ONLINE LEARNING: A CASE STUDY IN POLICYMAKING CHALLENGES FOR PUBLIC HIGHER EDUCATION GOVERNING BOARDS

A thesis presented
by
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to
The School of Education

In partial fulfillment of the requirements for the degree of Doctor of Education

in the field of

Education

College of Professional Studies
Northeastern University
Boston, Massachusetts
December 2014
Abstract

In the United States, public higher education governing boards have increasingly been held accountable by key stakeholders to decrease operational costs while providing increased access to students. Using Bush’s Educational Leadership and Management Theoretical Framework, this case study examined the impact of online learning delivery on board policy development at the University of Central Florida (UCF), and the Florida Board of Governors (BOG). The research described the policy and decision making processes at UCF and the BOG including how policy makers and external stakeholders influenced the decision making process. The findings of the study addressed the significance of the problem of practice and the research question. UCF’s online delivery model directly addressed the concerns of the administration and the governing boards by increasing access to students, and keeping costs down with the development of a hybrid mixed mode education delivery model. Moreover, the case study findings suggest that an informed decision making process such as the one utilized by UCF can help an institution to successfully achieve its strategic mission and goals in a thoughtful and deliberative decision making process. The research is significant because it helps to inform the higher education practice regarding a policy making process that could help decision makers, particularly in the area of online learning policy. The research further informs higher education administrators regarding the influence of a shared governance approach to policy and decision making and external stakeholders including elected officials in a policy making process that is highly influenced by key political leaders.

Keywords: governing boards, access, affordability, efficiency, online learning, March, Cohen, Olsen, policy development
Acknowledgements

I would like to first thank Dr. Joseph McNabb, an outstanding professor, mentor, and my advisor. I had the wonderful experience of taking three classes with Dr. McNabb, who challenges students to do their best, and I certainly learned a great deal from his classes and knew the experience would be the same for my dissertation process. I want to thank both Dr. McNabb and Dr. Kimberly Nolan for your consultation, guidance, wisdom, and most of all for your patience, especially in the early days of this process when I was trying to figure out what theoretical model would be most appropriate for my research.

I will be eternally grateful for the friendship, support and counsel of Dr. Diana Gonzalez, and her husband Brian, who helped me to get through many challenges throughout this program and the entire dissertation process.

I would like to thank my dear friend John Futterknecht for his encouragement, support, and friendship throughout this process. John along with so many others, including family, and friends who understood that missing family events would mean I could work on my research.

I thank Dr. Mark B. Rosenberg, President of Florida International University, who encouraged and supported my professional development, and my desire to pursue a doctorate; and, the Iowa Board of Regents, past and present who continue to fully support my professional development, and my desire to attain a Doctor of Education degree.

Finally, I would like to thank the Florida Board of Regents and the administration at UCF for providing me with documents and other information that assisted me in my research. In addition, my thanks to all of the study participants who provided invaluable content for this research.
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Chapter One: Introduction

Purpose Statement

The purpose of this single case study methodology was to examine and describe the process leading to the policy decision by the higher education governing boards (the University of Central Florida [UCF] Board of Trustees and the Florida Board of Governors [BOG]) and institutional administrators to increase online education delivery at UCF. The study, which was guided by a research question, focused on the insights and perceptions of the participants including members of the university governing board, faculty, and institutional and governing board staff. The knowledge generated is expected to inform policy development by public higher education governing boards related to online learning.

Rationale of the Study

In the United States, public higher education governing boards have come under increased scrutiny by key stakeholders who demand enhanced efficiency, productivity, transparency, and accountability. Wegner (2008) suggests that 21" century social, economic and political forces pose daunting new challenges for higher education institutions and governing boards, which have the fiduciary responsibility to hold institutions accountable in terms of greater efficiencies, and, as demanded by elected officials, to explain how appropriations are spent, and what the direct benefits are to the respective states.

Shifting board governance patterns have been driven by economic considerations, and political conditions (McLendon, Hearn, & Mokher, 2009). As state and federal monetary support continues to decline, public higher education governing boards are forced to seek more efficient and sustainable solutions to decrease costs while providing increased access (Styron, Wang, & Styron, 2009). In fact, higher education governing boards are challenged with a host of complex
issues such as expanding access, declining appropriations, increased regulatory requirements, more stringent state and federal legislative oversight and demands for accountability, maintaining quality, reducing costs, and an increased competitive environment (Kezar, 2010). One of the responses to declining resources calls for public higher education to explore cost effective education delivery alternatives, such as online learning which utilizes digital technologies and methodologies via the internet (Meyer, 2010).

In fact, online learning has been shown to lead to a reduction in cost of instruction by about 16 percent, savings which come from several areas including classroom space utilization and instruction costs, which has benefited both students and institutions (Meyer, 2010). While lower instruction costs do not always translate into lower tuition costs, the use of online learning technology has resulted in increased student access because underserved populations, including low-income, and non-traditional students (students whose ages range from 24 to 36 years) find on-line classes easier to access (Meyer, 2010). Across the country, enrollment in online courses grew by more than 10 percent between the fall of 2009 and the fall of 2011, and is now part of the college experience for 31 percent of all postsecondary students (Schaarsmith, 2012).

**Significance of the Study**

The challenges facing public governing boards and universities include a host of complex issues, including the ongoing decline in state appropriations to public higher education. Since the early 1980s, state appropriations to public universities have not kept pace with increased costs, causing higher education governing boards to reassess strategic direction, and operational priorities. Furthermore, the decreases in education appropriations to higher education resulted in some of the sharpest increases in tuition and fees, which increased by an average of 51 percent at four-year public institutions during the period 1995 – 2005 (Kanter, 2011). This is significant
because the decline in state funding combined with the increases in tuition and fees caused many public governing boards to look for alternative cost effective education approaches like online delivery to maximize resources. At UCF, in 2012, the local governing board raised tuition by 15 percent following a $50 million cut in state appropriation to the university, which experienced a total of $144 million in cuts during the previous five years (Balona, 2012).

Many of these issues have causal relationships that affect how governing boards develop policies to meet these challenges. These relationships are of critical importance because public higher education governing boards must respond to key stakeholders who demand enhanced transparency and accountability (Wegner, 2008). In fact, Christensen and Eyring (2011) maintain that governing boards will need to rethink the traditional model of higher education delivery as marketplace conditions and competition continue to disrupt and transform higher education delivery.

**Research Problem**

This study analyzed the impact of online learning delivery on the development of board policy at the University of Central Florida (UCF), the second-largest university in the country. UCF began online delivery in the mid-1990s in response to rapid increases in enrollment. UCF used online delivery as a strategy to improve access, particularly for students living far from campus. The effects of rapid enrollment growth and reduced state funding at UCF had a direct impact on its facilities and operational costs, particularly the need for construction of physical classroom space. According to Cavanagh (2012), offering online delivery was a key strategy in fulfilling the institution’s mission of education access, while scaling-back the need for increased physical plant infrastructure. At the present time, 58 percent of the university’s students are enrolled in at least one online course. Online learning represents more than 32 percent of UCF’s
total student credit hour production, which by some estimates would have resulted in a 40 percent increase in classroom space, which the institution would not have been able to support without increased state funding (Cavanagh, 2012).

Furthermore, this study analyzed how policymakers influenced the process used to determine which policies would best meet the needs of the institution and the state of Florida. The research was supported by data from interviews conducted at the institution and a literature review including studies focused on issues related to (1) recent trends in higher education policy research, (2) higher education governance and, (3) online education delivery. The research also included appropriate documents from university board meetings and institutional policies, and from state and federal legislative bodies.

**Research Question**

1. How can an online instructional delivery model influence the development of policies by public higher education leaders, and governing boards to improve student access and reduce operational costs?

This research question was central to this study because it helped to explain the relationships between the use of technology and more specifically online education delivery, and how governing boards address those relationships though policy development. Additionally, this question was directly related to my intellectual goals because it helped to explain what factors influence governing boards during their deliberations in the policymaking process. Specifically, the study produced data and information that can be used in the state of Iowa as the Iowa Board of Regents, the governing board for the three state universities, continues to consider online learning policies which will lead to increased student access, and decreased cost of education. Furthermore, as this researcher reflected on the challenges facing higher education today, access
to higher education in the United States continues to be a major concern for students, educators, state legislators, governors, system heads/State Higher Education Officers (SHEEOs), and governing boards. Major concerns center on the rising cost of education and whether higher education leaders and policymakers will continue to develop and implement strategies that will help contain cost without negatively affecting access.

This study utilized the Educational Leadership and Management theoretical framework which Bush (2009) suggests best explains the decision making process of complex organizations, such as schools and colleges. Furthermore, this study examined the ambiguity model, which describes decision making in organized anarchies. As described by Cohen, March, and Olsen (1972), the organizational structure of universities is a model of ambiguity within the framework of the educational leadership model, where decisions are difficult at best, due to unclear goals, unclear technology, and fluid participants. The framework of the ambiguity model is consistent with what Bush (2009) suggests are numerous disruptive innovations, such as online learning delivery, that challenge education governing boards’ current ability to meet the demands of 21st century education governance.

The theoretical framework explored the Cohen et al. (1972) Garbage Can Model, which Bush (2009) suggests is particularly appropriate to higher education. According to Bush (2009), the garbage can model of organizational choice is an important contribution to the theory of educational leadership and management because it is a descriptive and analytical model which examines how organizations are managed rather than a normative approach extolling the right way to manage institutions.

The literature review focused on recent trends in higher education governance, education policy research, and online education delivery. Conner and Robovsky’s (2011) research of recent
trends in higher education governance informed this study because they specifically researched higher education policy literature from 2009 – 2011, the period immediately following a fiscal crisis in the United States economy, which had a major impact on public funding for higher education. Conner and Robovsky (2011) analyzed the implications of performance-oriented policy reforms including those related to online education, which were implemented at public universities by governing boards that developed policy based on state government pressure for more accountability in public education. Additionally, the literature review examined the relationship between higher education governing boards and the development of policies that mandate strategic changes in Information Technology (IT) development and online delivery.

A qualitative single case study research design was the most relevant approach to study this problem of practice because this approach is appropriate when the researcher has an interest in higher education governance and policy development. A case study facilitates an in-depth analysis of bounded systems with the focus on the case or an issue illustrated by the case (Stake, 2001). A major strength of case studies is they allow researchers to analyze the processes that lead to outcomes (Maxwell, 2005). According to Yen (2014), this approach allows the researcher to focus on a case and retain a holistic and real-world perspective. In addition, the case study’s unique strength is its ability to deal with a full variety of evidence such as documents, artifacts, interviews, and observations. The essence of a case study is that it tries to illuminate a decision or set of decisions: why they were taken, how they were implemented, and with what result (Yen, 2014). The research design identified the case study participants, setting for the study, and data collection methodology including interviews, field notes, observations, and institution documents. Additionally, the analysis identified ethical challenges my research could face,
including potential risks with study participants, and adherence to all IRB protocols necessary for approval by the IRB Office at Northeastern University.

**Theoretical Framework**

This study utilized the educational leadership and management theoretical framework developed by Bush (2009), which best describes the study and practice related to the operation of educational organizations, and policy formulation. According to Bush (2009), effective leadership and management of schools and colleges are essential to addressing the wide-ranging expectations and objectives of key stakeholders in a rapidly changing environment. Bush (2009) utilizes six models (formal, collegial, political, subjective, cultural, and ambiguity) to characterize the major concepts of educational leadership and management theory. Specifically, Bush (2007) utilizes the ambiguity model as a tool to understand and interpret events and behavior in schools and colleges.

Bush (2009) suggests that ambiguity models are particularly important because they make a valuable contribution to the theory of educational leadership and management. The ambiguity model was the most appropriate model in terms of its applicability to the research question for this study. The significance of ambiguity models to the proposed study is that ambiguity is a prevalent feature of complex organizations, such as schools and colleges, where turbulence, instability, uncertainty, and unpredictability are the dominant features of an organization (Bush, 2009; McLendon, 2003).

Ambiguity models were developed by theorists who were dissatisfied with formal organizational models which they believed was inadequate for higher education organizations (Bush, 2009). The concept of ambiguity originated from the bounded rationality tradition, where the ambiguity of decision making refers to situations where there is lack of clarity and
consistency in reality, causality and intentionality (Vakkuri & Meklin, 2006). Ambiguity models assume that organizational objectives are problematic and decision making occurs within formal and informal settings where participation is fluid (Bush, 2009).

**Central features of ambiguity models.** The concept of ambiguity is a mainstay in public policy theory and has been used by researchers to study organization decision making (Robinson & Eller, 2010). According to Bush (2009), ambiguity models stress uncertainty and unpredictability in organizations, and assume that organizational objectives are problematic because institutions experience difficulty in ordering their priorities. Ambiguity models are important because they help researchers to examine the decision making process within educational organizations (Bush, 2009). The case study specifically examined the decision making process within a university.

One interpretation of Weber’s (1946) organizational model assumed that organizations were rational and structured (Ingersoll, 1993). According to Ingersoll (1993), Weber (1946) believed that the central concept within organizations, particularly bureaucratic organizations, was rationality, or rational choice. Rational choice is an area of decision theory, where individuals are embedded in structure, and knowing how those structures function is the key to understanding how individuals make choices in organizations (Tierney & Venegas, 2009).

One early critic of the rational choice model was Simon (1947), who suggested that individuals and groups were limited by cognitive, practical, and political conditions during the decision making process (Styhre, Wikmalm, Olilla, & Roth, 2010). Simon (1947), theorized that organizations could be described by ‘bounded rationality’ where decision makers never make perfect decisions (Kuo, Chiu, & Lin, 2009). Simon (1947) discussed the theory of bounded rationality as a new approach for the study of organizational decision making (Jones, 1999).
According to Jones (1999), Simon suggested that bounded rationality assumes that actors are goal-oriented; however, there were cognitive limitations of decision makers in attempting to achieve those goals. According to Ingersoll (1993), March and Cyert (1963) lost confidence in the practical applicability of rational interpretations of organizational models. March and Cyert (1963) introduced the concept of organized anarchy, which they suggest is at the core of the decision making process of organizations (Ingersoll, 1993). Organized anarchy was formally introduced as a post-rational organizational model called ‘A Garbage Can Model of Organizational Choice’ by theorists Cohen et al. (1972), who suggested that some organizations could be considered organized anarchies (Ingersoll, 1993).

**Organized anarchies as a lens.** Birnbaum (1988) suggests that organized anarchies exhibit three characteristics: problematic goals, unclear technology, and fluid participation. According to Birnbaum (1988), universities are complex organizations where decision making could be described through the lens of organized anarchy. Specifically, as Cohen et al. (1972) theorized, Birnbaum (1988) posits that the decision making processes at universities are unclear, due primarily to the fact that their organizational structures exhibit the three major characteristics of organized anarchies. According to Birnbaum (1988), Flagship University, which he describes as a complex institution with over 27,000 students, graduate studies, research centers and institutions and with national rankings among the top twenty-five universities in the nation, exemplifies the characteristic of ‘problematic goals.’

Birnbaum (1988) posits that goals are typically a loose collection of changing ideas at Flagship University, and these goals, most likely, can be replicated at similar public universities. In addition, researchers suggest that within the organizational structure of the university, members of the organization do not fully understand the workings of the organization (Lipson,
2007). In fact, Kingdon (2011) posits that members have only rudimentary understandings of the organization. Birnbaum (1988) argued that this characteristic of higher education was a strength not a weakness (Manning, 2013).

According to Birnbaum (1988), the characteristic of ‘unclear technology’ is the process through which organizations convert inputs to outputs. Using Flagship University as the example, Birnbaum (1988) states that when it comes to technology, which he defines as large lecture halls, seminars, small discussion classes, and remedial instruction, it is not clear what is effective and why it is effective. In fact, Manning (2013) argues that higher education does not have the luxury of clear technologies, and while some teaching methods work well, others do not. In addition, choices about the use of technology tend to be based on trial and error, and not on strong evidence indicating one method is more effective than another (Birnbaum, 1988).

The third characteristic, ‘fluid participation,’ may be formal, or informal, depending on the individuals, groups, departments, or administrators participating in a discussion on the campus or university (Birnbaum, 1988). Again, using Flagship University to illustrate his understanding of what fluid participation might look like at a typical university of Flagship’s size and scope, Birnbaum (1988) suggests that, at any given time, attendance at committee meetings in almost any area throughout the university is sporadic, particularly among faculty members depending on teaching schedules. Moreover, faculty who may not be assigned to a particular committee may attend meetings, and in some cases may participate in discussions where decisions are being made. Manning (2013) argues that the committee meeting structures of universities and colleges are predicated on the reality of fluid participation. In some cases, participation is so fluid, that there are few, if any, occasions where any two related decisions are made by the same people (Birnbaum, 1988).
Cohen et al. (1972) describe academic organizations as “organized anarchy” – a system with little central coordination or control, and fragmented with ambiguous and contested goals (Baldridge, Curtis, Ecker, & Riley, 2000, p. 131). According to Birnbaum (1988), Flagship University is one example of how organizational decision making, characterized as organized anarchy, occurs at universities. He suggests that the lack of common goals, clear technology, and stable levels of participation are all reasons why universities have difficulty making what he called ‘rational’ decisions (Birnbaum, 1988). Birnbaum (1988) posits that Flagship, like many universities, makes choices through a process called “garbage-can decision making” (Cohen et al., 1972; Birnbaum 1988, p. 162).

**Garbage Can Model (GCM) of organizational choice.** The GCM was introduced as a new model of organizational decision making by Cohen et al. (1972), who argued that organizations do not reach decisions in rational ways (Robinson & Eller, 2010). The garbage-can decision making model was an attempt to capture decision making in real-life settings (Styhre et al., 2010). According to Robinson and Eller (2010), Cohen et al. (1972) designed the GCM as a model to describe organizations facing tremendous ambiguity, which they suggest are “organized anarchies.” Specifically, Cohen et al. (1972) believed that properties of organized anarchy, such as inconsistent and ill-defined preferences, unclear technology, and fluid participation, were particularly conspicuous in public educational organizations such as universities. Moreover, in the GCM, Cohen et al. (1972) posit that individual decision makers within organizational anarchies have a large impact on organizational outcomes, due in part to ambiguous preferences, unclear technology, structure, and stochastic attention to problems and preferred solutions to problems (Morgan & Carley, 2012).

The GCM implies that institutions are unclear about how outcomes emerge from their
activities. For example, Davies and Morgan (1982) suggest that the president of a university has only modest control over events of an institution’s life because the central direction of the institution is extremely problematic (Rutherford, Fleming & Mathias, 1985). Other features of the model include fluid participation in the management of organizations where members move in and out of decision making situations (Bush, 2009). The application of the GCM helps researchers explain some of the myriad of challenges governing boards may experience when dealing with numerous external stakeholders (Bush, 2009).

Given the complexity of issues that many governing boards and administrators at colleges and universities encounter, as suggested by Christensen and Eyring (2011), this case study utilized the Cohen et al. (1972) GCM, which underpins the theoretical framework for the research question, and provides the necessary supporting information for this research. Garbage can decision making is to-date a dominant metaphor for the way decisions are made in organizations, such as universities, which operate under the influence of uncertainty and ambiguity (Styhre et al., 2010). The applicability of the GCM is further evidenced because university decision making has moved from the traditional process of shared governance, where decision making was shared between trustees (governing boards), administrators, and faculty (Tierney & Lechuga, 2004).

According to Tierney and Lechuga (2004) “as universities have become more commercialized, external constituencies – governors and legislatures” and others including strategic partners, and the federal government, have played a role in the decision making process at universities (Tierney & Lechuga, 2004, p. 63; Bok, 2003). In addition to the complexity of issues Christensen and Eyring (2011) suggest are disruptive to higher education, other external
environmental factors such as sensitivity to the demands of clients, and satisfying market needs add to the existing ambiguity (Bush, 2009).

**The Garbage Can Decision Making Process.** Bush (2009) argues that the GCM is the most celebrated of the ambiguity perspectives. Decision making in the GCM is ambiguous and the process is best described as one in which problems, and solutions, are dumped in a garbage can by participants (Bush, 2009). In the GCM, participants like faculty, committees, administration, and governing board members, all expect and demand input and control over the decision making process (Manning, 2013). Decisions in the GCM are characterized as outcomes resulting from the interaction of four streams described as: (1) problems are the concerns of people who are inside and outside the organization; (2) solutions to a problem are answers actively looking for questions; (3) participants who come and go; and, (4) choice opportunities which arise from behavior that can be called a decision (Cohen et al., 1972; March & Olsen, 1984; Bush, 2009). According to Kingdon (2011), each of the four streams can be described as independent of one another and having a life of its own. The GCM can be easily applied to educational institutions because many of the participants have ready-made solutions to the various problems (Bush, 2009).

