DIVERSITY & CULTURAL COMPETENCE IN AN ACADEMIC HEALTH CENTER: ORGANIZATIONAL LEADERSHIP IN A COMPLEX SYSTEM

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by

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ORGANIZATIONAL LEADERSHIP IN A COMPLEX SYSTEM

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DIVERSITY & CULTURAL COMPETENCE IN AN ACADEMIC HEALTH CENTER: ORGANIZATIONAL LEADERSHIP IN A COMPLEX SYSTEM

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ABSTRACT

Health care outcomes are dramatically worse for patients of minority and low-socioeconomic backgrounds (AHRQ, 2013; IOM, 2012). This problem is projected to worsen as the United States population shifts to “become more racially and ethnically diverse, with the aggregate minority population projected to become the majority” (Vincent & Verkoff, 2010, p. 1), gradually gets older as a whole (U.S. Census Bureau, 2011, 2012), and with the implementation of the Patient Protection and Affordable Care Act that extends insurance options to millions more Americans, many of whom are from these disadvantaged backgrounds (HHS, 2012; Pfizer, 2008). Health professions education institutions, known as academic health centers, have the responsibility for training new health care providers (AAHC, n.d.), and these institutions have increasingly experienced more pressure to improve diversity and cultural competence in their organizations because of the poor health outcomes of these patients (AACN 2008a; AACN, 2008b; AACN 2009; AAMC, 2005; AAMC 2008; ADA, 2011; Elwood, 2012).

The purpose of this study was to examine organizational leadership issues and adaptability of academic health centers as related to meeting social change of this magnitude. The qualitative case study examined an academic health center to learn about the organizational approach to diversity and cultural competence and ability to adapt to changing environments. Using an approach to leadership studies suitable for complex environments such as academic health centers, the researcher employed the lens of Complexity Leadership Theory (Uhl-Bien & Marion, 2009) to not only reveal the nature of leadership for diversity and cultural competence efforts at these...
institutions, but also to expand the emerging body of knowledge about the application of this theory.

Data collection consisted of a document and artifact analysis, personal interviews, and onsite observation. Data were analyzed using inductive techniques through a constructivist lens in order to ascertain the gestalt of diversity, cultural competence and adaptability at the institution. Triangulation and member-checking strategies were employed to help ensure the validity and reliability of the findings.

Findings of the research include inductive and conceptual themes. Inductive themes include examples of how the organizational values of diversity and cultural competence are demonstrated, an organizational phenomenon based on the relationship of money, the recruiting funnel and the development of partnerships, the emotional overlay of diversity-related initiatives and the role of accountability. Conceptual themes were those related to Complexity Leadership Theory such as the administrative, enabling and adaptive functions of leadership. Several conclusions can be drawn from this research including evidence of academic health centers as complex adaptive systems and the importance of time and money to advance diversity goals.

Implications for practice were identified in this research. Implications included bearing in mind the emotional aspects of diversity efforts, the role and importance of positional leaders, tempering the use of partnerships and listening to stakeholders to foster organizational learning.
CHAPTER ONE
INTRODUCTION TO STUDY

Academic health centers’ administrators are responsible for organizations that educate the next generation of health care providers (AAHC, n.d.). These leaders are tasked with demonstrating overall quality in their education programs that train future doctors, nurses, dentists, pharmacists and other providers. More specifically, the administrators have been asked to ensure future health care providers are culturally competent and prepared to provide high quality care to an increasingly diverse patient population (AACN 2008a; AACN, 2008b; AACN 2009; AAMC, 2005; AAMC 2008; ADA, 2011).

Cultural competence among health care providers is important because health outcomes are far worse among patients of low socio-economic or diverse backgrounds (AHRQ, 2013; IOM 2012). Since the 2003 seminal report, Unequal treatment: Confronting racial and ethnic disparities in healthcare (Smedley, Stith & Nelson, 2003), health care leaders have attempted to improve the quality of care patients receive. However, almost ten years later, in 2012, health care outcomes are still worse for patients of diverse backgrounds (Betancourt, 2012).

Throughout that same time period, various agencies affiliated with health professions education have issued recommendations, strategies and requirements related to improving diversity and cultural competence at academic health centers (AACN
From the federal level to the institutional level, attempts have been made to diversify these higher education institutions, and to embed cultural competence as an institutional value. Yet, the health outcomes of diverse patients remain virtually unchanged (AHRQ, 2013; Betancourt, 2012). Interactions with providers and management of chronic conditions are marred by low quality and morbid outcomes (AHRQ, 2013; IOM, 2012).

Further exacerbating this problem is the rapidly changing population of the United States to being more diverse and older (U. S. Census Bureau 2011, 2012), and the implementation of the Patient Protection and Affordable Care Act (HHS, n.d.). The shift in population means patients of more diverse background will be streaming into the health care system. With the Affordable Care Act, or Obamacare as it is frequently referred to, expanding coverage to millions more people (HHS, 2012; Pfizer, 2008), the problem of providing quality health care to all seems to be a massive undertaking. Academic health centers should adapt to these two seismic changes underway to provide educational programs that value diversity and cultural competence so their students are prepared to work in a dramatically different health care setting.

In 2013, the annual survey of Great Colleges to Work For, The Chronicle of Higher Education (July 26, 2013), asked employees at higher education institutions to respond to workplace quality and engagement issues. Of the 45,000 people at 300 institutions who responded, institutions across the country were noted for their employee’s overall job satisfaction, respect and appreciation, work-life balance and confidence in senior leadership (Chronicle, 2013). In 2013, still only a few institutions –
of the top colleges and universities in the country – were noted as a good place to work for in terms of diversity (Chronicle, 2013, A5). Academic health centers (AHCs), a specific type of higher education institution, have the opportunity to shape organizational cultural competence and instill diversity as core values in future health care providers.

To address diversity and inclusion issues on campus, numerous colleges and universities across the country have established the Chief Diversity Officer (CDO) position (Leon, 2014; Williams & Wade-Golden, 2013). In fact, over the last ten years, more than 60 CDOs were instituted to oversee diversity goal and units (Williams & Wade-Golden, 2013). Leon (2014) examined the scope and structure of these officers, outlining the various duties, responsibilities and characteristics. Leon concluded there are three general types of CDOs – ones of lower rank and scope to those that are of high rank (positional title) and scope. However, few of the CDOs Leon examined had enough authority, support or funding to fulfill the expectations set forth (2014). CDOs at academic health centers were not specifically delineated in Leon’s research. Therefore, AHC leaders need to know more about the nature of these efforts on AHC campuses, including how to improve cultural competence and diversity on their campuses.

Provided in this chapter is an overview of research that sought to gain a deeper understanding of what actions organizational leaders are taking that relate to diversity and cultural competence at academic health centers. First, a review of the problem will be addressed, followed by an explanation of the purpose of the research. Specific research questions will be presented along with information about the conceptual underpinnings of the study. The research design and methodology, along with definitions of key terms,
will explain how this study was conducted. Finally, an overall summary of project will reinforce the need for and potential benefits of this study.

**Conceptual Underpinnings for the Study**

To learn more about how academic health centers have approached diversity and cultural competence, this research examined the topic from the perspective of how leadership affects an organizational system. AHCs are noted to be complex environments (Begun, 2003; Brafman & Pollack, 2013; Lindberg et al., 2008). Diversity, cultural competence and inclusion can be abstract topics, difficult to define, measure and understand. Therefore, this research relied on tenants from Complexity Leadership Theory (CLT) to explore academic health centers to increase understanding and foster AHCs’ adaptive capacity related to diversity. CLT emerged in the early 21st century as a way of learning about complex situations and how organizations can adapt (Uhl-Bien & Marion, 2009; Uhl-Bien et al., 2007). Before exploring Complexity Leadership Theory and how it can be a useful lens for studying diversity and cultural competence, it is helpful to first review some general organizational and leadership concepts.

**Integrating Systems Thinking and Leadership**

Understanding the nature of an organization and how it can change can be approached by both a systems perspective and what is known of best leadership practices. In the case of attempting to improve diversity and cultural competence at academic health centers, this research employed the lens of Complexity Leadership Theory, a concept and model that has emerged from complexity science (Marion & Uhl-Bien, 2001; Uhl-Bien & Marion, 2009). This theory is appropriate for studying diversity in AHCs because it accounts for the complex environment in which these goals exist.
Other leadership theories can provide certain insights when studying diversity and cultural competence. Path-goal and leader-member exchange offer formulas for analyzing leadership or facilitating interactions at the individual level (Kezar, Carducci & Contreras-McGavin, 2013; Northouse, 2010; Yukl, 2006). Though, House (1996) pointed out path-goal theory is specific to the “relationships between formally appointed superiors and subordinates in their day-to-day functioning.” (p. 325) and that it is “primarily a theory of task and person oriented supervisory behavior.” (p. 325).

Essentially, path-goal theory addresses leadership at the ground level – not on a large scale or in complex environments. Similarly, leader-member exchange has been informative to studying diversity and inclusive leadership behavior that fosters retention of employees (Nishii & Mayer, 2009). Still, this theory is at the individual or small group level.

These options could be useful in studying diversity and change in an organization in combination with an organizational analysis model, but they are not sufficient for studying large, complex systems like an academic health center. Transformational leadership offers the most promise when considering alternative theoretical lenses. In fact, Wang et al. (2011) concluded in their meta-analysis of over 100 studies transformational leadership is positively related to strong individual, team and organizational performance. To be sure, many of the leaders who participated in this study demonstrated transformational leadership characteristics. Complexity Leadership Theory was selected over transformational leadership theory in this case because it provides a context to look at other leadership functions in large, system (Avolio, Walumbwa, & Weber, 2009; Pisarski et al., 2011).
Other AHCs concluded their various efforts to impact diversity goals on campus were disconnected and ineffective (South-Paul et al, 2013). This type of disconnectedness is what makes Complexity Leadership Theory useful. In the realm of complexity science, control is distributed or decentralized, order and disorder co-exist, and outcomes emerge from self-organization (Lichtenstein & Plowman, 2009; Marion & Uhl-Bien, 2001; Schneider & Somers, 2006; Uhl-Bien & Marion, 2009). Scientists and researchers have traditionally assumed that if the various pieces of the system could be known, then the whole system could be known, an approach known as reductionism (Mazzochi, 2008). In contrast, complexity embraces uncertainty, unpredictability and the non-linear nature of complex organizations because “complexity science suggests that rules have less relevance than we traditionally thought, whereas creativity has more relevance that traditionally thought” (Anderson, Crabtree, Steele & McDaniel, 2005, p. 677). Hubler, Foster, and Phelps (2007) suggested researchers should instead examine how parts of the system are interrelated and interact, and how the system as a whole adapts. It is for these reasons, social scientists have begun to adopt tenants of complexity science because it opens a window for qualitative analysis (Schneider & Somers, 2006).

**Complexity Leadership Theory**

Complexity Leadership Theory (CLT) suggests leaders must be alert and adaptive to stay ahead of changes in the environment (Uhl-Bien et al., 2007). CLT shifts leadership and organizational theoretical approaches because it moves from the linear to nonlinear system, from reductionism to holistic analysis, to reveal novel behaviors of the system (Marion & Uhl-Bien, 2001, Schneider & Somers, 2006; Uhl-Bien & Marion, 2009). Whereas, other leadership and organizational theories take a reductionist
approach, looking at the parts of the whole, CLT looks at organizations and leadership more holistically (Marion & Uhl-Bien, 2001).

CLT examines leadership, not just leaders, by encompassing formal leaders, informal leaders or middle managers, events, interactions, the context in which things happen, including sub-units, behaviors, and outcomes, and attempts to organize these things to gain understanding from them (Lichtenstein, Uhl-Bien, Marion, Seers, & Orton, 2006; Uhl-Bien et al., 2007). Further, the goal of utilizing CLT is to foster individual and organizational flexibility and adaptability (Uhl-Bien et al., 2007). The units of analyses are the larger organization, or Complex Adaptive System (CAS) as it is referred to, as well as sub-units, or micro-contexts, within the bureaucratic system (Nooteboom & Termeer, 2013; Uhl-Bien et al., 2007). Specifically, CLT focuses on “behaviors and changes that emerge spontaneously from the dynamic of neural-like networks” (p. 304) of people, units and the larger system. In short, CLT is an attempt to describe how people and organizations operate and change.

Though CLT offers a new way to study organizational leadership, especially in heavily bureaucratic ones, substantive research on the theory is still emerging (Ott, 2010; Sweetman, 2010; Uhl-Bien & Marion, 2009). Avolio et al. (2009) believed while complexity is an innovative way to study leadership, more research into the application is needed to harness the benefits of this approach. Even the most recent attempts to employ CLT models confirm “successful complexity leadership exists” (Nooteboom & Termeer, 2013, p. 12), also reveal limitations such as the need for larger or longer studies or perhaps mixed method approaches.
Studies utilizing CLT to analyze organizational problems have involved both quantitative (Hanson & Ford, 2010; Sweetman, 2010) and qualitative methods (Nooeeboom & Teermer, 2013; Ott, 2010). Both approaches have revealed new insights about organizations and the applicability of CLT. This research employed a qualitative approach using case study methodology, which will be more fully described in the following sections.

**Statement of the Problem**

Issues of diversity and inclusion continue to be highly charged topics in the United States. In 2013, the Supreme Court sent the Abigail Fisher case, which challenged the use of race in college admissions decisions, back to the district court, perpetuating the ongoing debate about race considerations in college admissions practices (Fisher v. University of Texas at Austin, 09-50822, 2013). The same year, the country watched as the *Zimmerman v. State of Florida* case unfolded acquitting community watch volunteer George Zimmerman of killing a black teenage boy, Trayvon Martin, leading to demonstrations of protest and a resurfacing of race issues in public discourse (Scherer & Dias, 2013). Other legal battles and public backlash have occurred such as celebrity chef Paula Deen’s discrimination case alleging racial slurs toward former employees (Duke, 2013), and a Cheerios commercial featuring a biracial family that caused a slew of racially charged remarks so hate-filled, Cheerios opted to turn off the commenting feature of the YouTube website [http://www.youtube.com/watch?v=lXinqlXvIRk](http://www.youtube.com/watch?v=lXinqlXvIRk). Also hate filled, were the reactions to 11-year old Sebastian De La Cruz, a Mexican American-born child in Texas who sang the National Anthem wearing mariachi clothing (Gutierrez, 2013). Perhaps the most visible recent event accentuating ongoing race-related tension is
the situation in Ferguson, Mo., where riots and unrest continue in the aftermath of the shooting death of a black teenager by a white police officer (“More Missouri protests planned over police shootings,” October 13, 2014).

Clearly, diversity and inclusion are still issues Americans struggle with even in the globalized world of 2014. The problem is, these struggles persist in hospitals, doctor’s offices, and other health care related agencies leading to significant disparities in morbidity and mortality (AHRQ, 2013; IOM, 2012). As a result, the accrediting bodies for hospitals and health education programs require these institutions to demonstrate efforts to improve cultural awareness and patient-centered care (AACN 2008a; AACN, 2008b; AACN 2009; AAMC, 2005; AAMC 2008; ADA, 2011; Elwood, 2012; The Joint Commission, 2010).

The intersection of higher education and health care results in a highly complex system that is difficult to understand and predict outcomes (Begun, 2003; Lindberg, Nash & Lindberg, 2008). Academic health centers have numerous considerations within the organization including curricula of health professions programs, organizational structure and employee relations, as well as related research, clinical operations and community health programs. Further, the need to reinvigorate organizational diversity efforts is growing as a result of changing United States demographics and health care policy. Dramatic shifts in minority populations (U.S. Census Bureau, 2011, 2012) and the new Patient Protection and Affordable Care Act of 2010 that expands health coverage to millions of Americans (HHS, n.d.), reaffirm the need for improved diversity and cultural competence efforts at academic health centers. As a result, to address diversity issues, “medical schools and teaching hospitals are shifting their strategies to better capture,
leverage, and respond to the rich diversity of human talents and aptitudes” (Nivet, 2011, p. 1488).

Currently, medical schools in the United States are on a “collision course” (Gonzales & Stoll, 2002, p. 1) with an increasingly diverse population. Not only are minorities underrepresented in medical schools, as students, faculty and leaders, this underrepresentation is linked to poor health outcomes of minority patients (Gonzales & Stoll, 2002; IOM, 2012). Traditional leadership, organizational, and systems approaches are not sufficient for guiding the type of institutional change required in a complex environment like academic health centers, especially when addressing complex topics like diversity and cultural competence (Schneider & Somers, 2006; Tan, et al., 2005). Traditional approaches focus mainly on the individual as a leader or follower (Kezar, Carducci & Contreras-McGavin, 2013; Northouse, 2010; Yukl, 2006) or a simple leader-follower relationship equation, not necessarily taking into consideration how leadership occurs within a changing system. The problem introduced here will magnify as the societal changes unfold, and the need for more culturally competent health providers will be greater in coming years. Going forward, Nivet (2011) reported the Association of American Medical Colleges stated it “will also play a more active role in building the capacity of the nations’ medical schools and teaching hospitals to move diversity from the periphery to a core strategy” (p. 1488). Other nursing and health programs have initiated similar strategies (AACN, 2008a; 2008b; AACN, 2009; ADA, 2011).

Despite innovative leadership models that are emerging such as servant leadership, distributed leadership and further study of transformational leadership (Avolio, Walumbwa, & Weber, 2009; Kezar et al., 2013; Yukl, 2006), these theories are
not sufficient to capture and account for highly complex systems. (Avolio et al., 2009; Uhl-Bien, Marion & McKelvey, 2007). More knowledge is needed about how diversity and cultural competence are implemented as core institutional values in a complex higher education environment. Leaders need to know more about the nature of these initiatives in order to formulate more informed institutional plans. Complexity Leadership Theory, an emerging organizational leadership concept, offers a modern framework for which to study leadership within a complex system (Marion & Uhl-Bien, 2001; Schneider & Somers, 2006, Uhl-Bien & Marion, 2009, Uhl-Bien et al., 2007). Therefore, this research engaged the concepts of complexity science, and will test the new framework of Complexity Leadership Theory, to learn about diversity and cultural competence in academic health centers. The goal of this research is to reveal new knowledge that could impact the quality of care. The purpose of this research, along with specific study methods will be explained in the next sections.

**Purpose of the Study**

The purpose of this research was to investigate the nature of diversity and cultural competence programs and efforts at a higher education institution, specifically an academic health center, to examine organizational structures, programs, and stakeholder perspectives to learn about leadership and the adaptive capacity of the organization. Further, the purpose of this research was to examine what Cross, Bazron, Dennis and Isaacs (1989) explained as “a set of congruent behaviors, attitudes, and policies that come together in a system, agency or among professionals and enable that system, agency or those professions to work effectively in cross-cultural situations” (p. 13). This research
explored an academic health center utilizing Complexity Leadership Theory as a lens to identify these aspects.

While this research examined the health care industry, it is specifically investigating the higher educational programs (e.g., training programs, professional schools) at universities. It did not address health care providers, nor did it analyze hospitals or other health care clinics. This research was focused on the higher education aspect of organizations that train future health care providers.

**Research Questions**

In this study, the following research questions guided the data collection and analyses so as to achieve the goal of increasing understanding about diversity and cultural competence efforts at an academic health center:

1. What are the organizational strategies that address diversity and cultural competence?
2. How are diversity and cultural competence viewed by institutional stakeholders?
3. How is leadership demonstrated related to diversity and cultural competence strategies?
4. What is the AHC doing to adapt to the evolving health care environment?
5. How can Complexity Leadership Theory be applied to address organizational leadership issues and foster change?

Examining these questions throughout the study provided information for AHC leaders to consider as they move forward with strategies addressing diversity issues. In addition, an exploration of a new perspective on leadership could further inform the conversation about organizational leadership in the modern era.
Design of the Study

This research employed a qualitative approach using case study methodology. This design was appropriate because the researcher could observe and analyze both the formal and informal constructs of the organization (Anderson, Crabtree, Steele & McDaniel, 2005). Certainly, analyzing an academic health center’s approach to diversity values and cultural competence issues meets these criteria because of the impending demographic shifts and health care policy changes, and the complex nature of these organizations.

Specifically, this research focused on various forms of data collection such as document and artifact analysis, personal interviews and observation (Blatter & Haverland, 2012; Swanborn, 2010). The goal was to discover the nature of diversity and cultural competence programs at academic health centers to glean knowledge for higher education leaders faced with historic, impending change.

Limitations and Assumptions

In any research endeavor there will be certain limitations to the project along with underlying assumptions that constrain the work. In this case study research, there are at least four limitations related to the design and the scope. Further, there is at least one major assumption based on using the qualitative approach, as well as assumptions related to the lens of complexity.

Limitations

There are several limitations to this study that must be considered when reviewing the data and subsequent findings. First, while there is value in examining an institution in a case study format so as to draw the most reliable conclusions, this can present a
limitation in that the themes may not be transferable to other institutions that are of differing size or scope, and in this case, differing geographical regions or proximity to the main campus. In this way, the knowledge gained could be “less informative” (Swanborn, 2010, p. 55) than in other approaches.

A second limitation is that the setting is a highly complex systems (Begun, 2003; Tan et al., 2005), even a case study may not fully capture the nature of diversity initiatives and organizational cultural competence in the organization. Perhaps another method, such as ethnography, could provide an even deeper understanding of the organization, its leaders, and the issues.

Third, the data collection methods, in and of themselves, have advantages and limitations (Crewswell, 2009). For example, using an observation strategy allows the researcher a live account of a situation. It also presumes the researcher is good at observing natural settings and the situations is not skewed simply because the researcher is present (Creswell, 2009). Interviews provide a certain amount of control over the data collection process, and allow for the construction of time sequences, but this approach is limiting in that the researcher may or may not obtain accurate and useful information from the interviewee (Creswell, 2009). Document and artifact analysis are useful and less affected by personal interpretation (of the participants or researcher), but not all information that could substantially contribute to this research may be accessible or complete (Creswell, 2009).

Finally, when analyzing the data from the organization, the leaders and others, the researcher brings a certain amount of bias into the research setting (Hatch, 2002).
Evaluating qualitative data using multiple evaluators could result in more reliable analyses and increase the validity of the findings (Creswell, 2009).

**Assumptions**

Using a qualitative approach and employing a case study method assumes relationships can be determined (Blatter & Haverland, 2012). Moreover, in case study research, the “investigator must assume that the factor of interest is both necessary and sufficient to produce the outcome” (p. 39). Even though qualitative research can provide insights different than quantitative, careful consideration must be given to findings. Assumptions are based on the foundation of qualitative research in that it presumes informative themes will be revealed (Blatter & Haverland, 2012). International research related to diversity training in healthcare settings suggested a mixed method approach is valuable when assessing organizational cultural competence (Celik, Abma, Klinge & Widdershoven, 2012), though most domestic inquiry has been one or the other. The underlying assumption about this particular approach to research is that more substantive information can be gathered using qualitative means instead of quantitative means.

While there is some recent supporting research (Nooteboom & Termeer, 2013; Ott, 2010), employing concepts from complexity leadership theory assumes this approach will make organizations more adaptive and innovative. For this research, the overarching assumption is that if leaders approach diversity and cultural competence from a complexity viewpoint, eventually, health professions students will be more adequately prepared to meet changing health care needs and ultimately health outcomes of minority and underserved patients will improve. The researcher assumed that by gathering and synthesizing this information, critical novelties emerged through the use of Complexity
Leadership Theory (Uhl-Bien & Marion, 2009; Uhl-Bien et al., 2007). There were no guarantees that this research would reveal anything novel or applicable, though the researcher strived to delve deep enough into the problem to ensure achieving this goal.

**Design Controls**

At the onset of this qualitative data collection process, the researcher established practices to facilitate an organized process. Specifically, the researcher maintained a journal outside of the actual interviews and observation field notes to keep track of research activities, tasks and the overall process (Lincoln & Guba, 1985). The journal tracked the researcher’s (as the data collection instrument) personal accounts of the research events and process (Erlandson et al., 1993). The purpose of recording this information was to monitor and mediate the researchers’ personal interpretations with the actual data collected and participant perspective (Creswell, 2009; Erlandson et al, 1993; Lincoln & Guba, 1985).

Since qualitative research is a subjective endeavor, issues of validity and accuracy are of concern (Creswell, 2009). To help ensure the trustworthiness and dependability of the research, data were triangulated to compare findings (Creswell, 2009, Lincoln & Guba, 1985), and thick descriptions were presented allowing readers to evaluate the overall accuracy of the work (Creswell, 2009; Erlandson et al., 1993). Thus, through evaluating data from the institution, themes emerged to reveal the nature of the issues at the selected institution. Evidence of the themes was described in-depth to offer examples and increase transferability (Erlandson et al., 1993). Consequently, deficiencies, competencies and novelties were identified. When examining the formal and informal constructs of the organization and leadership, triangulation ensured through audits
(Mertens, 2005) verified the researcher obtained the best information available and that he/she did not introduced too much bias or interpretation. In addition, member checking was employed as an added layer of reliability (Erlandson, et al., 1993) to confirm with the participants that documentation was accurate.

In occurrences where there was an anomaly in the data, the issue was re-examined to determine if it was benign or an outlier that deserved attention because it could be “a source of new structural arrangements and patterns of behaviors” (Anderson et al., 2005, p. 676). This information could prove useful to leaders to circumvent problems or consider new possibilities.

Finally, Anderson et al. (2005) cautioned the case study researcher to not “accept explanations that normalized something that initially was unexpected” (p. 677). This was important for the researcher to take into account as an added measure to ensure quality in the data and findings.

**Definition of Key Terms**

For clarity in the research process, key terms and phrases should be explained to ensure the researcher, participants, and potential readers understand the meaning of concepts included in the project (Creswell, 2009). The important words and phrases requiring explanation in this study are: Academic Health Center, since this is a specific category of higher education institution, Complex Adaptive System, complexity science, diversity, and cultural competence.

