ABSTRACT

Title of Document:	RECLAIMING THE EDUCATION DOCTORATE: THREE CASES OF PROCESSES AND ROLES IN INSTITUTIONAL CHANGE
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Directed By: Dr. Thomas Weible, Co-Chair, EDHI Dr. David Imig, Co-Chair, EDCI

The purpose of this study is to understand how change takes place in schools of education by examining three institutions involved in the *Carnegie Project on the Education Doctorate*. More specifically, this study will investigate how schools of education and their academic departments adopt, adapt, or reject change efforts and how faculty in a change agent capacity describe and understand their role in this process. The theoretical framework that guided this study is Everett Rogers' *Diffusion of Innovation* model which examines how innovative ideas are disseminated through an understanding of the innovation, the communication channels through which the innovation is described, the influences of the social system on the process, and the time it takes for a decision to adopt the innovation is made.

The methodology employed in this study was an embedded, multiple-case study. The two units of analysis were the school or academic department and the CPED primary investigator. Data was collected in three forms— documents, interviews, and observations. Case reports for each institution were generated and a cross-case analysis was conducted. Findings reveal that leadership, internal characteristics, external characteristics and change agent roles and strategies are significant in defining and shaping the change process.

RECLAIMING THE EDUCATION DOCTORATE: THREE CASES OF PROCESSES AND ROLES IN INSTITUTIONAL CHANGE

By

Jill Alexa Perry

Dissertation submitted to the Faculty of the Graduate School of the University of Maryland, College Park, in partial fulfillment of the requirements for the degree of Doctor of Philosophy 2010

Advisory Committee: Professor Thomas Weible, Co-Chair Professor of Practice David Imig, Co-Chair Professor Steven Klees, Committee Member Professor Jing Lin, Committee Member Professor Donna Wiseman, Committee Member Professor Lee Shulman, Special Committee Member © Copyright by Jill Alexa Perry 2010

Dedication

To my father, who when embarking upon my undergraduate studies, asked if I was going to be "a doctor, a lawyer, or businessman." A Doctor, dad.

I wish you were here to see it happen. I love and miss you.

Richard F. Perry 1922-2004

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Chapter 1: Introduction

Overview

In January 2007, the Carnegie Foundation for the Advancement of Teaching launched the Carnegie Project on the Education Doctorate (CPED) and charged this initiative to "reclaim" the education doctorate and make it the professional practice degree in education. CPED stemmed from the conclusions of the Carnegie Initiative on the Doctorate $(CID)^{1}$, a 5-year initiative to improve the research doctorate degree across several fields which suggested that schools and colleges of education needed to resolve the confusion over the two doctoral degrees offered for graduate education, the Ph.D. and the Ed.D. The project suggested that the Ph.D. is the "traditional academic degree that aims to prepare researchers, college teachers, and scholars in education" while the Ed.D. aims to "prepare managerial and administrative leadership... practitioners who can use the existing knowledge about the field to solve complex educational problems" (Richardson, 2006, p. 246). While the CID project focused primarily on ways to improve the Ph.D. in education, it also recommended the need for further contemplation about the ways that graduate programs in education should better prepare leaders for the world of practice. The project concluded that, currently, the Ed.D. is simply not adequately preparing "leading practitioners" for the challenges that confront America's schools and colleges.

According to the National Research Council, some 142 graduate schools of education currently award both degrees, with little differentiation between the preparation

¹ The *Carnegie Initiative on the Doctorate* (CID) took place from 2000-2005. The research project brought together doctoral-granting departments in six disciplines (chemistry, education, English, history, mathematics, and neuroscience) and sought to restructure their programs to better prepare graduates for academia. Additional information is available at http://carnegiefoundation.org.

of future faculty and researchers and the preparation of practitioners. Two degrees with dual purposes have long perpetuated misconceptions about the quality of the education doctorate and have led to accusations that both are "second-rate degrees" (Shulman, Golde, Bueschel, & Garabedian, 2006, p. 26). With the national education system under fire, a great deal of criticism about the role and purpose of the Ed.D. has surfaced. Most notable is the assertion that current Ed.D. degrees often fail to provide leaders in PK-12 and in higher education with practical knowledge and the capacity for expert leadership. The conclusion is that the profession needs more rigorous and relevant professional training. In 2007, Levine called for abandoning the Ed.D. and recasting the preparation for school and college leadership in an M.B.A.- type model. Others have argued that it is time to refashion the professional degree (the Ed.D.) and make it into the degree of choice for practitioners (Shulman et al, 2006). These contrasting points of view have provided the foundation for much debate and action.