**The application of the GCM to the study.** The application of the GCM is a first step in a process that enables choices to be made, and problems resolved, despite the fact that goal ambiguity exists, and problems wander in and out of the system (Cohen et al., 1972). In the GCM, problematic goals, unclear technology, and fluid participation are the three characteristics that form the basis of organizational decision making in universities as described through the lens of organized anarchy (Fardal & Sornes, 2008). While Weber’s (1947) traditional model of organizational decision making assumes rationality, the GCM assumes the opposite: contested
goals, a messy process, unstructured relationships, and uncertain results (Fardal & Sornes, 2008).

According to Fardal and Sornes (2008), the three characteristics of organizational decision making in the GCM create the four streams, or variables known as problems, solutions, participants, and choice outcomes. These streams are important because they are essential to understanding the decision making process at universities. For example, the stream of problems is primary for GCM because a great deal of organizational life, particularly at colleges and universities, focuses on problem solving (Fardal & Sornes, 2008). While solutions are answers actively looking for questions, which follows the classic description proposed by Cohen et al. (1972), researchers suggest that the stream of participants is more appropriately characterized as people moving toward what they prefer, suggesting that participants’ emphasis is on choosing, as opposed to deciding (Fardal & Sornes, 2008). Choice opportunities are occasions when the organization is expected to make a decision (Cohen et al., 1972; Fardal & Sornes, 2008).

According to Sillince, Jarazabkowski, and Shaw (2012), organizations like universities, which have a knowledge-based workforce, find it is particularly difficult to generate strategic organizational goals. However, Sillince et al. (2012), argue the GCM of decision making helps to provide insights into how strategic actions occur in such ambiguous contexts. “The GCM of decision making acknowledges the role of participants and other circumstances integral to the context of the choices available and decisions made” (Manning, 2013, p. 26). Decisions in the GCM emerge from actors’ (participants) responses to ambiguity in the garbage can over time, which actors can help to shape through their responses to the streams of activity (Sillince et al., 2012).

Although the methodology will be discussed later in this study, the GCM, as suggested earlier, was also the most appropriate model for this study because it attempts to capture decision
making in real-life settings (Styhre et al., 2010). This is of particular importance because the GCM model supports the qualitative intrinsic case study methodology proposed for this research, which will analyze the processes that lead to the outcomes (Stake, 1995; Maxwell, 2005). According to Stake (1995), intrinsic case study designs help the researcher to understand what is important about the case within its own world. The single case study methodology helped this researcher to reveal what the participants think and why (Fraenkel, Wallen, & Hyun, 2012).

**Summary**

This study will contribute to the existing educational leadership and management theory as discussed by Bush (2009) by emphasizing the importance of understanding how decision making in higher education organizations like universities occur. By studying the decision making process through lenses like the GCM, researchers are able to gain insight into how decisions are made. However, as Fardal and Sornes (2008) suggest, while data can identify the four streams, the streams do not themselves produce decisions; the decisions result from the many ways they interconnect (Fardal & Sornes, 2008). Moreover, Fethke and Policano (2012) attribute decision making ambiguity at universities to competency misalignment. They suggest the misalignment results from the confluence of participants (one of the four streams) like governing board members and university leaders whose experiences, principally academic and business, lead to misunderstanding, and at worst, dysfunctional relationships (Fethke & Policano, 2012).

The single case study focused on the process that emerges and what garbage can characteristics may be applied from the GCM that help to answer the research question. The empirical evidence captured in the study examined the decision making process that university administrators and governing boards engage in as they consider challenging issues such as the
influence of online delivery models on the development of policies to increase student access and reduce operational costs. Moreover, forty years after it was written, the GCM is as applicable to the proposed study as it was when it was developed in 1972.

However, there are limitations with the application of the GCM. Specifically, Cohen et al. (1972) suggest that while the GCM of decision making is applicable to a university, they also believe that the garbage can process does not resolve problems well. While this may appear to be a weakness of the model, it is also one of the reasons why the model works well for the proposed study. In fact, ambiguity models add important dimensions to the theory of educational management, particularly the concepts of problematic goals, unclear technology, and fluid participation (Bush, 2009). Most schools and colleges possess these characteristics, which suggest ambiguity models help researchers to examine and explain education management theory (Bush, 2009). Moreover, turbulence in education policy during the twenty-first century, such as unpredictable education funding, and enhanced government expectations of colleges and universities, lends credence to ambiguity theories (Bush, 2009).

The single case study focused on the University of Central Florida (UCF), an institution similar to Flagship University, as discussed by Birnbaum (1988). At Flagship University, choices were made through a process using the GCM, which enabled problems to be resolved even when there was goal ambiguity, poorly understood problems wandering in and out of the system, and variability in attention and presence of participants in decision making (Birnbaum, 1988; Cohen et al., 1972; Lomi & Harrison, 2012). At UCF, the decision making process regarding the development and expansion of online education became one of the choice opportunities, or streams, that surfaced in what is assumed to be a garbage can process. An examination of this decision making process using the GCM was appropriate given the numerous challenges,
uncertainty, and conceptions of online learning and the lack of clarity regarding its effectiveness, costs, and future application.

Chapter Two: Literature Review

The literature review section focused on recent trends in higher education governance, education policy research, and online education delivery. Several questions guided the review of the literature: what are the dominant governance models used in U.S. public higher education systems; what effect does the governing board structure have on the policy and decision making process; what are the major issues facing public higher education governing boards; and, what impact has online education delivery had on public higher education institutional and governing board decision making. Three major bodies of literature were reviewed: higher education governance, strategic issues in higher education and online education delivery models.

The literature review was conducted using several sources including (but not limited to): Google Scholar, Lexis-Nexis, ERIC, JSTOR, Educause, The Chronicle for Higher Education, State Higher Education Executive Officers (SHEEO), American Association of State Colleges and Universities (AASCU), the American Council on Education (ACE), the American Association of University Professors (AAUP), United States Department of Education publications, the Association of Governing Boards (AGB) publications, and dissertations. The review was organized by defining the areas of the three streams including governance, higher education policy, and online education. The review begins with a brief definition and history of each stream including the significance of the problem of practice.

Governance in American Public Higher Education

The literature on higher education governance reveals several definitions throughout history. In 1960, Corson defined governance in higher education as the authority to create rules
and regulations concerning the governing of the academy (Tierney, 2008). Kaplan and Lee (2007) define higher education governance as the structures and processes that institutions follow in the day-to-day operations, which include: organizational structures of individual institutions, or statewide systems; allocation of decision making authority; and, processes for challenging decisions. Kezar (2004) suggests that governance is the process of policymaking and macro-level decision making within higher education. The emphasis of much of the literature centers on the belief that the processes and procedures of decision making in governance take precedence over the decisions themselves (Cohen & March, 1974; Hirsch & Weber, 2001; Kaplan, 2004; Manning, 2013).

A review of the literature regarding the history of higher education governing structures suggests that governing structures began in Europe during the latter years of the thirteenth century with the issuance of papal statements and a proclamation in 1243 by Pope Innocent IV, calling universities “a free corporation” (E. D. Duryea, 1973, p. 4). According to higher education scholars, the Church allowed for a university to open; however, charters which were granted by an emperor or king gave institutions the ability to form self-governance in order to operate outside the church structure (Tierney, 2008; Beach, 1985). One early study conducted by Tewksbury in 1932 indicated that 163 of 182 American colleges and universities founded before the Civil War received their primary support from a religious organization (Brown, 2013).

In the fifteenth and sixteenth centuries, the concept of corporations was embraced by England and influenced the colonial colleges in America, such as Harvard in 1636 and William and Mary in 1693 (E. D. Duryea, 1973). Researchers suggest that with the founding of Harvard College over 370 years ago, U.S. higher education began its relationship with external governing boards (Taylor & Machado, 2008). Moreover, the governing boards of the twenty-first century
followed what Taylor and Machado (2008) describe as the Yale corporate model which utilized an external board of trustees to govern respective institutions.

According to Gordon Davies (2011), higher education governing boards in the U.S. were created in the 1950s and 1960s, when the country faced the challenge of building capacity to accommodate large numbers of students. Unlike the European governing boards, lay people controlled the majority of American college and university boards (Brown, 2013). In fact, a report by the American Council on Education (ACE) indicates that in 2012 higher education governing boards were dominated by lay members from the business sector (Bataille, Asfaw, Jackson, 2013). Several scholars have written about the increased presence of business leaders’ membership on higher education governing boards, including Tierney (2008) who suggests that boards of trustees have become increasingly populated with more activist businesspeople who expect universities to more closely resemble businesses (Brown, 2013; Tierney, 2008).

Governing board members provide service in four basic governance structures: (1) consolidated governing boards, (2) regulatory coordinating boards, (3) weak coordinating boards, and (4) planning agencies (Bracco, Richardson, Callan, & Finney, 1999; McGinness, 2003; Tandberg, 2013). In 2013, 24 states had consolidated governing boards that exercised direct autonomy overseeing management and operations including the academic and budget areas of the public universities and colleges. The remaining states had a combination of regulatory coordinating boards, weak coordinating boards, or planning agencies where decision making authority was less centralized (Tandberg, 2013; McGuinness, 2003; McLendon, Heller, & Young, 2005).

Higher education governance is divided into two categories: (1) internal governance structures and processes by which institutions govern themselves, and which depend on their
status as a public or private institutions; and, (2) external governance structures where institutions (which are primarily public entities) are created by the state governments that have legal authority over the governing board (usually trustees or regents), and use state taxpayer resources to fund institutional operations (Kaplan & Lee, 2007; SHEEO, 2009; Tandberg, 2013).

According to higher education scholars, the type of governance structure utilized by states may directly impact education policy making. In fact, one common theme, or trend, throughout the literature on governance relates to efforts by state policymakers to impact education policy by reforming, or restructuring, governance. Specifically, McLendon, Deaton, and Hearn (2007), examined the literature during the period 1985-2002 using comparative state politics and higher education to investigate how demographic, economic, organizational, and political characteristics of a state influenced the enactment of legislation to reform governance. The study, which included research conducted by Leslie and Novak, 2003; MacTaggart, 1996, 1998; Marcus, 1997; McGuinness, 1997; and, McLendon, 2003, indicates there were over 100 measures to modify state higher education governance systems. According to researchers, the reorganization efforts have taken several approaches including moving from centralization to decentralization, further regulation to deregulation, with justification ranging from desire for improved accountability, operating efficiency, cost saving, coordination, and accountability (McLendon, Deaton, & Hearn, 2007; Tandberg & Anderson, 2012).

McLendon et al. (2007) suggest that the modern era in public higher education governance redesign (reform) began in the late 1950s following postwar increases in college enrollments and calls for greater efficiency, coordination, and planning by governing bodies. These governance patterns existed until the 1980s and early 1990s, when governance structures were under increased scrutiny for being slow, inefficient, and unresponsive to the changing
environment (Kezar, 2005).

As part of her research on governance structures, Kezar (2005) employed a case study design based on the hypothesis that radical change, which involves a complete transformation of organizing principles and structures, which she suggests was necessary and desirable for creating a more functional and successful process of campus governance. Although Kezar’s (2005) research concludes that radical change has many negative consequences, the results of the study correlate with the findings of similar studies suggesting that gradual change and innovation was a more promising route to enhancing governance in higher education (Birnbaum, 1988; Kezar, 2005). Moreover, Kezar (2005) posits, as the institutional climates change, it appears governance systems need to change on an ongoing basis.

Additional studies, including one conducted by the Rand Corporation (1993) suggest that in the 1980s, there were several attempts by states to reform public higher education governance by adjusting the powers and duties of the governing bodies (Benjamin, Carroll, Jacobi, Krop, & Shires, 1993). Specifically, McLendon et al. (2007) indicate that during the period from 1980 to 2000 there were at least 22 documented cases of actual reforms in state higher education governance that impacted state higher education policy and finance decision making. Knott and Payne (2001) conducted similar studies during this period which suggest that reforms both consolidated separate governing boards into a statewide coordinating board, and in some cases increased the regulatory and financial powers of existing statewide governing boards.

There is evidence throughout the literature which suggests the overarching rationale for the governance changes centered on the desire by states to improve accountability, operating efficiency, cost savings, competitiveness, coordination, and innovativeness (McLendon et al., 2007; McGuinness, 1997; Tandberg, 2013). Epper and Russell (1996) posit that during the mid-
1980s the political environment together with growing concerns about the increased cost of higher education in the U.S., gave legislatures and governors pause to examine higher education governance systems. In fact, a survey conducted by Epper and Russell (1996) for SHEEO indicates that 27 states instituted studies, while six states restructured their systems (Mabley, 2004).

The literature review on governance indicates that beginning in the 1980s higher education scholars began to document changing public attitudes regarding the role of higher education in the U.S. The shift in the attitude of the public and key stakeholders, including legislators and governors, resulted in numerous governance reform measures that some scholars believe actually hindered reform, or added little or no value to the existing governance structures (Epper & Russell, 1996; MacTaggart, 1996). In fact, among higher education scholars there is general agreement that restructuring state systems of higher education can lead to institutional infighting and intrusion by governance leaders, which can lead to instability within the state (Tandberg & Anderson, 2012). Additionally, Tandberg and Anderson (2012) suggest that there is little empirical evidence that restructuring results in educational improvement because most efforts to restructure state systems of higher education are usually politically motivated.

Baldridge, Curtis, Ecker, and Riley (1977) posit that academic organizations have several unique characteristics, including ambiguous goals, and “they serve clients who demand a voice in the decision making process” (p. 131). Baldridge et al. (1977) suggest that the characterization of academic organizations as “organized anarchy” by Cohen and March (1974) reflects the stakeholders who participate in higher education governance and decision making processes. According to Cohen and March (1974), individual constituencies (stakeholders) included faculty (professors), students, donors, and legislators who were seen as making autonomous decisions,
yet no coordination or control over decisions was exercised. In fact, in higher education governance, the authority of various constituencies to participate in or make decisions is often unclear and frequently contested (Birnbaum, 1988).

One of the key stakeholders/constituencies prominent in the literature on higher education governance are the faculty (teachers/professors) who higher education scholars suggest play a significant role in decision making through a process of shared governance. While governance consists of explicit and implicit procedures where various participants exercise the authority and responsibility for decision making, scholars of higher education suggest shared governance plays a significant part of the process (Benjamin et al., 1993; Kaplan, 2004; Hirsch & Weber, 2001). Researchers posit that shared governance is a shared responsibility between the administration and the faculty that allows faculty to participate in institutional decision making (Jones, 2011; Taylor & Machado, 2008).

Prior to the 1850s, shared governance was neither a concept nor practice as faculty participation primarily focused on their competence to deal with strictly academic matters (Birnbaum, 2004). Faculty began to gain additional responsibilities such as teaching methods and curriculum in the late 1850s in institutions like the University of Michigan. The role of faculty continued to evolve with the creation of formal faculty bodies, such as senates, with rules concerning faculty decision making (Brown, 2013). In 1918, Veblen became one of the first scholars to raise awareness of the concerns of faculty regarding their role in university governance (Birnbaum, 1988; Tierney, 2008). While Veblen (1918) and Sinclair (1923) wrote about the intrusive nature of what they termed as corporate America, the sentiment that existed about universities during this period was that the faculty had a considerable voice in the institution (Tierney, 2008). However, many institutions did not give faculty a voice in other
education-related matters until the mid-1940s (Birnbaum, 2004). In fact, 1966 was the first time in which the role of faculty in governance was formally recognized in a “Statement on Government of Colleges and Universities” by the AAUP (AAUP, 1966, 2000; Tierney, 2008; Birnbaum, 1988, p. 8).

Through the statement on government, the AAUP, with the assistance and support of two higher education organizations – ACE and the AGB help to set the parameters for both tone and expectations of how faculty should be involved in shared governance of their respective, public, and private institutions. According to Tierney (2008), the literature on shared governance throughout much of the period following the 1966 statement has been dominated by reports from organizations such as the AAUP, AGB, and special commissions, with little qualitative or quantitative methodologies. Moreover, several scholars suggest there were major problems with the “Joint Statement” because it was not successful in identifying the specific structures and processes necessary for implementation (Birnbaum, 1988). According to Birnbaum (1988), the statement was also criticized because of the lack of specificity regarding “how governance really functions in many institutions” and its lack of appreciation for the differences between various kinds of institutions (p. 8).

Seeking answers to the overarching question of what is the most appropriate role for faculty in shared governance dominates the post-AAUP statement on government era. In 1970, Pfnister questioned what the appropriate role of faculty should be in an era where an increase in the size and complexity of the academy, together with what he suggests is the tendency of faculty to become anti-organization and anti-administration is occurring (Pfnister, 1970; Tierney, 2008). In addition, during this same period (1970s), there was an extensive unionization effort within higher education by institutions covered by the National Labor Relations Act (NLRA),
where collective bargaining efforts posed potential conflicts with shared governance (Bucklew, Ellison, & Houghton, 2013). According to Bucklew, Ellison, and Houghton (2013), shared governance on most campuses predates faculty unions and for the most part has co-existed with faculty unions Bucklew et al. (2013) suggest that faculty unions and shared governance not only co-exist, they have symbiotic or mutually beneficial relationships).

The consensus of many higher education scholars during this period is that shared governance functions effectively when there is a climate of trust, ongoing communication, and where participation in decision making and planning is shared by a broad spectrum of the university community (Glover-Alves, 2012; Venable & Gardner, 1988; Tierney, 2008). In fact, ACE President Molly Corbett Broad posits that shared governance is a critical requirement for the future of higher education (Bataille, Asfaw, & Jackson, 2013). Moreover, following a national roundtable discussion, Broad and other higher education practitioners and scholars recommended that governance, including shared governance, were more likely to succeed with clear policies, protocols, expectations, and improved communications among the stakeholders (Bataille et al., 2013).

According to Bornstein (2012), shared governance builds social capital, trust, cooperation, and helps institutions fulfill its goals. Bornstein suggests that boards should follow the guidelines set by the AGB in its “Statement on Board Responsibility for Institutional Governance” which recognizes the importance of participation by faculty and other key constituents in decision making (p. 26). Bornstein acknowledges the challenges facing shared governance due in part to reduced budgets, staffing, and limiting tenure. Moreover, these challenges suggest the need for increased empirical research regarding shared governance and how organizations such as the AAUP and higher education institutions will continue to cope with
trends in the increases in the ranks of non-tenure-track, adjunct, and part-time faculty in higher education, and what their role will be in the governance process (Bornstein, 2012; Tierney, 2008).

Trends in Higher Education Policy

The literature on higher education policy over the past few decades has centered on three prominent themes, including access, affordability, and accountability (Conner & Rabovsky, 2011; Heller, 2001; Sandeen, 2013). In fact, one qualitative study by Suspitsyna (2012) that reviewed 164 U.S. Department of Education speeches over a three year period from January 2005 to December 2007 indicates that the dominant concerns focused on the economic role of colleges and universities and their accessibility, affordability, and accountability. These three themes (trends) have helped higher education scholars to examine several subareas of education policy such as: federal policies and programs to promote increased access; policies to improve affordability via federal financial aid through Pell grants and other federal and state aid programs; and, accountability measures including federal and state education policies promoting college and university outcomes such as increased graduation and retention rates.

A review of the literature in American higher education indicates that during the period from the founding of Harvard University in 1636 to the beginning of the Civil War in 1862 access to a postsecondary education was primarily reserved for those who were affluent or interested in attending a religious institution (Webber & Boehmer, 2008). In 1862, with the passage of the Morrill Act, the enabling legislation by Congress, which established public land-grant colleges and universities, fundamentally changed higher education by broadening opportunities and providing access to all Americans (Franklin, 2009; Gates, 2013; Meacham, 2013). In 1944, Congress passed the first G.I. Bill which provided access to college for millions
of military veterans, and stimulated an unprecedented commitment of state and federal governments to finance the expansion of public higher education (Davies, 2011; Gates, 2013; Greer, 2013). The G.I. Bill was followed by the Higher Education Act of 1965, when President Lyndon Johnson launched the first major student aid program designed to provide enhanced access to those who could not afford attendance. Finally, in 2008, Congress passed the post-9/11 G.I. Bill which was the largest investment in veterans’ education since World War II, expanding access to higher education for veterans and their families (Knapp, 2013).

According to Wang (2013), public colleges and universities were generally founded and financed to give students access to an affordable college education. Fethke (2011) suggests that one prominent reason given for subsidizing public higher education is to provide enhanced access. However, policies aimed at providing greater access have run counter to trends in higher education funding for the past two decades, as declining levels of public support, and increases in tuition have far exceeded the rate of inflation (Ehrenberg, 2006; Fethke, 2011; Fethke & Policano, 2012; Johnstone & Marcucci, 2010; Marcucci & Johnstone, 2007; Zumeta, 2012). Higher education scholars attribute rising tuition costs to such factors as increased enrollments driven by employment requirements and the desire for increased social and economic mobility, and the steady disinvestment by states (Johnstone & Marcucci, 2010).