*Academic health centers.* AHCs are institutions of higher education that “consists of an allopathic or osteopathic medical school, one or more other health profession schools or programs (such as allied health, dentistry, graduate studies, nursing, pharmacy,
public health, veterinary medicine), and one or more owned or affiliated teaching hospitals or health systems” http://www.aahcdc.org/About.aspx. There are more than 100 of these institutions across the United States (Association of Academic Health Centers, n.d.).

**Complex Adaptive System.** The Plexus Institute, a non-profit organization that focuses expertise on developing knowledge about complexity, especially for health care, explains a Complex Adaptive System in their “primer” document as:

The three words in the name are each significant in the definition. 'Complex' implies diversity - a great number of connections between a wide variety of elements. 'Adaptive' suggests the capacity to alter or change - the ability to learn from experience. A 'system' is a set of connected or interdependent things.” (Plexus Institute, n.d., “A Complexity Science Primer,” adapted from Zimmerman, Lindberg & Plsek, 1998)

**Complexity Science.** “the metaphor … is the living system. Complexity Science is built on present-day research and thinking about biological models, where systems are viewed as nonlinear and able to adapt to a changing environment.


**Cultural competence** is valuing diversity and being aware of cultural implications http://nccc.georgetown.edu/foundations/frameworks.html. Cross et al. (1989) offer perhaps one of the most widely accepted definitions of organizational cultural competence: The culturally competent system of care is made up of culturally competent institutions, agencies, and professionals. Five essential elements contribute to a system's, institution's, or agency's ability to become more culturally competent. The culturally competent system would: 1) value diversity; 2) have the capacity for cultural self-
assessment; 3) be conscious of the dynamics inherent when cultures interact; 4) have institutionalized cultural knowledge; and 5) have developed adaptations to diversity (Cross et al., 1989). Further, each of these five elements must function at every level of the system. Attitudes, policies, and practices must be congruent within all levels of the system. Practice must be based on accurate perceptions of behavior, impartial policies, and attitudes should be unbiased (Cross et al., 1989, p. v). This definition is an excellent fit with complexity because it accounts for organizational culture, adaptability, and multiple elements and levels of an organization.

Diversity is the awareness and acceptance of differences in communication, life view, and definition of health and family are critical to the successful delivery of services (Cross et al., 1989).

Summary

Despite the limited nature of a case study research project, certain insights were gleaned from examining documents and the organization, and from discussing these topics with key stakeholders. The research provided contributions to the body of knowledge on diversity and cultural competence in academic health settings, and serves as potential, practical guidance for higher education leaders.

Further, employing CLT in this research increased the knowledge of both the usefulness of the theory and the nature of diversity and cultural competence programs in academic health care settings. Even though a few recent dissertations and organizational studies have embraced CLT, more substantive research is needed (Avolio et al., 2009). This research will add to the conversation on the topic and assist to “advance [complexity

This research sought to gain new knowledge about how to make complex organizations, such as academic health centers, more adaptable to change and responsive to important social problems. Through the lens of an innovative leadership theory suited for complex systems, this research engaged an AHC in a case study project. The following chapter will review the literature on these topics – health disparities, changes in the social fabric of the United States, and organizational leadership issues. In chapter three, the specific research design and methods will be explained. Presented in chapter four are the findings of the research and chapter five will conclude the research, drawing on the themes from the findings, suggesting conclusion and outlining implications of this project, as well as potential strategies for future inquiry.
CHAPTER TWO

REVIEW OF RELATED LITERATURE

The quality of health care a patient receives varies significantly depending on individual’s demographic background. The variation in quality can vastly affect the patient’s health (IOM, 2012; U.S. Department of Health and Human Services, 2012). Despite staggering statistics in health care disparities documented in the Institute of Medicine’s 2002 report, Unequal treatment: Confronting racial and ethnic disparities in healthcare, (Smedley, Stith & Nelson, 2003), the health care industry is still struggling to improve this dilemma (Betancourt, 2012; AHRQ, 2013). Patients of minority background receive poorer quality care, less desirable treatments, or no treatment for a multitude of illnesses and injuries. These individuals have higher rates of diabetes-related amputations, receive less attention and treatment of mental health issues, and experience low quality communication with physicians and other care providers (IOM, 2012; Smedley et al., 2003).

Unfortunately, the health disparities problem may get worse as the United States population becomes more diverse and older. The implementation of the Patient Protection and Affordable Care Act is bringing millions more un- and underinsured patients into the health care system (U. S. Census Bureau, 2011, 2012; U.S. Department of Health & Human Services, n.d.,). Recent reports show that more than 7 million people have enrolled in plans through the Marketplace (http://www.hhs.gov/healthcare/facts/factsheets/2014/10/affordable-care-act-is-
working.html). A large portion of those un- and underinsured patients are persons from various racial and ethnic backgrounds and/or low socio-economic status (HHS, 2012; Pfizer, 2008). National health care data show of the nearly 47 million uninsured people in the United States, Hispanics comprise about one-third of the uninsured, Blacks were more likely to be uninsured than Whites, and nearly 60 percent of the uninsured are under the age of 35 (HHS, 2012; Pfizer, 2008).

Administrators at health care organizations are tasked with implementing and accounting for cultural competence among their providers (Joint Commission, 2010). However, these cultural competence and diversity values should also be present and effective in the educational environments where providers learn their professions. Therefore, schools of medicine, nursing, pharmacy, dentistry, and other health professions are called upon to demonstrate cultural competence and diversity efforts in their organizations and in the curricula (Association of American Medical Colleges, 2008; American Association of Colleges of Nursing, 2008, 2009; American Dental Association, 2011). Academic health centers (AHCs), a specific type of higher education institution that provide academic degree programs and patient care (www.aahcdec.org/About.aspx), must consider cultural competence and diversity in many areas such as the curricula of health professions programs, the organizational structure and employee relations, the related research, affiliated clinical operations and community health programs to effectively meet the needs of all patients.

In addition, AHCs encounter external pressure from accreditation bodies to improve cultural competence and diversity (AACN 2008a; AACN, 2008b; AACN 2009; AAMC, 2005; AAMC 2008; ADA, 2011). The need to recalibrate organizational
diversity programs is growing as a result of these external pressures, and is intensified because of changing demographics and the national health care policy. Dramatic shifts in minority populations (U.S. Census Bureau, 2011, 2012) that have historically lower quality health care, and the new Affordable Care Act that expanded health coverage to millions of Americans, compounds the need for cultural competence and diversity as an organizational value at academic health centers. As a result, when addressing diversity issues, “medical schools and teaching hospitals are shifting their strategies to better capture, leverage, and respond to the rich diversity of human talents and aptitudes” (Nivet, 2011, p. 1488).

While there are other terms used to explain cultural competence needs in health care, such as cultural humility and cultural safety (Fung, Srivastava, & Andermann, 2012), the basic concept is students in health professions programs are not as prepared to serve a diverse population as they need to be. In fact, Weissman et al. (2005) postulated one in five medical residents (those practicing doctors who have just graduated from medical school) felt they possessed low skills in the area of cross-cultural issues with their patients. In the mental health field, Darnell and Kupermine (2006) affirmed organizational missions that promote cultural and diversity values and formal training programs were the “most powerful” (p. 203) approaches to improving cultural competence among employees of public mental health agencies in Atlanta, Georgia.

Effective leadership in AHCs is critical when considering the unprecedented changes in the health care system. At many academic health centers, diversity programs are not integrated with one another or the institution as a whole (Awosogba et al., 2013). Yet, the Association of American Medical Colleges (2008) stated that in coming years,
the organization “will also play a more active role in building the capacity of the nations’ medical schools and teaching hospitals to move diversity from the periphery to a core strategy” (p. 1488). Other nursing and health organizations have initiated similar strategies (AACN, 2008a; 2008b; ADA, 2011). Even though these professional organizations are calling on greater effort to improve diversity and cultural competence among their disciplines, and hospital accrediting agencies (The Joint Commission, 2010) have mandated improvement in these areas, significant health disparities persist in diverse populations (AHRQ, 2013; IOM, 2012). Moreover, little research and evaluation has been done in the area of organizational culture or organizational strategies that address leadership and organizational change related to diversity and cultural competence (Awosogba et al., 2013; Fung et al., 2012). There is a lack of research on health care and higher education concerning organizational leadership and effective organizational strategies to improve organizational cultural competence and reduce health disparities (Awosogba et al., 2013).

Traditional leadership theories and systems approaches could offer insights about how to establish and lead diversity programs, but lack the holistic approach for guiding institutional change in complex environments (Kezar, Carducci & Contreras-McGavin, 2013; Lichtenstein & Plowman, 2009). Academic health center leaders should explore new perspectives for their organizations as it pertains to diversity and cultural competence and the changing, complex world. Investigating how leadership and change occurs in complex systems will provide higher education leaders a better understand of the nature of their organizations, and perhaps create new strategies to improve the
organizational environment through enhancing diversity and cultural competence (Awosgba et al., 2013).

Since organizational cultural competence and diversity are challenging and complex constructs, a conceptual lens is needed to explore the issues of leadership in academic health centers. Historically, AHCs represent the intersection of two complex systems, higher education and health care (Begun, 2003; Brafman & Pollack, 2013; Lindberg, Nash & Lindberg, 2008). Traditional leadership theories primarily focus on the individual as a leader or follower or the system as a whole, not leadership and activities within a changing system (Kezar et al., 2013; Northouse, 2010, Yukl, 2006). Even though innovative and evolving leadership models such as servant leadership, distributed leadership and transformational leadership, could be informative to studying diversity-related leadership at an academic health center, complexity leadership theory is a more comprehensive approach (Avolio, Walumbwa, & Weber, 2009; Pisarski et al., 2011).

Therefore, complexity leadership theory offers a framework for which to study leadership as it occurs in complex systems such academic health centers (Linderg et al., 2008; Marion & Uhl-Bien, 2001; Schneider & Somers, 2006). Using the Complexity Leadership Theory lens can provide AHC leaders the ability to acquire new knowledge about their organizations. The process of applying knowledge can facilitate optimal organizational scenarios and strategic plan development to improve cultural competence among faculty members, students and staff members (Marion & Uhl-Bien, 2001; Weberg, 2013; Uhl-Bien & Marion, 2009; Uhl-Bien, Marion & McKelvey, 2007). A review of literature pertaining to cultural competence and diversity in health care and
Complexity Leadership Theory will guide this research. By reviewing the literature, the current conversation on the topics of health disparities and organizational leadership will be explored (Ravitch & Riggan, 2012). The review of literature primarily focused on three areas: investigating the problems of health care disparities as related to cultural competence and diversity to establish the impetus for examining organizational leadership; exploring what complex environments are, and the major issues affecting health care and health education programs; and examining the shifting demographics of the United States and the implementation of the Affordable Care Act. The literature review will conclude by explaining the lens of Complexity Leadership Theory and how using a proposed model of this theory could reveal new knowledge and understanding that supports diversity organizational strategies at AHCs.

**Health Disparities and Cultural Competence**

The connection between quality patient care and demographic or insurance status has been well established in the literature (Betancourt, Green, Carrillo, & Park, 2005; Betancourt & Maina, 2005; IOM, 2012; Smedley et al., 2003). Practitioners, educators and leaders know that patients of minority background often receive lower quality care and have worse health outcomes (AHRQ, 2013; IOM, 2012; HHS, 2012). Still, health care organizations and their education partners (e.g., schools of medicine, nursing and other health professions) struggle to meet patient expectations and needs due to lack of effective organizational strategies that address cultural competence among educators and care providers (Awosgba et al., 2013; IOM, 2012; Nivet, 2011). Research has also demonstrated the connection between embracing diversity as an institutional value and

In the United States, the National Academies are the non-profit agencies recognized for offering expert advice, information and reports on major issues related to science, engineering, medicine and other research (National Academies, n.d.). The National Academy responsible for health-related issues is the Institute of Medicine (IOM). The IOM “works outside of government to provide unbiased and authoritative advice to decision makers and the public.” (IOM, n.d.). Professionals in the fields of science, engineering, medicine and other research areas turn to the Academies for guidance on pressing issues and as an information source.

In 2002, the IOM issued its seminal report, *Unequal treatment: Confronting racial and ethnic disparities in health care* (Smedley et al., 2003). This report revealed the true nature of what minority and other disadvantaged patients experience in the health care environment. The report presented staggering data that non-whites receive fewer services and procedures for conditions across the health care spectrum, from preventive care to surgery and chronic disease treatment (Smedley et al., 2003). Non-whites receive less care, and the care they did receive was of substantially lower quality and desirability. For example, instead of ongoing management and treatment for diabetes, a non-white was much more likely to receive amputation of a limb (i.e., foot) (Smedley et al., 2003). In the aftermath of *Unequal Treatment*, health care providers and educators have attempted to improve these conditions through a variety of training programs (Darnell & Kupermine, 2006; Fung et al., 2012; IOM, 2012; Lie et al, 2010; Lim et al., 2008; Paez et al., 2009; Weissman et al, 2005).
Recent national health disparities reports from 2012 and 2013 show few improvements in the quality of care that minorities receive (AHRQ, 2013; IOM, 2012). In fact, for Latinos, African Americans, Asian Americans and other low-income populations, health care outcomes have been unchanged or have become worse in the last decade (IOM, 2012). African American women with breast cancer were less likely to have received the care needed to treat that disease. Similarly, children of color who were less likely to have received the proper asthma medications after discharging from the hospital (IOM, 2012). The American Indian populations had the overall worst health care outcomes, and African American males received poorer treatments for coronary heart disease and HIV (IOM, 2012). Carolyn Clancy, the director of the Agency for Health Research and Quality (AHRQ), stated in a 2013 summit on health disparities, “quality and disparities reduction efforts should be intrinsically linked … and it is essential that health care providers become more comfortable with treating racially and ethnically diverse populations” (IOM, 2012, p. 49). Thus, overall quality of health care in the United States cannot improve until health disparities among racial, ethnic, and low-income people improves. The most recent national report on health disparities showed the gap between Blacks and Whites did get somewhat smaller in some measures, but was unchanged or got worse in other measures (AHRQ, 2013). Nevertheless, stark differences remain in the quality and outcomes of health care patients receive depending on minority status.

Health care providers who demonstrate more comprehensive and robust cultural competence increases patient care quality and outcomes (IOM, 2012; Paez, Allen, Beach, Carson & Cooper, 2008; Smedley et al., 2003). Instead of building training programs
based on stereotypes, health education programs need to fully embrace diversity as a cultural value (Betancourt, 2012). Paez et al. (2008) concluded in their research surveying and interviewing physicians and patients, “patients of physicians who were more motivated to learn about cultures within their practice and society were more satisfied with the medical visit…” (p. 497). Medical students feel more prepared to work with patients of diverse backgrounds if they are exposed to culturally sensitive content early in their didactic and clinical medical education (Awosogba et al., 2013). Moreover, Andrulis contended “more specific detail on the operationalization of cultural competence is needed” (IOM, 2012, p. 80).

Accreditation Requirements

Health education programs across the country must meet certain criteria pertaining to their academic training experiences. In 2008, the Association of American Medical Colleges (AAMC) issued its Roadmap to diversity, a report intended to establish the legal and policy reasons medical schools should improve diversity among their faculty and student body, as well as within their programs and curricula (AAMC, 2008). The report provided organizational assessment tools and prompted organizational evaluation using questions pertaining to the nature of diversity and cultural competence (AAMC, 2008). In addition, the AAMC’s accrediting unit, the Liaison Committee on Medical Education (LCME) presented diversity and cultural competence in its accrediting criteria in section IS-16 where specific documentation is requested to demonstrate work in these areas. The criterion calls for medical education programs to have:
“policies and practices to achieve appropriate diversity among its students, faculty, staff, and other members of its academic community, and must engage in ongoing, systematic, and focuses efforts to attract and retain students, staff, and others from demographically diverse backgrounds” (LCME, 2013, p. 6)

Not surprisingly, this is one of the top areas where medical schools fall short in their accreditation processes (AAMC, 2012).

Similarly, the American Association of Colleges of Nursing (AACN) has focused on increasing diversity in the nursing faculty workforce, and improving cultural competence among current faculty (AACN 2008a, 2008b, 2009). Increasing diversity in the nursing workforce is a major initiative of the AACN (AACN, n.d.). The organization has also issued several position statements and toolkits related to increasing cultural competence in nursing curricula known as the essentials for building a stronger foundation of cultural knowledge and skills among faculty and within undergraduate and graduate programs (AACN, 2008a, 2008b, 2009).

Not only are the large accrediting bodies asking institutions to demonstrate their commitment to these concepts, discipline-specific bodies initiated their own recommendations and criteria. For example, the United States Accreditation Council on Graduate Medical Education (ACGME) set standards for its general psychiatry residency program. These extensive core competencies have expectations for cultural and sociocultural issues within each accreditation standard (Lim, Luo, & Suo et al., 2008). Thus, professional organizations and their accrediting bodies have issued statements, guidelines, toolkits and other materials related to cultural competence and diversity, mandating full implementation of this organizational goal.
Cultural Competency Efforts

Health education professional organizations continue to expect improvements in both the composition of the faculty and students, and programmatically (AAMC, 2012; AACN 2009; ADA 2011). Marc Nivet, chief diversity officer of the Association of American Medical Colleges, said in a 2011 commentary that health education institutions need a “paradigm shift to view diversity as a means to address quality health outcomes for all” (Nivet, 2011, p. 1488).

Even if institutions offer some type of training in diversity or cultural competence, these centers have not bothered to assess the impact of these initiatives (Awosogba, et al., 2013). Health disparities researchers, such as Andrulis, contended that the “biggest knowledge gap in the implementation of cultural competence interventions and the creation of measures involves the specific elements of a cultural competence model” (IOM, 2012, p. 81). Andrulis further called for more knowledge discovery related to cultural competency training that has taken place, and “more support for research and assessment activities that link health care organizations with efforts to reduce disparities is a necessary next step” (IOM, 2012, p. 81-82). Awosogba et al. (2013) supported this notion and claimed “despite decades of work to promote diversity within academic medicine, relatively few evaluations have been made to determine the most effective interventions” (p. 25).

In an attempt to review studies assessing the effect of cultural competence training programs, Lie, Lee-Rey, Gomez, Bereknyel and Braddock III (2010) discovered only a few studies actually addressed the link between the current training programs and improved patient care. The studies found, however, demonstrated cultural competence
training can make a difference. Findings such as patients reported more sensitivity in the care provider, greater satisfaction with the visit, a modest increase in use of health resources, better clinical outcomes (i.e., blood pressure, etc.) and improved communication and self-care were revealed (Lie et al., 2010). These researchers concluded “there is a critical need for increased resources to examine education an independent intervention to improve health outcomes” (Lie et al., p. 323).

Betancourt, Green, Carrillo and Park, have written extensively about cultural competence and diversity in health care and health education programs (Betancourt & Maina, 2004; Betancourt et al., 2005). Betancourt, a physician and scientist at Massachusetts General Hospital and Harvard Medical School, was part of the committee that compiled the Unequal Treatment report (Smedley et al., 2003). Betancourt et al. (2005) conducted interviews with stakeholders and other experts on diversity and cultural competence to identify perspectives and trends. The researchers interviewed 37 experts in managed care, academia and government, and the information they gathered suggested a dire need for systematic and multi-level cultural competence training that goes beyond stereotypic training and focuses more on building skills of empathy and reduced biased (p. 501). This research confirmed the increasing focus on these initiatives in health education programs from external forces such as “regulatory/accreditation pressures,” “funding opportunities,” and changing populations (p. 501). These experts further suggested the need to educate the faculty on cultural competence and diversity “given their impact as clinical role models” (p. 502).

No doubt a better approach to educating future health care providers is needed to improve existing health disparities and patient health outcomes, and to ensure quality
care to all patients in the future. However, these health education programs exist in complex environments. Further exploration on these environments and leadership approaches related to diversity and cultural competence are needed to determine a new course of action.

**Complex Environments for Leadership**

Addressing diversity issues is a challenge due to the complex nature of health education institutions within the complex environments merging health care and education. Substantial economic, industry and social shifts that affect organizations have occurred and will continue to progress in the new millennium (Kezar, 2001; Morey, 2004). The advent of mobile technologies, evolving educational platforms, and serious financial crises across the globe compounded the impact of technology and business changes already underway (Center on Budget and Policy Priorities, n.d.; Uhl-Bien, Marion & McKelvey, 2007). Further, the concept of learning organizations (Marquardt, 2011) compel organizations to be aware of their organizational climate and its place in the greater environment. Visagie, Havenga, Linde and van Vrede (2012) contended, "high performance organisations [sic] typically foster a work environment in which people are enabled and motivated to contribute" (p. 265). Among organizational strategies to enhance the workplace for optimal productivity are programs and values that demonstrate appreciation for members. Diversity values are one aspect of nurturing a healthy work environment, Visagie et al. (2012) posited, "diversity management and leadership practices are known to enhance workforce and customer satisfaction, to improve communication among members of the workforce, and to further improve organisational [sic] performance” (p. 266). Likewise, in *Workforce diversity and*
Okoro and Washington's (2012) review of literature determined due to trends in globalization, there is a growing "need for intercultural competence" (p. 58) in the workplace and "education within a diverse setting prepares students to become good citizens in an increasingly complex, pluralistic global society and fosters mutual respect and teamwork (p. 60).

These organizational learning concepts extend to higher education settings, where students, faculty members, and staff employees share knowledge, make discoveries, and learn skills (Williams et al., 2005). In fact, diversity as an organizational value continues to affect major social systems, especially the workplace and education, "given the widespread impact of globalization and internationalization, workplace diversity in all forms of organizations, including higher education, is now a fact of life and a trend that will continue for a long time" (Okoro & Washington, 2012, p. 58).

Academic health centers are complex organizations at an apex of many systems, and assume the unique position to enhance their organizations to become more culturally competent (Awosogba et al., 2013). It is imperative leaders at AHCs be poised to embrace changing complex environments. However, as it pertains to health disparities, there are at least two major social changes underway that will call for greater organizational leadership at AHCs – historical shifts in the United States population, and the Patient Protection and Affordable Care Act that expands health insurance coverage to approximately 34 million people (Foster, 2012; HHS, n.d; U.S. Census Bureau, 2010). These two changes will compound the issues already present in the health care system, will require more knowledge about leadership in complex environments.
Demographic Shifts in the United States

The population of the United States is changing dramatically, and these shifts will have an unprecedented impact on the health care system. To begin, the United States population is growing overall, and it is expected to increase by nearly 42 percent (310 million to 439 million) by the year 2050 (U.S. Census Bureau, 2010). That swell of people in the health care system will be a significant challenge, as the country is already battling shortages of health care providers, such the increased need for more primary care physicians (Petterson, Liaw, Phillips, Rabin, Meyers & Bazemore, 2012). However, there are two population trends that will most affect the health care system – historic shifts in age distribution and ethnic composition (U.S. Census Bureau, 2010). In addition to a rapidly aging population, the nation is projected to become “more racially and ethnically diverse, with the aggregate minority population projected to become the majority in 2042” (Vincent & Verkoff, 2010, p. 1). In fact, United States census data (2010) in recent years disclosed that most young children in the United States are of minority background. A closer examination of these two specific population issues will reveal how the health disparities problem in the United States will be compounded with the implementation of the Affordable Care Act, further complicating an already complex health care environment.

Majority minority. It has been well documented that sociocultural differences between health care providers and patients of diverse backgrounds have worse satisfaction and health outcomes (AHRQ, 2013; Awosgba et al, 2013; Betancourt, 2012; IOM 2012). With a dramatically changing United States population, the health disparities problem indicates no signs of improving, and is as likely to get worse.
Hispanic and Asian populations grew the fastest in the 2000-2010 census measures. In 2011, there were 52 million Hispanics, or 16.7 percent of the U.S. population (U. S. Census Bureau, 2012). In recent years, the Latino and Asia-Pacific Islander populations have increased by 43 percent each, and the African American population has increased by 11 percent (U. S. Census Bureau, 2012). The youngest generations show the greatest population of two or more Races (U.S. Census Bureau, 2010).

**Aging population.** While the racial and ethnic background of the population shifts, the age of people overall will shift concurrently with the census projections showing by 2050, “the number of Americans aged 65 and older is projected to be 88.5 million” or nearly one in five Americans (Vincent & Velkoff, 2010). Ironically, the aging population will be offset at least partially by immigration of “working age” persons (U.S. Census Bureau, 2010, p. 3). This is where the overall population growth (from births and immigration) will somewhat dilute the actual aging population of the “baby boomer” generation (U.S. Census Bureau, 2010, p. 3). Currently, older Americans are predominantly white, but that will change as the overall racial composition of the population increases (2010). Subsequently, there are many social issues surrounding an aging population, not the least of which is focusing more attention on the policies and administration of federal programs like Social Security and Medicare (U.S. Department of Commerce, 2010).

With these projected demographic changes, the health care system overall, and in particular academic health centers that prepare new doctors, nurses, and others, should prepare for these issues as organizations and clinicians. It is imperative AHCs become
better learning organizations to improve adaptability in this changing environment (Marquardt, 2011; Viasagie et al., 2012). Moreover, diversity and cultural competence are an ongoing concern over the United States health care workforce’s capability “to meet the increasing demand for care that a growing and aging U.S. population will have” (AHRQ, 2013, p. 8-11). Increasing minority and elder populations, in conjunction with a new federal law expanding health care coverage, will compound the need for AHCs to be more adept at embracing change and developing culturally competent providers to meet future needs.

**Affordable Care Act**

In 2010, the United States Congress passed and the Supreme Court later upheld the *Patient Protection and Affordable Care Act* (www.healthcare.gov). This law took an unprecedented step in health care more than two decades in the making, following the Clinton administration’s attempt at health care reform in 1993 (Schroeder, 1993; Starr, 1995). Known as the *Affordable Care Act* (ACA) or ObamaCare, the law expanded insurance coverage to nearly 34 million uninsured or underinsured Americans and disallows insurance policies viewed as punitive and restrictive such as eliminating pre-existing conditions rules (Fosters, 2010; HHS, n.d.)

