susan Rogers at [srogers@\[REDACTED\].edu](mailto:srogers@[REDACTED].edu).

**How will you insure that the subjects give their consent prior to participating? Will a written consent form be used? If so, include the form. If not, explain why not.**

Candidates give consent to participate by choosing to complete the survey. Candidates may opt out of completing the survey if they so choose.

**Will any aspect of the data be made a part of any permanent record that can be identified with the subject? If so, please explain the necessity.**

No data will be made part of any permanent record that can be identified with the subject.

**Will the fact that a subject did or did not participate in a specific experiment or study be made part of any permanent record available to a supervisor, teacher or employer? If so, explain.**

The fact that a candidate did or did not participate in the study will not be made part of any permanent record available to a supervisor, teacher, or employer.

**What steps will be taken to insure the confidentiality of the data? Where will it be stored? How long will it be stored? What will be done with it after the study is completed?**

1. Data will be collected by the faculty advisor and no names of participants are solicited or included.
2. The data will be stored in a confidential online folder throughout the course of the study.
3. Upon completion of the study, the data will be archived for future use by [REDACTED] University.

**If there are any risks involved in the study, are there any offsetting benefits that might accrue to either the subjects or society?**

While understanding student perceptions may produce unexpected results, the evaluation process is critical to a doctoral program's long-term success. Student evaluations, when used appropriately, aid educational leaders in assessing the impact of instruction within the context of the personal experience of the student. This study attempts to aid [REDACTED] University in evaluating, from the students' perspective, the program's ability to meet designed expectations, prepare candidates to take action for the betterment of society.

**Will any data from files or archival data be used? If so, please describe.**

The data collection procedures for this study consists of obtaining an archive of survey data stored in an Excel file format from the program coordinator.

## **Appendix F: Survey Instrument**



## Survey Instrument

### 1. Introduction

Understanding student perceptions regarding the components of their graduate program experience is critical in evaluating a doctoral program. Student evaluations, when used appropriately, aid educational leaders in assessing the impact of instruction within the context of the personal experience of the student. Student evaluations, in particular, achieve this goal in a manner that other forms of evaluations such as faculty interview or peer review do not as adequately address.

This survey is aimed at identifying the collective perceptions of graduate students who have participated in [REDACTED] University's Doctorate of Education in Educational Leadership program. This study attempts to aid [REDACTED] University in evaluating, from the students' perspective, the program's ability to meet designed expectations and achieve program goals in a manner that was reasonable for, and relevant to, student participants.

More specifically this survey has been designed to investigate student satisfaction levels during participation in the [REDACTED] University Educational Leadership Doctoral program. The survey should take no more than 20 minutes to complete and there are no right or wrong responses. All information will remain confidential and no individual respondent will be identified when results are published. Only summary information will be reported.

Protections for Participants: [REDACTED] University supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study.

Your participation is solicited, although strictly voluntary. Your name will not be associated in any way with the research findings. Completion of the survey indicates your willingness to participate in this project and that you are over the age of eighteen. If you have any additional questions about your rights as a research participant, you may contact Doug Sumner at [sumnerd@usd231.com](mailto:sumnerd@usd231.com) or Dr. Harold Frye at [hfrye@\[REDACTED\].edu](mailto:hfrye@[REDACTED].edu)

Thank you for taking the time to share your thoughts and experiences.

## 2. Background Information

### 1. Gender

Male

Female

### 2. Age Range

25-32

33-40

41-49

50-56

57+

### 3. Cohort Group Membership

Cohort #1

Cohort #2

### 4. Do you currently, or have you previously, served as a school administrator (building level, district level or post-secondary)?

Yes

No

### 5. Current Professional Position

K-12 Teacher

Higher Education Teacher

K-12 Building Administrator

K-12 District Administrator

Higher Education Administrator

Other

### 6. Primary Reasons for choosing this program (select up to three reasons)

Reputation of the Institution

Convenience/Location

Program Design and Expectations

Faculty Reputation

Previous personal experience with █████ University

Practical vs. Theoretical Program Approach

Program is/was promoted as "Student Centered"

Dissatisfaction with other Programs

### 3. Collegiality

1. My interaction with other cohort members was a valuable part of the learning experience.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

2. I could depend on other cohort members for support and encouragement.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

3. While others formed positive relationships, I often felt left out.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

4. The cohort format increased my level of class participation.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

5. I was no more or less comfortable in this "cohort" environment than I have been in previous "non-cohort" educational experiences.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

6. The cohort system created an unhealthy level of competition between class members.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

7. My level of academic achievement was not positively affected by the cohort format.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

8. I hope to maintain several of the relationships I have developed during this program.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

9. I prefer the cohort format over more traditional (non-cohort) settings.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

10. The cohort format was an unnecessary component of this program.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

#### 4. Program Design / Schedule

1. Courses were offered in a logical sequence (information in earlier courses was built on in later courses).

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

2. I would prefer taking courses twice a week to eliminate four hour class sessions.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

3. The course sequence in this program seemed random and often illogical.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

4. Ample consideration was given to school year (employment) events and work schedules when planning course schedules and class activities.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

5. Breaks between courses were appropriately scheduled.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

6. The use of Blackboard as an instructional resource could be better utilized to allow for one week of off-site, independent instruction during each seven week course.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

7. The program's attendance policy is/was reasonable and appropriate.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