The trend in state disinvestment in public higher education started in early to mid-1980; however, it became much more acute following the decline in the U.S. economy beginning in 2007 in a period referred to as the “Great Recession” (AASCU, 2013; Barrow, 2010; Dougherty, Natow, & Vega, 2012; Fethke & Policano, 2012, p. 13; Zumeta, 2012, p. 27). In fact, from 2008 through 2012, state support of public higher education rapidly declined relative to total state spending (Tandberg, 2010; Ma & Baum, 2012). According to Ma and Baum (2012), in 2011-12,
total state appropriations in the U.S. declined by 7.5 percent from the prior year. Overall, 41 states experienced declines in higher education funding with the largest in New Hampshire at 39 percent (AGB, 2013; Ma & Baum, 2012; Zumeta, 2012). Moreover, some reports indicate that funding per full-time equivalent (FTE) student decreased 25 percent from 2006-07 to 2011-12, which was the lowest level of funding per FTE in 25 years (Baum, Kurose, & McPherson, 2013; Tandberg, 2010; SHEEO, 2012). The declines in the levels of funding have led some scholars to suggest that many public institutions in America have moved from being state-supported to state-assisted (Webber & Boehmer, 2008).

A significant body of higher education literature is devoted to affordability as it impacts student financial aid, tuition policies, and postsecondary access. Webber and Boehmer (2008) suggest that financial aid policies established in the 1960s, including federal grants, loans, and work-study programs, created access for millions of Americans. The first significant federal program created to equalize access to higher education was authorized through Title IV of the Higher Education Act in 1965, when 23 percent of Americans (aged 18-64 years) had a college degree (HCM Strategists, 2013). Then in 1972, a major expansion in federal aid was authorized with the creation of the Basic Educational Opportunity Grant (BEOG) program (later renamed Pell Grant) designed for low-income students (a means-tested program based on parental income also referred to as need-based-aid) which increased access to higher education (Baum et al., 2013; Bowen, Chingos, & McPherson, 2009).

During the same period of expansion in federal aid designed to increase access to an affordable higher education, many states experienced increased tuition costs to compensate for declining state funding (Baum et al., 2013; Bowen et. al., 2009; Oliff, Palacios, Johnson & Leachman, 2013; Zumeta, 2012). According to scholars, these sharp increases in tuition
accelerated longer-term trends of reducing college affordability and shifted cost from states to students (Johnstone & Marcucci, 2010; Oliff et al., 2013). Johnstone and Marcucci (2010) suggest that tuition fees (meaning fees to cover a portion of the underlying costs of higher education) are part of a growing trend of cost-sharing in higher education where increased costs have shifted from governments to students and families. In fact, the average tuition at four-year public colleges grew by 27 percent during 2007-08 and 2012-13; seven states increased tuition by 50 percent, and 18 states had increases of 25 percent (Oliff et al., 2013).

According to the literature on affordability, the long-term trend of state reduction in funding and increases in tuition has caused a decline in higher education affordability (Baum et al., 2013; Bowen et al., 2009; Oliff et al., 2013). A 2012 national survey of 1,002 public, private, and for-profit university presidents conducted by Inside Higher Education indicated that 87.7 percent of university presidents nationwide anticipated little improvement in state funding in the next five years (Green, Jaschik, & Lederman, 2012). However, some education scholars believe that while very few higher education budgets have improved significantly since 2008, some states like California have proposed increases in funding for higher education through legislation (in California via Proposition 30) for the next four to five years; other states have proposed freezing tuition (Doyle, 2013). Additionally, some higher education research organizations, such as the Education Advisory Board (EAB), suggest “hope is on the horizon” as state appropriations to higher education are expected to increase by 3.6% in 2013-2014 (EAB, 2013).

Trends in the cost of attendance in addition to affordability and access concerns have caused many policy makers such as members of university trustees, legislators, governors, and federal officials including President Obama to call for the implementation of accountability measures (Baum et al., 2013; Suspitsyna, 2012). According to Conner and Rabovsky (2011), a
significant amount of literature related to accountability focuses on theories of political responsibility and the implications of performance-oriented policy reforms for public universities (p.93).

Performance-oriented policy reforms began in the 1970s, as policymakers became increasingly concerned about improving the performance of higher education institutions (Dougherty et al., 2013a; Friedel, Thornton, D’Amico, & Katsinas, 2013; Greer, 2013; McLendon et al., 2006). Dar (2012), and Powell, Gilleland, and Pearson (2012) posit that accountability in higher education is a theme that has been identified at the federal and state legislative levels by policymakers looking for higher education to be more accountable for the resources received from taxpayers. In fact, a 2006 report issued by the U.S. Department of Education called for all postsecondary institutions to improve both efficiency and effectiveness (including student outcomes assessment), in order to be more affordable and accountable to taxpayers (Powell et al., 2012; U.S. Department of Education, 2006; Webber & Boehmer, 2008).

Volkwein and Tandberg (2008) indicate that the literature on accountability in higher education includes very few studies or empirical data; therefore, more research is necessary. Volkwein and Tandberg (2008) reviewed data from “Measuring-Up” reports for the years 2000, 2002, 2004, and 2008. According to Volkwein and Tandberg (2008), the accountability environment for higher education shifted during the 1990s from one of regulatory compliance to a climate which concentrated on measuring performance and accountability for results. The researchers called the shift in policy a “new accountability” where effective governance, and measuring and rewarding performance on outcomes was essential (Volkwein & Tandberg, 2008, p. 182).

Volkwein and Tandberg’s (2008) study analyzed data collected from the 50 states. The
“Measuring Up” report used by the researchers is a state-by-state analysis of higher education prepared by The National Center for Public Policy and Higher Education. The report is designed to describe state performance on five key indicators: preparation, participation, affordability, completion, and benefits (to the state), with the goal of assisting the state to improve outcomes over time (Volkwein & Tandberg, 2008). The results of the statistical analysis indicated that none of the state measures including accountability practices, regulatory behaviors, or state appropriations to higher education, had any statistical connection to the indices for completion (graduation rates), participation, and preparation. In fact, the researchers concluded that things that states have little control over (such as demographics and economic characteristics) were more influential in determining the “Measuring Up” grade (Volkwein & Tandberg, 2008).

Like Volkwein and Tandberg (2008), Powell et al. (2012) suggest that there is insufficient research to determine if, or how, expenditures relate to outcomes, and whether there are correlations between expenditures and efficiency, and effectiveness. Powell et al. (2012) posit that according to the literature they reviewed for their study, defining productivity or efficiency (accountability) measures is a difficult matter. Powell et al. (2008) also conducted a study using data related to expenditures, efficiency, and effectiveness from national datasets including the Integrated Postsecondary Education Data System (IPEDS) and the National Study of Postsecondary Faculty (NSOPF). The data were analyzed to determine how expenditure and institutional characteristic variables related to efficiency and effectiveness variables. Efficiency was measured by the number of for-credit classes taught per semester, total number of faculty teaching hours, average class size, and executive/administrative staff as a percentage of faculty (Powell et al., 2012). Effectiveness was measured by six-and four-year graduation rates, retention rate of full-time students, and part-time retention rate of part-time students.
The Powell et al. (2012) study findings and conclusions indicate that as the cost of attendance at U.S. higher education institutions increases, the number of questions regarding the reasonableness of those costs also increases. In addition, the researchers concluded that there is an expectation by the public and key stakeholders that expenditures required to operate the institutions will be justified and there will be acceptable outputs such as degrees awarded. However, the researchers posit that no comprehensive national benchmarks exist to assist the institutions in determining if their cost structures are adequate or excessive. Moreover, no cost studies or models were found in the literature that provided links between institutional efficiency and effectiveness (Powell et al., 2012).

The research conducted by Powell et al. (2012), Volkwein and Tandberg (2008), and Dougherty et al. (2013b) is significant to higher education policy because it helps to inform the ongoing debate by policymakers about what variables or metrics help policymakers in their decision making process. According to the researchers, finding the appropriate variables and collecting the data that best fits a particular higher education institution is challenging. However, during the past two to three decades many state systems have continued to seek accountability policies that will improve both the performance and effectiveness of their institutions (Conner & Rabovsky, 2011). In fact, many state higher education governing boards have implemented or are in the process of implementing performance-based funding (PBF) policies, including performance-based budgeting (PBB), which permit governors, legislators, and governing boards to consider achievement on performance measures when they determine budget allocations to the campuses (Conner & Rabovsky, 2011; Friedel et al., 2013; McLendon et al., 2006; Powell et al., 2008; Zumeta 2011).

Accountability measures in the form of PBF began in the 1970s and have continued to be
part of the budgetary landscape for many U.S. public higher education systems. PBF is a system that basically rewards institutions (colleges and universities) that meet state goals, and is based on outputs instead of inputs (Friedel et al., 2013). PBF was first introduced to higher education by the Tennessee Higher Education Commission in 1978 (Dougherty, Natow, & Vega, 2012; Dougherty et al., 2013a; Daugherty et al., 2013b; Friedel et al., 2013). The early models of the funding were referred to as PBF 1.0 and emphasized outcomes such as degree completion and transfer, including some degree of retention (Friedel et al., 2013).

According to higher education scholars, while PBF started in the late 1970s, policymakers have only recently added performance indicators such as job placement rates, seamless transfer policies, and quality indicators such as licensure exam takers pass rates, as indicators of success (Dougherty et al., 2012; Dougherty et al., 2013a; Dougherty et al., 2013b; Fredel et al., 2013; Moynihan, 2008). This was a major shift from past PBF methodology that basically tied state funding to traditional inputs such as current cost, student enrollments, and inflationary increases. In fact, from 1979 to 1999, only 16 states had performance funding models (Burke & Modarresi, 2000). Burke and Modarresi (2000) suggest that public universities, which received the majority of their funding though state appropriations, were required to respond to the concerns of state officials and taxpayers regarding transparency and effective use of state resources.

Dougherty et al. (2013a), and McLendon et al. (2006) posit that despite great interest in PBF for more than 30 years, only half of all states have adopted or experimented with it. Dougherty et al. (2013a) conducted a qualitative study which examined documentary data, agency reports, newspapers articles, and academic research studies (journals and books), and interviewed higher education officials regarding performance funding indicators (p. 11). The
findings of the study were significant because the three states studied (Tennessee, Ohio, and Indiana) introduced a shift in the focus of PBF from what they termed PBF 1.0, a bonus program over regular state funding allocated on the basis of success in achieving indicators such as retention, completion, and transfer credits, to PBF 2.0 which excludes bonus funding, yet retain the regular state base funding formula (Dougherty et al., 2013a).

While the Dougherty et al. (2013a) study was limited to data from three states, McLendon et al. (2006) conducted a comprehensive longitudinal study covering the years 1979-2002 and all 50 states. McLendon et al. (2006) examined the factors that influenced states’ behavior over time, as states established new performance accountability policies in higher education. The researchers’ study design incorporated annual indicators of conditions using ten hypotheses they suggested influence the adoption of the policies over time. The hypotheses included such items as: educational attainment; poor economic climate; professionalized state legislature; gubernatorial power over institutions; growth in undergraduate tuition; centralized higher-education governance; and, state proximity to other PBF states.

McLendon et al. (2006) found that only 25 states (out of 47 states because Alaska, Hawaii and Nebraska were not included in that they were noncontiguous states, or had a nonpartisan legislature) had adopted performance-funding policies from 1979 to 2002. The findings of the study signaled a change in what researchers called a “new accountability” which shifted the focus of attention on outcomes, rather than the traditional focus on resource inputs (p. 1, 8). By focusing on outcomes, policymakers expected they would influence institutional behavior and improve institutional performance in areas including student retention, graduation rates, and undergraduate access (McLendon et. al., 2006). In fact, the findings indicated that the primary drivers regarding state adoption of PBF were legislative party strength and governance
structures. Specifically, both Republicans and Democrats supported PBF for different reasons. Republicans supported PBF as leverage for ratcheting up accountability pressures within higher education, whereas Democrats favored PBF as an accountability measure that did not penalize campuses (McLendon et al., 2006). Governance structures were also important because they are the authority structures that help determine whose interests will prevail (McLendon et. al., 2006). However, when compared to the McLendon et al. (2009) study, the researchers found no evidence that postsecondary governance structure influences state appropriations to higher education.

One critique of the literature on accountability and PBF was included in the conclusions of a qualitative study of the political origins of state PBF of six states conducted by Dougherty et al. (2013b). The researchers posit that in the six states they examined (Florida, Illinois, Missouri, South Carolina, Tennessee, and Washington); little or no concern was expressed about the potential impact of PBF on the quality of higher education opportunity. Moreover, the researchers found little discussion regarding how PBF might enhance access to and success in higher education for underserved populations including low-income students, students of color, or older students (Dougherty et al., 2013b).

From a theoretical perspective, the Cohen et al. (1972) GCM best describes the current higher education budgeting landscape. Specifically, the GCM works best when the features include ambiguity in the decision making process. According to researchers, a majority of public higher education budgets use a combination of three approaches: (1) Zero Based Budgeting (ZBB) where each budget year’s activities are judged anew, with no reference to the policy precedents or dollar amounts of past years; (2) Incremental Budgeting where increases in funding start with a base budget from the current funding year level; and (3) Program Budgeting
where the emphasis is on goals to be achieved according to the level of expenditure (Lepori, Usher, and Montauti, 2013; Reddick, 2003). The higher education budgeting process exhibits characteristics of organized anarchies that researchers suggest rely on many environmental factors such as dependence on tuition dollars, national and international economics, and fluidity of the client groups served (Cohen & March, 1986; Manning, 2013). In fact, incremental budgets reject the notion that decision makers use or actually need rational techniques in budget development (Reddick, 2003).

PBF continues to be a funding strategy for many states; 39 states are actively engaged in using, or preparing to use PBF (Friedel et al., 2013). The trend toward increased policies utilizing PBF accelerated during the past decade due in part to decreased state and national revenue, increased state requirements for direct evidence of accountability by higher education institutions, and the threat of more federal involvement (Toma, 2007). According to Friedel (2013), PBF is a key policy response to accountability and transparency. Moreover, several states have moved to PBF 2.0 designed to align higher education funding with the state’s agenda including workforce needs (Friedel et al., 2013). In addition, the prevalence of PBF models accelerated as states reacted to the ambitious agenda outlined by President Obama which calls for a national college rating system designed to reward colleges’ performance based on an evaluation of key measures including graduation rates, graduate earnings, affordability, and access (Brownstein, 2013; Field, 2013; Friedel et al., 2013; Jaschik, 2013; Riskind, 2014).

**Online Learning in Higher Education**

Throughout the literature, two overarching themes on online learning suggest that online learning has disrupted the higher education industry, and that the quality of the learning and how online education compares to the traditional (face-to-face) instruction continues to be a challenge
for higher education. The literature review focused on research studies, reports and articles that
help to answer questions regarding how well students learn online, and how sustainable online
learning will be in the future. The review begins with a brief overview of online learning, how
researchers define online learning, a review of empirical research regarding online learning
enrollment, retention and completion trends, and issues related to effectiveness and quality.

Ally (2008) defines online learning as educational material that is presented on a
computer. According to Ally (2008), online learning can also be defined as instruction delivered
to a remote audience using the Web as the medium, where students interact with the content,
instructor, and other learners. In addition, an online course is defined as one in which 80 percent
of the course is delivered online (Allen & Seaman, 2014). Moreover, online learning is a subset of
all distance education, providing access, and more flexibility in terms of time and space than
campus-based education which he describes as a learning system constructed around physical
buildings (Anderson, 2008b).

Anderson (2008a) and Taylor (2001), describe online learning as the fifth generation of
distance education. According to Taylor (2001) distance education evolved through four
generations (models), including: (1) the Correspondence Model based on print technology; (2)
the Multi-media Model based on audio, video, and print technologies; (3) the Tele-learning
Model based on the application of technologies; and (4) the Flexible Learning Model based on
online delivery through the Internet (p. 4). The fifth and current generation is one that will
capitalize on the development and use of the World Wide Web and interactive multimedia
(Anderson, 2008a; Taylor, 2001).

Researchers Christensen and Eyring (2011), Kanuka (2008), Sheets, Crawford, and
Soares (2012) theorize that online learning is an example of a disruptive innovation. Disruptive
innovation occurs when a product is introduced into the marketplace that may not be as good as the best traditional offering, but is more affordable and easier to use (Christensen & Eyring, 2011; Christensen, Horn, Caldera, & Soares, 2011; Kanuka, 2008). The disruptive power of the online model comes in the form of the online learning technology which basically provides access to anyone via the World Wide Web (AASCU, 2013; Christensen & Eyring, 2011; Sheets et al., 2012). Moreover, while it may be a disruptive innovation, scholars posit that the online delivery model is one of the most visible and important trends in higher education today, and helps to address state and national education policy concerns regarding increased participation (access), cost (affordability), and completion (Allen & Seaman, 2010; Bowen, 2013; Christensen & Eyring, 2011; Christensen et al., 2011).

William Pepicello, who founded the University of Phoenix in 1976, suggests that the University pioneered online education in 1989 by allowing students to enroll in courses from anywhere there was a phone (Pepicello, 2012). According to Pepicello (2012), all materials including textbooks, and a program disk (which students downloaded to their computers), were delivered by the postal system, “the work was then completed via dial-up modem” (Pepicello, 2012, p. 135). Much of what Pepicello (2012) experienced during the development of the University of Phoenix could be described as stages of Taylor’s (2001) Tele-learning and Flexible learning models. In 2009, the University of Phoenix enrolled 355,000 students, exceeding by more than double the total enrollment of the ten campus University of California system (Christensen & Eyring, 2011).

The for-profit University of Phoenix exemplifies its broad appeal and potential for growth in online learning. In the public sector, the North Carolina Community College System further illustrates the potential for growth as it experienced a dramatic increase in online course
offerings, from 2.4 percent to 37 percent from 2000 to 2009 (Christensen et al., 2011; Mullins, 2013). Similarly, the University of Maryland University College had more than 230,000 enrollments in online-only courses in 2013 (Bell & Federman, 2013). In fact, from a national perspective, roughly 33.5 percent (7.1 million) of higher education students took at least one online course in 2013 (Allen & Seaman, 2014; Bell & Federman, 2013; Bowen, 2013).

Moreover, a 2013 study by the Babson Survey Research Group (in partnership with the College Board) of 2,800 public, private, non-profit, and for-profit colleges and universities in the U.S. indicates that 90 percent of the academic leaders in those institutions suggest that by 2018, the majority of higher education students will take at least one online course (Allen & Seaman, 2014).

The issue of the effectiveness of online learning in improving learning outcomes is a consistent theme throughout the literature on online learning (Akyol & Garrison, 2009; Allen & Seaman, 2013; Bowen, 2013; Figlio et al., 2010; Parker, 2008; Wagner, Garippo, & Lovaas, 2011; Xu & Jaggars, 2013). Xu and Jaggars (2013) posit that a large body of research has compared outcomes between face-to-face and online courses. Xu and Jaggars (2013) suggest that results of many of the studies on online learning outcomes have been mixed in terms of both positive and negative findings. In the previously mentioned 2013 Babson study, 77 percent of the academic leaders surveyed believed that learning outcomes in online education are the same or superior to those in face-to-face instruction (Allen & Seaman, 2014). The Babson study, was based on the perceptions of chief academic officers about the relative quality of online and face-to-face education delivery rather than on the use of empirical evidence (Allen & Seaman, 2013).

Throughout the literature on online learning delivery, researchers discuss effectiveness in terms of the quality of courses and what students should know at the end of class. Higher
education quality, for most of its history, has been judged primarily by academics (Eaton, 2013).

According to Eaton (2013), academics decide what counts in terms of a quality institution, curriculum, program, and an educated student. However, in recent years, the federal government and states have increasingly weighed-in in terms of what they believe should be considered as quality judgments. Recent examples of government quality judgments include President Barack Obama’s call for review of the current regional accreditation process, and a college ratings system that would rate higher education institutions on a set of quality metrics. Moreover, state policymakers have increasingly called upon higher education to demonstrate effectiveness and quality through student outcome metrics such as: increased student retention; degree completion; degree-to-labor market alignment; and, graduate job placement. The focus on metrics has particularly stressed outcomes from low-income and minority students (AASCU, 2013).

Bowen (2013) posits that no one really knows the answers to the question regarding how effective online learning has been in improving or maintaining learning outcomes. According to Bowen (2013), the challenge of many of the studies regarding online learning (outcomes) is that very few are relevant to the teaching of undergraduates, and almost always have serious methodological deficiencies including small sample size. However, Bowen cites one empirical study of learning outcomes conducted by the ITHAKA organization which found that there was no statistically significant difference in standard measures of learning outcomes (pass or completion rates, and scores on exams) between students in traditional (face-to-face) and online classes. The ITHAKA study compared 600 participants at six public university campuses on learning outcomes which they found consistent across campuses, and subgroups of diverse student populations.
Research conducted by Wagner, Garippo, and Lovaas (2011), and Bell and Federman (2013), paralleled the ITHAKA study suggesting no significant difference (grades averaged 86.6% online vs. 88.7% traditional) was found in student performance in online and traditional classes. The Wagner et al. (2011) study was significant in that the research involved a longitudinal comparison of student performance (outcomes assessment) data from 624 students in online and traditional instruction courses across 30 sections of an introductory business course from 2001 to 2010.