Agreeing with the notion of rethinking the Ed.D. as the professional practice doctorate, the CPED initiative accepted the call for urgent action and sought to distinguish between the two degrees by focusing on re-defining the Ed.D. Following nearly two years of planning, the Carnegie Foundation for the Advancement of Teaching and the Council of Academic Deans from Research Education Institutions (CADREI) assembled twenty-five schools and colleges of education to engage in a national, interinstitutional dialogue seeking to improve the preparation of advanced educational practitioners. The initiative focused on developing *stewards of practice* in doctoral education—professional practitioners who are committed to the highest standards and are prepared to take on the challenges of teaching in and leading schools, serving as

administrators and clinical faculty in two and four year colleges and universities, and leading organizations that serve education. To do this, the initiative intended to define what a steward of practice should know, value, and be able to do. The initiative also intended to design the course of study and the experiences that could develop this type of practitioner. As a companion effort, the initiative sought to simultaneously strengthen the Ph.D. in education, with the goal of preparing *stewards of the discipline* as its primary purpose, or those that "generate new knowledge, understand the intellectual history of the field, to use the best ideas and practices in current work, and to represent that knowledge to others both within and outside the field" (Richardson, 2006, p. 254).

This ambitious initiative was undertaken at a "grassroots level"² with faculty members from the twenty-five institutions at the helm of creating new programs and a new identity for the professional practice doctorate. These faculty members participated in bi-annual CPED meetings then returned to their home institutions with CPED ideas where they work within their colleges or departments³ to generate new academic programs that would support the training of highly-qualified educational leaders and provide those leaders with better skills and experiences. Logistical details of the initiative will be provided in chapter three as part of the methodological design for the proposed study.

The purpose of this study was to understand how change takes place in schools of education by examining three institutions involved in the Carnegie Project on the

²For this research, I have adopted Wergin's (2007) definition of "grassroots leadership" which he explains as "leadership in place," or the pursuit of change without the pursuit of an administrative career in the institutional hierarchy by a non-administrative person such as a university faculty member.

³ While most institutional members of CPED have chosen one or more academic departments to pilot their effort, some institutions are working across all departments; while at others departmental distinctions have been eliminated, members are working across the college as a whole.

Education Doctorate. More specifically, this study investigated how schools of education adopt, adapt, or reject efforts to change and how faculty in a "change agent" capacity described and understood their role in this process. The theoretical framework that guided this study was Everett Rogers' *Diffusion of Innovation* model which examines how innovative ideas are disseminated through an understanding of the attributes of the innovation, the communication channels through which the innovation is described, the influences of the social system on the process, and the time it takes to come to a decision to adopt the new idea. A detailed understanding of how this model framed the study is provided later in this chapter.

First, to fully understand the contextual and historical basis for this study, the following section provides a description of professional preparation in education in the United States. The section begins with a working definition of a profession and description of professional preparation. The section then provides some of the arguments that support the notion that education is a profession. Next, I detail the history of the development of professional training at American universities. Finally, I review the on-going debate about the purposes of the Ed.D. versus the Ph.D.

A Profession

Sullivan (2005) suggests that a profession is often defined as an occupation that employs people who have "the capacity to solve technical problems" (p. 84). A profession, however, is much more than this simple definition. Forsyth and Danisiewicz, (1985), for example, explain that a profession "may be a fundamental social process embedded in the relationship between society and those who practice certain expert occupations" (p. 60). Gitlin and Larabee (1996) point out that over the evolution of professions (from guilds to associations) one common factor has always been evident the notion of authority. They define authority as something that professionals receive in return for confidence in their abilities, skills and knowledge (Gitlin & Larabee, 1996). Sullivan (2005) further explains that a profession encompasses a "partnership between the public and functional groups, [and is] organized to advance social values in the interest of those served" (p. 4). In addition, he notes, professions have a "responsibility for domains of knowledge and skill that are essential to modern life" (Sullivan, 2005, p. 4).

Darling-Hammond and Bransford (2005), following Sullivan's definition of a profession, explain that professionals have a "social calling that forms the basis of entitlement to practice" (p. 12). The authors further proclaim that because of the complexity of a professional's work, they must "know a great deal about how to achieve their goals for clients in situations that are unpredictable and non-routine; they must be able to enact what they understand in practice; and they must be able to continue to learn from their colleagues and their students about how to meet new challenges" (p. 13).