8. The 6:00 PM class start time is/was reasonable and consistently followed by program instructors.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

## 5. Curriculum Content

1. Courses in this program addressed common issues and contemporary challenges facing current and future school leaders.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

2. Courses in this program focused too heavily on a theoretical or historical perspective rather than on issues related to actual practice.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

3. Weekly assignments / course expectations were rigorous but reasonable.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

4. Assignments and course activities provided opportunities for practical application of critical leadership skills.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

5. The course outcomes associated with this program are too broad and need to align more specifically to K-12 school leadership.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

6. I believe courses in school/district governance and day to day operations/management were under-represented in this program.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

7. The courses in this program have measurably increased my ability to be an effective educational leader.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

8. The standards, expectations and deadlines related to the clinical research study were/are reasonable.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

9. In addition to a general statistics course, a specific course on research (directly related to the clinical research study) should be offered as part of the formal program.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

10. Overall the curriculum in this program was appropriate for my professional needs.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree



## 6. Advising and Instruction

1. The role of the major advisor was well defined and consistent for each student in the program.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

2. My advisor was readily available and played a significant role in my development throughout the Ed. D. program.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

3. My advisor was more critical than supportive.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

4. The assignment of major advisors should be made much earlier in the program.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

5. Materials submitted to my advisor were carefully considered and returned in a timely manner.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

6. I maintained a healthy and productive relationship with my advisor.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

7. Throughout the program instructors demonstrated mastery of the content they were responsible for teaching.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

8. Program instructors consistently demonstrated a knowledge of, and appreciation for, the principles of adult learning theory.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

9. Direct Instruction (lecture) was the dominant form of instruction throughout this program.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

10. Class activities and the instructional delivery strategies used throughout this program stimulated my thought process and led to immediate and long term professional growth.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

## **7. Recommendation and Open Comments**

1. All things considered I would recommend this program to other education professionals seeking to complete a doctoral program in educational leadership.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

2. Please include any comments you believe will help support and or explain your responses to previous survey questions (please skip a line between comments).

**Appendix G: IRB Approval**



*Baker University Institutional Review Board*

September 24, 2014

Dear Sandra Warner and Dr. Rogers,

The Baker University IRB has reviewed your research project application and approved this project under Exempt Status Review. As described, the project complies with all the requirements and policies established by the University for protection of human subjects in research. Unless renewed, approval lapses one year after approval date.

Please be aware of the following:

1. Any significant change in the research protocol as described should be reviewed by this Committee prior to altering the project.
2. Notify the IRB about any new investigators not named in original application.
3. When signed consent documents are required, the primary investigator must retain the signed consent documents of the research activity.
4. If this is a funded project, keep a copy of this approval letter with your proposal/grant file.
5. If the results of the research are used to prepare papers for publication or oral presentation at professional conferences, manuscripts or abstracts are requested for IRB as part of the project record.

Please inform this Committee or myself when this project is terminated or completed. As noted above, you must also provide IRB with an annual status report and receive approval for maintaining your status. If you have any questions, please contact me at [CTodden@BakerU.edu](mailto:CTodden@BakerU.edu) or 785.594.8440.

Sincerely,

*Chris Todden EdD*  
Chair, Baker University IRB

Baker University IRB Committee  
Verneda Edwards EdD  
Sara Crump PhD  
Molly Anderson  
Scott Crenshaw

**Appendix H: Cohort Member Ratings**

Table 36

*Cohort Member Ratings and Completion Tracking Information as of December 15, 2014*

Cohort (start date)	Rating of Cohort Model	Rating of Program Design and Schedule	Rating of Curriculum Content	Rating of Advising	Rating of Instruction	Completed Coursework	ABD / Graduated
1 (2/06)	4.22	3.49	3.89	3.17	3.67	100%	3/18
2 (8/06)	4.13	3.69	3.90	3.05	3.90	100%	0/21
3 <sup>a</sup> (8/07)	4.05	3.30	3.71	3.39	3.25	100%	10/11
4 (1/08)	3.99	3.66	3.85	3.64	3.76	100%	4/6
5 <sup>b</sup> (8/08)	4.12	3.53	3.92	3.63	3.90	96%	8/10
6 (8/09)	3.66	3.86	3.10	3.61	3.38	90%	4/9
7 (8/09)	4.15	3.67	2.95	3.47	3.37	100%	5/11
8 (8/10)	4.33	3.70	3.70	3.55	3.97	88%	10/9
9 (8/11)	4.04	3.47	3.80	3.68	3.86	85%	15/3
10 (8/12)	4.04	3.37	3.53	3.68	3.71	88%	16/1
11 <sup>d</sup> (8/12)	4.44	3.48	3.91	3.93	3.94	0	1/0
12 <sup>c</sup> (8/13)	3.96	2.89	3.35	3.65	3.59	0	0/0
13 <sup>cd</sup> (8/13)	4.27	3.70	3.92	3.96	3.77	0	0/0

*Note:* Data adapted from Personal Communication with Program Coordinator on December 15, 2014. The window for degree completion has expired for cohorts 1 and 2.

<sup>a</sup>One candidate died prior to graduating. <sup>b</sup>One candidate died prior to completing the last course.

<sup>c</sup>Cohorts 12 and 13 have not completed coursework. <sup>d</sup>Cohorts 11 and 13 are enrolled in the higher education track.