Similarly, Bell and Federman (2013) conducted an extensive review of meta-analyses and other studies that taken together suggest that e-learning (online) produces outcomes equivalent to other delivery such as face-to-face instruction. However, Figlio et al. (2010) caution that many studies are not generalizable because the study population may be too small in many cases. In fact, Figlio et al. (2010) posit that a major meta-analysis of available research on face-to-face versus online delivery conducted by the United States Department of Education in 2009 did not have sufficient analysis to conclude that online delivery of materials leads to improvements in student outcomes relative to live delivery versus hybrid method (or live-plus-Internet) delivery. Of the studies reviewed by the U. S. Department of Education (2009), Figlio et al. (2010) suggested that none of the studies included randomly-assigned students taking a full-term course in a setting that could be directly compared.

As suggested by Hiltz and Turoff (2005), online learning is revolutionizing higher education. As the cost of providing higher education continues to increase, administrators, trustees and other key policymakers must continue to explore education delivery strategies such as online learning to improve access and control cost (Bowen, 2013). Moreover, taxpayers, legislators, and interest groups continue to hold higher education leaders accountable in terms of
operating efficiencies and student outcomes assessments. Higher education will continue to look to innovations in technology that enhance online and e-learning delivery.

**Summary**

During the past decade, there have been significant issues confronting U.S. public higher education influenced by ambiguity: enhanced oversight by federal and state agencies; increased demands for governance reform; the need for greater transparency and accountability; reduced state funding; focus on performance/value-added demonstration; and increased operational costs resulting in higher tuition and fees for students. At the same time, disruptive innovations using technology have allowed higher education institutions to respond to many of these issues in an efficient and effective manner. In particular, online learning has made education available to new learners and has allowed institutions to control their costs. Governing boards and administrators have responded to these disruptive innovations by developing and adopting polices that address and support the use of technology in education delivery. This qualitative case study examined how one public university used disruptive innovations in technology to develop policies which focused on access, affordability, and accountability.

**Chapter Three: Research Design**

A qualitative single case study design was appropriate for answering the research question. A qualitative case study research approach was utilized because it employs empirical procedures designed to describe and interpret the experiences of participants within a specific setting (Ponterotto, 2005). According to Ponterotto (2005), a constructivism approach will help the researcher understand the “lived experiences” from the point of view of those who live it day to day (p. 129). In fact, the constructivism paradigm allows for deep reflection which is stimulated by the interactive researcher-participant dialogue (Ponterotto, 2005). Moreover,
Gibbert and Ruigrok (2010) posit that case studies enable a researcher to study phenomena in a real-life setting, where boundaries between context and phenomenon tend to be blurred, or ambiguous (Stake, 1995; Yin, 2009).

Qualitative research is effective at empowering participants to navigate complex systems and issues (Ponterotto, 2010). In fact, qualitative methods allow for an iterative process of ongoing data collection, analysis, and interpretation; allowing for participants’ active involvement in assessing and interpreting data (Ponterotto, 2010). Moreover, unlike quantitative designs where study participants have minimal direct contact with the researcher, qualitative approaches facilitate the participants’ ability to access and describe their experience (Ponterotto, 2010). This type of approach relates to the study because it supports a design that allowed this researcher to generate the data necessary to answer the research question.

**Research Question**

How can an online instructional delivery model influence the development of policies by public higher education leaders and governing boards to improve student access and reduce operational costs?

**Methodology**

The purpose of this single case study was to explore, examine, and describe the process leading to the decision by a higher education institutional governing board (board of trustees), institutional administrators, and faculty to increase online education delivery at a university. Guided by the research question, the case study reviewed UCF and the BOG and focused on the insights and perceptions of the study participants. Moreover, the research examined the relationship between the use of technology and online education delivery, and how governing boards support infrastructure though policy development. Additionally, the research explored the
role of the faculty, institutional leadership, and the governing boards in the policymaking process. The research attempted to answer the overarching question: What were the significant factors (issues) leading to the decision to increase online learning?

**Qualitative Research Design: Single-Case Study**

A qualitative single-case study was used for the research design because single-case studies can reach a deeper level of contextual insight than multiple-case studies (Jarvensivu & Tornroos, 2010). According to Maxwell (2005), a qualitative approach is utilized when the researcher wants to inquire about the meaning participants ascribe to a social or human problem, and how their understanding influences their behavior. Basically, qualitative researchers want to know what the participants think and why they think what they do (Franenkel et al., 2012). Maxwell (2005) posits that a case study approach will study a relatively small number of individuals rather than using large samples and aggregating the data across individuals and situations. A single case study design helped the researcher to analyze the processes that lead to outcomes (Maxwell, 2005). Moreover, the advantage of the single case study approach is the close collaboration between the researcher and the participant (Baxter & Jack, 2008).

Yin (2009) posits that a qualitative research design usually takes place in the natural setting of the participants. In addition, qualitative research gives the researcher the opportunity to explore a topic or a population where the researcher seeks to listen to participants and build an understanding of their perceptions (Yin, 2014). Yin (2014) suggests “being a good listener means being able to assimilate large amounts of new information without bias” (p. 74). Moreover, qualitative research design allows for in-depth analysis of complex and layered issues, with the flexibility to engage in open-ended research questions, data collection protocols using multiple sources of evidence, and analyses of interview results (Butin, 2010; Yin, 2009).
This case study included what Yin (2014) suggests every case study design should incorporate - five important components: (1) a case study’s question(s); (2) its propositions, if any; (3) its unit(s) of analysis; (4) the logic linking the data to the propositions; and (5) the criteria for interpreting the findings. Specifically, Yin (2014) posits that each proposition directs attention to something that should be examined within the scope of the study. Moreover, specific questions and propositions help the researcher to analyze the complex and layered issues, while keeping the case study focused (Yin, 2014).

The single-case study method utilized the constructivist paradigm, which allowed this researcher to reconstruct participants’ understanding of what they experienced at UCF and the BOG during the decision making process to develop policies regarding an online instructional delivery model (Denzin & Lincoln, 2000; Ponterotto, 2005). As the research problem suggests, the research analyzed the impact of online learning delivery on the development of board policy at UCF and the BOG. As outlined in the literature review, the challenges UCF addressed were the result of declining state resources and appropriations, increased demand for access to public higher education, growing concerns regarding cost of tuition and fees, and calls by governing boards and elected officials for increased institutional accountability. Moreover, the significance of the research problem is that it addressed the void in research regarding the challenges public governing boards and universities, like UCF, continue to face and the strategies they employ to address those challenges.

As the Executive Director of the Iowa Board of Regents (the chief public higher education officer and the State Higher Education Executive Officer [SHEEO]), in Iowa, this researcher posits that public higher education governing boards, university administrators, and faculty are challenged to find alternative methods of education delivery, such as online learning
and hybrid methodologies (online and face-to-face classes combined) that increase public postsecondary education access while decreasing the cost of delivery.

This researcher has a nineteen-year history of working for public higher education governing boards in Iowa and Florida. In Florida, this researcher served as the chief of staff and operations (vice-chancellor) for the Florida Board of Governors (the governing board for the 12 public universities in Florida), and the university governing board at Florida International University (FIU). As the SHEEO in Iowa since 2008, this researcher works with the Iowa Board of Regents and the public universities to address issues including: board governance, access, affordability, and accountability. In fact, the Iowa Board of Regents is currently working on accountability initiatives that include PBF models (discussed in the literature review).

This researcher continues to serve in executive positions in higher education which have given him a foundation of experience, knowledge, and understanding of the challenges facing public higher education. Moreover, this researcher utilized his experience to elicit the perceptions and experiences of the participants/unit of analysis in this case study, while taking every precaution to ensure personal biases, when/if present, were acknowledged.

Yin (2014) suggests that case study researchers must have a firm grasp of the issues being studied and they must be able to interpret the information as it is being collected. Specifically, a single case study researcher must understand the theoretical or policy issues because it allows for analytic judgments to be made throughout the data collection phase. The educational leadership and management theoretical framework by Bush (2009) utilizes the ambiguity model, which best explains the decision making process of complex organizations such as universities. Moreover, the ambiguity model by Cohen et al. (1972), called the GCM,
was designed to capture decision making in real-life settings, which reflects the design of this qualitative case study (Styhre, et al., 2010).

The educational leadership and management theory framework guided the structure of the questions investigated. The questions were designed to incorporate many of the themes and concepts explored in the literature review:

**What were the key factors that influenced the adoption of online learning development and implementation?** How did the administration at UCF decide that Web-based instruction opportunities might address the demand for increased access, particularly the increased growth in both overall enrollment and the transfer student population (ECAR, 2003)? Did the level of funding/state appropriation to UCF play a role in the decision to offer online learning? Was space utilization (the efficient use of classroom space) and/or space shortage factors that influenced the expansion of online delivery? Was UCF influenced by growing trends in the use of online education delivery, and what (if any) institutions did they consult with regarding best practices in online learning delivery?

**Who were the key stakeholders in the decision making process to establish and/or develop online learning as a strategic policy initiative?** What was the role of the UCF Board of Trustees (the university governing board) in the decision making process? What was the role of the Florida Board of Governors (the state governing board that must approve university programs that have been authorized by the UCF governing board)? How did administrators, faculty, and students participate in or influence the decision making process? Did external stakeholders such as legislators, business groups, alumni, or others influence the development of policies in online learning?
Did the creation and adoption of the online learning policy result in concerns or challenges for UCF in terms of implementation and infrastructure cost? What barriers did the faculty and/or departments experience in implementing online learning? Did the university provide the necessary resources/funds (appropriations) for implementation of online learning courses? Did the faculty receive the technological resources and necessary software to support the development and facilitation of online course delivery (ECAR, 2003)? Did UCF provide faculty with the necessary support services to assist with instructional design and curriculum development and delivery? Did UCF provide students with the necessary support services to assist them to be successful? Did the faculty and students receive the necessary training and information to ensure the success of online delivery?

Did UCF develop an online learning strategy/model that enabled the university to provide access and affordability while reducing operational costs? According to Bush (2009), studying the decision making process through lenses like the GCM allows researchers to gain insight into how decisions are made. Did UCF benefit from the decision to increase online learning? Has the decision to increase online learning been effective from a strategic and policy perspective? What if any negative aspects were encountered during the implementation process including: problems with technology, faculty complaints or push-back, student success, or decrease in face-to-face contact with students?

What was your overall impression of the effectiveness of the policy to increase online learning? Did UCF meet its objective to serve additional students through online delivery? Did the policy provide sufficient support to continue this effort? What advice would you give to other institutions that are contemplating similar policy changes?
Site and Participants

This case study research took place on the campus of UCF located in Orlando, Florida, and the Board of Governors office in Tallahassee, Florida. UCF is a metropolitan public research university, the largest of the 12 public universities in the State University System of Florida (in 2012, the Florida legislature authorized the creation of Florida Polytechnic University, the 12th university), and the second-largest university in the United States by enrollment. UCF serves a diverse student population of over 60,000 students. The student body represents over 140 countries, 50 states, with women making up 55 percent of the total. Moreover, 95 percent of UCF students are in-state students, and over 30 percent of the students are minorities, including African Americans (10.5%), Asian Americans (5.6%), Native Americans (<1%), and Hispanic Americans (21.5%), (UCF website, 2014).

UCF was the ideal site for this study because the university has several years of experience in online education delivery, policy development, and implementation. The university began its online learning enterprise in the mid-1990s, when enrollment was just over 21,000 students (Cavanagh, 2012). Offering online learning became a key strategy in fulfilling UCF’s institutional mission of educational access (Cavanagh, 2012). According to Cavanagh (2012), rapid growth in enrollment and reduced state funding resulted in several challenges, including the need for construction of physical classrooms to keep pace with the growth. In fact, by some estimates UCF would have needed a 40 percent increase in classroom space, which the institution would not have been able to support without increased state funding (Cavanagh, 2012). In 2013, about 58 percent of the university’s students were enrolled in at least one online course, and over 30 percent of UCF’s total student credit-hour production was delivered online (Cavanagh, 2012).
The participants for the study were key individuals who were identified though institutional records and press reports as having been involved in the policy making process. The eight participants included the president of the university, the chief academic officer (provost), the vice provost for Information Technologies and Resources, the vice president for governmental relations (the chief lobbyist for state appropriations to the institution), the faculty senate chairperson, one member of the faculty, the chairperson of the academic affairs committee of the UCF Board of Trustees (the governing body and policymaking authority for the institution), and the director for academic and student affairs (oversees distance and online education) for the BOG, the state governing board (off-site).

The participants received an invitation to participate in the research study via email and hard copy letter. Information regarding the research was outlined in the letter (see Appendix A). The research purpose and all contact information including questions during the pre-screening interview phase were provided to each participant. A consent form was provided to each participant including the date, time, location, and any other expectations regarding the research logistics (see Appendix B). Finally, each participant was informed that the research would follow the strict guidelines regarding the protection of human subjects including the confidentiality of participants, the voluntary status of their participation, and their ability to withdraw from the research study at any time. Moreover, given the voluntary nature of the participation and strict state rules and regulations in the state of Florida regarding the acceptance of gifts or gratuities to public employees, the participants did not receive any gift or gratuity for their participation.

Data Collection, Triangulation and Data Analysis

According to Yin (2014) “one of the most important sources of case study evidence is the interview” (p. 110). The interviews were semi-structured conversations guided by questions (see
Appendix C) provided in advance of the interviews (Yin, 2009). Each interview was scheduled for approximately 60 – 90 minutes, and the participants were asked to discuss their roles and perceptions of the policy making process, positions they supported on issues, and reasons for the positions (Mills, 2007). The interviews were audio recorded and field notes (memos) were taken during the interviews and coded to ensure accuracy during transcription. Additionally, participants were given opportunities during the interviews to suggest what they considered important aspects of events leading to policy decisions (Mills, 2007).

According to Yin (2003), data collection in case study research should include multiple sources of information. Maxwell (2005) suggests that collecting information (data) from a variety of sources and methods, or triangulation, is an important strategy. In fact, Gibbert and Ruigrok (2010) posit that triangulation of different data sources, such as interview data, archival sources, and participator or direct observation will help to ensure construct validity. Construct validity refers to the extent to which a study investigates what it claims to investigate (Gibbert & Ruigrok, 2010). This study used triangulation to enhance validity and reduce the risk of bias which occurs when sources are limited (Maxwell, 2005). Moreover, triangulation of the sources helped to ensure an understanding of the issues investigated in the study (Maxwell, 2005).

In addition to the interview results, this case study included different sources of data from documents including minutes of meetings, newspaper reports, articles, and memoranda, archival records, and direct observation (Gibbert & Ruigrok, 2010; Yin, 2003). Moreover, the interview tapes were reviewed prior to transcription as Maxwell (2005) suggests this process would help the researcher to analyze the data. Also, the analysis of the data began immediately following the interviews each day in order to ensure that unanalyzed field notes and transcripts did not accumulate (Maxwell, 2005).
Validity and Reliability

According to Baxter and Jack (2008), using multiple sources of data and organizing the data sources including notes, interview audio tapes (files) improves the reliability of a case study. Researchers must ensure validity and reliability/credibility in qualitative research by establishing a formal case study protocol that provides increased reliability (Tellis, 1997; Yin, 1994). In addition to triangulation, this research design ensured both validity and reliability with strategies that included building trust with participants and checking for potential misinformation introduced by the researcher or informants.

Participants in the case study were asked to examine a draft of the transcripts from the interviews to reflect on the accuracy of the information and provide alternative language or input based on their interpretations. According to Maxwell (2005), soliciting feedback about the data from the participants in a study is the single most important way of ruling out the possibility of misinterpretation of the meaning of what participants say and do. Moreover, while Maxwell (2005) suggests the feedback is important to validity of the process, he posits that it is simply evidence regarding the validity of the account.

Yin (2014) posits that reliability in a case study suggests that the operations of the study, such as the data collection procedures, can be repeated with the same results. Moreover, Yin (2014) suggests that case study design should describe the need for the case and why the study is being done. For example, the UCF case study was appropriate because the university experienced significant challenges including loss of revenue from state appropriations, and increased demands for access (enrollment), which were policy challenges that the governing board, the administration, and the faculty had to resolve via a decision making process. The study may add to the existing body of literature that examined the perceptions of participants
involved in the decision making process. The evidence included the process, and the impact of the decisions made by UCF and the BOG.

**Protection of Human Subjects and Ethical Considerations**

As part of the process of ensuring the protection of human subjects, researchers must demonstrate that they understand and have considered any risks that could potentially harm the participants in the study. This research included evidence that the researcher successfully completed the required certification to ensure the protection of human subjects, including evidence (certification) of approval by the Institutional Review Board (IRB) at Northeastern University of the research. Moreover, evidence of the protection of human subjects includes: signed informed consent forms/letters which indicate that the participants in the study were informed of the purpose of the research and understood the option of withdrawing from the research at any time; and the confidential nature of the study which ensured that information about the participants would remain confidential and no identifying information would be used at any time that may compromise participant confidentiality.

Researchers need to be concerned about the potential ethical challenges that may occur while conducting research with human subjects, and they need to ensure that the research design protects vulnerable populations. However, this research did not involve vulnerable populations, which may include children, pregnant women, or those who are incarcerated. Researchers also need to ensure against any personal bias that could potentially impact the research findings. This researcher ensured the neutrality, objectivity, validity, and reliability of the research by debriefing with all the survey participants regarding the intent of the study, by sending the survey instrument in advance, and giving personal assurance to the participants regarding confidentiality, anonymity, and neutrality.
Limitations of the Study

While the study was able to answer the research question and added a significant amount of information to the existing body of literature in the public higher education policy making process, particularly in online learning policy development, it is limited in scope and application. Specifically, this was a single case study that analyzed the policy making and decision making process at one university. Although the findings from the study could be generalizable to a similar institution in a very limited capacity, for example, similar policy challenges and participants in the process, the outcomes are not generalizable. Moreover, the findings of the study may not be able to be replicated in a similar institution because the participants, experiences, and information may not be the same. Additionally, confidential interviews were used as the primary source of information for the findings which may not be generalizable.

Conclusion

This research examined policy challenges facing public higher education governing boards in the United States. During the 21st century, economic and political trends in particular have forced higher education administrators and governing boards to seek greater efficiencies and more sustainable solutions in the delivery of public higher education. While prior research has contributed to the vast body of knowledge that exists in the literature about higher education policy decision making, there remains a gap in the current literature regarding how and why particular policies are developed and the decision making process utilized in the development of those policies.

The research was designed to expand the current body of literature aimed at examining and describing the process leading to the policy decision by the higher education governing board, university administrators, and faculty to increase online education delivery at the
University of Central Florida (UCF). Using semi-structured face-to-face interviews and field notes to collect data, the main purpose of this case study was to gather the insights and perceptions of participants involved in the decision making process. Bush’s (2011) Educational Leadership and Management theory provided the framework for the study because the theory best explains the decision making process of complex organizations like universities. In particular, Bush (2011) suggests that decision making at universities can best be examined using the ambiguity model designed by researchers Cohen, March, and Olsen (1972); a theory they called the “Garbage Can Model” (GCM) or ambiguity in decision making.

Chapter Four: Research Findings

The purpose of this study was to examine and describe the process leading to the policy decision by the public governing boards at University of Central Florida (UCF), and the Florida Board of Governors (BOG) and institutional administrators to increase online education delivery. As the research problem outlined, the focus of this study was to analyze the impact of online learning delivery on the development of board policy at UCF and the Florida Board of Governors. UCF began online education delivery in the mid-1990s in response to rapid increases in enrollment and funding decreases. Moreover, UCF used online education delivery as a strategy to increase access and affordability while it was faced with challenges including a significant decline in state appropriations (funding), and increased political pressure to produce quality programs and graduates while instituting more cost efficient practices.

This chapter presents the key findings and results of the data collected in interviews conducted at UCF, and the Florida Board of Governors (BOG) office in Tallahassee, Florida. The eight participants in the study include the president of the university, the chief academic officer (provost), the vice provost for Information Technologies and Resources, the vice
president for governmental relations (the chief lobbyist for state appropriations to the institution), the faculty senate chairperson, one member of the faculty, the chairperson of the academic affairs committee of the UCF Board of Trustees (the governing body and policymaking authority for the institution), and the director for academic and student affairs (oversees distance and online education) for the Florida Board of Governors, the state governing board. They will be referenced as participants A-H (in no particular order). Three major themes emerged in response to the questions during the interviews (see Appendix C).