Tamir and Wilson (2005) have come to a similar definition when describing the professional. They believe professionals are those that see their practice as one that serves the public good and believe they possess autonomy derived from their expertise. Having autonomy allows the professional the freedom to consider "alternatives and provide best answers; professionals make these decisions based on a codified knowledge, a common set of procedures to identify problems, consensual agreements...and the use of professional judgment in the face of uncertainty" (Tamir & Wilson, 2005, p. 335). Such judgments and decisions are ultimately made to maximize the public good.

Shulman (2007) elaborated a more detailed definition of a profession and included the following seven components. A profession, he claims,

- 1. Provides a service to society;
- 2. Is performed in exchange for autonomy;
- 3. Possesses a growing body of knowledge, research, and practice;
- 4. Possesses a mastery of technical skills and practices;
- 5. Holds the ability to make judgments under uncertainty;
- 6. Holds the ability to learn from experience, error, and others;
- 7. Has a professional community that sets standards, monitors quality, and offers continued education and development (*Address to the Council of Graduate Schools, 2007*).

Though similar to Sullivan's definition, Shulman (2007) has added the notions of "making judgments under uncertainty," continued learning, and the existence of common standards for monitoring the profession. Each of these points, he claims, contributes to the development of a professional group (Shulman, 2007).

Understanding the components of a profession and the roles of professionals provides a basis for which to understand professional preparation. In 1986, Stark, Lowther, and Hagerty surveyed the faculty within ten professional schools. They found that faculty frequently understood professional preparation to be a complex process, but also one that encompasses "several components involving knowledge, skill, and attitudes" (p. 15). The author's study led them to claim that professional preparation should "encompass the totality of professional study—learning academic concepts, learning necessary professional skills, integrating concepts and skills, and becoming socialized into the profession" (Stark, Lowther, & Hagerty, 1986, p. 6).

Sullivan (2005) has described professional preparation as a process that "demands a long apprenticeship and is carried out in formal education institutions" where students master "complex skills and a body of knowledge that constitutes a kind of professional culture"(p. 4). Sullivan and his colleagues have further elaborated on the goal of professional education stating that it should "prepare students for the complex demands of professional work—to think, to perform, and to conduct themselves like professionals [as well as] teach the complex ensemble of analytic thinking, skillful practice, and wise judgment upon which each profession rests" (Sullivan, Colby, Welch-Wegner, Bond, & Shulman, 2007, p. 27).

Outcomes of professional preparation have been clearly detailed by Stark, Lowther, and Hagerty (1986) who described two dimensions of professional preparation—building *competencies* and fostering *attitudes*. Professional *competencies*, the authors explain, include conceptual (theoretical understanding), technical (ability to perform tasks), contextual (understanding of work environment), interpersonal communication (ability to communicate effectively in writing and orally), integrative (ability to combine theory and technical skills into practice), and adaptive skills (ability to anticipate and accommodate change in the profession) (p. 13). Professional *attitudes* include career marketability (degree to which the graduate is employable), professional identity (degree to which the graduate internalizes norms of the profession), ethical standards (degree to which the graduate internalizes the ethics of a profession), scholarly concern for improvement (degree to which the graduate recognizes the need to increase knowledge of the profession through research), and motivation for continued learning (degree to which the graduate seeks to update knowledge and skills) (p. 13).

With the goals and outcomes illustrated, we see that professional preparation is tied closely to the definition and goals of the profession itself which often serves as a guide to creating professional preparation programs. In education, professional

preparation takes place at both the undergraduate and graduate level, from the initial preparation of teachers and principals to the continuing development of administrators and master teachers. Though the development of professional training in education in the U.S. began with teacher training at the upper-secondary level (last two years of high school) and within normal schools and then moved to university undergraduate programs, this study was concerned with university graduate level professional training for educational leaders, namely the doctorate in education.

Arguments for the Professionalization of Education

Those who declare that education is not a full profession gather their arguments from the definition of profession and the current context of professional preparation. These opponents call for clearer definitions of the skills, knowledge, training, and protocols of the profession. Howsam, Corrigan, Denemark, and Nash (1976) noted over thirty years ago that "teachers do not possess a common body of professionally validated knowledge and skills which is transmitted in the process of professional socialization... and which is constantly increased through the career span of the teacher (p. 10). They further warned "to fail to develop principles, concepts, and theories and to validate practice is to restrict the occupation [of teaching] to the level of craft" (Howsam et al, 1976, p. 11).