In states such as Texas and California with high rates of uninsured and underinsured, and high rates of minority populations (Pfizer, 2008; U.S. Census Bureau, 2012), the implementation of the *Affordable Care Act* means greater percentages of patients coming through hospital and clinic doors will be newly insured and of minority background. Okoro and Washington (2012) indicated, "organizations are now escalating their diversity initiatives as they measure the benefits of multi-cultural and diverse
organizations" (p. 58). With these unprecedented changes in the population and health care policy, the need for cultural competence programs increases.

Many provisions of ACA address culturally competent care. In a fact sheet available on the ACA website, health disparities are described:

The Affordable Care Act expands initiatives to increase racial and ethnic diversity in the health care professions. It also strengthens cultural competency training for all health care providers. Health plans will be required to use language services and community outreach in underserved communities. Improving communications between providers and patients will help address health disparities particularly in Hispanic communities, which currently have high numbers of uninsured people.


There are several steps as part of the ACA that focus on improving health care for diverse patients with the goal of reducing health disparities. Primarily, the ACA raises the National Center on Minority Health and Health Disparities to a National Institutes level which elevates the prominence of the Center and increases funding opportunities (IOM, 2012). In addition, the Department of Health and Human Services opened four minority health offices, along with publishing new strategies to reduce health disparities (IOM, 2012).

Despite its faulty enrollment debut and thus-far low enrollment numbers ("Contractors Blame Government for ObamaCare Website Woes," October 25, 2013), the Affordable Care Act is still predicted to reshape health care in the United States. Certain provisions of the ACA have already changed health care, as outlined on the
http://www.healthcare.gov timeline, such as extending the age limit of dependents on parental insurance policies and eliminating the pre-existing conditions clause in many policies (https://www.healthcare.gov/timeline-of-the-health-care-law/#part=1, n.d.). Thus, the ACA website further proves the deeply complex nature of health care in the modern era.

**Emergence of Complexity Leadership Theory**

To gain an in-depth understanding of AHCs and their attempts to improve diversity and cultural competence, it is important to consider a conceptual framework, or lens, from which to analyze complex systems (Ravitch & Riggan, 2012). Ravitch and Riggan (2012) explained that theory “informs the conceptual frameworks of scholars from different fields, using different methods” (p. 21). For the purposes of this research, revisiting leadership theories and the origins of systems thinking can provide new ways of looking at modern organizations and problems. A review of traditional leadership theories, and why they are not sufficient for studying the issue of diversity and cultural competence in complex systems, will be followed by an explanation of systems approaches to organizational leadership.

**Leadership Theories**

In the past, traditional and contemporary approaches were used to study organizational cultural competence. Few theories and models are viable do not account for the highly complex nature of academic health centers. Traditional leadership theories like Leader-Member Exchange (LMX) and Path-Goal theory take a linear approach to understanding leadership where there is a simple equation to achieving goals (House, 1996; Kezar, et al., 2013; Northouse, 2010; Yukl, 2006). The leadership experience or
event is between the leader and the follower and involves the dynamic between these two parties (Kezar et al., 2013; Northouse, 2010; Yukl, 2006). Leader-Member Exchange (LMX) and Path-Goal theories can be useful in certain contexts, but are over-simplified in complex environments (Avolio et al., 2009; Lichtenstein & Plowman, 2009; Lindberg et al., 2008).

This research employed the lens of Complexity Leadership Theory that attempts to explain a world-view and approach to modern organizational leadership issues. Marion and Uhl-Bien (2001) explained complexity theory as an alternative to traditional scientific approaches characterized by order, reason and stability. Complexity theory goes beyond simple equations and emotions. It is an approach that accepts the world and its systems as fundamentally chaotic and unpredictable (Anderson, Crabtree, Steele, & McDaniel, Jr., 2005; Marion & Uhl-Bien, 2001; Schneider & Somers, 2006). In these systems, there is no straight line to solving problems, thus, predictive measures and averages do not explain the context of the situation, and may actually misrepresent the system (Mazzochi, 2008). Anderson et al. (2005) described these complex systems “in which relationships are critical, are generally nonlinear, and lead to unpredictable dynamics” (p. 670). Complexity is not so much about analyzing an individual leader’s attributes as it is about studying the web of connections, issues, and relationships to understand how systems behave – the goal being to guide behavior and arrange settings for positive organizational outcomes (Lichtenstein et al., 2006; Uhl-Bien & Marion, 2009).

Before examining complexity leadership theory, it is important to understand the origin of the theory and how it differs from other leadership theories. Therefore, a brief
description of systems approaches will serve as the foundation for the emergence of complexity science and complexity leadership theory. This will establish complexity leadership theory as a method for investigating the system and how leadership occurs “in and of” (p. 631) the system (Uhl-Bien & Marion, 2009).

**Systems Thinking**

Throughout history, natural and social scientists have attempted to explain the organization or system of living things, also known as systems thinking. Beginning with biologist Ludwig von Bertalanffy’s work establishing General Systems Theory (1972) to Senge’s (2006) concepts on the fifth discipline addressing learning organizations, many attempts have been made to explain the whole by analyzing the parts. This is a concept known as reductionism (Mazzocchi, 2008), or that the whole system could be known if the parts of the system were understood (von Bertalanffy, 1972).

Contemporary systems theorists have rethought this concept and instead are analyzing how parts of the system are interrelated and interact, and how the system as a whole adapts and reacts (Hubler, Foster & Phelps, 2007). In the case of diversity and cultural competence at the organizational level, this may be the difference between stated beliefs and stand-alone programs versus lived values and interactive initiatives because complexity “results from the interaction between the components of a system, complexity is manifested at the level of the system itself (Cilliers, 1998, p. 2).

Complexity Science emerged from one type of systems thinking, primarily in the field of mathematics, referred to as chaos theory (Tan, Wen & Award, 2005). Chaos theory looks at nonlinear systems and attempts to explain how small changes can dramatically affect the system, in what is often referred to as the “butterfly effect”
This key element in chaos theory is also referred to as unpredictability (Lorenz, 1972). Even though the word chaos may suggest randomness, the theory actually suggests that over time, patterns can be found (Tan, Wen & Award, 2005). For this reason complexity came to be studied as a way of identifying or impacting these patterns. Complexity science confronts several deeply held beliefs about the natural world based on new abilities to study phenomena (Tan, Wen & Award, 2005). Researchers clarified ideas about the order of the world may not be as true as once thought. Whereas the scientific arena was once viewed as linear, differentiable and quantifiable, scientists now consider non-linear theories of interconnectedness, exceptions, and inverse power laws to explain the natural world (Hubler, Foster, & Phelps, 2007).

Complexity is a paradigm for understanding situations, and perhaps setting up certain conditions, but not necessarily formulating precise outcomes (Goldstein, 2000). This alternative attempt to explain the so-called quantifiable world through other methods, including qualitatively, prompted social scientists to adopt complexity as a lens for analysis (Schneider & Somers, 2006). Theories, such as Complexity Leadership Theory, are beginning to focus on how leadership occurs in the context of complex systems to understand phenomena that were unanticipated and system-altering (Anderson et al., 2005; Lichtenstein, 2006; Marion & Uhl-Bien, 2001). Schneider and Sommers (2006) compared properties of open systems, those having a linear feedback loop, and complex systems. The key differences between an open system and a complex one are adaptability and emergent qualities (Schneider & Sommers, 2006).

Health care has been proposed as perhaps one of the most complex systems in society (Begun, 2003; Lindberg et al., 2008; Tan et al., 2005). The health care system
has been called “unparalleled” (Tan et al., 2013, p. 40) in complexity compared to other industries. While this level of complexity is often viewed as a challenge, it can also be seen as an innate necessity. For example, because the health care system is a human system, being a complex environment is necessary in order to be flexible in dealing with emergencies and changing situations (Tan et al., 2013). Given the anticipated demographic and health care policy changes, health care organizations such as AHCs should become more adaptable to change especially in cultural competency and diversity.

**Academic Health Centers as Complex Systems**

Universities, academic health centers, and higher education in general are considered large, complex systems (Anderson et al., 2005; Begun, 2003; Kezar, 2001). Fundamental concepts related to complex adaptive systems (CAS) consisted of: 1) unpredictable, 2) no central control, and 3) ever changing (Tan et al., 2013). Threaded throughout these CASs are agents (i.e., people) who act and interact. Within these systems there are structures of hierarchy, learning pedagogy, governmental bureaucracy, external accreditation bodies, and internal business processes. If these complex systems are to adapt, the individuals that are part of their organization, should feel they have the latitude to contribute (Visagie, et al., 2012). Demonstrating diversity as a core institutional value, and in turn, enhancing cultural competence across the organization, can lead to improved outcomes. It is important to see that diversity as a core institutional value is the precursor to successful training and enrichment programs (Visagie, et al., 2012).
Diversity as a Core Organizational Value

In their systems research, Bassett-Jones, Brown and Cornelius (2007) contended the workplace should be an inclusive and respectful environment for diversity programs to be effective. Further, Olsen and Martins (2012) postulated organizations often value diversity as either instrumental (outcomes-focused) or as an objective (terminal value). However, when organizations strive to achieve diversity as both instrumental and terminal are the most effective in improving their workplaces and recruiting and retaining diverse employees (2012). Accordingly, an organization's diversity value will “affect the beneficial process connecting workforce diversity to work outcomes at the individual, group, and organization levels such that an instrumental or dual value will facilitate these beneficial processes more than an emphasis on diversity as a terminal value” (Olsen & Martins, 2012, p. 1173). Therefore, organizations that seek to improve cultural competence among their employees and enhance diversity as a core institutional value should focus both on outcomes (e.g., patient care, employee satisfaction, etc.) and as an intrinsic organizational value.

When embedding diversity as an organizational value the results are organizations that foster growth and increasing cultural competence. It is important to study diversity in an AHC since these organizations are complex systems (Begun, 2003; Tan et al., 2005). Integrating knowledge from both traditional leadership theories and systems approaches though the use of Complexity Leadership Theory will provide AHCs closer to the goal of improving cultural competence and better patient outcomes in the long term. Consequently, Complexity Leadership Theory will be described, along with exploring a model for analysis.
Introduction to Complexity Leadership Theory

Complexity Leadership Theory suggests leaders should examine the interactions, relationships, and emergent events in their organizations to discern how to “generate adaptive outcomes” (Lichtenstein et al., 2006). Whereas other leadership and organizational theories take a reductionist approach, analyzing the parts of the whole, Complexity Leadership Theory (CLT) evaluates organizations and leadership more holistically (Kezar et al., 2013; Marion & Uhl-Bien, 2001; Schneider & Sommers, 2006). Traditional leadership theories are based on the assumption that hierarchical leadership lends itself to the desired state of orderly existence, whereas complexity theory recognizes the ever-changing and living nature of organizations (Anderson et al., 2005; Marion & Uhl-Bien, 2009; Schneider & Sommers, 2006; Tan et al., 2005).

CLT is an evolution of both leadership theoretical approaches, where individuals affect the people and organization, and systems perspectives, where the problems presented are primarily analyzed at the system or macro level (Lichtensten et al., 2006; Marion & Uhl-Bien, 2001). CLT moves from the linear to nonlinear system of analysis, from reductionism to holistic analysis, to reveal novel behaviors of the system (2001). CLT encompasses formal leaders, informal leaders or middle managers, events, interactions, the context of which things happen, sub-units, behaviors, and outcomes, and attempts to organize these processes to gain a better understanding (Lichtenstein, Uhl-Bien, Marion, Seers, & Orton, 2006; Uhl-Bien et al., 2007). Further, the goal of utilizing CLT is to further foster individual and organizational flexibility and adaptability (Uhl-Bien et al. 2007).
The units of analysis in CLT are the organizations, or complex adaptive systems, as well as sub-units within the bureaucratic system (Uhl-Bien et al., 2007). Specifically, CLT examines “behaviors and changes that emerge spontaneously from the dynamic of neural-like networks” (Uhl-Bien et al., 2007, p. 304) of people, units and the larger system. In short, CLT is an attempt to describe how people and organizations live and change. CLT takes into consideration how little changes can have a big effect, and why large events seem to have little impact. Ultimately, the goal of CLT is to help organizational leaders learn how to position the organization to be more adaptable to keep pace with the world in which CASs reside.

For all of its promises in studying organizations and leadership, CLT is difficult to use and is still evolving conceptually. Avolio et al. (2009) said “... the complexity leadership field clearly lacks substantive research. We suspect this is a result of the difficulties in assessing this type of emergent construct within dynamically changing context” (p. 431). Consequently, CLT is both completely appropriate to study organizations and leadership in complex environments like academic health centers, and yet it is not easily employed due to its infant conceptual nature. Additional research in this area is needed to demonstrate the usefulness and application of complexity in organizational leadership (Avolio et. al., 2009; Lindberg et al., 2008). Subsequently, the concept should be employed in applicable settings to be fully understood. Therefore, a proposed model employing CLT will be explored as a potential method for learning about diversity and cultural competence in complex systems, specifically, academic health centers.
Complexity Leadership Theory: Meso-model

Uh-Bien and Marion (2009) outlined a model for understanding leadership in complex systems. This model could prove useful to leaders in academic health centers as they continue to address the need for developing a more culturally competent health care workforce and organizational culture. Traditional leadership theories focus on the leader – whether examining style, traits or skills (Kezar et al., 2013; Northhouse, 2010; Yukl, 2006). These theories are bound in linear, hierarchical systems and simple relationship and task equations. Academic health centers are more than hierarchical systems. They are complex and evolving organizations (Tan et al., 2005), and will only become more complicated in the future due to demographic changes and health care policy implementation. Contemporary leadership approaches are more relevant to complex systems because these theories and models in development are more reflective of the real world, representing complicated and diverse environments (Aviolo et al., 2009; Kezar et al., 2013). Complexity Leadership Theory offers a new paradigm for studying leadership – not as an examination of a single person, or even as a relationship exchange, but instead CLT is the study of dynamic processes and interactions examining the concept of leadership (Lichtenstein et al., 2006; Kezar et al, 2013; Schneider & Sommers, 2006; Uhl-Bien et al., 2007; Uhl-Bien & Marion 2009).

CLT is the “gestalt impact of collective leaderships” (Pisarski et al., 2011, p. X). However, introducing complexity theory into the leadership and organizational development conversation leads to more questions than answers (Aviolo, et al., 2009). What is complexity leadership theory, exactly? How do we use it? Does it tell us anything useful or new? These are all relevant questions and should be addressed
specifically. Therefore, this research will attempt to answer these questions surrounding complexity leadership theory with the goal to bring the theory into more readily understandable and applicable form.

To better understand the constructs of complexity leadership theory, Lichtenstein et al. (2006) explained CLT as a way of understanding the outcomes of relationships and interactions among agents. They termed this systems-based approach the “collective venture” where leadership “transcends the capabilities of the individual” (Lichtenstein et al., 2009, p. 2) or the supervisor, engaging the “space between” (Lichtenstein et al. 2006, p. 5) people and ideas. Complexity leadership is not analyzing the leader and the person’s actions within the organization (2006). The leader’s symbolic, motivational or charismatic attributes are of less consequence than the interactions among many persons in the organization (Lichtenstein et al., 2006). In CLT, the leader can facilitate situations (Lichtenstein et al., 2006; Schneiders & Somers 2006) by providing resources or enabling the conditions, but the leader does not apply attributes onto the organization to garner outcomes. Moreover, CLT is built on the foundation that leadership emerges, or is an emergent event (Lichtenstein et al. 2006; Lichtenstein & Plowman, 2009; Uhl-Bien et al., 2007, Uhl-Bien & Marion, 2009). In other words, leadership does not necessarily occur when a positional leader acts. Instead, people interact and build relationships, behave in ways that advanced the institutional mission and the outcome is leadership. Individual leaders can impact scenarios and the eventual outcome, but that individual’s overlay on the system is not necessarily leadership. Schneider and Somers (2006) called leaders “tags” (p. 356) who influence other persons and processes, often in a temporary capacity, and Lichtenstein et al. (2006) deemed this emergence as the “space between” (p. 9).
Lichtenstein and other complexity leadership scholars (Marion & Uhl-Bien, 2001; Schnieder & Somers, 2006, Uhl-Bien et al., 2007; Uhl-Bien & Marion, 2009) do not negate the value of the formal and informal leaders as individuals that affect the system, but the emphasis in studying complex systems is directed toward events, interactions, behaviors and dynamics that result in change and certain outcomes.

Lichtenstein et al., (2006) offered a definition of adaptive leadership – a main concept in complexity leadership – in which leadership is “an interactive event in which knowledge, action preferences, and behaviors change, thereby provoking an organization to become more adaptive” (p. 4). In other words, as agents and “tags” (positional leaders) act and interact, things happen in the organization that causes the organization to change. Thus, employing CLT is a novel and appropriate lens for examining the concepts of diversity and cultural competence in organizations. Further, Lichtenstein, et al. (2006) posited:

…adaptive leadership does not mean getting followers to follow the leader’s wishes; rather, leadership occurs when interacting agents generate adaptive outcomes. According to this definition leadership can occur anywhere within a social system. It need not be authority or position based, but is instead a complex interactive dynamic sparked by adaptive challenges. Individuals act as leaders in this dynamic when they mobilize people to seize new opportunities, and tackle tough problems (, p. 4).

It is evident that diversity and cultural competence in health care have proven to be adaptive challenges (Awosgba et al., 2013). Gaining new insights through the use of the complexity leadership lens could foster creative strategies and greater adaptability to
organizations. Thus, using complexity leadership theory is precisely the right approach to learning about diversity and cultural competence at academic health centers because these organizations are the initial point of contact for the health care system and health care providers. Leaders at these institutions can be informed and understand why and how things happen at their organizations if they look at issues through a new lens – one that is not reliant upon formal positions or experts, but one that studies how these concepts are engaged every day, over time (Marion & Uhl-Bien, 2001; Uhl-Bien, Marion & McKelvey, 2007, Ott, 2010; Uhl-Bien & Marion, 2009, Weberg, 2013).

Uhl-Bien and Marion’s (2009) model is an attempt to employ CLT to generate new knowledge about leadership, which they contend is “about leadership in and of complex adaptive systems” (p. 632). Some scholars and doctoral students have attempted to use the model, including Sweetman (2010), Ott (2010) and Weberg (2013), who examined or relied on certain aspects of the model. The model put forth by Uhl-Bien and Marion attempts to explain how leadership is analyzed through the CLT lens.

Complexity science and complexity leadership theory, is an abstract way of gaining knowledge. Therefore, the outcomes of this model are different than even some qualitative research goals that seek to identify themes or grounded theories (Creswell, 2009; Lichtenstein & Plowman, 2009). In CLT, the outcomes of using this meso-model are to foster innovation, learning adaptability and new organizational forms (Uhl-Bien & Marion, 2009) in order to “generate novel opportunities and solutions” (Lichtenstein & Plowman, 2009, p. 622). The model will be explained in further detail, including identifying the main functions of CLT and the role of shaping optimal organizational conditions to advance institutional mission.
**Key concepts of Complexity Leadership Theory.** There are at least four foundational concepts to CLT. Before examining the functions of the CLT, these concepts should be further described. First, foundations of CLT are based on the idea of non-linearity (Uhl-Bien & Marion, 2009). While there are constant feedback loops occurring throughout the system, the events and interactions in the system are not linear. Second, in CLT, the adaptive effect occurs as a result of decentralization (Uhl-Bien & Marion, 2009). While there is a formal structure in place, the flexibility and evolution of the organization happens as a result of events and interactions not highly centralized. Third, the concept of time matters when using CLT to study organizational leadership (Uhl-Bien & Marion, 2009). Historically, in the current organizational status, the present and future prospects affect the nature of the organization and its adaptive capacity. Last, a complex adaptive system, one that can evolve from changes in the environment, and should be heterogeneous (Uhl-Bien & Marion, 2009). Thus diversity of thought is a requisite component of learning, adapting organizations.

CLT as a concept is large and has many layers of ideas, but these four main concepts are essential to understanding the functions of leadership in a complex system (Uhl-Bien & Marion, 2009). This is especially true when the content under examination is not only complex itself (cultural competence) but when the system will continue to face substantial change including historic changes in population and policy (Anderson, et al., 2003; Lindberg et al., 2008; Uhl-Bien & Marion, 2008). Recalling these four foundational concepts – non-linearity, decentralization, the concept of time in an organization and heterogeneity – is key to understanding the functions of leadership in a complex system (Uhl-Bien & Marion, 2009).
**Three functions of Complexity Leadership Theory.** Uhl-Bien and Marion (2009) contend there are three functions of complexity leadership – administrative leadership, adaptive leadership and enabling leadership. Administrative leadership is the formal and positional aspects of leadership in bureaucratic systems, while adaptive leadership is focused on interactions of the agents (individuals) in the system (Uhl-Bien & Marion, 2009). The third function, enabling leadership, is the “interface … it works to foster conditions conducive to the complex interactive dynamic …” (Uhl-Bien & Marion, 2009, p. 633). In addition to these three leadership functions that serve as the proponents of the model, Uhl-Bien and Marion (2009) introduced the concept of “entanglement” (p. 633) to envision the dynamic that occurs between the administrative and adaptive functions in order for the system to function properly. This concept of entanglement is similar to what Lichtenstein et al. (2006) called the “space between” (p. 9). These three functions, including the idea of entanglement, are depicted in Figure 1.
To fully understand these functions, and to determine how to use CLT to study diversity and cultural competence in organizations like academic health centers, it is necessary to understand the propositions according to Uhl-Bien and Marion’s (2009) model. There are several propositions attributed to this CLT meso-model, and the first few are the basic foundation of the model.

Proposition 1 of the meso-model, the main proposition, posited organizations with a “well-functioning informal leadership processes” that are “effectively entangled with
administrative leadership” (Uhl-Bien & Marion, 2009, p. 635) will be more adaptive. In this proposition, organizations may have one of four typical scenarios where administrative leadership and adaptive leadership occur in varying degrees. The subsequent propositions (2a - 2d) describe differing levels of administrative and adaptive leadership and the likely outcome (Uhl-Bien & Marion, 2009). These subsequent propositions can be represented descriptively, but it may be more useful to see them graphically in Figure 2.

![Graphical representation of enabling function in Complexity Leadership Theory](image)

**Figure 2.** Enabling function in Complexity Leadership Theory. Reprinted with permission from “Complexity leadership in bureaucratic forms of organizing: A meso model,” by M. Uhl-Bien and R. Marion, *The Leadership Quarterly*, 20, p. 635. Copyright 2009 by Elsevier.

Represented in Figure 2 are the propositions 2a – 2d. Proposition 2a is the most desirable since the administrative and adaptive function are well integrated; entanglement is so effective that the other two functions, administrative and adaptive, are “hard to
distinguish” (Uhl-Bien & Marion, 2009, p. 636). However it is important to recall that this research is looking at complex, changing systems, dealing with the complex constructs of diversity and cultural competence. Depending on the organization and its leaders, the other propositions (2b-2d) may actually be what it occurring. For example, if an organization is operating in the arena of Proposition 2c, where the grassroots efforts are not taking hold or being institutionalized, enabling may help temporarily switch the momentum to 2b to instill the official nature of the effort, with the ultimate goal of reaching the optimal 2a scenario. Conversely, the formal administrative function may be too overbearing, suffocating and ignoring the grassroots initiatives and creativity. In this setting, the enabling function of CLT could foster a feedback loop informing positional leaders (Uhl-Bien & Marion, 2009). Unfortunately, the research has shown that diversity efforts over the last few decades have varied in their official, formal nature and work on the ground has continued, whether it was done in an official capacity or not (Awosgba et al., 2013). Proposition 2d seems to represent the isolated nature of diversity programs noted in past studies and writings on diversity initiatives (Betancourt, 2012). Through understanding these first two propositions, the value of the adaptive function is recognized as essential to organizational effectiveness (Uhl-Bien & Marion, 2009).

Propositions 3-12 address adaptive leadership. These Propositions display the remaining propositions, 13 and 14, that further suggest how innovation can occur in organizations through formal, administrative functions. But, the largest component of CLT is the adaptive leadership function. This aspect of CLT is where leadership occurs as a result of rich information flows, where adaptive leaders are attuned to the organization and can effectively read what is happening (or not), then facilitate scenarios
and interactions (Uhl-Bien & Marion, 2009). This element of leadership is critical because this is where action occurs. The leadership dynamics are occurring in meaningful ways changing the system because adaptive leaders are interpreting historical experiences and future plans, manipulating situations, and setting up the conditions for change (Uhl-Bien & Marion, 2009). The adaptive function of leadership in a complex systems calls for leaders to have a “keen sense of timing” (Uhl-Bien & Marion, 2009, p. 640) and effectively engage with the agents in the system.

The administrative function in CLT recognizes the formal, bureaucratic position and obligation to nurture and guide the adaptive function (Uhl-Bien & Marion, 2009). This engages the notion of effective “entanglement” is in play because an effective administrative leadership will establish and support a strong meso component (Uhl-Bien & Marion, 2009). Administrative leaders in a complex system like academic health centers also are responsible for recognizing and rewarding adaptive leadership (Uhl-Bien & Marion, 2009). Moreover, an administrative leader “actively recruits adaptive leadership talent, develops this talent, and works to engage and retain it” (Uhl-Bien & Marion, 2009, p. 644). Finally, the enabling function is explained as an extension of the administrative function through fostering adaptive conditions and mediating the relationships within the organization (Uhl-Bien & Marion, 2009). In this way, a cohesive, adaptive organization occurs when the formal structures are engaged and supported. Allowing innovative and talented agents to continually work and inform the formal leadership facilitates the administrative leaders reinvesting in the system. These constant and non-linear feedback loops are what make an organization nimble, ready to meet ever-changing internal and external pressures and challenges.
Based on the functions and subsequent propositions of this model, the dilemma of enacting leadership related to diversity and cultural competence in academic health centers can be examined. By looking at how leadership occurs in health education organizations through the lens of this meso-model, knowledge can be gleaned to inform organizational adaptability at academic health centers.