The themes included: 1) State and UCF online education policy development as related to the mission of increasing access, affordability, and accountability; 2) The role and influence of external stakeholders (state elected leaders, governor, and legislators) in the development of online learning policies; and, 3) The role of the UCF BOT and the BOG in the development of online learning policy in Florida’s public universities. The two subthemes included the role of politics and political pressure regarding online education delivery models and policy; and, student learning outcomes, quality, faculty instruction and development.

**State and UCF Online Education Policy Development**

Public higher education in the state of Florida began distance education (pre-online learning) policy development with the creation of the Post-Secondary Distance Learning Task Force in 1994 by the state Board of Regents (the governing board for the 11 public universities in Florida prior to a change in the governance structure resulting in the creation of the Florida Board of Governors in 2003). According to participant G, one of the first entities that engaged in distance education (later online) was the Florida Engineering Education Delivery System (FEEDS) program, which provided distance learning as an outreach effort to professional
engineers, providing graduate-level education and course offerings across the state university system.

Florida’s public universities, which total 12 as the state recently created Florida Polytechnic University in 2012, have had a great deal of autonomy to determine what education programs and delivery modalities best fit their particular university mission and strategic plan. Early online policy development was encouraged by the regional compact known as the Southern Regional Education Board (SREB). The SREB created an electronic campus, a virtual campus that includes all 16 of the SREB states, to help drive policy development in distance and online learning. According to participant G, the SREB efforts were important to the universities and “were really driving the train with regard to online course development and online program development.” Although there have been several initiatives throughout the past two decades involving studies, task forces, and summits to discuss online learning - The Orange Grove - which was the digital repository for online learning objects was the primary state-level coordinating organization for state policy development in online learning until about 2011.

The consensus among the eight participants was that UCF was one of the first of Florida’s public universities to embrace online learning, which began in 1996 with just a few programs. The university began offering courses and programs in distance learning as a way of extending the resources of the university. In particular, university administrators at the time made the decision to invest in distance learning as part of a strategy to answer growing concerns from students who experienced scheduling and timing challenges with campus-based courses (offered face-to-face).

Participant D suggests that “UCF did not start out with the idea that they were going to do a separate enterprise online.” According to the majority of participants the strategy to create a
distributed or distance learning model, which later included online and a hybrid modality called mixed-method, was fundamentally created to meet the demands of existing students. The strategy was designed to provide access and help students to graduate on-time (4-year graduation), which also helped to increase affordability. The strategy did not take a great deal of complex policy development – and it has worked since its inception.

While many individuals were part of the development of the distance and online programs at the university, the majority of participants in this study attributed the success of the UCF model to the visionary leadership of two individuals, President John C. Hitt, who has served as president for over 22 years, and Dr. Joel Hartman, who serves as Vice Provost and Chief Information Officer (CIO). Their collective vision has allowed the institution to successfully take advantage of the rapidly growing technology and outreach to the college deans, faculty, and others with a strategy that basically suggests – let me know what you need and I will help you in whatever way possible.

In 1997, UCF developed the blended modality (called mixed mode) which basically means that students meet face-to-face once a week, and the rest of the time is online. Today, UCF offers classes in several modalities including: face-to-face, fully online, web and lecture capture (which features digital recording of lectures that can be viewed live or reviewed at any time), and blended. While convenience and flexibility were identified by several participants as the primary reasons why students generally take online classes, the UCF model serves both the campus and the students in terms of choice and opportunity. In fact, participants suggest that the model builds access while allowing students to participate in many other campus-based activities that they would otherwise not be able to take advantage of if they did not have the flexibility in their schedules. Moreover, in terms of access, the model caused a shift from what was primarily
a face-to-face modality at the regional campuses, to one offering online to regional and main campus students. UCF campuses initially believed online delivery would place them at a competitive disadvantage; however, the online modality actually did just the opposite, as it helped to increase the credit hours offered by the regional campuses.

Participant C suggests that “one of our goals is access for our students and online has allowed UCF to achieve that goal.” The UCF model has allowed the university to leverage the small number of faculty with the large student population. Additionally, the model allowed the university to outreach to the military, and other place-bound students (those students who are unable to take classes at the main or regional campuses due to distance or other challenges), providing the resources and opportunity to access over 60 university degree programs fully online.

Part of the UCF access strategy is based on a philosophy of becoming a partnership university, which several participants suggest has been a key to the success of UCF. Partnerships were forged with the then community colleges (which are now called state colleges under the umbrella of the new State College System established in 2011 for Florida’s 28 community colleges) allowing students with an associate of arts degree to be admitted as a full-time student to UCF. Participant F suggests that UCF is an “opportunity university” providing access to academic excellence and opportunity to students regardless of socioeconomic, academic, cultural, ethnic or racial background. Participant F acknowledges that UCF’s partnership strategy also helped build lasting relationships with major industry and business in Central Florida, such as Disney, Universal Studios, hotel chains, NASA, and other industries which intensified and strengthened the role UCF plays in the overall economic development in Orlando and Central Florida.
The majority of participants posit that access was enhanced at UCF because the university increased its overall student credit hour offerings significantly, which was due primarily to enhanced online offerings. Specifically, participant B indicated that from 2002 – 2014 student credit hours increased over 50 percent – from about 990,000 hours in 2002 to just over 1.5 million hours in 2014, with online hours increasing from 8.82% of the total in 2002 to about 35.89% in 2014 (see Appendix D). Participants suggest the growth in online hours has effectively made the institution much more efficient as both need for space and capital costs for building new classroom space has not kept UCF from growing its student population (access), or increasing class offerings, despite not having sufficient resources to fund the growth. Moreover, according to participant H, blended courses helped to make UCF much more efficient due to strategically scheduled classroom utilization.

While affordability and operational cost were concerns identified by the participants, they were in general agreement that UCF continues to make every effort to keep student cost down despite the fact that tuition at all Florida universities remains relatively low and competitive when measured against other public systems across the United States. However, Florida’s public universities did experience considerable appropriations decreases during the recent economic recession in 2009 – 2011, particularly due to the depressed housing market. In fact, during this period, UCF lost about $144 million as a result of state budget cuts. Several participants reported that, as a result of the revenue loss, the state legislature (which authorizes tuition increases for the system) allowed the university BOTs to increase tuition by as much as 15 percent each year for a period of three years (the original legislation allowed for increases over five consecutive years). Currently, UCF continues to be challenged by the budget cuts, together with the fact that
there were little or no increases in state support; furthermore, most universities were not allowed to increase tuition.

Participants reported that the Florida governor and legislature have increasingly called upon the BOG and the universities to become more efficient and accountable for the state appropriations (taxpayer dollars) received. Participants were asked to give their perceptions of the newly mandated BOG accountability initiative on Performance Based Funding (PBF), which is a formula based on incremental budget growth in which points are given for each performance metric achieved. The participants believed PBF was a good idea and would help UCF showcase efficiencies and accountability. In fact, participant F viewed it as an opportunity to focus attention and energy and limited resources on the areas the BOG believed was necessary in order to accomplish the goals identified for the system. The general perception among the participants was that UCF did exceptionally well in the performance funding rankings (UCF ranked second of the 11 institutions in terms of points), where UCF was rated on metrics such as: cost per undergraduate degree; six-year graduation rate; Science, Technology, Engineering, Math (STEM) graduates, and University Access Rate (percentage of undergraduates with Pell-Grants).

The Role and Influence of External Stakeholders in Online Policy Development

Participant G indicated that the state of Florida goes through cycles every few years in terms of what influence external stakeholders, such as legislators, the governor, business leaders, and others, have on education policy development – particularly online education. Participant G suggests that every few years, as state and legislative leaders change, “someone redisCOVERS distance and online learning.” According to participant G, it is likely that legislators, staff, or other interested stakeholders will begin to ask questions about what is going on in terms of online learning, and they may offer their own ideas about what they believe should happen.
Participant G believes that quite often these individuals are influenced by a constituent, someone they met, a vendor, or someone who would like to influence education policy development in the area of online learning. Participant G states “the heightened interest in online learning often leads to further investigation or study, task force, summit, or some other vehicle” to discuss in what direction the state should move. Moreover, participant G acknowledged that strong interest in online learning is in part driven by “a desire on the part of legislative leaders and others to try to build as much efficiency in higher education as they could.”

Participant G suggests that there are a number of different perceptions and concepts associated with online education delivery, and some state policymakers associate reduced infrastructure costs (the cost of building and construction) as increased efficiency. According to participant G there is “a perception that you do not need new buildings, you can build one course, and every student in the world can go and take the course.” However, participant G posits, in reality, that is not the case. In fact, UCF was a leader in terms of developing a strategy that effectively expanded course offerings without expanding facilities at a parallel rate.

The consensus among participants was that funding for new building and classroom space was a major concern of legislators. In part, the concern was due to the fact that state resources for new construction for public universities were almost nonexistent as revenues from the gross receipts tax on utilities, particularly land line phones, were in steady decline. The taxes funded the Public Education Capital Outlay (PECO) appropriations for bonding of non-auxiliary (academic and classroom space) university facilities. According to participant E, PECO funding has steadily declined “and finding classroom space is a huge challenge for us, because we are so big and have grown so fast.”
Participant B suggests when you look at the overall growth of UCF from 1995 when the university faced about a 42 percent shortage in classroom space by state standards, that in 2014 the shortage had not decreased, and yet with online learning UCF's enrollment has grown to about 60,000 students, making it the largest university in the Florida system. In fact, according to participant B, classroom space needs would have led to capital construction cost increases of almost $70 million dollars, not including plant, operations, and maintenance (POM) costs of about $4.1 million dollars per year; costs that UCF was able to avoid due to its overall strategic planning process.

According to a consensus of the participants, external stakeholders, particularly elected officials including the governor and legislature, play a significant role in the development of state online education policy. Participant B posits that “the legislature and the BOG have had much more involvement in online education in the last three years than at any time in the recent past.” For example, in 2012, the legislature created UF (University of Florida) Online with the expectation that the UF brand and reputation would help to address any concern about the quality of online offerings. The legislation gave a special appropriation of $35 million over a five year period, to assist the university in offering a 25 percent tuition discount to students taking online classes. The legislation also called for the creation of a task force to study and report recommendations on the future direction of online learning in Florida. The task force made nine recommendations before concluding its work. Subsequently, the BOG created an “Innovation and Online Committee” to address the recommendations around online learning.

Participant C posits that there have been a number of initiatives in the state driven by individual agendas in the legislature. For example, several participants observed that the legislature discussed different higher education delivery models including the Western
Governors’ University model where you have one entity offering all online classes, also referred to as competency-based education, and Massive Open Online Courses (MOOCs) which are free courses; however, they have significant startup costs, no ability for student faculty interaction, and have average completion rates of less than ten percent. Other legislative initiatives include the one introduced by Florida House of Representatives Speaker Will Weatherford with an emphasis on online learning – which created UF Online. In fact, participant E posits that Speaker Weatherford “seemed to be the driving force regarding more online learning” with the vision that a university that met “preeminence” (a metric-based designation created in legislation) criteria would lead the effort for all the public universities in Florida.

According to participant C, decisions by the governor, legislature, and the BOG often factor-in cost and “What’s the best, cheapest way to deliver content.” However, not much consideration is given to the importance of student contact with faculty, other students, and campus resources. In fact, participant B posits that most of the high-level actions do not use data to inform decision making. Several participants were in general agreement that state actions were not so much informed decisions based on a rationale, as they were political decisions based on a desired outcome.

The process followed by the legislature is typical according to participant G who observed that “the process is such that there will be no consensus going into it to begin with. What typically happens is that a study will come out of it.” The study process affords other key stakeholders an opportunity to weigh-in on the process and ask questions or raise issues that need to be resolved. The end result according to participant G is that the study gets “written into statute as policy, or in some cases not written as statute, but supported through the appropriations process as an initiative of several stakeholders involved in the process.” In fact, that is what
happened in the case of Speaker Weatherford’s legislation which was designed to create a state designated online provider. Several of the participants reflected on how the legislation called for a study, and how the study – called the Parthenon Group study - recommended what later became UF Online, and Complete Florida Plus (a library system to help facilitate the coordination of online resources through the University of West Florida).

The participants were also in general agreement regarding some of the unintended consequences of the legislative interest in online learning. For example, participant D posits that during the discussions with legislators and other key stakeholders regarding online learning offerings, and the existing infrastructure and other support, the perception of many university administrators and members of the UCF BOT was that “it was a very positive exercise because legislators seemed generally pleased with what had already been accomplished at UCF and Florida’s public universities around the state.” However, ambiguity remains in terms of legislative intent regarding online and other education delivery in Florida’s public university system. As observed by several participants, the state has not been very clear about what the endgame is with the UF model.

**The Role of the UCF BOT, BOG in Online Learning Policy Development**

As discussed earlier in this section the governing boards for UCF and the state university system have played a role in the development of online learning policy and implementation. According to the participants, the support for the academic enterprise by the university BOT has been outstanding. University officials give periodic updates and program review before the Education Program Committee, the academic committee of the UCF BOT. The review and approval process by the UCF BOT has been in place since the creation of the universities’ BOTs in 2003. In fact, “the local BOT have taken no overt or direct role in shaping or limiting online
programs” according to participant B. However, in recent years the BOG has taken a much more active role in both policy development and implementation. An example of this is the post-legislative action process that created UF online, whereby the BOG managed the legislatively created task force and just before the task force completed its work, a new recommendation rose to the top of the agenda called “the institution model” which later became the UF online model.

It did not seem entirely clear to participants why the state initiated the Parthenon Group study, the task force, or the creation of the preeminence status, although several participants believed it was directly related to UF’s status as the only Association of American Universities (AAU) institution in Florida; this organization recognizes the top 62 research universities in North America, 34 of which are public. Also, the consensus among participants was that the UF brand gave some key stakeholders in the decision making process a sense that the brand was equivalent to quality.

All of the participants believed that UCF offered high quality programs and the institution made significant efforts to ensure student and faculty satisfaction. As participant B indicated “in 1996, UCF began a rigorous, continuous assessment at an institutional level.” The data are collected on students, faculty, and on institutional impact to assess success, satisfaction, and other factors related to both the cognitive and effective parts of the online learning environment. “The data have been extraordinarily valuable in informing the practice so they know what works, when it works, and with whom it works” posits participant B. The consensus of the participants indicates that the data collected and analyzed by UCF reassured them that quality in online learning is not a concern. In fact, participant D posits “that we have been able to show students, as near as we can measure their learning, are at the same or maybe even slightly better in online/mixed mode instruction.” Moreover, the data regarding student perception of a
desirable course suggest that the mixed mode of instruction gets the best rating from students, followed by purely online and face-to-face instruction.

In 1996, UCF initiated quality control, assessment, faculty development, and evaluation at the same time the institution began offering online classes in blended and hybrid (mixed mode). According to the participants, UCF began the evaluation protocols in order to evaluate institutional effectiveness and have the data to ensure institutional progress. The protocols were developed by the director and staff of the Research Initiative for Teaching Effectiveness (RITE) under the umbrella of the Center for Distributed Learning (CDL). The CDL evaluates distributed learning of all of the populations, and the university culture, to support the scholarship of teaching and learning. All of the participants were familiar with the work of the CDL and overall were highly complementary of the impact of the support and direction of the center.

According to participant H, RITE plays a key role in the evaluation of both quality and effectiveness of various teaching modalities and supports the scholarship of teaching and learning particularly “looking at the impact of technology on learning outcomes, on the teaching enterprise, and on the many aspects of disruption that technology may or may not cause in the learning environment.” Specifically, participant H suggests that “the center evaluates big data and looks for trends that will help to inform the decision making process which is a critical piece in education policy development.”

Participant H posits that “students make no distinction in their evaluation of courses based on modality.” In fact, participant H stated that “the data suggests that certain modalities in the online environment have been marginally higher in terms of student rating,” which was also noted by participant D. Moreover, UCF’s approach has been to evaluate effectiveness while ensuring that there is a high degree of faculty development that gives the faculty the tools
necessary to guide them in terms of best practices in student interaction. According to participant H, in order for faculty to offer online classes, a member of the faculty would need to get approval from the department chair, and the dean. In addition, participant H posits that “faculty need to enroll in a development course and would typically have two semesters to prepare the module (class).” Faculty who teach online are given many development tools in order to help them develop every aspect of an online class. They are also required to make an investment in time as they must take about 80 hours of training (education). Since the program began, about 1,600 faculty members have participated.

**Research Findings: Secondary Data Sources**

The secondary data sources used in this section focused primarily on the themes identified by the interview participants and helped to confirm, support, or add clarity to the interviews. To begin this section, archival and newspaper data sources were used to piece together an accurate chronology of dates, times, and events regarding postsecondary distance learning policy development at the UCF, BOG, and the state level (legislature). The sources indicate that early stages of policy development began with activity in distance education at the state level during the 1994 and 1995 Florida legislative sessions which included an appropriations act directing the State University System (SUS) to develop a Distance Learning Addendum to the SUS Master Plan in coordination with community colleges. The act recommended that a Florida Distance Learning Network (FDLN) be established to plan, design, coordinate, and deliver distance learning provided by the public schools, community colleges, and the state universities to be administered by the Board of Regents (Florida Board of Governors, n.d.).
At the same time the state of Florida began online policy development, several participants suggest that UCF began looking at online learning in 1995-1996 as a way to address access and manage growth. In fact, participant C suggests “one of our goals is access for our students and online has allowed UCF to achieve that goal.” This view was corroborated by institutional documents which reflect that UCF began its online strategy in 1996 as “an institutional response to the need for increased access to higher education in a rapidly-growing region” (Hartman et al., 2007). Moreover, the institution viewed online as an opportunity to: increase student engagement and learning outcomes; focus on technology enhanced teaching and learning accompanied by faculty development and assessment; and, improve efficiency in using scarce classroom resources (Hartman et al., 2007).

The access strategy utilized by UCF was identified by the participants as having two overarching challenges, including: 1) How to fulfill the institutional access mission by increasing student enrollment given the increased pressure on both the UCF budget, and the physical campus infrastructure; and, 2) How to maintain quality of instruction and student satisfaction. Specifically, some of the participants posit that there has been a slow and steady disinvestment in public higher education in Florida over the past several years. Several statewide newspaper accounts confirmed the participant perceptions regarding state disinvestment. In fact, two reports indicated that support for universities shrunk by $1 billion in 2007 - 2012 (Haughney & Deslatte, 2013; Poliakoff & Alacbay, 2014). Additional newspaper reports suggest that of the $300 million lawmakers cut in university funding in 2012-13, UCF suffered one of the biggest hits in the State University System (SUS) of more than $50 million (Balona, 2012). Overall, from 2009 – 2011 UCF lost over $144 million in state revenues to budget cuts (Balona, 2012).
Several of the participants posit that UCF developed the blended modality (mixed mode course where 30%-79% of the instruction is delivered via technology) in 1997 to achieve one of their core goals – student access. However, blended courses were also used as a strategy to compensate for physical infrastructure challenges, particularly limited classroom space (Dziuban et al., 2011). In fact, UCF experienced unprecedented pressure on the physical campus infrastructure due to its rapid enrollment growth during the past decade. One of UCFs key strategies uses creative course scheduling of blended courses in existing facilities by placing two or three courses in a single classroom during the same class time staggered throughout a week (Dziuban et al., 2011).

According to a 2003 Educause research study that reviewed drivers behind e-learning initiatives at institutions nationally, “mixed mode” courses were used to alleviate physical space shortages resulting from soaring enrollment (Arabasz, Pirani, & Fawcett, 2003). The study suggests that UCF used a hybrid online course (a reduced-seat-time) model as a strategy because rapid growth was outstripping the institution’s ability to build classroom space (Arabasz et al., 2003).

While the 2003 Educause study confirmed the hypothesis of some participants regarding UCF’s online strategy, the BOG SUS Strategic Plan 2012-2025 confirmed participants’ observations that the PECO capital funding structure was insufficient to address classroom shortage challenges at UCF. Specifically, participants posit that resources for new construction for public universities were almost nonexistent. In fact, as participant B posits, UCF faced a 42 percent shortage of classroom space or about $70 million in construction costs (plus maintenance costs of over $40 million) during UCF’s growth from 1995 – 2014. Participant E stated that PECO funding had steadily declined and finding classroom space was a huge challenge for UCF.
In fact, the BOG Strategic Plan suggests the decline of PECO, the primary source of constructing facilities (classroom space), is harming physical plant upkeep and constraining university growth (Florida Board of Governors Strategic Plan 2012-2025, 2011).

**Online Learning Policy Decision Making Process**

As suggested by a consensus of the participants, policy development was structured as a very thoughtful and inclusive process. According to the participants, part of the policy making process regarding online learning was to ensure resources and support services were available throughout the institution. The online policy decision making process began with the development of goals and objectives discussed by senior leadership that was followed by planning meetings with deans, department chairpersons, and faculty members which included policy formation discussions with faculty particularly in the areas of intellectual property, and support services (Hartman et al., 2007). In fact, UCF established institutional goals that included: identifying potential online degree programs; faculty professional development and support; and, online support services for faculty and students including evaluation and assessment methodologies (Hartman, Dziuban & Moskal, 2007).