Gitlin and Larabee (1996) suggest that education is contested as a profession not because of its claims for authority, but rather by the criteria used for making claims about its abilities, skills, and knowledge. They outline various "professional projects" (Gitlin & Larabee, 1996), or attempts throughout history to establish an education profession. Gitlin and Larabee (1996) demonstrate over time that the failure of education to become a

profession stems from two barriers. The first barrier is the perpetual employer demand to fill schools with teachers that has caused teacher education to become a producer of bodies rather than of qualified specialists. As public schools increased over the course of the last century and the number of children entering schools also increased, teacher education institutions accepted virtually anyone to study teaching. Second, as more people saw tertiary education as a means for social mobility, education consumers pushed the demand for more educational opportunities. The massification⁴ of higher education led to the expansion of the normal school into a "peoples college" (Gitlin & Larabee, 1996, p. 93) and eventually into state colleges and universities. Gitlin and Larabee (1996) have suggested that placing teacher education in higher education institutions has marginalized the field as a profession because teacher education is often spread throughout the institution—including subject matter learning situated in other colleges and departments—and it is frequently utilized as a "cash cow" (p. 96) rather than being recognized as an academic discipline within the institution. As a result, education has occupied the "lowest rung" of the status hierarchy at the university (Gitlin & Larabee, 1996, p. 95). Gitlin and Larabee (1996) argue that for the position of education within the university to improve and for the profession to fully realize itself, education must consider the affect of these "historical roots" (p. 103) on current efforts to professionalize.

Other arguments focus more directly on the need for developing stronger preparation that is built upon a knowledge base in education, one that provides the skills necessary to practice education. Larabee (2004), though an adamant supporter of the idea

⁴ According to Altbach (1999), 'massification,' or mass higher education, refers to the circumstances and processes by which higher education is expanded to a wider population.

of education as a profession, has also stressed the troubling fact that teaching "has no established set of professional practices that have been proven to work independent of the particular actors involved and the particular time and place of the action" (p. 53). The difficulty with education as a profession is that its clientele comes with a wide variety of issues and circumstances that make it difficult to define the service provided. Judge (1987), however, cautioned that the danger of having an orthodoxy that states that a profession must possess a knowledge base is "at several points, ... [this] may be demonstrably untrue" (p. 19). He pointed to other professions such as law, medicine, and clergy to provide examples. Darling-Hammond and Bransford (2005) suggest that education is a profession namely because it serves democratic purposes. However, they stress the need for stronger preparation for practitioners before they can be considered to be professionals. For teachers to "understand their roles and responsibilities as professionals in schools" (p. 11), Darling-Hammond and Bransford (2005) argue, they must be given the opportunity to see the commonalities of their profession with those of other professional groups.

The intention of this paper is not to argue that education should or should not be recognized as an established profession, however, this brief discussion seeks to note two points about the argument for education as a profession. First, education scholars believe education is a profession. Leaders in the field such as Darling-Hammond and Bransford (2005) and Shulman (2007) demonstrate that education meets the criteria of a profession: one that provides a service to society, can and should be autonomous, holds a body of knowledge and skills, teaches mastery of skills, utilizes sound judgment and continuous learning, and has a professional community. Second, education scholars recognize that

the profession is lacking a clearly defined set of knowledge and skills as well as professional status at institutions of higher education and they have called for reforms to address these concerns. Consequently, many scholars have spent a lifetime laboring toward finding clear definitions of the professional skills, standards, and knowledge necessary for the establishing education as a recognized profession.

The next section will provide a description of the history of professional preparation in education at the university level which began with the undergraduate teacher training and steadily grew into graduate level leadership training.

Professional Education in the United States

In 1857, Scottish-born teacher, lecturer, writer, and editor William Russell proposed that teachers should be given control over entry into their profession. Russell wrote, "Let a teachers' association receive a charter from the State and proceed, without further authorization, to examine and pass upon applicants for membership" (in Bradley, 1999, p. 38). That same year the National Education Association (NEA) was founded as a professional association for teachers in Cincinnati. William Russell closed its first annual convention (Wesley, 1957). However, Russell's idea was not to be immediately developed, and the path to the professionalization of education has since been a long and arduous process.

Between 1870-1910 professional preparation in the fields of law, medicine, and education emerged as a response to dissatisfaction with then contemporary training models (Cremin, 1978) which often included apprenticeships, but no formal study. By the turn of the 20th century, these professions had sought ways to define and establish respectable training, resulting in well-qualified specialists. One of the early steps taken by

each of these professions was to "attach themselves to the modern American university" (Clifford & Guthrie, 1988, p. 82) believing that formal study at an institution of higher education would provide better preparation.