Researchers and scholars (Ott, 2010; Sweetman, 2010; Nooteboom & Termeer, 2013) have attempted to employ this model to date. A brief review of those studies will be explored followed by an analysis of how those studies are relevant to the venture of improving diversity and cultural competence at academic health centers.

**Complexity Leadership Theory in Action**

In recent years, a few studies using CLT and the meso-model have been conducted (Ott; 2010; Sweetman, 2010; Weberg, 2013; Wong, Ormiston & Tetlock, 2011). These studies used both quantitative and qualitative methodology, with a couple studies conducted in health care settings (Hanson & Ford, 2010; Weberg, 2013). These studies support the use of CLT and help to build validity in the framework.

Sweetman (2010) examined the adaptive function of CLT by studying the concept of innovation at an agency that provides leadership development for educators. Even though Uhl-Bien and Marion (2009) suggested qualitative methodologies would afford greater collection of rich data to test the application of CLT, Sweetman used a quantitative approach surveying 60 individuals within this organization, of which he attained an 81% response rate to a web-based survey (Sweetman). This study examined “shared leadership, advice-seeking, reflective reframing, reinforcing, and innovation” (Sweetman, 2010, p. 40). Overall, Sweetman sought out to determine the relationship
between the adaptive function of leadership and innovation. He discovered people in the agency with the “greatest number of adaptive ties are also more likely to be involved in innovation” (Sweetman, 2010, p. 60). In this way, Sweetman’s research supported the notation that adaptive leadership, or leadership that allows for rich interactions and information flows, in complex systems does foster innovation and organizational change. He further referred to “shared leadership” and “collective creativity” (p.68) in the same way Lichtenstein, et al., (2006) used the idea of the “collective venture” (p. 2).

Weberg (2013) also examined innovation and CLT, and this inquiry did use a qualitative methodology employing a case study approach. Weberg investigated the development of clinical simulation in health professions education, specifically in nursing education. Through a multi-level case study analysis using interviews and other data collection methods such as document analysis, Weberg determined seven characteristics among formal and informal leaders which successfully encouraged organizational innovation (Weberg, 2013). Those characteristics included concepts like coordinating information flows, risk-taking and leveraging opportunities, all part of the adaptive function of CLT (Uhl-Bien & Marion, 2009; Weberg, 2013). Consistent with Sweetman’s (2010) findings, Weberg’s study confirmed that adaptive capacities in leadership among complex environments can positively foster innovation and organizational change. His work is important to this current study because it is analogous to this study’s purpose. Even though the content Weberg analyzed centered on other problems facing health professions education, the use of CLT in this study supports its appropriateness in studying academic health centers faced with external changes and pressures.
Hanson and Ford’s (2010) analysis of networks in a hospital laboratory setting also supports the importance of the adaptive leadership function in complex systems. In this study revealing the value of the informal leaders, the customer service representatives contributed to the successful functioning of that hospital unit. While not employing CLT specifically, Wong, Ormiston and Tetlock (2011) investigated elements of CLT, specifically, the administrative function, by studying the effects of decentralization and integrative complexity in the corporate sphere. These researchers used qualitative methodologies, but converted the data to quantities measures, to analyze sixty-one top firms and their management teams. They examined the effects of decentralized decision-making, and their results showed that top corporate leadership teams that actively relied upon decentralized decision making improved social performance (principles and policies related to social responsibility), which contributes to overall financial performance (Wong et al. 2011). The researchers further suggested that top leadership in corporate firms can nurture this capability by recruiting diverse employees –ones from different backgrounds, educational experience, and ages. While Sweetman’s (2010) work didn’t necessarily indicate these demographics made a substantial impact, Wong’s et al., suggestions supported the CLT administrative and enabling leadership functions of fostering appropriate conditions, mediating relationships, and recognizing and recruiting talented agents (Uhl-Bien & Marion, 2009).

Ott (2010) conducted a case study at a biomedical organization to learn about micro- and meso-level interactions that foster innovation in the complex environment of “radical product innovation” (p. 11). This work found that culture creation, mentoring and the use of humor contributed to highly functioning teams (Ott, 2010). Similarly,
Dutch researchers Nooteboom and Termeer (2013) conducted two case studies using CLT to learn about how leadership occurs through networks of informal leaders (i.e., agents). The researchers identified specific strategies related to CLT and documented evidence of those strategies throughout their participative research, ultimately postulating successful complex leadership does occur and it fosters the innovative capacity of an organization (Nootboom & Termeer, 2013). Other doctoral candidates have employed CLT to study higher education institutions (Bennett, 2011), organizations in the business sector (Cochran, 2013), and even in the arts sector (Dayton, 2011). Each of these studies have contributed to the overall knowledge base applying complexity leadership concepts for organizational improvement through identifying and exploring the nuances of a large theoretical paradigm. This current inquiry will attempt the same task – to engage a new perspective on an organizational challenge. However, before explaining the process used in this research, a brief review of CLT is needed.

**Complexity Leadership Theory: A Review**

Employing a model of CLT is necessary for conducting research using the theory (Avolio, et al, 2009; Kezar et al, 2013). However, in learning about the details of the model, it can be challenging to recall the overall constructs and purpose of CLT. Basically, CLT is the integration of collective leadership in a complex system (Lichtenstein et al., 2006). CLT posits that in a complex system, especially when addressing complex dynamics like diversity and cultural competence, the unit of study is the system and what happens in it. Nonetheless, CLT examines behaviors, interactions, relationships, and emergent and spontaneous leadership events to understand the impact of these things on the organization, and to “generate adaptive outcomes” (Lichtenstein, et
al., 2006, p. 4). Formal and positional leaders can enable conditions, provide resources, position the organization to facilitate movement toward goals, and influence the system (Lichtenstein et al., 2006; Uhl-Bien et al., 2007; Uhl-Bien & Marion, 2009). Ultimately, it can be argued that leaders in complex systems can and should learn. The knowledge gained from studying the health professions education systems’ attributes, agents, and interactions could provide information for future planning regarding cultural competencies.

**Conclusion**

In this review of literature, the argument was made that the ongoing problem of health disparities could be addressed from one angle, the origin of health professions education – the academic health center. The nature and current status of health disparities was reviewed. Despite attention to this matter over the last decade, little progress has been made to improve health outcomes for patients of diverse backgrounds (AHRQ, 2013; Betancourt et al., 2012). Minority and low-income patients continue to receive lesser care, including less attention or treatments (IOM, 2012). Even though, research has shown that improving cultural competence among health care providers can lead to improved care (Darnell & Kupermine, 2006; Fung et al., 2012; IOM, 2012; Lie et al, 2010; Lim et al., 2008; Paez et al., 2009; Weissman et al., 2005), little effort has been made to identify and evaluate specific interventions or overall organization strategies (Awosgba et al., 2013).

Further the context of the health care system was examined, including what issues are affecting this already complex system. Specifically, the unprecedented changes in the U.S. population, and the historical implementation of the Affordable Care Act in the
United States were reviewed to explain the implications to the existing health disparities problem. In addition to the impending societal issues perturbing the complex health care system, academic health centers were explored as Complex Adaptive Systems. A new approach to leadership is needed so as to educate future, more culturally competent and inclusive health care providers.

In conclusion, an argument for why using an emerging leadership theory could bring new perspectives on the issue of health disparities and leadership in academic health centers was presented. By investigating this problem through CLT lens, new knowledge was gleaned that will fosters flexibility and adaptability in organizations (AHCs). This adaptive capacity may position AHCs to improve cultural competence among health care providers, faculty and students. Using the CLT model for understanding a complex system such as health care and health professions education, may advance the knowledge with the goal of positively affecting patient health outcomes.

Explored in Chapter Three will be the research design and methodology utilized along with the research questions, population sample, methods of data collection, and data analysis. Presented in Chapter Four are the analysis and the results of the data collected. Findings, conclusions, implementations for practice and recommendations for future research are described in Chapter Five.
In hospitals and clinics throughout the United States, patients of minority and low socio-economic backgrounds receive less care, lower quality care, and have worse health outcomes (AHRQ, 2013; IOM 2012, Smedley et al., 2003). Minority and low socio-economic patients have higher rates of diabetes-related amputations, lower quality care for breast cancer and asthma, and higher rates of poorly managed heart disease and HIV, among other detrimental health outcomes (AHRQ, 2013; IOM, 2012; Smedley et al., 2003). Health education institutions, the entry point into the health care professions, are the organizations that establish expectations, give structure, and offer leadership for instilling diversity and cultural knowledge as core values (AAHC, n. d.; AAMC, 2008, 2012; Awosgba et al., 2013; Lindberg et al., 2008; Nivet, 2011).

Creswell (2009) noted that a purpose statement is the “central, controlling idea in a study” (p. 111) and it “sets forth the intent of the study” (p. 111). The purpose of this research was to discover the nature of diversity and cultural competence programs at higher education institutions, specifically an academic health center, to learn about organizational adaptive capacity and effective strategies. The goal of this research was to identify behaviors, interactions, relationship dynamics among leaders and changes that advance diversity and cultural competence initiatives in an academic health center. The research employed Complexity Leadership Theory (CLT) as a lens to understand these aspects. CLT offered a framework for which to study organizational leadership within a
complex system. (Schneider & Somers, 2006; Marion & Uhl-Bien, 2001, Uhl-Bien & Marion, 2009).

Higher education leaders need to know more about organizational approaches to enhance these efforts health and medical education institutions. Information in this chapter will provide an overview of the design and methods used to conduct a qualitative research project using case studies to compare and contrast academic health centers diversity programs to garner more insight into the nature of such efforts.

**Research Questions**

In this study, the following research questions guided the data collection and analyses so as to achieve the goal of increasing understanding about diversity and cultural competence efforts at academic health centers:

1. What is the organizational strategy that addresses diversity and cultural competence?
2. How are diversity and cultural competence viewed by institutional stakeholders?
3. How is leadership demonstrated related to diversity and cultural competence strategies?
4. What is the AHC doing to adapt to the evolving health care environment?
5. How can Complexity Leadership Theory be applied to address organizational leadership issues and foster change?

**Design for the Study**

Complexity theory is a method for studying the web of connections, issues, and relationships to understand how systems behave and adapt to change (Lindberg et al., 2008; Marion & Uhl-Bien, 2001; Uhl-Bien et al., 2007). Health care has been proposed
as perhaps one of the most complex systems in society (Begun, 2003, Tan et al., 2005).

To learn about the nature of diversity and cultural competence issues, this research used a qualitative approach in a case study design where the researcher explored and observed an organization on site, in the natural setting (Creswell, 2009; Denzin & Lincoln, 2005, Erlandson, et al., 1993; Lincoln & Guba, 1985).

CLT shifts the study of leadership from a linear to nonlinear system, from reductionism to holistic analysis, in order to reveal novel behaviors of the system (Lindberg et al., 2008; Marion & Uhl-Bien, 2001; Uhl-Bien & Marion, 2009). Therefore, CLT expands the study of leadership from traditional theoretical approaches that examine leader qualities and simple interactions, to relationship and outcome analysis – an approach more useful in complex environments, such as academic health centers.

The definition of qualitative research is elusive because it is often viewed as the opposite of quantitative or empirical research, and it encompasses broad ideas about what and how information is collected (Denzin & Lincoln, 2005). However, it can be described as research that is “a situated activity that locates the observer in the world,” and more specifically it is positioned in the “fractured future” where the conversation among researchers centers on social equality and liberty (Denzin & Lincoln, 2005, p. 3). Creswell (2009) offered a list of characteristics that define qualitative research including: it takes place in the natural setting (rather than bringing subjects to a site or laboratory), there are multiple means of data collection, and the researcher is the data collection instrument (Creswell, 2009).

This qualitative case study design was appropriate for learning about complex topics within complex environments because the researcher observed and analyzed both
the formal and informal diversity leadership constructs of the organization, and because qualitative approaches are best for emergent knowledge (Anderson et al., 2005, Creswell, 2009; Merriam, 1998).

**Rationale for Use of a Case Study**

Hatch (2002) posited case studies differ from other qualitative approaches, such as ethnography or observation, and that the case study method is appropriate for contemporary issues (p. 30). Consequently, analyzing an academic health center’s approaches to diversity and cultural competence met these criteria, especially with impending demographic shifts (U.S. Census Bureau, n.d., 2011) and health care policy changes through the new Affordable Care Act of 2010 (HHS, n.d.). These changes will create an influx in the healthcare system with more patients of diverse backgrounds, increasing the need for more culturally competent providers and organizations.

Blatter and Haverland (2012) offered a definition of contemporary case study research developed by researchers and methodologists over the last 40 years. They posited case study research is non-experimental and that the following four characteristics apply: 1) a small number of cases; 2) a large number of empirical observations per case; 3) huge diversity of empirical observations for each case; and 4) an intensive reflection of the relationships between concrete empirical observations and abstract theoretical concepts. Moreover, Blatter and Haverland suggested, “case studies are superior to large-N studies in helping the researcher to understand the perceptions and motivations of important actors and to trace the processes by which these cognitive factors form and change” (p. 6). This definition coincides with the tenants of complexity, such as examining elements of change and adaptability.
While Swanborn (2010) believed case study research is often viewed as the opposite of hypothetical or empirical research, this “exaggerated” (p. 12) comparison stems from a lack of rich methodological experiences with case study and other qualitative methods. Further, this discrepancy can be reconciled if there is greater attention and reflection of the data collected (Swanborn, 2010). This notion is supported by Blatter and Haverland’s (2012) definition “intensive reflection” (p.19) between measurable data and theoretical concepts. Swanborn (2010) used the descriptive “most” (p. 12) in defining case study research in that a significant number of case studies are bound in a social system, such as organizations, and should be studied in the natural context, where data unfolds but is not limited by the research questions (Lincoln & Guba, 1985; Merriam, 1998).

Case studies rely on several data sources including documents and interviews. The subjects are given the opportunity to clarify misunderstandings (Swanborn, 2010), a concept referred to as member-checking (Erlandson et al., 1993). Anderson et al. (2005) stated, “multiple lenses can be used by observing and interviewing people at all levels of the organizations (e.g., patients, nurse aides, all the way to the top administrator) and across disciplines (e.g., nursing, food service, social services, housekeeping) asking about the same phenomena” (p. 676). Therefore, this research relied on three forms of data collection. In each data collection technique, the same basic research questions were addressed.

The purpose of the research was to investigate the nature of diversity and cultural competence programs at an academic health center to glean knowledge about adaptive capacity and effective strategies. Faced with historic population and policy changes,
leaders at academic health centers are called to action (Awosgba et al., 2013; Elwood, 2012; Nivet, 2011). This research was designed to identify structures, policies, situations, attitudes and behaviors at a select institution in order to examine how leaders navigate these relationships to advance diversity and cultural competence at their institution.

Therefore, this study had three main data collection components. The first was a document and artifact analysis to learn about the culture, formal constructs and strategies of the institution (Creswell, 2009; Erlandson et al., 1985). The second data collected was through personal, individual interviews of the diversity and cultural competence stakeholders such as executive leaders, diversity officers or program directors, and other key people identified in the process. The third component consisted of observation to explore the informal constructs, how activities are implemented and potential organizational change.

Anderson et al. (2005) warned against letting the formal elements of the organization “mask the nature of the organization, which is defined by the informal organization” (p. 677). Therefore, the personal interviews and observations encompassed employees and informal leaders to garner underlying sentiments that potentially affected, if not dictated, the overriding success or failure of organizational initiatives. Throughout the data collection process outlined in the forthcoming sections, CLT concepts helped reveal the issues, relationships, and outcomes related to diversity leadership.

Participants

Research sites in a case study should not be selected randomly because the factors under examination may vary too widely to result in informative outcomes (Blatter &
Haverland, 2012). The goal of this research was not to examine all academic health centers, but to comprehensively investigate an institution with diversity initiatives underway, an approach Mertens (2005) claimed “represents depth of information rather than breadth” (p. 345). To select a site that represented the nature of diversity at academic health centers, the researcher established several criteria.

Using both pragmatic and substantive sampling criteria (Hatch, 2002; Swanborn, 2010), an institution that demonstrated it could be an “informative case” (Swanborn, 2010, p. 52) was identified based on the following factors:

1) Academic Health Center: By definition provided in Chapter One, these institutions are those that “include: an allopathic or osteopathic school of medicine; at least one other health professions school or program (such as allied health, dentistry, graduate studies, nursing, pharmacy, public health, and veterinary medicine); and, as a major component of the nation's health care delivery system, one or more owned or affiliated teaching hospitals, health systems or other organized health care services” (AAHC, n. d.). Even though many colleges and universities offer health professions or medical education, an AHC is a specific type because they are a partnership between large educational institutions and large hospitals or health systems. AHCs are have large biomedical research functions. There are 101 institutions that are members of the Association of Academic Health Centers.

Yin (2003) contended selecting participants for a case study should be based on replication logic, similar to that of experimental studies, not necessarily just sampling logic. In other words, selecting sites should be based on the ability to predict similar or
contrasting results (Yin, 2003). Therefore, other selection criteria were included to position the research to be applicable at similar institutions. The following replication factors further influenced the selection of the sites.

2) Only public MD Program in the state: To facilitate the ability to apply findings from this research, or make the comparisons to other institutions, the institution selected for this case study was the only public MD program offered in their state. Of the 101 AAHC member schools, 76 are public institutions but only 18 were the sole MD program provider.

3) Non-contiguous: The selected institution was non-contiguous with the flagship or main campus. While this was a challenging criteria to define, the researcher identified 11 possible locations that were not closely linked to the main or flagship campus. This criterion was considered because non-contiguous campuses might face different challenges. Instead of choosing an academic health center connected or integrated with the main campus, the AHC selected was comparable to the researcher’s organization, separate both physically and financially from a flagship or main campus.

Of the 11 possible locations that met the basic sampling criteria, one presented a conflict of interest to the researcher. The researcher connected with institutions directly and through professional contacts. Over a period of 10 months, only seven AHCs would consider the research request, four explored the logistics and interest among leaders on their campuses and one site approved the study. The site was selected because the met the basic sampling criteria and the replication logic criteria (Yin, 2003).
Data Collection and Instrumentation

Multiple data sources are required in a case study project such as interviews, documents, stakeholder input, and observations (Denzin & Lincoln, 2005; Swanborn, 2010). For this case study project, there were three main sources of data: document analysis, leadership analysis through interviews and observation. Each of these areas is explained more fully in the next section, followed by a description of steps the researcher followed to ensure participants’ rights and protections.

It should be noted that while these were the primary data collection steps planned for this research, other additional data collection options arose throughout this naturalistic process (Lincoln & Guba, 1985). As the research unfolded through the initial data collection strategies, the researcher continually reassessed the needed information and stakeholders to investigate (Lincoln & Guba, 1985). The researcher’s advisors and gatekeepers were consulted throughout the process to ensure ongoing focus and permissions, as needed.

To ensure the rights and protections of the study participants (i.e., the organizations and the individuals), several steps were taken to inform and solicit permission. First, this project met the requirements and was approved by the Human Subjects Committee at the University of Missouri- Columbia (see Appendix E). Second, the researcher fulfilled all institutional review board requirements and training certifications at each site, as required (see Appendix E). Next, approval of the gatekeeper was secured at each organization (see Appendix A.2.). The researcher submitted written request to executive leaders at the institution, including the chancellor and chief diversity officer (see Appendix A.1.). The permission letter explained the research goals and
confirmed approval to analyze the organization and its members (see Appendices A.1., A.2.).

Third, interview permission letters along with interview protocols were submitted to the individual interview participants (see Appendices A.3. and B). Participants were fully informed, both in writing and orally, of the project and outcomes, and had the opportunity to withdraw at any time during the process. Anonymity was maintained through the use of pseudonyms (Creswell, 2009), and individuals were informed of potential risk in presenting descriptive data in the findings. Results were described in general terms or as an aggregate as much as possible.

**Data Collection**

Through the institution’s websites, the chief diversity officer was identified and contacted so as to make an initial entry into the organization. A central contact person was identified at the site to assist with coordination and provide additional introductions. The researcher coordinated with the contact person to facilitate securing the official permissions from the executive administrator (chancellor), and to make local arrangements. A final, signed form from the gatekeeper confirming approval was secured prior to the beginning of any research (see Appendix A.2.).

**Document and artifact analysis.** To learn about the institution, a document and artifact analysis was conducted, which included examining documents related to organizational structure, along with program and department descriptions, and when available, budgets and strategic plans for diversity-related efforts (Hatch, 2002; Erlandson et al., 1993). Other artifacts included websites, newsletters or other
communications items, devices or products, syllabi or curricular outlines, and other relevant, physical materials (Erlandson et al., 1993).

This initial analysis of the organization primarily relied on a structural lens as described by Bolman and Deal (2008). These authors posited that the core premise of the structural frame is that there should be clear, well understood goals, roles, and relationships and that adequate coordination is essential to organizational performance (Bolman & Deal, 2008). Further, Erlandson et al. (1993) believed documents and artifacts provide information that sometimes goes unnoticed to researchers and which could “provide a context for understanding and evaluating the data obtained from dynamic human sources” (Erlandson et al., 1993, p. 101).

The primary purpose of the document analysis was to collect the formal, official materials related to diversity, cultural competence and organizational leadership. However, through this process, information of a more symbolic nature may be revealed (Bolman & Deal, 2008; Erlandson et al., 1993). This information was useful in the coding and theme identification process because it provided concrete, less subjective data points and a historical perspective (Hatch, 2002). In combination with other data collection methods, the document and artifact analysis helped build a longitudinal view of the case in study. The document and artifact protocol (see Appendix D) included descriptive details about the material under review and was coded (see Appendix F) according to the research questions and themes identified in Complexity Leadership Theory.

**Leadership analysis through interviews.** CLT suggested leaders are the individuals who can "influence this dynamic and the outcomes" (Uhl-Bien et al., 2007, p.
299) and leadership is the "emergent, interactive dynamic that is productive of outcomes" (p. 299). At the AHC, personal interviews lasting approximately 60 minutes each were conducted with the executive-level leader and chief diversity officer, and other stakeholders identified throughout the process. These stakeholders included faculty and staff members, deans, administrators and students. Through a series of individual interviews, the researcher sought information about formal and informal constructs of diversity-related initiatives, as well as information pertaining to changes over time (Lincoln & Guba, 1985). Since CLT incorporates the elements of time – history and future adaptability – the interviews addressed the “here-and-now,” as well as “reconstructions” and “projections” (Lincoln & Guba, 1985, p. 268) in order to construct the overall nature of diversity-related activities and outcomes at the site. The interview protocol (see Appendix B) consisted of 33 categorized questions that were directly connected to the research questions and Complexity Leadership Theory.

In a method known as “snowballing” or “chain samples” (Hatch, 2002, p. 98), the researcher identified the key stakeholder first— the chief diversity officer or human resources officer, then upon the recommendation of those individuals, identified and interviewed subsequent stakeholders (Lincoln & Guba, 1985). The interview approach can be described as semi-structured since the researcher had baseline information to gather, but also collected information initially unknown to the researcher (Lincoln & Guba, 1985). In sense, the researcher asked the interviewee to, “tell me the questions I ought to be asking and then answer them for me” (p. 269). Using this semi-structured approach allowed the researcher to gather uniform information that can be compared, but also made space for attaining knowledge about events, agents or other forces unknown to
the researcher in order to learn the gestalt of the institution (Pisarski et al., 2011). The interview protocol used in the individual interviews addressed the research questions, and also allowed for open dialogue (see Appendix B).

**Observation.** In qualitative research, the researcher must be cautious to not allow “the formal organizational documents and policies mask the nature of the organization,” (Anderson et al., 2005, p. 677). Therefore, observation as a data collection strategy afforded the researcher an opportunity to learn and understand situations as they occur (Hatch, 2002). In this project, further information about diversity and cultural competence, leadership and the organization was gathered through field observation of various faculty and staff members interacting with the institution’s diversity officers. Observations of space and resources were also made, and through this process the researcher maintained detailed field notes that documented the setting, participants, and actions throughout the two visits (Hatch, 2002). Coming from the constructivist perspective, especially in a case study methodological approach, it is worth noting that the researcher was at least minimally participative in the observed events (Hatch, 2002). Upon completion of the observation, the researcher organized and “filled in” (Hatch, 2002, p. 77) the blanks of the field notes as soon as possible after the session so as to construct the story of the observation while it was still fresh. Still, the researcher focused on the perspective of the participants to record what appeared to be most meaningful to them (Creswell, 2009; Hatch, 2002).

**Data Analysis**

Since qualitative research relies on interpretation and representation of meaning (Creswell, 2009; Denzin & Lincoln, 2005), data collected were analyzed and synthesized
by the researcher to identify themes. Hatch (2002) described a process for analyzing data gathered in qualitative research as moving from “specific to the general” concepts that eventually comprise picture of “a meaningful whole” (p. 161). Using inductive analysis, data were coded and categorized as key concepts, patterns and issues emerge (Lincoln & Guba, 1985). The researcher created a codebook to track and record various themes (Creswell, 2009). The data were categorized descriptively and inferentially (Lincoln & Guba, 1985), and where appropriate, segments of data were described in vivo, or in the language of the participants (Creswell, 2009).

A case study design lends itself to evaluation from the constructivist paradigm which suggests knowledge can be found in naturalistic settings (Hatch, 2002; Lincoln & Guba, 1985; Swanborn, 2010). Employing a constructivist lens revealed the overall nature of diversity and cultural competence programs at the selected AHC because “constructivists assume a world in which universal, absolute realities are unknowable, and the objects of inquiry are individual perspectives or constructions of reality” (Hatch, 2002, p. 15).