Several participants attributed the success of UCFs online strategy to early development of evaluation, and assessment protocols to ensure overall quality control for assessing data on both faculty and student satisfaction, and student success and failure in online courses. Assessment protocols specifically addressed issues of quality regarding both the traditional face-to-face instruction and online courses. Moreover, UCF’s Center for Distributed Learning (CDL) offers a comprehensive faculty development program to help faculty design and deliver courses in an online modality (Dziuban et al., 2011).
As noted earlier in this study, participant G stated that the heightened interest of legislators in online learning often leads to the creation of a study, task force, or legislation regarding online education policy development. Participant G’s reflection is consistent with numerous documents and reports examined that suggest the desire by state elected officials to be directly involved in the decision making process regarding online education policy development. Legislators were specifically interested in collecting and analyzing data regarding the number of students enrolled in distance learning courses (headcount) and the number of students earning credit in distance education. Moreover, both the legislature and the BOG tracked the progress of several legislative directives and initiatives, such as the Florida Distance Learning Consortium (FDLC) and the Florida Distance Learning Task Force.

The FDLC was established in 1996 in administrative rule by the State Board of Community Colleges to advise on policy and fiscal issues related to distance learning, provide resource sharing, and coordinate the use of technology-enhanced educational resources that support the mission of Florida educational institutions to ensure maximum access to education for all Florida residents by eliminating the barriers of distance, time, and place (Cobb et al., 2009). In 2003, the Florida Virtual Campus created for the BOG consolidated into a single entity called the FDLC which operated informally until it was formally established as a “higher education collaborative to assist institutions in the implementation of distance learning policy as defined by the legislature, BOG and State Board of Education” (Cobb et al. 2009, p. 3).

The Florida Distance Learning Task Force was created by the legislature through House Bill (HB) 7105 in 2008. The nine-member Task Force was appointed by the Chancellors of the State University System and the Florida College System. In a 2009, report the Task Force issued recommendations and findings that parallel several policy areas identified by the study
participants. Specifically, the Task Force report issued 26 recommendations that were listed as three separate categories including: 1) Critical State Policy Recommendations; 2) Essential Support Activities; and, 3) Strategic Goals of the State (Cobb et al., 2009).

Task Force recommendations that parallel policy areas discussed by participants included: Professional development of faculty and staff in the development, evaluation, and enhancement of distance learning courses; Opportunities for partnerships among educational institutions, businesses and communities; Accountability (of distance learning) in terms of increasing student access, and cost effectiveness; and, a recommendation that college and university boards of trustees should encourage the expansion of distance learning course offerings and implement a process for evaluating new technologies and to improve instruction, student learning and overall quality of distance learning courses and programs (Cobb et al., 2009). Moreover, the report suggests “the disruptive effects of rapid technological change on the nature of instruction will challenge the institutions to address state priorities (Cobb et al., 2009).

As suggested earlier in this study, participant B opines that during the past three years (2011-2014) the legislature and the BOG were more involved in online learning policy development than in the past. Specifically, in 2012 the Florida House of Representatives HB 5201 (Chapter 2012 – 134) repealed s. 1004.091, F.S. (Florida Statues), an act that established the Florida Distance Learning Consortium (established two years earlier). HB 5201 also established the Florida Virtual Campus (FVC), including a state appropriation to fund the new entity. The FVC was created to provide access to online student and library support services and serve as a clearinghouse for technology-based public postsecondary education distance learning courses (Florida House of Representatives, 2012).
Several participants recalled that the legislature provided funds in 2012 to the BOG to hire a consulting firm that would study online education in Florida. While numerous press stories confirm the observations made by the participants, which includes participant B’s account of legislative involvement, one story in particular suggests that the Florida Speaker of the House, Will Weatherford, helped secure $300,000 in state funds to hire a consulting group to study online learning and make recommendations to the BOG and the legislature. Moreover, Speaker Weatherford wrote a letter to the Chairman of the BOG, Dean Colson, to seek support for an online university (Chen, 2012).

BOG records indicate that The Parthenon Group, based in Boston, Massachusetts, was awarded the contract for a scope of services (see Appendix E) that included: an analysis of existing online postsecondary programs in Florida; an assessment of educational opportunities needed to boost Florida’s economy; and, options for expanding and awarding degrees (Board of Governors, Strategic Planning Committee, 2012). In fact, a letter from The Parthenon Group to the BOG dated November 16, 2012 states the online university study lasted four months and examined potential online strategies for consideration (see Appendix F). The letter also outlined four primary objectives for online learning in Florida including: 1) Expanding access; 2) Reducing system and student cost (efficiency/accountability); 3) Strengthening the link between the labor market and post-secondary education (partnerships with business); and, 4) Enhancing the student experience (quality). The areas highlighted in the report were consistent with the major areas discussed by participants during the interviews (see Appendix F).

The Parthenon Group report recommendations also outlined four strategic options that would be tied to labor market needs and aim to lower recurring per student costs to the state, including: 1) State (the legislature/BOG) will clarify the objectives of expanded online learning
models; 2) Institutional Collaboration where system-wide degree program offerings are developed under the direction of a coordinating body, such as the BOG, FVC, Florida Department of Education, etc.; 3) Lead Institution where one institution is selected to drive the development of new online programs in target degrees and disciplines where the selection is based on a process emphasizing existing best practices and organizational strengths; and, 4) Creation of a new Online Institution (Toothman, 2013).

All of the participants interviewed mentioned the Parthenon Group study and were aware of the four strategic options outlined in the final report to the BOG. A consensus of the participants perceived that option three, which designated a lead institution to develop and offer new models across the State University System (SUS), as the first step to having UF designated as the lead (Ladd, Lytle, & Webb, 2012). In fact, a Florida House of Representatives Staff Analysis for HB 7057 suggests that the bill establishes academic and research excellence standards for universities to be designated as a preeminent state research university (see Appendix G). HB 7057 granted the BOG the authority to designate a qualifying institution as preeminent providing they meet twelve standards (see Attachment G).

Additionally, HB 7057 established that the state university that attained the highest levels of research standards for preeminence “must establish an institute for online learning, subject to funds appropriated by the legislature” (see Appendix G). Also, BOG records indicate that an agenda item from a BOG “Workshop on the Expansion of Online Education” held on December 17, 2012 stated that following a presentation by the Parthenon Group regarding the study recommendations (the Parthenon Group study was done in early 2012), the BOG Strategic Planning Committee and the Board would need to make policy decisions in order to make recommendations to the Florida legislature on how to proceed.
Conclusion

In summary, the purpose of this study was to examine the process leading to the policy decisions in online learning. The findings of the case study, as evidenced by the responses of the participants and the triangulation of secondary resources, addressed the research problem and problem of practice. Specific examples of participant perceptions of public higher education issues addressed how higher education officials at UCF and the BOG responded to the challenges of decreasing operational costs and increasing student access. Participant F posits, when you look at “the economic pressures that all higher education is facing and the advances in technology and adaptive learning … there is a huge upside in this technology for the future of education in the U.S. and here at UCF.” According to participant G, technology has been incorporated into the very fabric of the institutions and “online concepts no longer exist outside the traditional role of universities.” However, as articulated by participant G, a significant issue remaining, is that “the entire dialog around distance education and online is that people still tend to see it as some new thing.” In general, the participants were in agreement that, if you are not engaged in some complement of online or hybrid learning modality, you are far behind the time and cannot remain competitive for faculty and students. In chapter five, the research findings will be reviewed in relation to the major areas of the study.

Chapter Five: Discussion and Implications for Practice

This qualitative single case study utilized both primary and secondary data to discuss the purpose of the study, to examine the process leading to the policy decision by the public governing boards at UCF and the BOG to increase online learning. This chapter begins with a discussion of the three major themes: 1) State and UCF online learning policy development related to the mission of increasing access, affordability, and accountability; 2) The role and
influence of external stakeholders, including elected leaders in the development of online learning policies; and, the role of the UCF BOT and the BOG in online learning policy development; and, the subthemes including: the role of politics and political pressure regarding online education delivery models and policy; and student learning outcomes, quality, faculty instruction and development.

This chapter will review the research findings in relation to the major areas of the study including: the literature review; the theoretical approach; the significance of the study; and concluding thoughts including the implications of the finding for the practice, and what future research might be explored. The theoretical approach examined the applicability of Bush’s Educational Leadership and Management Theory, with a focus on the ambiguity theory to the research study. Moreover, the chapter will examine the GCM developed by Cohen et al. (1972) and discuss the four major streams of the GCM relationship to the primary sources including the participant perceptions and secondary data sources. Additionally, the chapter will discuss how the findings addressed the research problem, purpose of the research, and the research question:

How can an online instructional delivery model influence the development of policies by public higher education leaders, and governing boards to improve student access and reduce operational costs?

The Literature Review: Relationship to the Findings

The study began with a description of the landscape of higher education and why there was a need to study the proposed research question and how the data gathered from the research addressed specific areas of concern such as: the role of governance in the higher education policy decision making process; and, the importance of access, affordability, and accountability in higher education policy decisions. The study also addressed how online learning developed in
the past two decades to the point where many higher education decision makers, like governing boards, university administrators, and other key stakeholders including legislators and governors, used online education delivery as a strategy to address challenges created by budget cuts to state appropriations at public universities, and overall chronic budget instability in higher education funding (Wellman & Chaffee, n.d.).

As the literature review for this study suggests, during the past few decades, governing boards have been faced with many significant challenges including: increasing access, improving efficiency, competitiveness, coordination, and innovation (McLendon et al., 2007; McGuiness, 1997; Tandberg, 2013). The major themes discussed by the participants and documented in numerous secondary sources, confirm the challenges addressed in the literature review, and the perception by the participants that the Florida SUS, and UCF in particular, were equally challenged by many of these issues. Furthermore, the most recent BOG Strategic Plan 2012-2025 illustrates that many of these policy issues continue to be both a challenge and a policy priority for the SUS. Specifically, the BOG Strategic Plan calls for: increasing efficiencies; expanding access; providing more coordination of programs; and, broadening the use of innovative methods of education program delivery, including online learning and digital technologies (Florida Board of Governors, 2011).

The literature review section on governance indicated that Florida’s public higher education governance structure faced the same scrutiny as many other systems throughout the U.S. regarding calls for reform measures centered on the themes of improving access and efficiency. However, based on the participants’ observations and perceptions, UCF was several years ahead of its sister institutions in terms of policy development and implementation of alternative education delivery models, particularly online learning, that specifically addressed
governing board concerns of access and efficiency. The participants credit the success of policy development in online learning to the inclusiveness of key university stakeholders, and shared governance in the decision making process from inception, which they attribute to UCFs president and senior leadership.

One of most significant findings was that shared governance was a factor in both the policy making and decision making process in the development of online learning at UCF. The finding is supported by information obtained by the participants during the interviews and confirmed by triangulating data included in literature review and other secondary sources reviewed during the pre/post-interview research phase of the study. The literature review included numerous studies and research, such as Bataille et al. (2013), which indicates that if shared governance is respected and practiced, key stakeholders such as faculty and administrators will help develop policies that will support an institution’s efforts to fulfill its goals.

Based on the perceptions that the majority of participants expressed during the interviews, the practice of shared governance played a key role in both the policy making and decision making process. In fact, evidence of the perception of inclusiveness came from participants’ answers to the question “Who were the key stakeholders in the decision making process regarding policy changes in online education delivery at UCF?” (see Appendix C); and, secondary sources which included peer reviewed articles where researchers posit that at UCF online policy development and decision making included planning meetings with senior leadership, deans, department chairpersons, and faculty (Hartman et al., 2007). Moreover, participants also expressed praise and appreciation for the support and encouragement of the
university BOT in working with the faculty and administration to approve expansion and
development of online programs.

Another significant finding was that UCF was able to increase access to students by
significantly expanding its course offerings during a period when state budget appropriations and
tuition resources did not keep pace with the resources necessary to expand programs and
classroom space. This finding was determined after analyzing data and information obtained from
several questions asked during the interviews that focused on trends in public higher education in
the U.S. and in Florida that influenced the decision by UCF to formulate an online learning
strategy. One question specifically asked participants how online learning addressed the
need to increase access, affordability, and accountability? Participants posited that UCF designed
a strategy that focused on expanding distance and online programs to directly address the access
challenge. In fact, as discussed in chapter four, from 2002 – 2014 student credit hours increased
by 50 percent – from 990,000 hours in 2002, to over 1.5 million hours in 2014. Online hours
increased from 8.8 percent in 2002 to almost 36 percent in 2014 (see Appendix D). Also, by
offering a hybrid modality or mixed mode delivery, UCF was able to address both access and the
recurring budgetary constraints which would have made any expansion of programs, or courses
virtually impossible for the institution to achieve, due primarily to the shortage of classroom
space.

In addition, it appeared that the hybrid model strategy indirectly became part of the
solution to the concerns about the sustainability of the PECO funding model. Concerns about the
sustainability of PECO were raised by several of the participants who suggested that PECO was
no longer a viable mechanism to fund the building of academic and classroom space. According
to participants, the decision to build a hybrid model saved UCF more than $110 million in
additional classroom building and maintenance costs. Moreover, the decision by UCF to take this approach directly addresses part of the research problem raised in the introduction of this study which suggests that rapid enrollment growth and reduced state funding had a direct impact on UCF’s facilities and operational costs, particularly the construction of physical classroom space.

Another key finding suggests that while shared governance and support from the administration and the BOT were key factors in the success of online policy development and implementation at UCF, the establishment of the Center for Distributed Learning (CDL) and the Research Initiative for Teaching Effectiveness (RITE) equally contributed to the university’s success in online learning. The CDL and RITE were frequently mentioned by participants in answer to questions related to “What were some of the concerns of governing board members, administrators, faculty, and students regarding policy discussion on online education?” According to participants, questions regarding quality of distance and online programs were a major concern. Specifically, participants posited that the faculty members at UCF were concerned about the quality of online education compared to face-to-face instruction, which corresponds to one of the two overarching themes found in the literature review; the other was how online learning disrupted the higher education industry.

The study also found that the CDL and RITE, which approached their missions around a shared governance design by structuring online learning to align with the goals, mission, and vision of the institution, directly contributed to the overall quality of the courses and programs offered in online learning. In fact, CDL and RITE were able to achieve this goal by reaching out to faculty, department chairs, and deans to discuss success, challenges, and what online learning could do for them (Fawcett, 2003). The participants were in general agreement that CDL and RITE played a critical role in the development of online policies, procedures, and tools to ensure
both quality and success. Moreover, participant H believed that the CDL played a vital role in both faculty development and overall evaluation of student outcomes.

In fact, participant H suggested that part of the job of CDL and RITE is to ensure the quality of online is the same, and they are not offering a course that is of less quality than face-to-face. Also, several participants were in agreement that based on information provided by RITE, students make no distinction in their evaluation of courses based on the modality, and some data suggest that students rate the quality of certain modalities in the online environment as being marginally higher than face-to-face instruction. Participant perceptions were consistent with a large body of research identified in the literature review that suggests that online learning outcomes are equivalent to other delivery methods, such as face-to-face instruction (Bell & Federman, 2013; Wagner et al., 2011).

**The Influence and Control of Decision Making by External Stakeholders**

Another major finding supported from primary and secondary sources indicates that the governor, legislature, and the BOG significantly influenced the decision making process in online learning during the past two decades, which accelerated in recent years from 2011 – 2014. Specifically, as participant B indicated, “the legislature and the BOG have had much more involvement in online policy in the last three years than at any time in recent past.” In fact, participant E posited that Will Weatherford, the Florida Speaker of the House of Representatives, was the driving force regarding more online learning over the past two years. Moreover, participant B, and other participants who were cautious in their explanation of events, suggested that elected leaders actions regarding online learning policy development were not so much informed decisions based on a rationale, as they were political decisions based on a desired
outcome. This confirms the GCM as discussed by Cohen et al. (1972) where several streams exist in a decision making process; in particular this was a case of a solution seeking a problem.

One example of the political involvement in higher education policy in Florida was captured in an article in the Orlando Sentinel which illustrates both the use of political power and legislative intent to establish more control over higher education decision making. The article confirms what some participants suggest is interference in the higher education policy and decision making process. Specifically, Florida Governor Scott called for a repeal of the legislation that allowed tuition increases of up to 15 percent per year for five years, which were designed to balance state budget cuts to higher education with double-digit increases in student tuition, increases that UCF relied on to help off-set cuts in their state appropriations. Scott stated that “We have to figure out a way to provide a quality education for less money” (Haughney & Deslatte, 2013). Scott’s statements drew criticism from former Florida legislator and current chancellor of Flagler College, Bill Proctor, who stated the policy was contradictory, lacked vision, and it was “kind of hard for a person outside the state to grasp what we’re doing, because I’m not really sure what we’re doing” (Haughney & Deslatte, 2013).

Another example of political involvement in the education policy decision making process in online learning was illustrated in the direct involvement by the Florida legislature in discussions focused on alternative higher education delivery models, including Western Governors’ University and MOOCs. Concerns were raised by the participants in the study about how and what the legislature would do and the effect on UCF’s already vibrant and successful online learning infrastructure. Participants also seemed to be concerned about Florida House Speaker Will Weatherford’s legislation regarding a designated online university, and the preeminence designation and its potential impact on both the system and UCF’s online policies.
and programs. Moreover, Speaker Weatherford’s letter to the Chairman of the BOG to seek support for a fully online university left little doubt among the participants as to the direct political involvement in online education policy that they suggest would have some effect on their institution.

An additional area of concern by the participants involved the legislature and the BOG and the recommendations that resulted from the Parthenon Group report. While the recommendations were not directed at UCF, participants raised concerns and questions about why the group was hired. Participants also questioned Parthenon’s recommendation for the creation of a fully online university, which mirrored a recommendation made by Speaker Weatherford in his letter to the BOG chairman. In addition, participants questioned the need for a lead institution that would develop a new online program that the state legislature would support as the designated online provider. Moreover, HB 7057 which established criteria for preeminence and the language of the bill that stated the preeminent institution must be the lead online education provider, left little doubt regarding legislative and BOG intent to establish a policy that UF would be the exclusive state lead in online learning with additional state funding support.

Finally, concerns were raised by the UF Faculty Senate about the creation of UF Online, and by national higher education leaders like David Longanecker, president of the Western Interstate Commission for Higher Education (WICHE), who indicated that UF Online made no sense because “the University of Florida was virtually absent” from that activity (O’Neil, 2014). In fact, Longanecker stated, “The University of Central Florida is clearly one of the top 10 institutions doing online work in the country right now, maybe even higher than that” (O’Neil, 2014).
**Bush’s Theoretical Framework: Relationship to the Findings**

The research used Bush’s Educational Leadership and Management theoretical framework because it best explains the decision making process in complex organizations such as colleges and universities. Specifically, Bush’s theory posits that of the eight models or approaches that can be used to examine education leadership and management, the ambiguity model fits this case study research because of its emphasis on uncertainty and unpredictability in organizations such as universities including UCF. In fact, a dominant feature of the ambiguity model states that participation in policy making is fluid as members opt in or out of the decision opportunities (Bush, 2009). Bush posits that theorists Cohen, March, and Olsen (1972) developed an ambiguity model called the Garbage Can Model (GCM) of Organization Choice that bests describes the decision making process of most public education organizations (Bush, 2009).

The GCM of decision making by Cohen et al. (1972) best describes what the theorists suggest are organizations that do not reach decisions in rational ways (Robinson & Eller, 2010). Cohen and March (1974) determined that organizations such as universities, face tremendous ambiguity in the decision making process because of factors that include the interrelations among four streams identified as problems, or concerns of people inside and outside the organizations; solutions, or answers looking for questions; participants, or fluid involvement in the process; and, choice opportunities, like UCFs decision making process to develop and expand online education. The application of the GCM helps researchers explain some of the challenges that administrators, faculty, and governing boards may experience when dealing with numerous stakeholders (Bush, 2009). Moreover, Tierney and Lechuga (2004) posit that external constituencies, such as governors and legislators, play a role in the decision making process at
universities, which is sufficiently documented at UCF and the SUS based on participants’ reflections and perceptions, and secondary data sources.

The application of Bush’s (2009) theory to the case study is best illustrated by describing the decision making process at UCF using the GCM four streams developed by Cohen et al. (1972), because decisions in the GCM are outcomes of the interaction of the streams. Specifically, the problem stream is exemplified in the numerous challenges that participants in the study perceived UCF faced during the pre/post-decision making process to develop online learning. The institution was challenged with declining resources, often referenced as the disinvestment in higher education, while dealing with access issues caused by increased enrollment created in part by the growing population of central Florida where UCF is located. Moreover, based on the perceptions of the participants, UCF faced the problem of a shortage of classroom space and the inability to expand classroom space to meet the demands for access and rapid enrollment growth. Participants suggested that challenges with the PECO funding formula contributed to the space shortage. Furthermore, other problems existed including: competition from other higher education providers, especially for-profit institutions, calls for increased efficiency in operations, governance reform, and increased governmental oversight, including active involvement of the Florida governor and legislature in higher education policy.

The second stream, which theorists labeled solutions, had different meanings to the internal and external participants in the decision making process. The internal participants were the administrators, faculty, deans, chairperson, and BOT who the study participants suggest approached the decision making process in online policy development from a shared governance philosophy that was inclusive and supported by the senior administration. In contrast, the external participants in the process, those identified by the study participants as the governor,
legislators, BOG, vendors, and legislative staff, seemed to have a different agenda regarding the direction the state and the universities should take in terms of online learning policy. In fact, the study participants were concerned about decision outcomes developed outside the university process that would affect the UCF decision making process, because the solutions seemed to be more political and agenda-based rather than rational and informed decisions.

As suggested by the study participants, solutions to perceived problems were addressed by the external stakeholders through a process of appropriations, task force, study group, or legislation. Examples of this are the Parthenon Group options, the preeminence status for UF which also created UF Online with an exclusive state status and a $35 million appropriation, and what seemed to be more duplication and less coordination – two areas of priority focus for the legislature just prior to passage of these initiatives. Overall, the series of events are all factors that lay the foundation of Bush’s theory, with an emphasis on the unpredictability of the internal and external environment leading to ambiguity.

The third stream includes the participants in the decision making process. In this stream, participants come and go in the process which Cohen et al. (1972) attributed to the fluidity of participants’ availability or interest in a particular issue or policy at an institution including UCF. Bush (2009) maintained that the degree of predictability in schools and colleges depends on the nature of the participants’ relations in the internal and external environment. In fact, Bush (2009) posits the relationships are so important that schools and colleges have a continuing existence only to the degree that they are able to satisfy the needs of the external constituencies.

Based on the perceptions of the participants interviewed for this research, the decision making process regarding online policy development seemed to be clear. As stated earlier, participation included faculty, department chairs, deans, administrators, and the process applied
the principles of shared governance. However, it was not clear how fluid the participation was or if it was a factor, given the general consensus among the study participants that the overall goal in the development and implementation of an online policy was achieved.

Although UCF participated in the events and processes created by the external stakeholders including discussions, task forces, and special committees, that involvement was characterized by the participants as having minimal effects on the decision making process in online education policy development. However, the circumstances during 2011-2014 did give the study participants pause for concern about the impact of future online policies developed as a result of decisions made by external stakeholders. Again, concerns were raised regarding the impact of both the decision making process and implementation of UF Online (resulting from the Parthenon Study), repeal of the five-year tuition plan, and preeminence status.

In the fourth stream, choice opportunities were characterized as the stream where decisions were made. Specifically, Cohen and March (1974) viewed choice opportunities as a metaphorical garbage can into which various problems and solutions are dumped by the participants. During the interviews with study participants, it seemed clear that the decision making process at UCF included all four streams of the GCM. In fact, it also seemed clear that the senior leadership at UCF made the decision to involve key stakeholders early in the decision making process. This resulted in stakeholder identification of the dynamics of the problems and challenges UCF faced regarding growth, funding, space, technology, and competition. The end game effectively called for an online policy that addressed many of the challenges and concerns of the key participants in the decision making process.

What was not clear from the research participants’ perspective was the role, intent, and outcome of external stakeholder decisions on UCF. In fact, the participants in the research study
suggest that ambiguity remained in terms of gubernatorial, legislative and BOG intent regarding online education and alternative education delivery in Florida’s public universities. While decisions were made by the external stakeholders regarding several online policy directives, there did not seem to be any understanding among the study participants as to the endgame, particularly regarding the Parthenon Study, the UF Online model, or the fact that the university with preeminence status must be the state officially authorized provider of online programs.

Conclusion

The research question: “How can an online instructional delivery model influence the development of policies by higher education leaders, and governing boards to improve student access and reduce operational costs?”

The study was able to answer the research question with an analysis of trends in public higher education policy, trends in higher education governance, and online learning policy, as part of a comprehensive literature review, and included collection of data from primary and secondary sources. The literature review for this study gave an overview of reform measures that played a significant part in the development of higher education policy in the U.S. and in Florida. Several examples illustrate the desire by elected leaders such as governors and state legislatures to reform higher education by making changes to governance structures that they perceived as being wasteful and not good stewards of public appropriations to their respective budgets. In fact, many of the efforts to reform governance focused on the desire by elected leaders for cost savings through improved efficiency and accountability measures (McLendon et al., 2007; Tandberg & Anderson, 2012). However, the research also revealed that many reform efforts were politically motivated and sometimes driven by the agenda of a particular elected leader.
Although this study did not focus on education reform measures, the reform efforts as outlined in the literature review were very important to this study in terms of context regarding political interference, and motivation by external stakeholders. In fact, Florida was no stranger to reform measures, particularly during the period 1996 – 2014. Some examples of this include reform measures in 2000, 2008, and 2012, which were all politically motivated. In 2000, Florida House Speaker John Thrasher, publically threatened the Board of Regents, the public higher education governing board, with dissolution for not supporting his medical school proposal. Thrasher introduced legislation that passed unanimously in both the Florida House and Senate that dissolved the governing board while creating a new governing board structure, a medical school for Florida State University (FSU), and two law schools including one at Florida International University (FIU) in Miami, and one at Florida Agriculture and Mechanical University (FAMU, an Historically Black College/University [HBCU]) in Tallahassee, Florida (Mills, 2007). In 2008, Senate President Ken Pruitt introduced legislation to dissolve the BOG when the chancellor questioned the sustainability of a school grant program created by Pruitt.

In 2012, in what was characterized as a “vendetta,” the powerful Senate Budget Committee Chairman, JD Alexander, threatened to cut funding at the University of South Florida (USF) by 59 percent ($104 million) for opposing his plan to create a new university, called Florida Polytechnic University, in his district. Alexander publically threatened several universities’ funding and threatened the entire higher public education appropriation. Alexander’s positions were widely criticized at a time when Governor Scott cut state appropriations to universities by about $300 million. In particular, John Temple, a member of the BOG, which supported Alexander’s initiative, said the initiative was forced on the BOG which he characterized as “all political pressure” (Bousquet & Wilmath, 2012).
Cumulatively, the historical events, in addition to what the study participants suggest was heightened activity by the BOG and elected leaders, including the governor and legislature, certainly gave participants pause to consider the long-term effects of changes to online education policy. Moreover, the top-down policy making approach by the state ran counter to the bottom-up collaborative, shared governance, philosophy exercised by UCF’s senior leadership and university BOT. In fact, this researcher was surprised to discover the level of involvement of external stakeholders, particularly legislative leadership in online education policy development and decision making.

The participant interviews and the triangulation of the additional sources of information gave this researcher sufficient evidence to support the fundamental premise of Bush’s ambiguity theory, and use of the Cohen et al. (1972) model to prove that the GCM best fit the dynamics of this study. In particular, the findings suggest that there was a high degree of fluidity in participant involvement in decision making process. The findings also indicate that the policy making process involved numerous participants who had varying degrees of information about online programs. These facts support the GMC model where the underlying premise is “there are solutions looking for problems.” This was best illustrated by the creation of a task force and the hiring of the Parthenon Group that developed solutions through recommendations to problems that did not exist. In fact, there did not seem to be sufficient information to suggest that Florida had a problem with online policy development or the current methodology for online policy development. However, the BOG decided to move forward on major policy changes in online learning with little or no justification.

Significance of the Study/Implications for Practice/Future Research
The findings of the study addressed the significance of the research problem and the research question. The online delivery model created by UCF directly addressed the concerns of the administration and the governing boards by increasing access to students, and keeping costs down with the development of a hybrid mixed mode education delivery model. The model allowed for expansion of classes, flexibility, and creative space utilization that permitted growth without building additional classroom space to meet demand – ultimately keeping operational costs down. Moreover, the case study findings suggest that an informed decision making process such as the one utilized by UCF can be successful in helping an institution to successfully achieve its strategic mission and goals in a thoughtful and deliberative decision making process.

The research is significant because it helps to inform the higher education practice regarding a successful policy making process that could help decision makers, particularly in the area of online learning policy. Moreover, the research further informs higher education administrators regarding the influence of both a shared governance approach to policy and decision making and how external stakeholders including governors, legislators, and others in a policy making process that is highly influenced by key political leaders.

While the Bush Educational Leadership and Management Theory is highly informative and fundamentally is the most appropriate theory for this research, the theory does not address one specific aspect of the research – the influence of political leaders and politics in the development of higher education policy and decision making process. The strength of Bush’s theory is that it is the most applicable to higher education organizations. While participants are not clearly defined in the participant policy stream it is assumed that external stakeholders such as elected leaders may be included as participants in the stream.
The theory that comes closest to the Bush theory, specifically the ambiguity theory, and the use of Cohen et al. (1972) GCM is offered by Kingdon (2011) in his “revised garbage can model” which is a modified version of the Cohen et al. (1972) GCM. Kingdon’s (2011) model includes one key element not identified in Cohen et al. (1972) which is the Political Stream where policies drive politics and decision making patterns in national politics, i.e., Congress. Kingdon’s (2011) theory is appropriately applicable to policy development in highly bureaucratic organizations in the national arena such as national health care, or national transportation. In fact, Kingdon (2011) suggests that issues achieve public agenda status when (public) problems, solutions (policy alternatives), and political opportunities intersect in a garbage can process.

The research and the findings inform the practice in several significant ways. For example, this researcher, as the state higher education executive officer in Iowa is responsible to the Iowa Board of Regents (BOR), the public university governing board, for making recommendations regarding state higher education policy. The findings addressed in this case study research have been instrumental in helping to inform policy discussions in Iowa regarding higher education policies including: Online learning policy development; Performance-Based Funding (PBF) modeling which was recently approved by the Iowa Board of Regents and will be discussed by the Iowa legislature; The next BOR Strategic Planning process in Iowa, with a specific focus on access, affordability, and accountability will be informed by the literature review and the participant interviews; and, a comprehensive Efficiency and Transformation Study, informed by the trends in higher education governance, and online learning.

As a practitioner, this researcher was able to implement one of the key findings that suggest the UCF online learning policy decision making process followed the principles of
shared governance as defined by the AAUP which was discussed in the literature review. Specifically, the Iowa Board of Regents followed the same principles in its decision making process for the ongoing Efficiency and Transformation Study, specifically by allowing faculty, administrators, students, and other key stakeholders to have input into the process, thereby having the ability to influence the policy outcomes. Birnbaum (2004) posits that increasing participation in governance activities provides a sense of influence, and the social capital that leads to trust and cooperation.

The finding that UCF was able to save over $110 million in academic building, construction, and maintenance costs is significant because of the interest of legislators and other key stakeholders who have expressed concerns regarding brick and mortar construction projects that commit millions of taxpayer dollars to long-term capital projects. Moreover, the case study also caused this researcher to investigate how alternative education delivery models may help to address some of the same challenges such as increased access needs due to significant increases in enrollment at one of the Iowa’s public universities, while addressing Board, legislative, and other state officials’ concerns regarding long-term capital commitments.

Finally, the use of the qualitative single case study approach was significant because it allowed this researcher to explore multiple resources including primary and secondary data in the triangulation process. This methodology is particularly useful in helping the research to understand, and cross reference data using information and data from archives, newspapers, articles, government documents, notes, minutes of meeting, and staff analysis, to gain significant insights into the research question.
Future research could explore the development of a modified Cohen et al. (1972) and Kingdon (2011) model that includes the role of elected leaders and politics in the higher education policy making process. Moreover other areas to be examined include:

x What is the effect of the new legislation on UCF’s online learning program?

x What role should state legislators play in higher education policy development?

x What do state legislators perceive as their role in higher education policy development?

x Could a multiple case study approach be used to research the policy making process at two or three similar institutions within a state university system?

x Can a mixed-method research approach utilize both surveys and interviews to capture a larger sample population which could include legislators and legislative staff?

x Is there an enhanced role for governing boards to develop policies directed at disruptive innovations which will better serve students and result in greater accountability?
References


http://www.nber.org/papers/w16089.pdf?new_window=1

Florida Board of Governors (n.d.), Postsecondary Distance Learning Chronology. Retrieved from the Board of Governors data files, Tallahassee, FL.


Florida House of Representatives (2013). Staff Analysis of HB 7057. Retrieved from


n_b_northest&it=r&p=ITOF&sw=w


Meyer, K. A. (2010). If higher education is a right, and distance education is the answer, then who will pay? *Journal of Asynchronous Learning Networks, 14*(1), 55-78.


Appendix A: Recruitment Letter (Invitation to Participate)

Date

Name
Address
City, State

Dear Last Name:

My name is Bob Donley. I am a doctoral student at Northeastern University in Boston, Massachusetts, and serve as the Executive Director of the Iowa Board of Regents. I am in the process of conducting a research study that will examine and describe the process leading to the policy decision by the higher education governing board and institutional administrators to increase online education delivery at the University of Central Florida (UCF). The study will focus on the insights and perceptions of the participants in the decision making process, including members of the university governing board, the administration, and faculty. My research question is: How can an online instruction delivery model influence the development of policies by public higher education leaders, and governing boards to improve student access and reduce operational costs?

I would deeply appreciate your participation in this study. If you agree to participate, you will be asked to share your insights and perceptions in a face-to-face interview for a 60 to 90 minute interview (you may choose an online format if it’s more convenient for you). The interviews will be audio recorded and transcribed (by Words Unlimited located in Des Moines, Iowa) following the interview and you will be given an opportunity to review the transcript for accuracy. The information will be kept confidential and will be only be used for this research. Your participation is voluntary, you will be asked to sign a consent form, and you may withdraw at any time you wish.

For additional information please feel free to contact Bob Donley, Ed. D student at donley.r@husky.neu.edu or 515-419-5285.

Thank you in advance for your assistance.

Bob Donley
Appendix B: Consent to Participate

Northeastern University, College of Professional Studies
Robert Donley, Doctoral Candidate
Dr. Joseph McNabb, Principal Investigator

Title of Project
Online Learning: A Policymaking Challenge for Public Higher Education Governing Boards

Informed Consent to Participate in a Research Study

We are inviting you to participate in a research study. This form will explain the study; however, the researcher will also discuss the study with you. You may ask any questions you have. Please notify the researcher when you are ready, if you will be able to participate. You do not have to participate. If you decide to participate, the researcher will ask you to sign this statement and give you a copy for your records.

Why am I being asked to participate in this research study?

You have been asked to participate because you have participated in the decision making process that led to policy changes in the development of online learning at the University of Central Florida (UCF) in Orlando, Florida.

Why is the research study being done?

The purpose of the research is to interview individuals who will share their insights and perceptions regarding their involvement in the decision making process to develop online learning policies.

What will I be asked to do?

You will be asked to answer questions about your involvement in the process. The semi-structured interview questions will be provided to you in advance of the interview, which will last approximately 60 – 90 minutes. The interview will be audio recorded. Your name will not appear on the interview transcripts, alternatively pseudonyms will be used.

Where will the interviews take place and how much time will it take?

If possible, the interviews will be conducted face-to-face. However, you may choose an online format and a place that is convenient for you. The interview will take about 60 – 90 minutes in total.

Will there be any risk or discomfort to me?

The interview questions are designed to engage the participants in a conversation regarding their experience and perceptions. There will be no risk to you as a participant in the conversation. You
may choose not to answer questions that you feel uncomfortable answering. You may choose to stop the conversation at any time.

Will I benefit from my participation in the research?

No. There will be no direct benefit to you. The information from the study will be used in order to gain additional knowledge regarding decisions in the policy making process related to an online policy. The information will contribute to the body of existing knowledge in this area.

Who will see the information about me?

This is a confidential process. No one will see or know the answers you give in the interview because the answers will be number coded with no matching participant identity, or information.

What will happen if I suffer any harm from this research?

No arrangements will be made to compensate you regarding this research.

Can I stop my participation in this study?

Yes. As your participation is voluntary, you may stop participation at any time in the process without explanation.

Who can I contact if I have questions or problems?

If you have any questions you may call the researcher, Bob Donley at 515-419-5285 or by email at donley.r@husky.neu.edu. You may contact Dr. Joseph McNabb, the Principal Investigator at j.mcnabb@neu.edu.

Who can I contact about my rights as a participant?

If you have any questions about your rights in this research, you may contact Nan C. Regina, Director, Human Subject Research Protection, 960 Renaissance Park, Northeastern University. Boston, MA 02115. Tel: 617.373.4588, Email: n.regina@neu.edu. You may call anonymously if you wish.

I agree to take part in the research.

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Appendix C: Guided Interview Questions

Research Question: How can an online instructional delivery model influence the development of policies by higher education leaders, and governing boards to improve student access, and reduce operational costs?

1. Background Information: Tell me about yourself and how long you have been working at the university, and in higher education?

2. What trends were occurring that influenced the decision by the University of Central Florida (UCF) to formulate the university’s e-learning (online) strategy?
   a. What studies or data regarding institutional technology enhancement, and/or costs of online expansion were used to inform the decision making process?

3. What changes at your university have evolved in online since the policy was implemented?
   a. How does the cost of your online learning offerings impact the decision to develop or expand the current offerings at the university?
   b. Who were the key stakeholders in the decision making process regarding policy changes in online education delivery?
   c. How would you characterize online delivery with respect to the university’s mission of providing access, affordability, and accountability? How has online learning addressed the need to increase access at your university?
   d. How has online learning addressed strategic goals/mission of the university?

4. What role, if any, did you have in the decision making process to establish online learning as part of the institutional strategy to enhance online education delivery.
a. What were some of the concerns of governing board members, administrators, faculty, and students regarding policy discussions on online education? How have you been able to address these concerns?

b. What was the role of the board of trustees (the university governing board) involved in the policy discussions regarding online education delivery or expansion?

c. How did faculty, administrators, and students participate or influence the decision making process?

d. How did external stakeholders, such as legislators, business groups, alumni, etc., influence the development of policies in online learning?

5. Have the university’s efforts in the delivery of online programs, been successful and why?

6. From the standpoint of new institutions looking to online learning as an effective delivery method, what benefits and challenges should a university consider in the development of online learning delivery?

7. What additional thoughts or insights would you like to share regarding the process that lead to online policy development and implementation?
Appendix D

Sources of UCF Student Credit Hours
FY 2002-2003 to FY 2013-2014
From 8.82% to 35.89% Online
Florida Board of Governors

Online University Study

The 2012 Legislature provided funds to the Board of Governors to obtain the services of a consulting firm that would study online education in Florida. Through a competitive bidding process, the contract was awarded to The Parthenon Group, which is based in Boston, MA. The Scope of Services provided that the study would include, among other requirements, a description of the nature and extent of existing online postsecondary programs in Florida; an assessment of educational opportunities needed to boost Florida’s economy; options for expanding the awarding of degrees; and, for each option, a ten-year plan for start-up and operating costs, enrollments, degree production, and revenue generated.

Parthenon's report, Postsecondary Online Expansion in Florida, its Detailed Fact Base, and its cover letter were submitted to the Board Office on November 16, 2012.

The report was presented to the Board's Strategic Planning Committee at a workshop on December 17, 2012, at Florida Atlantic University's Davie Campus. The Committee continued its discussion on online education at its meeting on January 16, 2013, and again at its meeting on February 13, 2013.

At its February 13 meeting, the Committee recommended that the full Board:

1. Use the Strategic Plan preeminence metrics to designate the university which would create a separate arm to provide online degree programs of the highest quality, and that funds be requested of the Legislature to support such an effort. The preeminence metrics would be those passed by the 2012 Legislature and approved by the Board for use in the 2012-2013 university workplans. Further, the selected university would create an innovation and research center to (1) ensure the State is a leader in the development of cutting-edge technology and instructional design for the online programs and (2) conduct research that would help strengthen online degree programs and the success of online students.

2. Direct the Chancellor to form a systemwide work group that would report back to the Strategic Planning Committee and continue to work with our colleges and universities and the other delivery systems to determine ways in which services and online degree programs, including market-based job analyses, can be better coordinated to ensure State and student needs are being met in a cost-efficient and effective manner.

The Board approved the Committee's recommended motions at its meeting on February 21, 2013. Subsequently, Senator Galvano filed SB 1720 and the House Higher Education and Workforce Subcommittee and Representative Nunez filed HB 7057, both of which include statutory language proposed by members in the two chambers to implement the Board's first motion.

http://fbog.edu/resources/publications/online_university.php
To: Florida Board of Governors  
From: Haven Ladd, Robert Lytle and Vanessa Webb, *the Parthenon Group*  
Date: November 16, 2012  
Re: Online University Study

Over the course of the last four months, a team from The Parthenon Group has been engaged in a project with the Florida Board of Governors to develop the fact-base for Florida post-secondary online education and identify potential online strategies to expand the number of post-secondary graduates through the use of online education. The memo that follows provides a high level description of the objectives for post-secondary online learning in Florida and potential options for the state of Florida to pursue. The attached summary presentation and detailed fact-base presentation include additional information on the options we have developed through an iterative process with higher education stakeholders across the state.