Role of the researcher. Qualitative researchers are sometimes referred to as a Bricoleur, or quilt-maker (Denzin & Lincoln, 2005). In this analogy, the researcher pieces together bits of information to create a representation of a situation. The representation is seen from the perspective of the researcher, however by gathering information from various sources, the researcher, or quilt-maker, is able to establish reliability of the interpreted piece. In this research, the role of the researcher was to collect information from a variety of sources at institutions similar to one another to attain the best possible comparisons and reliability. This “triangulation” process through
documents analysis and observation ultimately guided the researcher to arrange the information in order to create a meaningful and accurate whole (Denzin & Lincoln, 2005, Lincoln & Guba, 1985). It was the researcher’s responsibility to translate the data and draw meaning.

Summary

Described in this chapter are the design and methods of a qualitative case study research project aimed at gaining a deeper understanding of how academic health centers address diversity and cultural competence. Learning about how academic health centers address these issues is important because of known health disparities and major societal and policy shifts underway in the United States. In particular, this study examined leaders and leadership, organizational structures and solicited information from staff and other employees interested in diversity and cultural competence.

The study relied on a conceptual framework to set the boundaries of the research and test a modern leadership theory to determine its usefulness and application options. Despite inherent qualitative limitations, the case study served as a manageable method for gathering and analyzing data that ultimately guide the researcher in identifying themes to gain understanding into this issue. Diversity and cultural competence are broad subjects that affect many parts of the organization and its people, but by learning about peer institutions, leaders can make more informed decisions and set new strategies.

Presented in the next chapter are the findings of this research and discussion on the themes that emerged from the data collected. These themes are considered through the lens of Complexity Leadership Theory to determine potential applications at academic health centers for the improvement of diversity and cultural competence efforts.
Chapter Five will include limitations of the study, along with implications for practice and overall conclusions.
In this chapter, a review of study the design, conceptual underpinnings and research questions will precede a description of the data collection and analysis processes. Discussion will include a description of the setting, data sources and participants. The findings of this researcher will be presented as general themes, as well as themes based on the conceptual framework and research questions.

**Study Design**

The research used qualitative methodology, designed as a case study to examine the topic both through a conceptual lens and to allow knowledge to emerge naturally. Due to the complex nature of the topic and research setting, the case study design allowed for in-depth analysis, learning from multiple data sources (Swanborn, 2010) and gaining a rich understanding of the situation. Further, case study was useful for examining leadership and adaptive capacity of a higher education institution; it was also an appropriate design for the researcher to study leadership through the lens of complexity.

Participants and materials analyzed during the case study were identified to glean both general information as well as to ensure thorough representation of the various leaders and stakeholders at the institution. Certain participants, such as the students or faculty leaders, were specifically included in the interview process so as to invite potential new dimensions into the data.
Data Collection Methods

Substantial preparations were made prior to collecting data from the site. Foremost, the leaders at the study site thoroughly reviewed the abstract and proposal, and interviewed the researcher prior to agreeing to participate. The research proposal and request was reviewed by both the academic and legal teams to ensure privacy and protection of the institution and individual participants. Ultimately, permission from the participating site was secured and confirmed by both official letters of permission from the authorized agents (Appendix A) and through a temporary academic appointment or the researcher. Upon receiving permission from the AHC, the researcher fulfilled the Campus Institutional Review Board application at the University of Missouri – Columbia to ensure all ethical concerns had been addressed (Creswell, 2009). Once the approvals were secured, the researcher commenced communication with the site coordinator who facilitated initial contact with the participants. The coordinator was the primary contact person at the institution, facilitating the document collection and participant recruiting. The contact person offered the first recruitment communication by e-mail with the participants, introducing the research project and researcher to colleagues. After the initial communication, the researcher coordinated personal interviews with individuals during two visits to the research site.

The researcher traveled to the participating institution twice, spending a total of seven days on campus. During each visit, the researcher observed general interactions of the diversity office staff members, academic departments and hospital administrative offices. The interviews were conducted in pre-arranged conference rooms or offices. Four interviews were conducted by phone. Each interview participant was informed of
his or her rights verbally and through the informed consent letter (Appendix A.3). All participants authorized consent by either signing the informed consent letter or granting permission verbally over the phone after reviewing the letter. In addition, each participant was informed of the IRB approval (Appendix E) and institutional approval of the study. All interviews were audio recorded and a verbatim transcript was provided to the participants for their review. Participants were offered the opportunity to make corrections to the transcript, a data validation process known as “member checking” (Creswell, 2009).

Throughout the data collection time period, the primary contact person provided numerous reports pertaining to campus and diversity strategic planning, progress reports and demographical human resources reports. The messages and trends identified in these reports were considered against the personal narratives of the individuals interviewed. In addition, the researcher maintained notes on observations throughout the visit and these three sources of data were checked against one another in a process of triangulation (Creswell, 2009) to validate and support the findings.

**Conceptual Underpinnings**

While this research relied on induction to derive themes, it also was anchored by the conceptual underpinnings of Complexity Leadership Theory (CLT) presented by Marion and Uhl-Bien’s meso-model (2009). These scholars offered a framework for understanding Complexity Leadership Theory in large, bureaucratic settings making CLT an optimal framework for studying leadership at academic health centers.
Research Questions

Using the overall purpose of the study and the conceptual framework of CLT, the research questions that guided this study were:

1. What are the organizational strategies that address diversity and cultural competence?
2. How are diversity and cultural competence viewed by institutional stakeholders?
3. How is leadership demonstrated related to diversity and cultural competence strategies?
4. What is the AHC doing to adapt to the evolving health care environment?
5. How can Complexity Leadership Theory be applied to address organizational leadership issues and foster change?

Process of Data Analysis

The process of data analysis had two phases. The first phase was an informal reflection phase; the second was a formal code application and analysis phase. Moving from the informal to the formal phase provided for increased reliability of the initial impressions of the researcher to be confirmed or invalidated by the formal theme development of the interview transcripts. This approach made for a thorough analysis of the data.

The resulting themes were converted into a total of 46 data codes – 30 parent codes and 16 child codes. Codes based on the conceptual framework were created and defined based on related literature (Lichtenstein & Plowman, 2009; Marion & Uhl-Bien, 2001; Schneider & Somers, 2006; Uhl-Bien & Marion, 2009). Inductive codes were
themes that emerged from the interviews, observations and documents. During the analysis process, these codes were applied 828 times through 469 excerpts.

**Researcher Reflection and Initial Themes**

Throughout the visits to the research site, the researcher maintained a log of field notes and personal reflections. These notes and reflections led to the creation of several initial inductive themes. Later, as the researcher reviewed interview transcripts and documents, such as strategic plans, these themes continued to emerge. Early emergent themes that carried throughout the data collection and analysis process include topics such as *funnel, partnerships, emotional* and *communication*.

**Code Building**

From the themes that emerged through reflection and initial transcript review, the researcher constructed a code table. Since this research was also guided by a conceptual framework, the code table included the concepts from Complexity Leadership Theory. These CLT concepts include the three leadership functions, the concepts of *entanglement, non-linearity* and *decentralization*, as well as *adaptive outcomes*. The code table (Appendix F) contained the code title and the code description. The code description originated from either the description of the concept by Marion and Uhl-Bien (2009), the study research questions, or from a working definition developed by the researcher outlining the parameters of inductive codes.

**Conceptual framework and research question codes.** Codes related to the conceptual framework included: *adaptive function, adaptive outcome, administrative function, complex adaptive system, complexity leadership, decentralized control, emergence, enabling function, entanglement, and non-linearity*. The codes related to the
research questions included: accreditation requirement, Affordable Care Act, communication, disparities, health outcomes, information flow, organizational learning, organizational value, positive or improved (health outcomes) and student preparation.

Inductive codes. Just over half of the codes used in this data analysis were the result of inductive themes. Of the 46 total codes, 26 were identified through the reflection and review process. These inductive codes included: accountability, burden, centralization, community involvement, competition, diversity definition, emotional, external funding, frequency, funnel (pipeline), interprofessional education, isolation, knowledge, money, partnerships, politics, presence, recruitment, reputation, scholarship, state institution dynamic, time, tokenism, traditional leadership and value of convenience.

Code Application

An internet, cloud-based mixed methods analysis tool was used to apply the codes to the documents and interview transcripts, analyze the data and generate reports. The tool was a secure, password-protected website used by scholarly researchers to analyze code application including co-occurrence. Resulting reports helped guide the findings of the study. The researcher considered the frequency of code application, co-occurrence of themes, and researcher notes to derive general information from the research that can be used to advance knowledge and provide applicable information to higher education professionals. This process is known as moving from the specific to the general (Hatch, 2002, p. 161) in order to translate knowledge into practice.

Setting

The research took place at a large, public academic health center (AHC). An AHC is a specific type of higher education institution that includes education programs
and patient care through tertiary hospitals and clinics (AAHC, n.d.). These teaching hospitals are large and include a substantial research mission. The case study site was an AHC located in the South. It is a stand-alone entity, not connected physically or organizationally with the public, flagship higher education institution in the state. With over 11,000 people on campus including students, faculty and staff members, and patients, the AHC is a comprehensive health education institution with five schools that offer degrees in medicine, nursing, pharmacy and many other health occupations. The tertiary hospital is located on the campus with faculty in the College of Medicine serving as staff (doctors) for the hospital. Many other health professionals holding faculty appointments also practiced throughout the hospital and related clinics.

Located in a city of approximately 800,000 people, approximately half of the area residents are Caucasian. This represents a 40-year shift in the number of Caucasians and increase in minority residents, primarily African-American, but also a growing number of Hispanics. The AHC was described by interview participants as more liberal and progressive overall than the politically conservative state in which it resides. The state is predominantly rural, having only a few major cities, however there are higher-than-average health disparities and poorer patient health outcomes.

During the visits to the research site, the primary contact person initially escorted the researcher to appointments and provided a tour of the diversity office and the campus. The diversity office was notable in that it was a fairly new fixture on campus providing visibility to diversity, inclusion and cultural competency values on campus.

The researcher was required to obtain a campus identification badge and was provided temporary work space in the diversity office. Once acclimated, the researcher
was free to explore the campus and city. Several historical and politically significant places were located throughout the city and the researcher visited some of these sites because they were mentioned during the interviews as elements that influence the campus climate related to diversity and inclusion.

**Data Sources**

Data collected throughout this research included 32 media items plus researcher observations and field notes. Of the 32 media, 21 items were transcripts from personal interviews and 11 media were documents related to strategic planning and other institutional reports.

**Document Analysis**

The documents analyzed in this research included a diversity strategic plan, the institutional strategic plan, human resources reports from 2013 and 2014 containing demographic and programmatic information, minority recruitment plan, and other items such as web articles that provide updates about the strategic plan. The diversity office produces an online e-newsletter and one article was analyzed from that publication.

For each document, an analysis form was used to record relevant information and track themes pertinent to this research. In most cases, electronic versions of the documents were uploaded into the web-based analysis software to be woven into the data coding and analysis process.

**Interviews**

Personal interviews were conducted with 21 individuals. Other than four interviews conducted over the phone due to scheduling conflicts, all interviews took place on campus in pre-arranged offices or conference rooms. Participants were fully
informed of the project, the approval from the institution, and their rights as subjects in the study. All participants consented to be interviewed and audio recorded. On three occasions, the audio recording was halted and no notes were maintained from off-the-record conversations. Participants requested the audio recording to be stopped in order to speak frankly about emotional issues, personal experiences or to clarify the scope of the project.

Interview participants consisted of organizational leaders, faculty members who serve as teachers, clinical providers and researchers, and staff members, mid-level administrators and students. More information on these individuals will be provided in subsequent sections of this chapter.

Observations and Field Notes

The researcher maintained notes about interactions with the institution including in-person observations. Prior to visiting campus, the researcher held numerous phone conversations email communications with the primary contact to coordinate the visits and learn about the state of diversity work on campus. One site visit occurred in the summer when limited classes were in session while the other site visit took place during the fall semester. The researcher was unable to attend the Diversity Council meeting due to scheduling, but the chair of the council was interviewed.

Participants

The primary contact at the institution facilitated the introduction of the research project and helped coordinate the initial communications. The researcher organized interviews with 21 individuals from across campus. The interview participants can be grouped into the following five categories:
Diversity Officers (DOs)

Two individuals were identified as Diversity Officers. While one was the executive officer and a clinician (health care provider), the other was an administrator of the diversity office who served as the primary contact. Both diversity officers were African American, one male and one female.

Executive Leaders (ELs)

Three executive leaders were interviewed including the chancellor, the executive officer of the hospital and the provost who oversees the academic operation. The ELs were male and female, all Caucasian.

Administrators (ADs)

There were five deans and/or directors who participated in the study. These administrators represented the academic and administrative aspects of the institution. The ADs represented both males and females; one was African American, one person disclosed sexual orientation as gay and one person self-identified as an immigrant.

Diversity Agents (DAs)

Nine individuals were identified as diversity agents or stakeholders. This group included male and female faculty and staff members and program coordinators. Of the nine DAs, six were Caucasian, two were African-American and one person was of unknown descent.

Students (STs)

Attempts were made to involve several students but due to scheduling only two students were able to participate by phone. These students both self-identified as African American females in two different academic programs.
Themes

One of the tenants of qualitative methodology is that knowledge can be found in the natural setting (Hatch, 2002; Lincoln & Guba, 1985; Swanborn, 2010). Using a constructivist paradigm, which contends reality can be known and understood (Hatch, 2002), certain general concepts were derived from this project. The findings from this naturalistic research will be described as themes.

The findings of this research can be considered from three major perspectives. The first perspective is considering the major themes revealed through inductive analysis process focusing on the tactical, on-the-ground constraints and ongoing concerns. The second perspective is through the lens of CLT, the conceptual framework of the study, which is an approach to understanding leadership of a complex adaptive system (Uhl-Bien and Marion, 2009). Finally, the data can be considered by revisiting the research questions. By reflecting on the findings from these three perspectives, several conclusions can be drawn that will advance knowledge and practice in organizational leadership efforts focused on diversity, cultural competence and inclusion in higher education.

The rich data collected through this project revealed numerous themes. However, the themes discussed will advance knowledge, derive concluding concepts and provide applicable recommendations (Creswell, 2009; Denzin & Lincoln, 2005). Therefore, these themes will be discussed specifically but also from a general overview (Hatch, 2002).

Inductive Themes

Several themes emerged from analyzing the information obtained through the interviews, observations and documents. Lincoln and Guba (1985) postulated inductive
analysis is the process of identifying pattern and key concepts. The data in this study revealed numerous inductive themes. However, these themes can be categorized into demonstrated organizational value, the money-funnel-partnerships phenomenon, role of accountability and the emotional overlay. Examples of each key concept will illustrate the importance of the theme.

**Demonstrated organizational value.** One of the prominent themes that emerged from the data was the strong sense of diversity, inclusion and cultural competence as organizational values. The demonstration of these values began at the top with the executive officers and appeared to transcend down through the academic and organizational administrators, and through to senior faculty members and staff members.

The most noted demonstration of this concept is from the top campus Executive Leader (EL) who came to the institution in 2009. Nearly all of the interviewed participants noted the strong leadership of this EL in the area of diversity. Time after time, research participants complimented the EL in this regard.

One of the first actions the EL administered when he joined the institution was to adjust the organizational structure to support diversity strategies. Previously, the various colleges had their own, smaller diversity offices or officers. The EL moved some of them to a campus-wide office and appointed a leader to guide the effort for the AHC. This newly arranged diversity office was given a new charge to serve all of campus, not just one school within the university. To ensure the effectiveness of this move, the EL elevated the position of the diversity leader to vice chancellor, a top leadership level at the institution. These actions communicated to the campus the earnest nature of the
diversity and inclusion goals of the administration. One of the Diversity Officers (DO) said,

I think he came here with a sense of what is right, what is the public view, and he came with that as part of his fabric. With that, he has certainly been really supportive of what we’re trying to do and he is the real reason we’re outside of any college and why we’re under the chancellor’s office.

In addition to establishing a campus-wide diversity office, elevating the role of the DO to a vice chancellor level positioned him to be present at certain high-level leadership meetings. The DO attends top council meetings regularly and provides specific reports about the status of diversity initiatives at least twice per year. Several administrative officers noted this change and one in particular said, “the Council and the [Chief Diversity Officer] meets with us at least once or twice a year and talks about what the office is doing and how we can work with them to increase diversity on campus. It's sort of built into our regular process … the [Executive Leaders] arrange for that to happen.”

Another dean shared a similar comment,

Sometimes, somebody who's really not at the table, it's hard to remember them. I think actually having [diversity officer] at the table in the Chancellor's Cabinet is great, but having [the diversity officer] at the table for each Dean's meeting, that's amazing to me. There's never a time where I'm not thinking about diversity when I meet with the Chancellor.

This AD also demonstrated how diversity as an organizational value filters down from the very top leadership to the administrative and mid-level leadership. The AD invited the diversity officers to their annual faculty retreat – the one time per year where the AD can discuss goals, conduct training and set the expectation for the year. The AD said she felt, given this retreat is only once per year and the time is limited, devoting an
entire section to improving cultural competence in the curricula conveys the importance
from the executive leadership down into the faculty and curricula.

The institution has mandated training for supervisors, and also offers training to
non-supervisors that addresses diversity, communication and conflict resolution skills.
Training for departments and students is also available upon request, and over 800
students in one college have participated. Much of the training focuses on racial and
ethnic differences, but programs are also offered addressing generational differences and
accessibility issues. There is also a monthly workshop series recognizing various
heritage celebrations.

In addition to the academic functions of the university, the institution is also
obliged to monitor and develop a health care workforce for the state. The organizational
values related to diversity and inclusion were demonstrated by a endorsing a new project
that helps train and match individuals with disabilities to employment opportunities. An
AD in charge of implementing this program said this helps ensure the institution
addresses cultural competence in the workforce.

“I believe that the [Executive Leaders] are committed to developing a culturally
competent workforce. The chancellor has demonstrated his commitment by his
willingness for the campus to undertake [this workforce project], for instance. I think
that's an example of his commitment to inclusion,” the program administrator said.

Other strategies demonstrate the organizational value as well. Some of these
strategies are documented in the AHC’s strategic plan, a Vision for the Future, and their
Minority Recruitment Plan. However, one of the most notable demonstrations is the EL
has allowed some grant funding to circulate back into the effort to improve diversity and
cultural competence across campus. This funding is called indirects. Certain money from a grant goes to supporting the grant project itself, while other money – the indirects – go to the institution to offset overall expenses of running the grant such as utilities (http://www2.ed.gov/about/offices/list/ocfo/intro.html). Often these indirects go to a centralized research office that uses the funds for this purpose. However, the EL demonstrated diversity and cultural competence are top organizational values by putting those indirects back into the programmatic piece of the grant.

In the end, visible demonstrations of an organizational value include being present. One AD said demonstrating an organizational value means simply showing up. “That right there tells people it's important,” the AD said. “I think if the leader is involved physically … for example we have all kinds of meetings on campus, of course, everybody does. If the Chancellor shows up, people know that's an important meeting. You don’t even have to say it. If he shows up it's important.”

All of the stakeholders generally agreed that establishing the Diversity Office is the most visible and effective demonstrations of the organizational value and one that seems to be moving the symbolic needle.

“You need some area – if it's a part of what everybody is supposed to do, it gets crowded off the table by the urgent things for today – so you need something that really serves as the center of gravity,” the chancellor said.

Still, demonstrating organizational values can occur indirectly and hinder the communication of value in other areas. Despite the fact that nearly all the interview participants applauded the EL’s commitment to diversity on campus, recent unintended indirect messages could be communicating diversity is only a value of convenience.
Several faculty and campus leaders mentioned the recent attention to financial issues taking over as the leading organizational value at the institution. One Diversity Agent said,

I think the leadership has gotten diverted from diversity right now by financial issues. I think that's not their interest right now. I would say it's not their interest. I think they're probably very committed to diversity. It's just that it's not their highest priority right now.

Both of the students interviewed shared this sentiment. One student said, “I don't feel like that’s (diversity activities) their main goal.”” Another DA said,

I think diversity is one of those things that, it's a very nice word. It's easy to say, harder to actually implement. Some people get it and some people don't. If it's diversity that fits in to whatever they're trying to do, all these other priorities that they have, and it just happens to be diversity [related] and free, well then maybe we can do it.

Even the EL acknowledged this reality when he mentioned, “I believe the biggest problem is in the crush of all the work that's done every day, and the fact that, bandwidth is limited and resources are limited … with other issues of a higher priority.” The competing priorities of a higher education organization are not out of the ordinary, however, given the recent acute focus on finances at this research site, diversity as an organizational value seemed to be pushed aside in order to focus on money. While this recent focus on institutional finances may not fully account for one of the other key concepts that emerged out of the inductive data analysis, it does appear to solidify a phenomenon that can be referred to as the money-funnel-partnership strategy.

**Money-funnel-partnership phenomenon.** Three themes emerged in connection with one another in what will be described as the money-funnel-partnership phenomenon. Each theme was addressed frequently by the interview participants and well-documented in the AHC’s strategic materials and reports. While these topics are likely not unique to
this research AHC, the pattern of these topics as connected to one another does appear to be a unique finding. This phenomenon will be described in part, then collectively, and will again be addressed in Chapter Five when considering implications and/or future areas of research.

These three areas, each worthy of examination individually, seem to create almost a circular phenomenon at this institution. It usually begins with lack of money – funds needed to do a program or implement an initiative. The initiative or project is often geared toward affecting the funnel, or the process of recruiting underrepresented individuals to the institution. Since money can be scarce and the goals geared at improving the funnel are lofty, the strategy of the organization appeared to be forming a partnership of some kind to achieve the goal. When done successfully, this approach seemed to solve the money issue because the partner shouldered some of the related expenses and the funnel was positively impacted. When not successful, this model is attempted, but breaks down. The failed partnership further afflicts the money and funnel problems. The circular phenomenon can be positive or negative. To better understand the phenomenon, each aspect should be examined individually.

Money. Probably little surprise to those who work in the area of diversity and inclusion in higher education, money emerged as a critical issue. At least 15 participants interviewed mentioned money directly, and several others referred to resources and other financial support as an issue.

While diversity is frequently stated as an organizational goal and value, over the years, those that have worked toward the achieving these goals said they felt severely underfunded. “I’ve never had a real budget or money. A lot of the things that we have
accomplished on this campus the past 18 years were done with very little money and a lot of blood, sweat, and tears,” said one Diversity Agent. A Diversity Administrator confirmed this sentiment when he said, “I think generally speaking, as long as it's not going to cost the campus a lot, there's a lot of support for new (diversity) initiatives.” Even though support is conveyed in spirit, and progress has been made in the area of diversity and cultural competence on campus, funding has often fell short. Even the group tasked with organizing diversity activities is underfunded. The chair of the group said that if they want to initiate a program or coordinate an activity, they have to find funding. The small budget they have is housed in the diversity office. “It's small. It's really for programs, not as much as maybe it should be for us to do something … we'd probably like to do,” the Diversity Administrator who chairs the group said.

This perceived perpetual underfunding can sometimes cause diversity to be viewed as a value of convenience, a concept mentioned earlier. This notion means that the things that are truly valuable and important to the institution are the ones that are funded, and diversity is only a value when funding is occasionally available. In this way, money, or lack thereof, can negatively affect diversity as an organizational value. Related to the issue of underfunding, diversity efforts seem to be frequently reliant on external funding. This will be further explained when the topic of partnerships is discussed, but suffice it to say, reliance on external funding reaffirms the value of convenience concept.

“There's not a lot of resources in this (diversity work), not a lot of time. Most of my committee ... This committee meets once a month and everybody has a day job.
That's not their main gig so they go away,” said a Diversity Agent who chairs another group on campus focused on minority recruitment and retention.

Even though the current top Executive Leader has taken steps to enable progress toward the institution’s diversity and inclusion goals, all of the Diversity Officers, Diversity Administrators and Diversity Agents (16 of the 21 individuals interviewed) expressed doubt about accomplishing diversity-related goals as a result of underfunding. A Diversity Agent described a typical approach to solving diversity issues when she said, “Anytime anybody asks about it, we say ‘oh, we'll just bring [the Diversity Officer] in.’ Let's forget about the fact that we haven't really funded that office very well.” Another Diversity Agent conveyed anger about the subject saying, "Where is the money? We don't have the money for this. Sure, it sounds nice. Oh yeah that's a great thing to say. That's a great tag line, that's a great whatever. Where is the money?” The frustration became palpable the more money was discussed. In fact, one of the Diversity Officers confirmed this frustration stating, “I think that kind of leadership that is real and demonstrative in word and in deed and in finance, those three things are really, really, important. If you don't have that it's very difficult to move forward, period.”

A surprising phrase that came up throughout several interviews was that people on campus seeking to advance the diversity mission “have a good heart” but lacked financial support to make initiatives successful. Five individuals from various parts of campus used this phrase nearly verbatim. For example, one stakeholder said, “I think it's really lack of resources. We don't have enough human power. We have great ideas and a good heart, but not enough human power to follow through in a lot of these things.”
These “great ideas” born from a “good heart” often refer to efforts to recruit underrepresented minority students, faculty, staff and leaders. From the comments shared by those 16 diversity officers, administrators and agents, the two concepts seemed synchronous. These diversity stakeholders said they felt strategies and work to recruit minorities have been moderately effective, but more money is needed to truly affect a demographic change on campus. In this research, the recruitment and retention effort is generically referred to as the funnel.

**Funnel.** One of the most frequent topics in the diversity field also emerged as a major theme from the research. This concept can be loosely referred to as the funnel, or the pipeline, which is the process of recruiting and retaining students, faculty, staff members and leaders. Many academic health educators view the funnel as the primary mechanism for affecting patient health care. This is the reason accrediting bodies have focused on improving diversity among student and faculty populations at AHCs and integrating more cultural competence content into the health education curricula.