Process

This process has relied on deep engagement with stakeholders from the Florida Board of Governors, the Florida Department of Education, the Florida Virtual Campus, individual institutions both within the Florida systems of higher education and external to those systems, as well as state legislative and budget staff. We have kept these stakeholders updated through a series of ongoing discussions and meetings designed to gather input, push the dialogue forward and solicit feedback, all while maintaining our objective view. The options presented here and in the accompanying documents represent the output of that iterative process.

Online Offerings

The online offerings that students seek come in a number of forms, targeting different students with different requirements for success:

- **Online /hybrid courses** are taken primarily by students living on-campus but seeking increased course flexibility. 40% of SUS and FCS students took an online course in 2010-2011, above the national average.

- **Fully online degree programs** are targeted towards degree-completer students who are unable to take onsite courses, for work, family, geographical, or other reasons. These courses require fundamentally different onboarding, ongoing support services and data tracking than programs for onsite students. Examples of
these supports include multi-modal support services (in-person, online, phone) with 24/7 responsiveness, identification of a student's "at risk" factors prior to enrollment, and daily, weekly, and monthly monitoring of a student's activity levels and grades to allow early identification of "at-risk" behavior that can then be addressed with the student. While the SUS and FCS do offer 700 programs that can be taken fully online, the online-only student has been a lesser focus and online-only enrollee levels are below the national average.

- Finally, self-directed courses (e.g., the Massively Online Open Courses-MOOCs) that pervade the higher education media are a nascent online offering at a very low cost. Florida’s statewide common course numbering system could allow MOOCs developed within the FCS/SUS (e.g., for introductory and high demand courses) to be taken by students of all types (e.g., high school, on-campus, adult) across the state. Proctored exams would need to be established in order for students to receive course credit.

While these three types of online offerings share much in common, the different target students and varying requirements for success imply that different strategies could be considered for each.

Objectives for Online Learning

Through discussions with stakeholders, Parthenon identified four primary objectives for online learning in higher education within the state of Florida:

- **Expanding Access:** Allows students who cannot take face-to-face courses to continue their education.

- **Reducing System and Student Costs:** Allows for a lower cost of delivery, through lower physical infrastructure costs, better utilization of resources, reduced time- and cost-to-completion, and increased effective capacity of institutions.

- **Strengthening the Link between the Labor Market and Post-Secondary Education:** Enables a broader scaling of labor force-demanded degree programs through coordination with the Department of Economic Opportunity (DEO) and "Labor Councils" and program dissemination beyond the local catchment area.

- **Enhancing the Student Experience:** Allows digital delivery, in its many forms, to enhance the quality of existing core programs and to expand the flexibility offered to students through a portfolio of online learning models.
We understand that different stakeholders have different objectives for online learning. In developing potential strategies for the state of Florida to pursue, we have been inclusive of these objectives to allow stakeholders to decide their relative priority.

**Strategic Options to Consider**

In focusing on the objectives for online learning outlined above, we provide four strategic options for Florida to consider for the creation, development and expansion of new online learning models. These strategies are meant to build on the online efforts already underway across the SUS and FCS today, to develop a comprehensive, best-in-class portfolio of online degree programs, while testing best practices that could be applied to existing offerings. These programs would include both competency-based and credit-based offerings, would be tied to labor market needs and would aim to lower the recurring per student costs to the state and/or the student. These strategies include:

1. **Institution by Institution**: Institutions continue to develop online offerings on their own, driving innovation in a way that fits each institution’s mission. The state will clarify objectives of expanded online learning models, but potential collaboration among institutions remains at their own discretion.

2. **Institutional Collaboration**: System-wide online degree program offerings are developed under the direction of a coordinating body (e.g., FLVC, BOG, FL DOE). Centralized marketing, onboarding, support services, and data analytics are each either managed by the central body or one of the participating institutions. Program-level RFPs are issued to institutions for program development. Online degree programs developed collaboratively under the direction of this coordinating body would be marketed to students across the state.

3. **Lead Institution**: One (or a few) institution is selected by RFP process to drive the development of new online programs in target degree levels and disciplines. The lead institution would be selected on the basis of a performance grant process that allows applicants to emphasize existing best practices and organizational strengths that can contribute to effective state-wide online degree programs. This institution, on its own or with other institutions, would need to ensure program access to a diverse student body.

4. **New Online Institution**: An online institution is launched with a mandate to drive the development of new online programs in target degree levels and disciplines.

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1 Competency programs award credit based on mastery of material rather than seat time. These programs lower instructional costs by utilizing student tutors/mentors and allowing students to complete courses at their own pace.
The primary focus of these strategies has been on the development of online-only degree programs, and the marketing, onboarding, support services, and data analytics needed to make them successful. These supports require a fundamentally different approach vs. the onsite student. These strategic options could also apply to existing online/hybrid courses and to the development of credit-bearing MOOCs (and their proctored exams). The strategic option implemented for each type of online offering could differ (see the worksheet matrix on page 37 in the summary presentation).

Additional Considerations

Given our familiarity with Florida’s comprehensive K-20 data system, we were surprised at the lack of persistence (beyond course level) and graduation rate data for hybrid and online-only students, available across the system. Because these students are not walking into a classroom, more extensive data monitoring of their progress is needed. Persistence and activity data should be monitored on an ongoing (e.g., weekly, monthly, by term, yearly, cohort) basis to enable the early identification of a student being "at risk" of dropping out to then trigger action. It is difficult to establish best practices for this newer modality without comprehensive tracking. As the state of Florida plans for the expansion of online learning opportunities, we would strongly encourage that it make comprehensive data tracking a critical priority.
SUMMARY ANALYSIS

The bill amends provisions of law relating to the State University System (SUS), the Florida College System (FCS), school districts, developmental and general education requirements, adult education, workforce education, and various other provisions. The bill:

- Provides the Board of Governors (BOG) oversight enforcement authority over the SUS and requires the BOG to include in its strategic plan criteria for designating high-demand degree programs of emphasis. It also expands the exemption from limitations on bonus and severance pay to include employees of state universities.

- Revises the purposes, membership, and governing principles of the Higher Education Coordination Council (HECC); revises the duties of the Articulation Coordinating Committee; and creates the Office of K-20 Articulation to support these entities.

- Establishes academic and research excellence standards for universities to be designated as a preeminent state research university. The bill requires the research university that attains the second-highest level on the standards to establish a fully online institute for higher learning and makes specific provisions relating to operations and tuition for the online institute. The research university that attains the second-highest level on the standards shall recruit National Academy Members, expedite provision of a master’s degree in cloud virtualization, and implement an entrepreneurs-in-residence program.

- Revises requirements for basic skills instruction for career education programs and revises provisions relating to adult education program priorities. It also amends various provisions relating to implementation of developmental education and defines certain associated terminology.

- Makes provisions for performance funding for workforce education, FCS institutions, and state universities, subject to specific appropriation in the General Appropriations Act (GAA).

- Authorizes additional postsecondary general education core course options and increases the required number of semester hours of general education coursework.

- Establishes a separate method to determine the residency of adult education students for tuition purposes.

- Codifies tuition and fees set in the Fiscal Year 2012-2013 GAA for FCS and workforce programs. Increases the number of fee exemptions each FCS institution may grant, authorizes a differential out-of-state fee for students enrolled in distance learning courses, and authorizes tuition and fee waivers to facilitate baccalaureate degrees programs for state residents at a cost not to exceed $10,000.

The fiscal impact of the bill is indeterminate at this time.

The bill has an effective date of July 1, 2013, except as otherwise provided therein.
A. EFFECT OF PROPOSED CHANGES:

**Florida Preeminent Universities**

*Present Situation*

In 2012, the Legislature passed the State Universities of Academic and Research and National Preeminence Act (Act), a collaborative partnership between the Board of Governors (BOG) and the Legislature to raise the academic and research excellence and national preeminence of the highest performing state research universities in Florida. The partnership was based on the March 24, 2010 State University System (SUS) Governance Agreement that affirmed the commitment of the BOG and the Legislature to continue collaboration on accountability measures, the use of data, and recommendations derived from such data. On April 27, 2012, the Governor vetoed the Act, which had passed the House of Representatives by an 85 to 28 vote and the Senate by a 36 to 3 vote.

Under the Act, a state research university that met specific eligibility requirements was authorized to raise tuition and fees at differentiated and market rates once each academic year. The authority to raise student tuition and fees was contingent upon the BOG verifying that the SUS institution substantially met at least 11 of 14 academic and research excellence standards.

Several nationally recognized entities collect data relating to various aspects of postsecondary education across the United States, including:

*Integrated Postsecondary Education Data System (IPEDS)*

IPEDS is a system of interrelated surveys conducted annually by the U.S. Department of Education’s National Center for Education Statistics (NCES). IPEDS gathers information from every college, university, and technical and vocational institution that participates in the federal student financial aid programs. The Higher Education Act of 1965, as amended, requires institutions that participate in federal student aid programs to report data on enrollments, program completions, graduation rates, faculty and staff, finances, institutional prices, and student financial aid. Data from IPEDS are commonly used as the foundation of state and national reports.

*The Center for Measuring University Performance*

The Center for Measuring University Performance (Center) is a research enterprise focused on comparative performance of major research universities. The Center publishes an annual report, The Top American Research Universities (TARU), which provides analysis and data to assess the performance of research universities based on nine research-specific measures.

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1 House Bill 712, 2012 (vetoed by the Governor on April 27, 2012).
4 The Higher Education Act of 1965, as amended, requires institutions that participate in federal student aid programs to report data on enrollments, program completions, graduation rates, faculty and staff, finances, institutional prices, and student financial aid. Data from IPEDS are commonly used as the foundation of state and national reports.
The TARU report includes institutions with a certain level of federal research expenditures. These data are the same or similar to data used by nationally recognized ranking systems.

The National Science Foundation (NSF)

NSF is an independent federal agency created by Congress in 1950 "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense; and for other purposes." NSF ranks institutions based on research and development expenditures in science and engineering fields.

Effect of Proposed Changes

The bill grants the BOG authority to designate a qualifying institution as a preeminent state research university.

The academic and research excellence standards established by the bill are as follows:

1. An average weighted grade point average of 4.0 or higher on a 4.0 scale and an average SAT score of 1800 or higher for fall semester incoming freshman, as reported annually.
2. A top 50 ranking on at least two well-known and highly respected national public university rankings, reflecting national preeminence, using most recent rankings.
3. A freshman retention rate of 90 percent or higher for full-time first-time-in-college students, as reported annually to the IPEDS.
4. A 6-year graduation rate of 70 percent or higher for full-time first-time-in-college students, as reported annually to the IPEDS.
5. Six or more faculty members at the state university who are members of a national academy, as reported annually by TARU annual report.
6. Total annual research expenditures, including federal research expenditures, of $200 million or more, as reported annually by the NSF.
7. Total annual research expenditures in diversified nonmedical sciences of $150 million or more, as reported annually by the NSF.
8. A top 100 university national ranking for research expenditures in five or more science, technology, engineering, or mathematics fields of study, as reported annually by the NSF.
9. One hundred or more total patents awarded by the United States Patent and Trademark Office for the most recent 3-year period.
10. Four hundred or more doctoral degrees awarded annually, as reported in the BOG Annual Accountability Report.
11. Two hundred or more post-doctoral appointees annually, as reported in the TARU annual report.
12. An endowment of $500 million or more, as reported annually by the BOG Annual Accountability Report.

Of the 14 academic and research excellence standards proposed in HB 7129 in 2012, the bill includes 12 identical measures, four of which have increased benchmarks. The BOG must verify that a university has met benchmarks associated with 11 of the 12 measures before it can designate the university as a preeminent state research university.

The state research university that attains the highest level on the academic and research excellence standards, as verified by the BOG must establish an institute for online learning, subject to funds appropriated by the Legislature. The state research university that attains the second highest level must recruit National Academy Members, expedite provision of a master's degree in cloud

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8 42 U.S.C.A. s 1861; see also National Science Foundation, About the National Science Foundation, available at http://www.nsf.gov/about/ (last visited Feb. 21, 2013).
virtualization, and institute an entrepreneurs-in-residence program throughout its campus, subject to funds appropriated by the Legislature.

The bill also establishes the Preeminent State University Special Course Requirements Authority, under which any preeminent state research university may require its incoming first-time-in-college students to take a 9-to-12 credit set of courses specifically determined by the university. The university may stipulate that credit for such courses may not be earned through any acceleration mechanism pursuant to ss. 1007.27 or 1007.271, F.S. or other transfer credit. Any accelerated credits earned up to the limits specified in ss. 1007.27 and 1007.271, F.S. must be applied toward graduation at the student's request.

The BOG is encouraged to identify and grant all reasonable feasible authority and flexibility to keep designated preeminent universities free from unnecessary restrictions. The bill also encourages the BOG to identify individual programs within state universities that objectively reflect national excellence. The BOG is encouraged to make recommendations to the Legislature as to how any such programs could be enhanced and promoted.

State University System Online Education

Present Situation

Currently, 10 of Florida's 12 state universities offer online courses and online degree programs. Each institution has its own, independent online strategy, with its own marketing, course design, instruction, support services, and IT capabilities. Systemwide, state universities offer a total of 389 online programs for undergraduate and graduate certificates, bachelor's degrees, master's degrees, and doctorate degrees. Of the 389 online programs currently offered by state universities, only 46 are baccalaureate programs. The majority of these consist of only upper-division courses.

In 2012, the Parthenon Group conducted a survey of online postsecondary education in Florida and identified four primary objectives for postsecondary online learning:

- Expanding access;
- Reducing system and student costs;
- Strengthening the link between the labor market and postsecondary education; and
- Enhancing the student experience.

Effect of Proposed Changes

The bill provides that the state university that has attained the highest level on the academic and research standards for preeminence ("university" for purposes of this segment of the bill analysis) must establish an institute for online learning subject to funds appropriated by the Legislature. It also creates an advisory board, which must advise the university in the development and implementation of a business plan; authorize the release of funds to the university; and monitor, evaluate, and report on the status of the implementation of the plan.

The advisory board for the online institute is comprised of the following:

- The chair of the Board of Governors or the chair's permanent designee;
- A member with expertise in online learning, appointed by the Board of Governors;
- A member with expertise in global marketing, appointed by the Governor;
- A member with expertise in cloud virtualization, appointed by the President of the Senate; and

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10 The Parthenon Group, Summary: Post-Secondary Online Expansion in Florida, at 5 (Nov. 7, 2012). SUS institutions that do not offer online courses or degree programs include Florida Polytechnic University and New College of Florida. The figures presented within the Parthenon Group's Summary are based on a 2010-2011 headcount.
12 Id.
• A member with expertise in disruptive innovation, appointed by the Speaker of the House of Representatives.

The president of the preeminent university must be consulted on the institute's advisory board member appointments.

The bill requires the university to submit a comprehensive plan to the advisory board detailing the expansion strategy for online education. This plan will include the university's approach to develop:

• General education and new course offerings online;
• Applicable support services for online students;
• A tuition and fee structure for courses, programs, and student support;
• A timeline for offering, marketing, and enrolling students;
• A budget for development and marketing; and
• Strategies for ensuing success of students and sustainability of programs.

The university must offer high-quality, fully online bachelor's degree programs starting in January 2014. The programs must:

• Accept full-time, first-in-time-in-college students;
• Have the same rigorous admissions criteria as an equivalent on-campus degree program;
• Offer a curriculum of equivalent rigor to on-campus degree programs;
• Offer rolling enrollment or multiple windows of enrollment throughout the year;
• Not require any on-campus courses; and
• Apply the university's existing policy for accepting credits for both freshman applicants and transfer applicants.

The bill authorizes the institute to offer master's degree programs, including a fully online Masters in Business Administration, and must periodically expand its offerings for online bachelor degree programs. The university may also offer degree programs and courses that are competency based.

With respect to tuition, the university must establish a structure for its online institute in accordance with the following provisions:

For Florida residents, tuition for any online baccalaureate degree program may not exceed 75 percent of the combined tuition and tuition differential for the equivalent on-campus baccalaureate degree program. The university is also authorized to assess the technology, financial aid, and Capital Improvement Trust Fund (CITF) fees. Revenues generated by the CITF fee must be dedicated to the institute.

For non-Florida residents, tuition may be set at market rates.

Tuition for the online program must include all costs associated with instruction, materials, and enrollment, except costs relating to laboratory supplies and textbooks.

Tuition may be differentiated by degree program as appropriate to the instructional and other costs of the program. In doing so pricing must incorporate innovative approaches that incentivize persistence and completion, including but not limited to fees for assessment, bundled or all-inclusive rates, and sliding scale features.

The online institute of the university must accept advance payment contracts and student financial aid.

Fifty percent of the net revenues generated from the online institute are used to enhance and enrich the online program offerings, and the other 50 percent of the net revenues are used to enhance and enrich the university's state-of-the-art research programs and facilities.

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14 For courses or programs that require clinical training or laboratories that cannot be delivered online, the university shall offer convenient locational options to the student, which may include but not be limited to the option to complete such requirements at a summer-in-residence on the university campus; additionally, for purposes of proctored assessments or testing, the university may provide a network of sites at convenient locations and may contract with commercial testing centers or identify other secure testing
- The institute is authorized to charge user fees with the approval of the BOG. \(^{15}\)
- The university may submit a proposal to charge fees in association with additional voluntary student services.

Oversight of Florida College System and State University System

**Present Situation**

**Florida College System**

The Florida College System (FCS) is the state's system of regionally-based public two- and four-year colleges. \(^{16}\) The FCS is comprised of 28 public postsecondary institutions located at 181 sites statewide. \(^{17}\) Each FCS institution is assigned a service area comprised of one or more counties. \(^{18}\)

The State Board of Education (SBE) provides state-level governance of the FCS, with agency oversight provided by the Department of Education's (DOE) Division of Florida Colleges. \(^{19}\) Each FCS institution is governed locally by a board of trustees; \(^{20}\) individual trustees are appointed by the Governor and confirmed by the Florida Senate. \(^{21}\) Local boards of trustees must govern their institutions in accordance with state law and state board rules. \(^{22}\)

As part of its oversight authority over the Florida College System, the SBE has authority to request and receive information, data, and reports from individual FCS institutions. \(^{23}\) Further, the Commissioner of Education may investigate allegations of noncompliance with law or state board rule and determine probable cause, reporting determinations of probable cause to the SBE. \(^{24}\)

Once a determination of probable cause for violation of law or rule is reported to the SBE, the SBE must require the FCS institution's board of trustees to document compliance with the law or rule. \(^{25}\) If the board of trustees cannot satisfactorily document compliance, the SBE may order compliance within a specified timeframe. \(^{26}\)

The SBE may initiate certain actions in the event it determines that a FCS institution board of trustees is unwilling or unable to comply with law or state board rule within the specified timeframe. \(^{27}\) The actions prescribed by statute include any of the following: \(^{28}\)

- Reporting to the Legislature that the institution has been unwilling or unable to comply with law or state board rule and recommend action to be taken.

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\(^{15}\) Section 1009.24(14), F.S.

\(^{16}\) Part III, ch. 1001, F.S.; Part III, ch. 1004, F.S.; see ch. 2009-228, L.O.F. FCS institutions were first known as "junior colleges." Today, FCS institutions may use one of four name designations - junior college, community college, college, or, if the FCS institution offers baccalaureate degrees, state college. Sections 1000.21(3), 1001.60(2)(b), and 1004.66, F.S.


\(^{18}\) Sections 1000.21(3) and 1004.65(2)(a), F.S.

\(^{19}\) Sections 20.15(3)(a) and 1001.02(1) and (4), F.S.

\(^{20}\) Sections 1001.60(3), 1001.61(1), and 1004.65(1), F.S. FCS institutions are statutorily designated as political subdivisions of the state. Sections 1004.65(3) and 1004.67, F.S.

\(^{21}\) Section 1001.61(2), F.S.

\(^{22}\) Section 1001.64(1) and (2), F.S. Among other things, each board is authorized to adopt rules, procedures, and policies on such matters as admissions, educational programming, administration, personnel, contracts, grants, and facilities. Section 1001.64(4), F.S.

\(^{23}\) Section 1008.32(1), F.S. FCS institution presidents are responsible for the accuracy of information and data reported to the SBE.

\(^{24}\) Section 1008.32(2), F.S.

\(^{25}\) *Id.*

\(^{26}\) Section 1008.32(3), F.S.

\(^{27}\) Section 1008.32(4), F.S.

\(^{28}\) Section 1008.32(4)(a)-(e), F.S.