Recruitment of students remains a long-standing yet elusive goal. More than half of the faculty, students and leaders interviewed spoke to the concept of the funnel. The general sense is that the organization recognizes the need to focus on the pipeline of students coming to the institution, and many discussed specific programs and initiatives that are underway. Some programs have been successful, but everyone that mentioned the issue of student recruitment expressed frustration with identifying solutions. When discussing the efforts to improve diversity among faculty and students, the conversations begin with examining the current student body, then back up the funnel from that point. One Diversity Agent said, “I think the holes are the applicants.” This is often the first
step in analyzing the student body. However, the dilemma of the funnel begins with reflecting on the big picture. One of the Diversity Officers pondered the predicament of the funnel overall:

Where does the funnel start from? What does the education pipeline look like, what do your members look like, what are your recruitment efforts looking like and what do our enrichment programs look like? What is the sort of environment state-wide, what are other people doing and then what are the people outside of the state doing to compare?

There are several issues that affect the student recruitment funnel including: student preparation; funding for recruitment programs; the impact of partnerships and programs, as well as other dynamics such as the institution being a public, state institution. Ten of the participants addressed the dynamic of being a state institution. These dynamics included lack of funding for scholarships to attract diverse students, competition, perceived lower prestige as compared to peer or private AHCs, and the obligations of the institution as “a public trust” (Executive Leader). Since competition for recruiting diverse students is high, the perceived prestige and the ability to provide scholarship and other financial incentives to attract recruit minority students is viewed as critical. One Administrator mentioned losing students to a neighboring state that had secured federal funding for a program to provide out-of-state minority students tuition assistance.

Sometimes we lose strong students to those schools. Then sometimes in the past, [a neighboring state] had gotten money federally to help give in-state tuition and/or to give no tuition to minority candidates that were highly qualified. We were occasionally, we knew, losing students to [the neighboring state] because we couldn’t compete. (Administrator)

In 2011, the institution began offering a similar non-resident diversity scholarship to “help defray rising educational costs for … students, especially those who are
economically disadvantaged; and … to increase diversity among the [state] health and healthcare professions workforce” (Minority Recruitment Plan). In 2013, a total of 12 students from two of the colleges received these scholarships. Affecting the funnel early is the key strategy believed to be needed, but lack of resources for these efforts is also a struggle. Faculty and staff are needed to facilitate recruitment, but time as a resource is an issue. The chair of the group tasked with monitoring minority faculty recruitment and retention addressed this issue:

They need to continue working with the high schools. I think we do that well, but it’s a little harder for us. For one, there virtually no resources for us to reach down to do that. Although [the Chief Diversity Officer] has some really good high school programs, and it's not just resources, it's also the people that do it, they’re faculty, and faculty time is just huge. (Diversity Agent)

The need for more funding and resources to improve the pipeline of minority and underserved students matriculating to the institution has prompted efforts for alternative strategies. For example, the institution has been successful in securing external funding to help support recruitment efforts. One program that is designed to expose undergraduate minority students to health and scientific research is supported by two National Institutes of Health grants. This program has been successful in bringing students from across the country to the campus, but it is small in numbers. Another strategy is to form partnerships. This strategy addresses both the financial resource needs as well as relationship-building. This strategy has had a mixed effect – both positive and negative. While some partnerships have proven effective, others have failed.

**Partnerships.** Closely related to the concept of the funnel is another idea that emerged from the data – partnerships. This was an unanticipated theme and a compliment to the institution for exploring and working to develop effective strategies to
advance the diversity goals. These partnerships often occurred with other potential "feeder" institutions, specifically historically black colleges and universities (HBCU) throughout the region, as well as partnerships with the state’s flagship university and within the community.

The Chief Diversity Officer and several Diversity Agents work with HBCUs in the region to build relationships that facilitate the pipeline of students going into medical and health professions. The AHC diversity officers and agents visit the campuses throughout the year. One program aims to funnel minority students into graduate biomedical science degree programs. The director of the program said,

We’ve established partnerships with several HBCUs in the region, and that is a huge difference in the number of African American applicants. I'll say the African American, it has also made a difference in Native Americans, and Vietnamese. In our region is mostly African American. That next year, their summer mentor goes down to [a regional HBCU] and gives a seminar and talks to students down there, their thesis adviser comes up here and gives a seminar and meets our faculty up here. (Diversity Agent)

Even though establishing partnerships and building relationships has proven successful and fostered good will, they are not always successful. For example, an initiative a few years ago was to establish a pre-medical office at the state’s flagship university to partner with the institution and bolster the funnel to the AHC. The idea for this partnership was to enlist the flagship university in supporting the office and staff to run it with a goal of bridging the undergraduates with the AHC. In the end, both institutions wanted the other to fund the office, so the effort stalled. Similar ideas have been considered with the HBCUs in the region. Even though establishing a partnership seems to be a positive move for both institutions, funding is a concern:

If we have this premedical office in [the regional HBCU institution] whether it's spending money for … the part time person. It can be done
cheap but it still costs money. Because a part time person is still what $25,000? The office you still have to have, even if it's an office that is really not used you still have to outfit it with the basics, you've got to get a phone, you've got to get a computer, that kind of thing. It still takes some investment so we are probably talking about for the first year – this office including purchasing pre- and post- exams for PCAP and MCAT, probably $50-60,000 dollars for one year.

When recruitment is successful and more minority students have been recruited and accepted in medical and health professions education programs, resources and more coordination are needed to support and retain them. “I need more money and resources to build an office for these students to succeed. That's my point. That's what I think is lacking,” said one DA.

In the end, however, progress has been slow and the ratio of effort to matriculated students is high. All of this effort and programs not resulting in greater number of minority students leaves most confounded. One student, actively involved in a minority student organization that offers programs to high school students, said she sees substantial effort in addressing the early pipeline, but the efforts do not seem to translate into higher minority students enrolled at the institution.

Recruitment of faculty and leadership was also addressed by several participants. The focus on faculty and leadership recruitment stems from the evolving knowledge of how to develop culturally competent organizations, along with increasing knowledge of successful retention of minority students; confirmed by external requirements by accrediting bodies and grant funders who have concurrently learned these same concepts. Like recruiting students, there is difficulty in recruiting leaders. “We have trouble recruiting chairs to [our state] anyway. We had an African-American dean at one point in time. He didn't stay. He was on his way to bigger and better things,” said one AD.
One of the goals set forth in the institution’s *Diversity Strategic Plan* is to track all related recruitment activities. A recruitment goal has been established, a step toward accountability, which is another key theme of the research.

**Accountability.** A key component to the effectiveness of diversity efforts was accountability. Some steps have been taken to address accountability, but many stakeholders either spoke to the need for more data and accountability measures, or are in the early stages of establishing methods to ensure accountability. One of the most noted efforts to instill accountability was a survey of students in one of the colleges at the AHC. The survey examined student attitudes about diversity and cultural competence, and the results were surprising to the faculty and administrators in the school. The survey data revealed lack of knowledge of and appreciation for the value of diversity in higher education health professions programs. The dean said:

> It was pretty obvious that there was a problem beyond the number of African-Americans in the class and that had often been the focus; how many African-Americans? That described whether or not you have a diversity problem. That's just a tiny part of whether or not you have a diversity issue. I think that data helped show that the problem was a lot bigger than that. (Administrator)

Since the survey was conducted, the school has attempted to work with the Diversity Office to improve cultural competence and diversity knowledge in the curriculum. The dean noted that the chancellor often checks in to see how the school is addressing the survey results, and they are considering repeating the survey to see if change has been made in attitudes.

Most stakeholders, however, indicated accountability as the next step in their work to improve diversity and cultural competence on campus to build a more inclusive environment. The group responsible for monitoring faculty recruitment and retention
recently examined the structure and policies pertaining to diversity across the
organization revealed a deficit in this work:

That survey, which we just did probably a couple of months ago, it really
shows that most departments don’t have any set rules, any set policies and
certainly, when it comes to recruiting, there is no set statement or certainly
not a mandate to include diversity as part of the research activity and
there’s certainly no mandate or no policy to say we have to have a
diversity representative on this search committee. (Diversity Officer)

Several stakeholders spoke to the need to more closely examine efforts at the unit level
such as asking specific areas and individuals what strategies are in place to improve
diversity and cultural competence in their school, their program or their group. One
faculty member described this as a need to get “down into the weeds of basically going in
to department chairs and leaders and holding them responsible for it,” (Diversity Agent).
However, another warned an approach like this is likely to be an unpleasant process, the
results analogous to finding out “how the sausage is made” (Diversity Agent).

Institutionalizing accountability is perceived to be the most effective method of
instilling diversity and cultural competence as organizational values. The chair of the
group responsible for monitoring faculty recruitment and retention said he would like to
see accountability measures integrated into the promotion and tenure process – a pillar of
academic life.

A lot of tenure is checking off all the boxes. If you don't have a mentor
telling you, ‘You need this box, too.’ I would like to see more formalized
things. One big thing I've been trying to push for is to have the question,
‘What have you done for diversity?’ be a part of the tenure process. Have
that be a box and you have to say something there, and preferably not
nothing. (Diversity Agent)

The dean of another school also demonstrated accountability by re-organizing its internal
diversity committee to focus on data and, he said,
What they've been doing this year is just compiling lots of data about how the college is performing in the areas of diversity. I think they're focusing mostly on students right now, but we really do need to look at staff and faculty as well, but students is a good place to start. (Administrator)

Overall, diversity is built into the AHC’s strategic plan, *A Vision for the Future*, and their *Diversity Strategic Plan*. In these documents, the institution’s short- and long-term goals are presented, along with goals accomplished to date. Perhaps the most visible goals that have been accomplished are the creation (reconfiguration) of the Diversity Office and establishing a neighborhood clinic. Other long-term goals are more complex to achieve such as the goal of increasing the number of underrepresented minority faculty and students by 20 percent each over five years as noted in the *Diversity Strategic Plan*.

At times, external pressure or requirements force the institution to be accountable for improving diversity and cultural competence. The accreditation bodies are external agencies described in this research, but faculty members also mentioned government funding and reporting agencies as driving accountability, too. For example, the state department of education requires data annually pertaining to minority recruitment and retention. One Diversity Agent said, “I would also say that the external pressure of NIH [National Institutes of Health] and CDC [Centers for Disease Control] and all these funding organizations saying you have to engage the community in your work, that forces people, researchers who are traditional researchers, to do something they weren't trained to do and not feel comfortable doing.”

Certain related efforts are also intended to improve cultural competence such as the push for service learning where students participate in activities in order to gain experience and knowledge from interacting with the people in the local community. One
program requires service learning as part of the graduation criteria, thus instilling accountability in the curriculum.

In the end, the Chief Diversity Officer said he would like to see more writing and dissemination of the efforts that various stakeholders have been involved with to improve diversity and cultural competence on campus. Developing “diversity scholarship” (Leon, 2014, p. 89) is a trend that is intended to “incorporate diversity into the academic aspects of institutional life” (p. 89). He said that even though there is still a long way to go in their work, he believes positive steps have been made and that he would like to recognize this work in order to keep diversity part of the broader conversation about the future of the AHC.

**Emotional overlay.** The movement to improve diversity and cultural competence at academic health centers can become bureaucratic and technical in nature as leaders navigate the complex organization and seek new ways to advance these efforts. Still, the emotional nature of this work cannot be understated or ignored. “We've had meetings in the [minority recruitment and retention group] where I felt uncomfortable. It's gotten heated. I think that's actually good for everybody because you come away realizing that it is emotional,” one Diversity Agent said.

Diversity as a generic concept or strategic priority can be examined collectively or objectively, but leaders should not be distracted by these aspects of the work and neglect the personal and emotional nature of it. As a social matter, attempts to mold a more diverse student body or faculty can have unintended outcomes. A few of these outcomes were mentioned by the minority participants in this study – in particular, the burden of tokenism and isolation.
The burden of tokenism. While often thought of as the attempt to appear diverse by including one minority person in a group, tokenism is also the idea that a person of color is expected to speak for diversity efforts overall. One dean addressed this issue as it relates to a minority faculty member in the college, “everyone turns to her to get a minority person on their committee so that they have a diverse perspective on the committee. She's called on all the time.”

As noted here, even well-intended efforts to assure diversity perspectives are included in academic work can feel more like tokenism that creates a burden. Minority faculty members expressed frustration and worry over wanting to be involved in efforts that improve diversity and cultural competency on campus, but they stress over too much time being diverted away from their scholarly, teaching and research activities. These activities are the measure of a faculty member’s success and a demonstration of mastery is required in these areas in order for faculty members to move up in academic rank.

It's time consuming work and it takes away from their scholarly activities and their own personal event. This was expressed in the Council of Deans, actually the director of the cancer institute piped up and said, ‘Why don't we make some kind of a pool of [people who wish to represent diverse perspectives]. Then let people, all departments, kind of pick from that pool.’ That seemed like maybe a good solution to that problem. (Diversity Agent)

Burden also extends to the diversity leaders themselves. One faculty member described the informal role of the Chief Diversity Officer as it relates to minority faculty on campus. She said, “he has done an excellent job of mentoring each and every [minority faculty member].” The Chief Diversity Officer has single-handedly and personally mentored scores of minority faculty members. A burden large enough for several full-time people, much less one person who also still holds clinic hours treating
Another faculty member confirmed the notion that much of the mentoring of minority faculty has been informally relegated to the Chief Diversity Officer:

I can only imagine how many stories, how many complaints, how many tears he's had to deal with. Thank God for him because honestly, as much as people complain about what's going on, all of us go to him. If anything got so bad, we would go to him. I don’t know if anybody could ever fill his shoes whenever he chooses to, ‘Okay I've got to take this hat off.’ He's got a big job to do and a lot of people to please, including us, which I'm sure at times feels like his bunch of whiny toddlers. (Diversity Agent)

Ultimately, this feeling of tokenism and burden can affect the funnel of minority faculty members who potentially could move into leadership roles. When it is time to promote faculty members into leadership positions or attempt to recruit them, institutions do themselves a disservice if they stifle the pipeline too early by burdening faculty members with representing all minorities on every committee. In addition, organizational leaders should note the real emotional toll minority faculty, staff and students may feel from being "the only" in every situation. The sense of isolation could lead to underperformance, attrition, low morale or other legal actions.

**Isolation.** Faculty and staff members from diverse backgrounds who participated in this research all expressed a sense of isolation that has affected their work and personal lives. Non-minority colleagues spoke of observing and/or empathizing with the phenomenon. The phrase repeated by various minority and non-minority participants was “the only.”

A student said, “I just wish the [college] was more diverse. Because even if the people around you don't feel that way, when you walk into a room and you're the only black person or you're the only white person or whatever ...” and a faculty member said, “I think the truth of it is that there's comfort when you know you're not the only because
in every meeting you're the only. In every classroom, you're the only. Most hallways, you're the only.”

These sentiments from faculty members and students show that deeper into the AHC, the attitudes and experiences shift from positive organizationally to more personal, emotional and sometimes negative. One Diversity Agent said,

All of us shouldn't be coming and going into our own room just trying to stick it out. Come through the door, go to your office, so you can get by and leave at the end of the day. Then when you're about to boil over, go try to search out a friend, “Hey just listen to this real quick and tell me am I not crazy.” That's what's happening.

This phenomenon is observed from others, as well. “I worry because I've heard directly from students. I worry that they still don't feel ... I worry that a lot of them still feel like outsiders,” said one Diversity Agent. Because of this, the Diversity Office has been the main resource for emotional support for faculty, staff members and student

The Chief Diversity Officer said that one college at the AHC has utilized the Diversity Office in this capacity, “They’ve been sending students here for, not so much counseling, but to [address] this idea of … not idea, but the realness of isolation.” One of the students agreed, “I mean, I feel like the diversity office, they are supportive, and I feel like they are the reason that I made it through my 1st year.” That student said from her perspective, another avenue for minority students getting emotional support related to isolation was through diversity-related student organizations. The other student shared this sentiment, “If I went to a dean or a faculty member about that, I honestly don't think that they would understand. I don't at all.”

The various themes that emerged inductively from the data collected are all useful in organizational learning and technical planning, from examining what diversity looks
like as a demonstrated organizational value, to the peaks and pitfalls of recruiting diverse students to the organization. Still, AHC leaders should keep in mind the nature of this work always has a very personal and emotional foundation. Therefore, using a framework to understand the nature of diversity and cultural competence on the campus of an academic health center can help utilize the knowledge gained from this research in how to build an adaptive organization. The next section of research findings will describe how the Complexity Leadership Theory model can be used as a lens to understand the nature of this work at an AHC and how to learn from it.

**Complexity Leadership Theory Themes**

This research set out to evaluate the usefulness of Complexity Leadership Theory as a framework for understanding organizational leadership in a large, complex system. CLT was identified as a strong potential framework for examining leadership at an academic health center because the framework offers an approach to studying decentralized, non-linear and bureaucratic institutions (Uhl-Bien & Marion, 2009). The academic health center has been described as a highly complex system (Begun, 2003; Tan et al., 2005). When attempting to inject and improve an abstract concept like the value of diversity and cultural competency in this complex system, it can be difficult to identify how to understand this system. Complexity Leadership Theory offers a model for understanding how a large, bureaucratic system can function effectively.

Complexity Leadership Theory is comprised of four foundational concepts and three leadership functions (Uhl-Bien & Marion, 2009). The foundational concepts are non-linearity, decentralization, effect of time, and heterogeneity. The leadership functions are administrative, enabling and adaptive, with the concept of entanglement interwoven
among those functions. Through examining the data inductively and through the lens of CLT, several themes emerged concurrently. When considering these co-occurring themes, four organizational leadership concepts emerged. These themes are entitled: 1) *Top leadership drives the organizational value of diversity*; 2) *Enabling the system to work*; 3) *Capacity for change*; and 4) *Facilitating change through strategic communication*. The researcher identified these conceptual themes through reflection of observation field notes, and reflection of the interview process along with analyzing the most frequent co-occurrence of themes as notated in the interview data analysis process. Each of these areas will be further explained according to CLT and with examples found in the data.

**Top leadership drives the organizational value of diversity.** The administrative function is crucial to demonstrating and advancing the organizational values of diversity, cultural competency and inclusion, and this was evidenced throughout the data. According to CLT, administrative function of leadership in a large, complex system is that which provides resources, addresses positioning within the organization, influences the people and system and can build structures to facilitate work toward goals (Uhl-Bien & Marion, 2009). In the academic health center studied, it became evident that the administrative function is crucial to demonstrating and advancing the organizational values of diversity, cultural competency and inclusion. Consequently, nearly all of the study participants mentioned the critical role their current top executive leader has played in advancing these efforts. The Executive Leaders at the AHC were referenced positively throughout the data collection and interview process, and much attention was given to the Chancellor. One key stakeholder said,
I believe that the Chancellor and the Provost are committed to developing a culturally competent workforce. The Chancellor has demonstrated his commitment by his willingness for the campus to undertake [a community workforce project], for instance. I think that's an example of his commitment to inclusion. (Administrator)

This sentiment was confirmed by 12 other stakeholders. Other examples include stakeholders who said, “I think it is outstanding the moves this Chancellor has made in this regard” and another stakeholder who said, “there's a top-down commitment to making this diversity-friendly campus that is very clearly stated.”

In addition to a general sense of the organizational values of diversity, cultural competency and inclusion, some key administrators indicated the Executive Leader’s demonstration of the value provides personal support in their roles:

I said many times that now that we have a chancellor who really understands and has a presence out in the community and is an advocate for public health, he needs to be out there in the front saying those things and speaking from his bully pulpit, which is a lot stronger than mine. I felt like the pressure is a little off me in doing that. (Administrator)

Not only was the administrative function found to be present and effective from the Executive Leaders, the administrative function conveying the organizational value was evident among other leaders at the AHC such as the deans of various schools. One stakeholder said:

The [community clinic] is a big outreach to the community. It’s very, very supported by the chancellor and our provost and all of our council of deans. For a fact, we recently received an e-mail from our Associate Dean in our college wanting to know what our experience has been with being able to plan programming and get your students in on this opportunity, to give back and work in a community and in service learning. (Diversity Agent)

This excerpt also reiterates the inductive theme associated with the administrative function of CLT – accountability. A prime component of the effective administrative
function is the expectation of accountability. For example, one stakeholder described an accountability strategy when she described service learning, a method for infusing cultural content into the curricula. She said, “it is a graduation requirement for many programs. It started out on volunteerism basis. I know for many programs, it is the final graduation requirement as will in professional education.”

As one of the leadership functions identified in Complexity Leadership Theory, the administrative function at the AHC has waxed and waned since their initial diversity work began 30 years ago, but the current Executive Leader is nurturing an environment where the organizational value is demonstrated and work is advancing in this effort. This Executive Leader facilitated the reorganization of the Diversity Office, the administrative function that builds structure. At first this move seems contradictory to the tenants of CLT which posits decentralization of leadership can advance goals. However, by centralizing the Diversity Office, a mechanism was created for supporting decentralized activities and initiatives. The Executive Leader has demonstrated and advanced the organizational value in other ways, which will be described in the following themes, but the administrative capacity as it relates to diversity has been critical to creating real progress in the effort.

Another way of examining the administrative function driving change pertaining to diversity as an organizational value is to consider external forces as administrative functions. The particular angle refers to agencies such as accrediting bodies and granting authorities, as well as state or federal reporting requirements. Conceptualizing the administrative function as an entity instead of as a person may seem to mix metaphors at first, however, CLT is about leadership functions, not necessarily a leader as an
individual. These external bodies exert administrative leadership on the organization and help drive organizational values.

Specifically, academic accrediting bodies such as the Liaison Committee for Medical Education (LCME) were mentioned as an external force affecting not only the role of diversity on campus, but other areas as well. The LCME has been focused on improving diversity among faculty and leaders in schools of medicine. Other agencies, such as the National Institutes of Health, which authorizes grant funding, influences the organizational values through an administrative function by requiring certain diversity-related compliance in order to secure and maintain research funding. Interview participants indicated other bodies such as the state higher education department and Centers for Disease Control.

However, as it relates to the CLT model, administrative leadership occurs when leaders influence the system and position others to lead, and provides resources. To that end, evidence of providing resources was demonstrated by the Chancellor allowing the indirects from a large grant to go back to the grant work itself instead of into the centralized administrative fund. While this was accomplished through an administrative function, it exemplifies the concept of entanglement. That is, entanglement in this example is an effective intertwining of positional, authoritative leadership and decentralization. Entanglement will be explained further in the next theme.

**Enabling the system to work.** The enabling function is that which fosters conditions, mediates relationships and recognizes and develops potential (Uhl-Bien & Marion, 2009). The enabling function of CLT creates an atmosphere of effective entanglement thereby allowing the organizational system to work.
There are two informative examples of entanglement at the AHC. The first example of the enabling function that results in beneficial entanglement is the emergence of initiatives designed to support lesbian, gay, bisexual and transgender (LGBT) individuals and raise awareness about related issues. A faculty member describes the development of this initiative:

I had a … student come to me and say, “there's nothing here for LGBT people. I just want to have a social gathering, so people can connect.” I said, “Sure.” She needed a faculty adviser, and so I said, “I'll be your faculty adviser.” (Diversity Agent)

More than 50 people participated in the initial gathering to discuss LGBT issues on campus. Since then, the Executive Leaders and Diversity Officers have supported the initiative and it was a frequent topic among the interview participants and in the documents. The faculty member enabled the student by recognizing the potential of the initiative and fostered conditions to make it happen. The Executive Leaders further facilitated the conditions and help mediate the initiative with others such as the hospital leaders.

Another example of the enabling function of leadership is the emergence of a minority faculty caucus. Though still in the early stages of organizing, the caucus has spurred interest among minority faculty members and gained an endorsement from the administration. Faculty leaders voiced an interest in coming together to support one another and address relevant issues. It is unclear if this initiative will be a successful example of entanglement because, to date, there is a lack of funding and high burden potential for minority faculty members. While the enabling leadership function is present in the form of recognition and good will support, more administrative leadership will be needed for this group to be an effective example of entanglement.
Research participants conveyed a strong sentiment about feeling generally supported to initiate activities that advance diversity and cultural competence. Deans viewed the Executive Leaders as supportive and the faculty viewed the Deans as supportive. The Diversity Office works with the schools and departments, as well as other higher education and community partners. Through the institutional and diversity strategic plans, Executive Leaders set the expectation to improve in these areas, and other positional and informal leaders on campus have taken that charge and moved on it. From an external observer’s perspective, the organization has progressed and adapted in their work to improve diversity and cultural competence. Examples of this change are described in the next two sections that address the adaptive function of complexity leadership along with the role of strategic communication.

**Capacity for change.** The adaptive function, if effective, does in fact lead to adaptive outcomes, in other words, progress toward a goal. The adaptive capacity of the institution is its ability to change as conditions merit. Uhl-Bien and Marion (2009) explain the adaptive function of CLT as “leadership that reads the system, connects past-present-future, stimulates, injects ideas, creates tension.”

An example of adaptive leadership inserting tension is when the dean of one school challenged the school’s internal diversity committee to do more. A faculty member describes this scenario:

> For instance, when I served on this committee in the past, we in the diversity committee, we looked a lot at scholarships and things of that nature and some recruitment exercises but our dean challenged us. Our charge with this year’s committee was to just get really in depth and let’s look at the numbers and figure out what we could do to make it better. That was just awesome to get that type of support. (Diversity Agent)
As mentioned earlier, another college at the AHC formed a taskforce to examine and strategize around the disturbing data pertaining to student understanding of and appreciation of the value of diversity. In a third school at the AHC, one faculty member substantially changed the contents of a two-part required course to include more cultural experiences and cultural knowledge. She described this project:

I realized how important cultural competency issues were about three to four years ago, and how much was lacking in our curriculum, and so I made some major changes for our course that I think are resulting in ripple effect in a lot of people. (Diversity Agent)

The LGBT initiative described earlier went on to form a cross-campus alliance group endorsed by the Executive Leaders and the Diversity Office.

Two other areas that exemplify the adaptive function and capacity for change at the AHC are the evolution of the definition of diversity and noted policy changes.

**Definition of diversity.** Perhaps the strongest indication of the adaptive capacity of the institution is the evolving definition and scope of the diversity concept on campus. Of the 21 research participants interviewed, 11 specifically addressed the definition and scope of diversity. While many asked the researcher what definition of diversity was used in the study, many offered their own evolving understanding of the term that went beyond racial, ethnic or religious explanations. Most noted the concept of inclusion along with LGBT and women’s issues as encompassing of diversity in its present form at the AHC. A faculty member addressed this when she described the definition of diversity, “when I first started talking about this in the campus, they did not include this group [LGBT] in diversity. It was just not considered, but they’ve come around and they started including the topic. Another faculty member concurred when discussing the
women’s faculty group, “we got more inclusive. It's been a broader definition of what
diversity means.”

The Chief Diversity Officer attributes this evolving understanding of diversity at
the AHC as mirroring changes in society. He said,

We and probably all other institutions have expanded their role because
society is changing and we’re becoming certainly more inclusive as a
society, I think and there are multiple populations out there that need to be
represented and included at the table, so to speak. We become more
involved in things such as disabilities and gay and lesbian organizations.
Any marginalized population that we feel needs to have some voice we at
least include them in what our activities are. It’s a lot broader now than it
used to be. (Diversity Officer)

Inclusion has become part of the phrases used when diversity and cultural competence
are addressed. One dean noted that inclusion is a more proactive concept instead of a
reactive, tolerance based idea.

I also think that we need to really start melding the notion of inclusion
more with diversity. What do we have to do affirmatively to include
people, rather than making sure that we're not discriminating. I think we
need to take that more positive approach to how we're doing this.
(Administrator)

The dean went on to say he thinks the concept of diversity should include things
like economic background, age, family circumstances. He pointed out there is no place
on campus where a nursing mother can breastfeed her baby or express milk. He said,
“there's nothing like that and I think that's because we, as an institution, just don't
consider that a diversity issue, an inclusionary issue.”

Two other deans shared the same sentiment, noting they want students to think
about diversity and inclusion in a different way, more than race or the traditional
categorical way. Executive Leaders on campus noted there is often a large international
student and faculty population at an AHC. “We have a quite diverse international
community, and we are looking to have an environment among our 10,000 faculty and staff and our 2,800 students that recognizes the value of an inclusive environment,” the Chancellor said.

The hospital CEO also pointed out that there is a regional understanding of what diversity might mean. “We are in the South, so sometimes gender is the diversity. It goes down race too, so now we're seeing other religious diversity that is gaining wide acceptance and sexual preferences,” she said. This has led the hospital to adjust the message around diversity. “We don't call it diversity, but our philosophy is patient and family-centered care. The concept of family-centered care is synonymous to the concept of inclusion,” she said.

As a result of the changing concept of diversity and inclusion, the hospital has adjusted its visitor policy. This and other policy changes are further demonstrations of the capacity for the AHC to change.

**Policy changes.** A marker of adaptive capacity is in changes to institutional policies. Two examples of these changes are the hospital visitor policy and the AHC’s discrimination policy. First, the hospital Executive Leader explained their policy change:

One of the things that we've done is, we have established a family presence policy. That's in lieu of a visitor policy. In that policy, we state that whoever the patient decides is their family, is who we recognize as family, and we welcome them to participate in the care. That was important, especially for people who may have a nontraditional family, which I think is more the norm now than the traditional family. That way, if a couple is gay and if they consider a same-sex person their spouse, then that's who we consider their spouse. (Executive Leader)

This policy had just been enacted six months prior to the research study. Clearly the organization has evaluated the landscape and made adjustments needed to continue to
serve their customers. Similarly, on the academic side of the AHC, leaders read the environment and enacted change. The dean of one of the colleges described the process:

Now what was really interesting is that a couple of years ago, our associate dean for student success had drafted a policy for our college that would say that we, within our college at least, wouldn't discriminate on the basis of gender identity or expression and admissions or whatever and I said, okay, this is great. This is a huge step forward. I mean, our department chairs all voted for it. There actually was not even that much discussion because it was not an issue for the department chairs and I said this is great, let's just run this by university counsel and make sure that everything we're doing … that we can actually say our college is not going to discriminate and the rest of the university will. We ran it by legal counsel and they really didn't know what to do with it, but to their credit, they pursued it and now, within a year or so, it was adopted at the university level, so our non-discrimination policy includes gender expression and identity in there too. (Administrator)

While there are other examples of the AHC’s capacity to change, these two areas, the expanded definition of diversity and changes in institutional policy, demonstrate in both abstract and tangible ways the organization has changed. Still, all of these efforts in various units across the organization must be shared with others to continue the momentum in achieving diversity goals. Therefore, the last theme that will be examined through the lens of CLT is that of strategic communication.

Facilitating change through strategic communication. In any large system it can be a challenge to communicate goals and important information that affects the viability of the organization. Strategic communication methods and facilitating information flow help support the overarching goal to increase diversity, cultural competence and inclusion. As noted previously, the current Chancellor is known to communicate often about these organizational values. Diversity stakeholders from across the institution applauded the Chancellor for using his positional authority to put out the message and influence the flow of information. Not only does the Chancellor
communicate directly about diversity issues, he also positions others to communicate. For example, the Chief Diversity Officer is expected to provide input at high-level cabinet and council meetings, as well as provide a semi-annual report on the state of diversity affairs. The Chancellor also welcomed advocates to share information about new initiatives with other top leaders. One faculty member said, “… then myself and [the Chief Diversity Officer] and a couple of committee members were invited to the Chancellor's meeting with the deans, the Council of Deans. We presented these ideas to them. We do get some exposure. It was actually quite helpful.”

In addition to executive-level communication back and forth with the Diversity Agents, among the stakeholders themselves there is an effort to document and communicate issues. The chair of the group responsible for minority recruitment said he started writing issue briefs to be available to the Diversity Office and Executive Leaders. “Many great ideas happen in the room. It's important to capture that and to get it recorded and out of the room to somewhere else where it can hopefully fall on ears that can ultimately effect policy changes,” he said. Other strategic communication that supports the diversity goals include the creation of an e-newsletter from the Diversity Office. The newsletter is produced online quarterly.

Considering the depth and breadth of themes that emerged from the data collected, it is evident that the AHC is making progress in its goals to improve diversity, cultural competence and inclusion on campus. The lens of CLT can assist in discerning the meaning and relationships among these themes. Learning from this process will be summarized further so as to realize applications and implications of this research.
Summary

The findings of this research have been presented by reviewing the study design and setting of this project, then by analyzing the data to identify themes. The themes were considered from an inductive perspective, and also through the conceptual framework of Complexity Leadership Theory. Knowledge was gained about the nature of diversity at the AHC, along with how complex leadership functions can lead to adaptive outcomes.

In Chapter Five, the overall impetus and purpose of the research will be reviewed, including answering the research questions. Last a discussion about the limitations and possible implications of this research will conclude the study, with recommendations for future study on leadership in complex organizations.
CHAPTER FIVE
SUMMARY, RECOMMENDATIONS AND CONCLUSIONS

This study set out to learn about the nature of organizational leadership in a complex system. Specifically, this research examined leadership pertaining to diversity at an academic health center through the lens of Complexity Leadership Theory. The impetus of the research was exploring how academic health centers can address poor patient health outcomes among minority and low income populations. Complexity was chosen as a framework for understanding leadership in academic health center because it accounts for distributed and decentralized control, order and disorder that co-exist and outcomes that emerge from self-organization (Lichtenstein & Plowman, 2009; Marion & Uhl-Bien, 2001; Schneider & Somers, 2006; Uhl-Bien & Marion, 2009).

It is important to note, some of the activities and initiatives discussed in this research have been undertaken at other AHCs. This research was not intended as an audit or to look for unique strategies or programs. The goal was to examine the nature of diversity and cultural competence at an AHC and to study how leadership occurs related to the topic. Since work in this area has proven difficult and success has been elusive (Leon, 2014), it is important for organizational leaders to learn about how progress occurs at an institution that is demonstrating success in this area. Again, this is a study about how, not about what. Therefore, it is valuable to revisit the themes that emerged from the research, reflect on the whether or not the research questions were answered,
and discuss overarching conclusions and the implications for higher education practitioners. In this way, the research is informative to both the broader theoretical conversation about complexity leadership, and the practical application of gaining such knowledge.

In this chapter, a summary of the findings is presented, followed by a review of the research questions. Limitations of this research will be addressed, along with possible implications and recommendations for future study in this area.

**Summary of Findings**

This qualitative research that examined data collected through document analysis, field notes from observations and individual interviews revealed several themes. Numerous themes were noted in the data. The researcher relied on personal reflection along with frequency of code occurrence to determine which specific themes could provide general knowledge (Hatch, 2002). These key concepts were organized into inductive themes and themes revealed through the lens of the conceptual framework of Complexity Leadership Theory.

**Inductive Themes**

The inductive themes were those themes that were identified most often in the data. The most frequent theme addressed diversity and cultural competence as strong organizational values at the AHC. The second theme was a relationship-based phenomenon called the money-funnel-partnership theme. This theme showed how lack of funding for recruitment-related activities often lead to the development of partnerships. Two other themes emerged frequently in the data including the role of accountability in diversity work and the strong emotional aspects of the work.
Conceptual Framework Themes

Three themes emerged from the data by considering the conceptual framework of this research which examined organizational leadership through the lens of complexity. Uhl-Bien and Marion (2009) developed a model for studying leadership in complex systems such as academic health centers. These systems are large and bureaucratic, thereby necessitating an approach to organizational leadership that looks at leaders and the occurrence of leadership with the system.

The three themes identified were those that co-occurred most often with the tenants of the Complexity Leadership Theory model (Uhl-Bien & Marion, 2009). These themes included top leadership drives change, enabling the system to work and the capacity to change, where the evolving understanding of diversity was discussed along with policy changes at the AHC.

Research Questions

In Chapter Four, the findings of the research were explained through two lenses – inductive themes and conceptual framework themes. There is a third perspective of considering the findings and that is to look at the research questions set forth in this study:

1. What are the organizational strategies that address diversity and cultural competence?
2. How are diversity and cultural competence viewed by institutional stakeholders?
3. How is leadership demonstrated related to diversity and cultural competence strategies?
4. What is the AHC doing to adapt to the evolving health care environment?
5. How can Complexity Leadership Theory be applied to address organizational leadership issues and foster change?

Each research question will be addressed to determine if the overall goal of the research was achieved.

*What are the organizational strategies that address diversity and cultural competence?*

The AHC examined in this study has had numerous programs in place to increase recruitment and retention of underrepresented minority students, and to encourage a diverse and inclusive workforce. These strategies are coordinated both centrally through the diversity committee or human resources, as well as throughout the colleges and departments at the AHC. Some of the colleges in the AHC have very specific goals related to diversity and inclusion. These goals are tracked and assessed, then communicated through various publications such as the *Minority Recruitment Plan*. Other colleges and programs have sought out grant funding to support specific initiatives such as attracting more diverse students to biomedical research or to provide more master’s-prepared health care providers to rural areas of the state.

In recent years, new programs and strategies have been enacted to address diversity and cultural competence. As noted in Chapter Four, the first strategy the chancellor enacted in 2009 was to establish the campus-wide Diversity Office. This strategy is viewed positively by those who participated in the interview, though a few suggestions and issues did come up during the data collection process. The Diversity Office has dedicated staff support to advance the diversity goals and made the effort more visible on campus. As part of that strategy, the Chancellor also created the Chief Diversity Officer position which is a high-level role in the administrative campus. This
tactic ensures ongoing presence and communication about diversity and inclusion during decision-making sessions.

In addition to creating the Diversity Office and making the leader of that office a cabinet-level position, the leaders at the AHC created a *Diversity Strategic Plan*. This strategic plan is in addition to and complements the overall institutional strategic plan. At least twice per year, the Chief Diversity Officer provides an update to the cabinet to share updates about the diversity strategic plan.

The AHC has been responsive to its internal and external constituents. The Chancellor formed a faculty and staff committee to specifically address the recruitment and retention of minority faculty members. In addition, the leadership has supported the emergence of a minority faculty caucus, though this group appears to be fledgling at the time of data collection. The institution established a community clinic to provide patient care to residents in a low socio-economic neighborhood. This clinic has been viewed very positively by the students and faculty health care providers.

Other notable efforts to advance diversity and cultural competence goals include actions taken within certain colleges on the campus. As mentioned in Chapter Four, some of the colleges retain a diversity committee and have a liaison to the larger, campus-wide diversity committee. Diversity was a major focus at an annual faculty retreat in one school. In another school, the dean recalibrated the diversity committee and gave them new goals to work toward.

Overall, the AHC appeared to be active in pursuing its goals to improve diversity and cultural competence and to build a more inclusive campus community. With a few
expected exceptions, these actions have been viewed positively by the faculty and students.

*How are diversity and cultural competence viewed by institutional stakeholders?*

When the AHC received a new Chancellor in 2009, there was a marked change in the way diversity and cultural competence was viewed on campus. Efforts had been in place prior to the new Chancellor, however, nearly all of those interviewed expressed praise and gratitude for the new Chancellor for bringing an increased level of awareness and commitment to these issues.

There is not complete agreement about the overall success of the efforts to improve diversity and cultural competence, however. The most frequently cited issue is perceived lack of funding to make real progress in this area. Though most interviewed participants seem to understand that serious financial issues have become the main focus of campus leadership discussions, there is still frustration with low funding support of diversity activities.

*How is leadership demonstrated related to diversity and cultural competence strategies?*

Leadership is demonstrated in many ways from the Chancellor and other Executive Leaders to Administrators and faculty and staff members. One of the most noted ways leadership was demonstrated is through presence. Presence refers to the Chancellor attending diversity-related events, as well as having the Chief Diversity Officer as part of the leadership cabinet. This visibility of leaders participating in diversity activities conveyed a sense of importance and value.

Another way leadership is demonstrated is through strategic communication. As mentioned, including the Chief Diversity Officer in the cabinet and requiring periodic
updates ensures information flow. Also, both the institutional strategic plan and diversity strategic plan communicate the value and importance of diversity. These publications are available publicly, online and in printed format. Various news articles refer to these publications by providing status reports and feature articles.

A major demonstration of leadership pertaining to diversity is the Chancellor supporting the return of funding for indirects back to the grant program. Instead of these funds going to a centralized research office to support the operation of research on campus, the Chancellor specified that money from some grants can go back into the program.

What is the AHC doing to adapt to the evolving health care environment?

Two main activities showed how the organization is adapting to the changing health care environment. The first is the creation of the community clinic. This clinic has opened opportunities for student and faculty members to participate in service learning and gain exposure to working with patients in un- or underinsured populations.

The second activity is the attention to restructuring the service lines in order to align with cost structures outlined in the Affordable Care Act. Unfortunately, this shift seems to have detracted from the once prominent focus on addressing diversity issues, even though it is a demonstration of the adaptive capacity of the organization.

Although the research initially identified external forces affecting the AHC in regard to diversity as related to accrediting bodies, the Affordable Care Act, and the changing population, more external forces than initially considered were identified in conversations with stakeholders such as funding bodies and state and federal governmental reporting requirements. There is also a substantial effort to transition to
new models of education delivery referred to as interprofessional education (IPE). IPE was mentioned by several interview participants, with mixed response about the effort. Some view IPE as positive, and potentially a way to integrate more cultural competence content into the curricula, while others viewed it as the next movement on campus that will require change.

*How can Complexity Leadership Theory be applied to address organizational leadership issues and foster change?*

The application of CLT truly lies in the three functional aspects of leadership as described in the model. Individual leaders can use their administrative authority to build organizations that are adaptive. That means encouraging and supporting the work of others, making leaders and others accountable, and communicating the value, the goals and progress related to it. Leaders should become comfortable with progress that happens in a non-linear, decentralized manner. In a large complex system, no single person can know or control the entire organization. Therefore, leaders can set the expectations, then offer support when it is needed and appropriate – allowing ideas, approaches and work to happen in various forms throughout the institution.

Leaders also should continuously scan the environment and address obstacles as they are encountered. It is important to be responsive to the climate on campus and tend to the external requirements. Leaders should be alert and nimble, stay tuned in, and be willing. Leaders should use communication tools at their dispense including traditional and social media and positional authority. Ultimately, the leaders are responsible for keeping the momentum going to make progress toward a goal.
Conclusions

Three overarching conclusions can be derived from this research. This study was intended to learn about leadership in a complex system, and one of the main conclusions is displaying evidence that an academic health center is a complex adaptive system. Moreover, as it pertains to diversity goals, complexity leadership approaches appear to be present and effective in this organization. Ultimately, this study communicated some of the ways leaders demonstrated organizational values.

AHC is a Complex Adaptive System

Diversity and cultural competence are stated organizational goals at this AHC. For nearly 20 years, the AHC has been more or less active in working to achieve these goals. However, since the arrival of a new chancellor in 2009, work in this area has accelerated. Visible changes have been made in structure, personnel and activities. Still, the AHC does not exist in a vacuum. It is a complex system that is part of a larger, complex system – the local community and society at large. Despite progress that has been made programmatically and in personnel, stark realities remain. The chancellor described the institution’s obligation to continue this work in earnest:

It's trans-sectional, it crosses all sectors, it is messy, but in this state rurality [sic], minority, ethnicity, poor educational attainment, poverty, and poor health, track with each other. There are disparities by region that are stunning. Infant mortality is worse than those in Cuba. Life expectancy - difference of ten years in different regions of the state. We have the county-level health data from the [population heath agency]. We produce a report on rural health every other year, that includes all the county-level health data, and you look at the maps ... and these things track. Percent of population in poverty, percent of minority ethnicity, percent with low educational attainment, and the percent with poor [health outcomes]. (Executive Leader)
It is evident there is considerable work to be done to effect change in patient health. This is the impetus for increased attention for diversity, cultural competence and inclusion at AHCs. Leaders at these institutions seek to transform their students’ educational experiences so that when they become providers, they have experience learning from many different types of people, as well as hands-on experience working in the community, among a variety of populations.

A dean of one of the colleges concurred, “it takes a lot of different efforts to address change in the diversity of a student body, the diversity of faculty or workforce and really trying to raise the level of cultural competence of the people that you currently have.”

Nevertheless, this AHC has demonstrated progress and shown it is can be adaptive to change. From general progress such as attempting to improve students’ attitudes toward diversity and inclusion, to more specific changes such as those in development related to the Affordable Care Act planning, the AHC has set up structures and positioned individuals to facilitate change.

**Complexity Leadership is Evident**

One of the questions for this research was to learn about Complexity Leadership Theory to see what applicable knowledge can be gained from this perspective. As a result of examining the AHC, CLT appeared to be evident on campus. Thus, the leaders and agents on campus demonstrate leadership characteristics and activities that exemplify CLT tenants including balancing decentralization of the work addressing diversity with the campus-wide Diversity Office, providing adequate and helpful administrative
support, enabling other individuals and units, and fostering conditions that allow for progress to be made in this area.

Even though creating a campus-wide Diversity Office appeared to contradict the concept of decentralization, the work of the office is partially centralized and partially decentralized as the staff members work to support efforts throughout the institution. Others across campus acknowledged the non-linear method of addressing diversity and cultural competence goals. “It's very loose arrangement right now,” one Administrator said when discussing how progress is made toward these goals.

As described in the themes in Chapter Four, CLT is evident in four ways: top leadership drives the organizational value, leaders enable the system to work effectively, the organization has the capacity for change and strategic communication supports and reinforces the effort.

**Time and Money: The Current Reality of Diversity Initiatives**

This AHC was an informative case because it demonstrated strong leadership related to its diversity goals, but it also encounters obstacles to the work similar to other higher education institutions (Leon, 2014). AHCs are expected to make progress to improve diversity among their faculty and increase cultural competence in the curricula. These seem like straight-forward goals, but under closer examination, there are ongoing challenges to achieving these goals, even in supportive environments such as the AHC in this study. Improving diversity on an AHC campus is a multidimensional concept, an organizational value unevenly adopted. A resounding theme from this research is the need for more time and money to be effective and do justice to diversity and cultural competence initiatives.
There was no information available to calculate the total amount of money devoted to diversity and cultural competence activities. However, through various reports, it appears diversity-related funding has increased in certain areas even if some of the funding has come from external sources. Programmatic funding and scholarship monies appear to have increased across the various academic programs, but several positions in the Diversity Office have not been filled as people vacated positions.

Anderson et al. (2005) suggested re-examining outliers in the data to determine if it was benign or a “source of new structural arrangements or patterns of behavior (p. 676). While time and money were most certainly not outliers in the themes that emerged, the concept of having “a good heart” was a surprising phrase that was repeated almost verbatim by several participants. It is difficult to know the motivations and undertones of this phrase, but it is worth considering the notion that “having a good heart” could be viewed as placating the perceived under funding of diversity expectations on campus.

Also, it is important to note that using the site selection criteria, only seven AHCs were willing to consider the research project, and four institutions engaged in conversations with others on their campuses to discuss the logistics and gauge the level of interest. In the end, only one school agreed to be part of the study. Of the seven schools contacted, five were reticent to share information about their diversity efforts and recruitment effectiveness, and one school withdrew interest immediately prior to granting permission.

**Limitations**

While this study resulted in several conceptual and applicable findings, there are limitations that must be considered. For this research, there are at least four main
limitations. The first is that the study design is limiting since it is a case study of one organization. Second, there is a limitation in the reliability of information gained since only 21 people out of thousands participated in the research. Third, the nature of the topic could inhibit freedom to offer full disclosure, and finally, the topic itself was large and analyzed a large system.

To begin, a case study design was useful in offering in-depth data collection and observation experiences, but it is limiting in that the knowledge gained may not be applicable at other settings. Even though there are other similar AHCs, each is unique relative to its own setting and issues. Even though many people were interviewed and several documents were analyzed over the course of two visits to the research site, still only 21 people out of potentially thousands of individuals who comprise faculty, staff and students contributed to the research.

One of the more notable limitations is a result of the topic itself. Issues of diversity and cultural competence can invoke personal opinions and relate past individual and organizational experiences. Since there are strong personal emotions related to the topic, as well as organizational stakes at hand, participant may not have felt they were free to share fully their thoughts related to research. As mentioned in Chapter Four, three participants asked for the audio recording to be halted in order to speak more frankly off the record. In addition, given the nature of the topic, participants may have felt more or less able to speak frankly with the researcher if they were of a different racial or perceived religious or political background.

Finally, there are many variables that can affect progress toward organizational goals, even a case study that examines a situation in depth cannot fully account for the
variables and influences of such a large topic as it occurs in a large, complex system. These and other limitations should be considered when attempting to translate the findings to other organizations or topics.

**Implications for Practice**

The goal of this research was to learn about leadership as it pertains to diversity and cultural competence at a large, complex organization. While there are many concepts to be gleaned from this research, there are implications that should be considered as well. There are at least four major implications to consider including the emotional nature of the work, the administrative role, balancing partnerships cautiously, and the uncertain future of the health care environment given the implementation of the *Affordable Care Act*.

**Emotional Aspects**

As noted, it is important to keep in mind that diversity work is emotional work. As this study confirmed, analysis of diversity efforts on campuses is as much about the organization as it is about individual’s personal experiences and feelings. Individual faculty, staff and students may have experienced overt or indirect discrimination in the organization leading to an array of emotional responses such as anger, distrust, fear or hopelessness. Leaders and advocates who work to improve diversity and cultural competence should take care to remember this personal aspect to their work when planning programs, discussing budgets or addressing policy.

Not only is there a personal, emotional implication to consider, there is also an emotional aspect manifested at the organizational level which is fear of exposure. Through this research project, it was revealed that several organizations were reticent to
participate due to lack of an organized effort and/or worsening organizational outcomes. Even those organizations that at first demonstrated interest in the project ultimately declined, not wanting to be audited or analyzed in depth in this area.

**Administrative Function Cannot Be Underestimated**

Even though this research looked at diversity efforts through the lens of Complexity Leadership Theory which purports decentralization as inherent in large complex systems, the value of strong administrative function cannot be underestimated. The top administrative leaders that control the institutional priorities and funding can accelerate work in this area, but they can also be counterproductive if their actions convey the idea that diversity is only important if extra money is available or if there are external pressures to comply. Leaders should recognize their critical role in advancing diversity goals, understanding they can have a strong, positive impact through action and endorsement, or a negative impact if the value is perceived apathetically or obligatory.

Top leaders at AHCs have many avenues for advancing the diversity goals. Simply being present and supporting diversity activities or strategy sessions demonstrates the value and importance of the work. Certainly providing adequate funding demonstrates the value and is a catalyst for accomplishing goals. Even communicating expectations, good will support and general endorsement of activities raises the awareness of diversity as an organizational value worthy of time and attention.

**Engage in Partnerships Cautiously**

On the surface, formulating partnerships seems to be a good solution to share resources and build relationships. This strategy was successful in some areas at the AHC. However, organizations should enter into partnerships with clear goals and
responsibilities so each party carries their part of the resource burden and benefits from the arrangement. Further, AHC leaders should temper this strategy as an answer to chronic underfunding of diversity work. If diversity, cultural competence and inclusion are stated institutional values and part of top organizational goals, funding and support should be devoted to these efforts. Leaders at AHCs should engage in partnerships if that is a primary goal of the work, not as a back-up plan for adequately supporting initiatives. Perpetual reliance on external funding, whether in full or partial, again can convey the value of convenience concept thus undermining the effort.

**Listening Leads to Learning**

Since diversity work is often decentralized and non-linear, as demonstrated at the AHC in this research, numerous individuals from across the organization have varying perspectives on the topic. Knowledge can be gained to improve the efforts simply by listening – to both people and information. This is how organizational learning occurs. For example, it was suggested that the Diversity Office at the AHC should itself be more diverse. Currently, all staff members in the Diversity Office are African American. This prompted the researcher to inquire about the composition of the office, but also a few of the interview participants addressed this topic. One Administrator said, “I think until we get more actual diversity in the Diversity Office, I think it's still going to look like, "Oh, that's just for black people." Given the expanding definition of diversity expressed by 11 of the 21 individuals interviewed, ironically there is no racial diversity in the Diversity Office. While this issue did not emerge as a strong theme, it is worth listening to the feedback and considering it when planning for the future.
Impact of the Affordable Care Act

One of the biggest implications related to diversity and cultural competence work at AHCs is the unknown future as the Affordable Care Act continues to be implemented. This is what makes utilizing Complexity Leadership Theory so useful when studying organizational leadership in this arena. The psychological technique Johari’s Window (Luft & Ingham, 1955) describes ways of knowing, which include quadrants about what is known to yourself and what is known to others. Each quadrant reveals a level of knowledge, or lens for understanding. One of the windows addresses what is unknown to others and unknown to the self (Luft & Ingham). As AHCs struggle to address the known issues of implementing the ACA, they must also realize they do not know what changes the ACA may bring into the future. Therefore, they must nurture their adaptive capacity in order to adjust to situations.

Since the ACA is so intensely debated, certain politically motivated actions can cause both direct results and indirect unanticipated repercussions. For example, in states such as Kansas and Missouri that have declined Medicaid expansion, an ACA funding mechanism, a $9 billion financial loss is projected for hospitals in the next 10 years (Kansas Health Institute, 2014). For AHCs, such a loss could have a substantial impact on funding to operate the education programs, in addition to the loss of revenue at the hospital. This example exemplifies the unknown effects the ACA and actions related to the ACA could have on AHCs.

Recommendations for Future Study

This study resulted in numerous findings and useful, practical information. Still there are other aspects of this topic that could be examined. There are at least three areas
that could prove useful for future study. The first area of future study would be to conduct similar research at other academic health centers. Second, an area of interest for future study would be to look the funding of diversity initiatives. Last, an area of future study would be to look into the role of diversity in the wave of interprofessional health education.

Repeated Study

Since this research study design was a single case study, it would be worth looking at other AHCs to see if similar themes and issues arise. There is some evidence that similar strategies have been enacted elsewhere. Other AHCs have taken this strategy to link the various efforts related to diversity and inclusion, in addition to consolidating resources or staff, while maintaining related committees (South-Paul et al., 2013). If, in fact, other AHCs experiences pertaining to diversity goals are the same, perhaps influential leaders at the national level in professional organizations or accrediting bodies will see how to support these expectations.

Funding

A second area of future study should focus on the funding of diversity initiatives. Diversity continues to be a top priority in higher education, specifically at academic health centers, though financial support for these goals is irregular and minimal at best. For the level of expectation and hopes for these efforts, it seems to be significantly underfunded. It would serve the effort well to comprehensively identify and communicate the source of funding. Diversity efforts are often viewed as underfunded, but the reality at this institution is that they may not know what they spend on such
programs in total. In addition, considering the percent of funding that is external should be measured against the stated organizational value.

**Intersection of Interprofessional Education and Diversity Goals**

A major push in medical, nursing and other health professions education is the interprofessional education (IPE) strategy. More information is needed to determine if IPE initiatives could advance diversity and cultural competence goals. Conversely, IPE strategies could nudge out diversity as the next focus area on AHC campuses. It is undetermined if IPE will be a catalyst to diversity efforts, a competing force, or perhaps another underfunded mandate.

**Concluding Overview**

While the findings of this study are intended to reveal practical applications and strategies, the findings are not intended to be formulaic solutions. Studying leadership in complex systems, especially examining topics that have historically been difficult to affect, calls for deep understanding of the organizational culture and leadership. Complexity science can be a meaningful and insightful way to learn the true nature of a phenomenon, and may eventually move leadership closer to effective approaches. Still, complexity must be understood as an overall phenomenon and no one particular strategy. Even the same combination of strategies applied at a different institution, at a different time, will not have the same effect. If this were possible, the situation under examination would be complicated, not complex (Sturmberg & Martin, 2012). Yet, improving diversity, inclusion and cultural competence in an organizational is complex work, where unintended consequences occur, and intended outcomes dissipate.
Employing the lens of complexity to study organizational issues is appropriate, but transcending knowledge gained into actionable measures continues to challenge organizational leaders. These leaders must confront uncomfortable or seemingly insolvable problems in order move beyond strategies that should work simply because they've worked elsewhere. Complexity is a personal lens for organizations to use because it calls for deep understanding that leads to actionable steps unique to the organization. Organizations are social experiences as much as they are structural or political frameworks, and as with any social relationship, constant awareness and tending is necessary to move forward in a positive direction. Pisarki et al. (2011) posited Complexity Leadership is the “gestalt of collective leadership” (p. 4). Consequently, those who work in complex systems such as academic health centers must be willing to lead as well as learn.
References


Betancourt, J. R., (2012). The Institute of Medicine Report Unequal Treatment ten years later where we’ve been, where we are, where we are going .... Retrieved from http://www.slideserve.com/glyn/the-institute-of-medicine-report-unequal-treatment-ten-years-later-where-we-ve-been-where-we-are-where-we-re-going.


Appendix A: Organizational Permissions and Informed Consent

Request for institutional permission letter

Chancellor
Academic Health Center
City, ST ZIP

Chancellor:

This letter is to request permission to use the [Academic Health Center] as a study site for a research project entitled, Diversity and Cultural Competence in an Academic Health Center: Organizational Leadership in a Complex System. This research is in partial fulfillment of the Doctor of Education in Educational Leadership and Policy Analysis at the University of Missouri, Columbia, MO.

This research is a case study and will include a document and artifact analysis, personal interviews, and in-person observation of diversity-related activities. This research will benefit academic health centers as they face historic changes in patient population and health care policy. The researcher will provide copies of all data collection protocols, as well as documentation of Institutional Review Board (IRB) approvals, at the request of the participating institution. In addition, the researcher agrees to fulfill IRB requirements at the participating site as necessary.

Participating in this study is completely voluntary, and participants may withdraw at any time. Information gathered during this research will be de-identified through the use of a case number or pseudonyms. However, certain attributes of the participants or the institution may be discernible. Information and findings of this study will be available upon completion of the published dissertation. The researcher will make a stringent effort to maintain the institution’s and participants’ anonymity.

As an agent authorized to act on behalf of the Academic Health Center, please sign and date the attached consent form to confirm approval to you the [Academic Health Center] as a study site in this research.

Questions pertaining to this study may be directed to the researcher, who can be reached at (816) 377-8638 or saltcityjen@gmail.com, or the researcher’s advisor, Dr. Barbara Martin, at (816) 830-3904 or bmartin@ucmo.edu.

Respectfully,
Jennifer D. Keeton
University of Missouri
Columbia, MO
Doctor of Education ELPA program
Diversity & Cultural Competence in an Academic Health Center: Organizational Leadership in a Complex System

INSTITUTIONAL PERMISSION

As an agent authorized to act on behalf of ___________________________, I, _____________________________________________, grant permission for affiliated individuals, including diversity officers and other leaders, to participate in the study Diversity & Cultural Competence in Academic Health Centers: Organizational Leadership in Complex Systems to be conducted by Jennifer D. Keeton, a doctoral candidate in educational leadership at the University of Missouri-Columbia.

By signing this permission form, I understand that the following safeguards are in place to protect those choosing to participate:

- Participation in the study is voluntary, and may be withdrawn at any time prior to the conclusion of the project.
- Responses will be presented in the dissertation research of the investigator as well as for potential scholarly publications.
- The identity of the institution and all individual participants will be confidential in all phases of the research through the use of case numbers and pseudonyms.
- Onsite observations by the researcher will take place as arranged by institutional leadership or the chief diversity officer of the institution.
- Document and artifact analysis will rely on publicly available information, such as that found on the institution’s website, and other available materials provided by the institution.

If you choose to grant permission for your organization and its agents to participate in this study, please complete this Institutional Permission Form, and return it to Jennifer Keeton at your earliest opportunity. For your records, please keep the consent letter and a copy of this signed permission form.

I have read and agree to the terms described above. Questions pertaining to this study have been answered to my satisfaction. I grant permission for individuals at my institution to be contacted and invited to participate in this study.

Signed: _______________________________ Date: ________________

Title/Position: ________________________________________________________

Institution: __________________________________________________________________
Diversity & Cultural Competence in an Academic Health Center:
Organizational Leadership in a Complex System

INFORMED CONSENT: PERSONAL INTERVIEW

Date

Dear (Participant):

As a leader at the Academic Health Center Name, you have been invited to participate in a research study examining diversity and cultural competence at academic health centers. This study is part of my dissertation research for a doctoral degree in Educational Leadership and Policy Analysis from the University of Missouri-Columbia.

This study, entitled Diversity & Cultural Competence in Academic Health Centers: Organizational Leadership in Complex Systems, will benefit health professions schools faced with impending and historic changes in the patient population and health care policy. You have been invited to participate in this study because of your role at the institution as it pertains to diversity and cultural competence. The institution has approved this study through its granting authority Chancellor Name.

The following research questions will guide this study:

1. What is the organizational strategy that addresses diversity and cultural competence?
2. How are diversity and cultural competence viewed by institutional stakeholders?
3. How is leadership demonstrated related to diversity and cultural competence strategies?
4. What is the academic health center doing to adapt to the evolving health care environment?
5. How can Complexity Leadership Theory be applied to address organizational leadership issues and foster change?

PURPOSE OF THE STUDY

- The purpose of this research is to discover the nature of diversity and cultural competence programs at higher education institutions, specifically academic health centers, to learn about organizational adaptive capacity and effective strategies.

- This study is in partial fulfillment of requirements of the Doctor of Education degree in Educational Leadership & Policy Analysis at the University of Missouri in Columbia, MO.
If you agree to participate in this study by sharing your insights and perspective on the topic described, please sign this Informed Consent form. A copy is available for you to keep in your records. Thank you for your willingness to take part in this research.

I have read this Informed Consent Letter. I agree to take part in this study as a research participant. By my signature I confirm that I am at least 18 years old and that I have received a copy of this Informed Consent Letter.

________________________________________
Participant's Signature

Researcher Contact Information:
Jennifer D. Keeton
University of Missouri
Columbia, MO
(816) 377-8638
saltcityjen@gmail.com
Appendix B: Interview Protocol

Diversity & Cultural Competence in an Academic Health Center:
Organizational Leadership in a Complex System

INTERVIEW PROTOCOL

Participant code: Date:
Participant title and role:
Start/end time:

- Introductions, project overview
- Questions about the project
- Review informed consent and obtain signature

<table>
<thead>
<tr>
<th>Organizational Structure Questions</th>
<th>Research Question Theme/Data Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What is your role and responsibilities are your institution?</td>
<td>Introductory</td>
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<tr>
<td>2. Briefly describe diversity and cultural competency programs or efforts at your institution.</td>
<td>Q1</td>
</tr>
<tr>
<td>3.</td>
<td></td>
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<tr>
<td>4. Does your institution have a diversity mission? Strategic plan?</td>
<td>Q1, Q4</td>
</tr>
<tr>
<td>5. What structures are currently in place at your institution related to diversity?</td>
<td>Q1</td>
</tr>
<tr>
<td>6. Who are the formal leaders at your institution who actively work to support or advance diversity and cultural competency? Who are the informal leaders?</td>
<td>Q1, Q3, Q5</td>
</tr>
<tr>
<td>7. What are the pros and cons about the current nature of the organizational structure at your institution?</td>
<td>Q1, Q2</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Communication &amp; Relationships Questions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Explain how information about diversity efforts flows at your institution. What are the formal methods of communicating? Informal?</td>
<td>Q5</td>
</tr>
<tr>
<td>2. Do you think the institutional diversity mission and/or strategic plan are known or understood across campus?</td>
<td>Q1, Q2</td>
</tr>
<tr>
<td>3. Describe your perception of what has made knowledge about diversity efforts successful, or not, at your institution.</td>
<td>Q2, Q5</td>
</tr>
</tbody>
</table>
4. What elements of the diversity or cultural competence efforts do you feel are the strongest at your institution? The weakest?  
Q2, Q5 OL, OV

5. Describe the relationship between departments or units in relation to advancing diversity and cultural competence at your institution.  
Q3 EF, IF, DC, NL

<table>
<thead>
<tr>
<th>Adaptability Questions</th>
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</table>
| 1. What seems to be the modus operandi for getting things done on your campus?  
Q3 DC, NL |
| 2. How has your organization changed in the last 5 or 10 years? What has facilitated or hindered that change?  
Q4, Q5 AF, OL |
| 3. Can you name an example of how your institution has responded to external pressure to improve diversity and cultural competence?  
Q4, Q5 AR |
| 4. What are the barriers to advancing diversity and cultural competence efforts on your campus?  
Q1, Q4 OL, ST |
| 5. Are there key stakeholders who should be more actively involved in diversity-related efforts on campus?  
Q3 DC |
| 6. Have leaders or stakeholders at your campus discussed or made plans for pending changes in the U.S. population as it relates to providing quality patient care?  
Q1, Q4 FP, HO, ST, AD, AF |
| 7. Have leaders or stakeholders on your campus discussed or made plans for the implementation of the Affordable Care Act?  
Q1, Q4 FP, HO, ST, AD, AF |
| 8. If there was discussion or planning related to either the changing U.S. population, or the implementation of the Affordable Care Act, what was the nature of those discussion? Was it proactive? Contentious? Worried? Eager? Stressed? Strategic?  
Q1, Q4 FP, HO, ST, AD, AF |
| 9. Have there been any formal or official measures take to address the pending population changes or ACA?  
Q1, Q4 AD, AF |
| 10. Have you seen much change over the years in regard to diversity and cultural competence? Why has it changed? Or not?  
Q4 AF, AO, OL, ST |
| 11. Does your institution have anything in place the measures outcomes of diversity programs or strategies? What have those measures indicated?  
Q1 OL, ST |
<table>
<thead>
<tr>
<th><strong>Organizational Values Questions</strong></th>
<th></th>
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<tbody>
<tr>
<td>1. Do you think that overall, diversity and organizational cultural</td>
<td>Q2, Q5</td>
</tr>
<tr>
<td>competence are valued at your institution?</td>
<td>OV</td>
</tr>
<tr>
<td>2.</td>
<td></td>
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<tr>
<td>3. What do you think would best help diversity and cultural competence</td>
<td>Q1, Q4</td>
</tr>
<tr>
<td>become more embedded at your institution?</td>
<td>AO, HO, OL, ST</td>
</tr>
<tr>
<td>4. How would you describe the general attitude about diversity and</td>
<td>Q2</td>
</tr>
<tr>
<td>cultural competence? What about specific leaders’ or stakeholders’</td>
<td>OV</td>
</tr>
<tr>
<td>attitudes? Other groups on campus?</td>
<td></td>
</tr>
<tr>
<td>5. Is diversity work recognized or rewarded at your institution?</td>
<td>Q3, Q5</td>
</tr>
<tr>
<td>6. Does the leadership of your institution provide updates or evaluations about the status of diversity and cultural competence at your institution?</td>
<td>Q1, Q3</td>
</tr>
<tr>
<td></td>
<td>AF, IF, OV, OL</td>
</tr>
<tr>
<td>7. How does the leadership foster the conditions necessary to advance</td>
<td>Q1, Q3, Q4</td>
</tr>
<tr>
<td>the diversity value on your campus?</td>
<td>AD, AF, EF</td>
</tr>
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<thead>
<tr>
<th><strong>Leadership Questions</strong></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1. Does your organization recognize potential leaders and develop them?</td>
<td>Q1, Q4</td>
</tr>
<tr>
<td></td>
<td>EF, ET, OL</td>
</tr>
<tr>
<td>2. Are there others you might recommend I speak with to gather</td>
<td>Q4, Q5</td>
</tr>
<tr>
<td>information related to diversity and cultural competence at your</td>
<td>OL</td>
</tr>
<tr>
<td>institution?</td>
<td></td>
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</table>
Appendix C: Onsite observation Form

Diversity & Cultural Competence in an Academic Health Center: Organizational Leadership in a Complex System

ONSITE OBSERVATION PROTOCOL

Location & Date:

Time Start: Time Complete:

Setting:

Purpose of observed situation:

Participants:

Notable Elements:

Transaction summary:

Themes/tags: (according to data codes)

Interpretation using Complexity Leadership Theory:
Appendix D: Document & Artifact Review Form

Diversity & Cultural Competence in an Academic Health Center: Organizational Leadership in a Complex System

*DOCUMENT & ARTIFACT REVIEW PROTOCOL*

Name of Document:

Author/Creator & Date:

Type of Document:

Intended Audience/Use:

Notable Attributes:

Purpose of Document:

Significance of Document:

- Element of significance:
- Element of significance:
- Element of significance:

Themes/tags:

Interpretation using Complexity Leadership Theory:
June 12, 2014

Principal Investigator: Keeton, Jennifer D
Department: Educational Leadership & Policy Analysis

Your Application to project entitled Diversity & Cultural Competence in Academic Health Centers: Organizational Leadership in Complex Systems was reviewed and approved by the MU Campus Institutional Review Board according to terms and conditions described below:

<table>
<thead>
<tr>
<th>IRB Project Number</th>
<th>1209979</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Application Approval Date</td>
<td>June 12, 2014</td>
</tr>
<tr>
<td>IRB Expiration Date</td>
<td>June 12, 2019</td>
</tr>
<tr>
<td>Level of Review</td>
<td>Exempt</td>
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<tr>
<td>Project Status</td>
<td>Active - Open to Enrollment</td>
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<tr>
<td>Regulation</td>
<td>45 CFR 46.101b(2)</td>
</tr>
<tr>
<td>Risk Level</td>
<td>Minimal Risk</td>
</tr>
</tbody>
</table>

The principal investigator (PI) is responsible for all aspects and conduct of this study. The PI must comply with the following conditions of the approval:

1. No subjects may be involved in any study procedure prior to the IRB approval date or after the expiration date.
2. All unanticipated problems, serious adverse events, and deviations must be reported to the IRB within 5 days.
3. All modifications must be IRB approved by submitting the Exempt Amendment prior to implementation unless they are intended to reduce risk.
4. All recruitment materials and methods must be approved by the IRB prior to being used.
5. The Annual Exempt Form must be submitted to the IRB for review and approval at least 30 days prior to the project expiration date.
6. Maintain all research records for a period of seven years from the project completion date.
7. Utilize the IRB stamped document informing subjects of the research and other approved research documents located within the document storage section of eIRB.

If you have any questions, please contact the Campus IRB at 573-882-9585 or uncresearchdrb@missouri.edu.

Thank you,

Charles Bordin, PhD
Campus IRB Chair
### Appendix F: Data codes

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Preparation</td>
<td>Curricular or clinical interventions, strategies, or adaptations</td>
</tr>
<tr>
<td>Health Outcomes</td>
<td></td>
</tr>
<tr>
<td>Positive or Improved</td>
<td>Individual or population health outcome</td>
</tr>
<tr>
<td>Disparities</td>
<td>Individual or population health outcomes</td>
</tr>
<tr>
<td>Complex Adaptive System CAS</td>
<td>Organizational concepts and phenomena</td>
</tr>
<tr>
<td>Emergence CAS</td>
<td></td>
</tr>
<tr>
<td>Adaptive Outcome CAS</td>
<td></td>
</tr>
<tr>
<td>Non-linearity CAS</td>
<td></td>
</tr>
<tr>
<td>Decentralized Control CAS</td>
<td></td>
</tr>
<tr>
<td>Organizational Value</td>
<td>Evidence (explicit or implicit) of things the organization values</td>
</tr>
<tr>
<td>Value of Convenience</td>
<td>Org value that can be pushed aside when other more pressing matters arise; a nice to have</td>
</tr>
<tr>
<td>Complexity Leadership</td>
<td>Parent code for Complexity Leadership Theory</td>
</tr>
<tr>
<td>Entanglement CLT</td>
<td></td>
</tr>
<tr>
<td>Adaptive Function CLT</td>
<td>Leadership that reads the system, connects past-present-future, stimulates, injects ideas, creates tension</td>
</tr>
<tr>
<td>Administrative Function CLT</td>
<td>Leadership that provides resources, addresses positioning, influence, builds structure</td>
</tr>
<tr>
<td>Enabling Function CLT</td>
<td>Leadership that fosters conditions, mediates relationships, recognizes/develops potential</td>
</tr>
<tr>
<td>Accreditation Requirement</td>
<td>Strategies, policies, decisions related to accreditation requirements for the academic or care system</td>
</tr>
<tr>
<td>Organizational Learning</td>
<td>Evidence that the organization has learned and acted upon past knowledge</td>
</tr>
<tr>
<td>Information Flow</td>
<td>How information is communicated throughout the organization</td>
</tr>
<tr>
<td>Isolation</td>
<td>Sense of being on your own, &quot;the only&quot;</td>
</tr>
<tr>
<td>Tokenism</td>
<td>Filling the lineup; burdened by relegation</td>
</tr>
<tr>
<td>Frequency</td>
<td>Event or topic is in the ether often</td>
</tr>
<tr>
<td>Partnerships</td>
<td>Forming partnerships internally or externally to advance the strategy</td>
</tr>
<tr>
<td>Politics</td>
<td>Influence of civic politics or political atmosphere on the strategies</td>
</tr>
<tr>
<td>Presence</td>
<td>Visible participation in related activities</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Communication</td>
<td>Keeping information front of mind; frequency</td>
</tr>
<tr>
<td>Accountability</td>
<td>Mechanisms to show follow through, closing the loop; eg., report or reporting mechanisms</td>
</tr>
<tr>
<td>Time</td>
<td>Time needed to demonstrate value; lack of time; time given as demonstration of value</td>
</tr>
<tr>
<td>Money</td>
<td>Resource for initiatives; competing interests</td>
</tr>
<tr>
<td>External Funding</td>
<td>Soft money, non-state aid, reliance on</td>
</tr>
<tr>
<td>Knowledge</td>
<td>Leaders and other stakeholders awareness of issues; familiarity with landscape</td>
</tr>
<tr>
<td>Funnel (Pipeline)</td>
<td>Social process for identifying and matriculating students, faculty and staff</td>
</tr>
<tr>
<td>Recruitment</td>
<td>Strategies to address recruiting targeted populations, specifically students, faculty and leaders</td>
</tr>
<tr>
<td>Competition</td>
<td>Competing for students, faculty and leaders when trying to meet recruiting goals</td>
</tr>
<tr>
<td>Burden</td>
<td>What is asked of, relegated to, expected of certain people, in particular minorities</td>
</tr>
<tr>
<td>Community Involvement</td>
<td>Reaching out to community partners, working in the community, service learning, listening to the local community</td>
</tr>
<tr>
<td>State Institution Dynamic</td>
<td>Issues that impact the strategies as a result of being a state institution, public trust. Eg., obligation, public trust, political landscape, funding, image, constraints</td>
</tr>
<tr>
<td>Reputation</td>
<td>Image, prestige or lack thereof from being a state institution</td>
</tr>
<tr>
<td>Scholarships</td>
<td>Limited ability to offer substantial financial aid to URM or targeted groups as a result of being a state institutions. Related to money/funding.</td>
</tr>
<tr>
<td>Affordable Care Act</td>
<td>Political implications; requirements; changes patient population; financial implications</td>
</tr>
<tr>
<td>Interprofessional Education (IPE)</td>
<td></td>
</tr>
<tr>
<td>Diversity definition/scope</td>
<td>Evolving nature of what we mean by diversity, scope is broadening</td>
</tr>
<tr>
<td>Centralization</td>
<td>Efforts to bring initiatives or people together</td>
</tr>
<tr>
<td>Emotional</td>
<td>Indicates the emotional and highly personal aspect of diversity issues on campus. Includes support and mentorship.</td>
</tr>
<tr>
<td>Traditional Leadership</td>
<td>Strategies and examples of traditional leadership approaches; includes reliance on single person or hierarchical structure</td>
</tr>
<tr>
<td>Population</td>
<td>Shifts in demographics</td>
</tr>
</tbody>
</table>
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<td>reuse in a thesis/dissertation</td>
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<td>Portion</td>
<td>figures/tables/illustrations</td>
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<tr>
<td>Number of figures</td>
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</tr>
<tr>
<td>tables/illustrations</td>
<td>both print and electronic</td>
</tr>
</tbody>
</table>

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Jennifer D. Keeton was born and raised in Hutchinson, Kansas, where she attended a rural high school and became involved in community groups such as the Boys and Girls Club and the parks and recreation department during her adolescent years. She studied mass communication and sociology at Baker University, Baldwin City, Kansas, and earned a Bachelor of Science Degree in 1999. Jennifer was heavily involved in campus life as an undergraduate, sparking an interest in higher education. She began recruiting for Baker upon graduation and completed a Master of Liberal Arts degree in Management and Leadership from Baker in 2001. For six years she worked in college admissions counseling where she was active in the Great Plains Association for College Admission Counselors and other professional organizations. She volunteered for the Keeler Women’s Center, Kansas City, Kan., served on the Park Board of Directors in Belton, Mo., and coordinated the Belton Vision Team, a community service organization.

Jennifer began working at the University of Kansas Medical Center (KUMC) in 2005, coordinating special projects for the Schools of Health Professions and Nursing. Projects included managing a faculty and staff development program, wellness activities, diversity programs, strategic planning, communications and media, writing and publications. Throughout her career Jennifer has served in an organizational leadership capacity and has worked to promote diversity, cultural awareness and equity. Jennifer is now the Director of Special Programs and Strategic Initiatives for KUMC. She is a candidate for the Doctor of Education degree in Educational Leadership & Policy Analysis at the University of Missouri, Columbia. Jennifer is resides in Kansas City, Mo., with her husband and two children.