Though Harvard (law), Johns Hopkins (medicine), and Columbia (education) were "nascent universities" (Cremin, 1978, p. 6), the deans who took on the task of formalizing professional education for each of these fields believed in raising the standards of each profession through university study. Law Dean Christopher Columbus Langdell of Harvard College, for example, believed that textbooks and lectures represented a "more efficient way of teaching the general principles of law" (Cremin, 1978, p. 6) than did the apprenticeship model. William Henry Welch believed that formal medical training needed a solid academic base reinforced by practical clinical training. At Johns Hopkins he introduced three curriculum reforms in medicine to achieve his vision -preclinical courses, clinical courses, and the teaching hospital. While investigating medical training in the United States, Abraham Flexner discovered a "great discrepancy" [that] had opened up between medical science and medical education. [He observed that] while science had progressed, medical education had lagged behind" (Starr, 1982, p. 119). In the 1910 landmark study for the Carnegie Foundation for the Advancement of Teaching, Flexner highlighted the Welch model as the basis for the reform of medical education. The Flexner Report eventually led to millions of dollars of funding from the General Education Board that solidified what we know today to be formal medical training.

In Massachusetts in the 1830s, normal schools were established as publically funded, state controlled institutions. These would eventually evolve into freestanding

comprehensive post-secondary schools and colleges. Education, however, had a more difficult experience establishing itself within the university. In 1879, the University of Michigan created a "chair in the science and art of teaching" (Hazlett, 1989, p. 11). Many other institutions followed this notion and by 1890 a total of 31 professors of education could be named across the country in established colleges and universities. Despite the proliferation of education faculty and courses at universities, however, the education profession faced a greater challenge in bringing teacher training into the university setting. At the time, teacher training was sporadic. Many elementary school teachers had no training beyond their own schooling or the normal courses in their high schools (Clifford & Guthrie, 1988). Secondary teachers were mostly prepared at normal schools—vocational schools that were originally designed to provide new teachers with basic classroom management and instructional techniques. However, even this training was incoherent as Learned and Bagley (1965) discovered in Missouri. They found that several teacher-training institutes were under constant pressure to become general education schools which undermined their goals of professionally training teachers, a fact they felt could be generalized to other states (Imig & Imig, 2004). In addition to confusion within institutions, critics outside of education at the time viewed the educators' status much like the status of clergy-with a lens of moral responsibilitybelieving that educators were called to their profession, but did not need to specifically train for their vocation. Despite this fragmentation in preparation, the turn of the century brought many changes to the definition of professional training that forced the field of education to abandon outdated ideas about its profession and to look toward the "new

exemplar of the professional man" (Clifford & Guthrie, 1988, p. 82). These new models of professional preparation came from the legal and medical professions.

James Earl Russell (no relation to William Russell) sought to bring this new model of professional preparation to the nascent Teachers College at Columbia University. In 1898, twelve years after Teachers College was founded, Russell wrote, "The true educator must know the nature of the mind, he must understand the process of learning, the formation of ideals, the development of will, and the growth of character. The artist in every vocation must have consummate skill in the use of his tools" (Cremin, 1978, p. 10). Russell used this notion of 'educator as artist' as the basis for a curricular reform at Teachers College. His reform strived to give the "novice what he will need in his practice" (Russell, 1924, p. 210). He changed the existing curriculum to include four central components-general culture (preparation equal to undergraduate education at the time and the ability to see relationships to other fields), special scholarship (reflective inquiry and continued learning), professional knowledge (systematic inquiry into the theory and practice of education), and technical skill (expert ability acquired in experimental schools or laboratories) (Cremin, 1978, p. 10). His goal was to marry professional knowledge with technical skills, a marriage he thought relevant to teacher abilities. In doing so, Russell raised admissions standards, length of time to degree, and aligned departments of education with professional associations.

Graduate work in education appeared in 1893 when the University of Minnesota offered *pedagogy* as a graduate subject (Clifford & Guthrie, 1988). Shortly thereafter, the universities of Iowa and Michigan began offering education courses to graduate students. The proliferation of graduate study in education was a direct response to "city, state, and

federal officials in education [looking] increasingly to the university for manpower" (Clifford & Guthrie, 1988, p. 72). Just as law and medicine adopted professional credentials to demonstrate competence, education saw "younger men substitute university credentials and contacts for the traditional experience" (Clifford & Guthrie, 1988, p. 73) in order to obtain new administrative positions.

The development of doctoral programs in education can be traced to three key events which mark the development of the doctorate of philosophy (Ph.D.) in education and the doctorate of education (Ed.D.). The first event was an announcement made by James Earl Russell in 1893 of the first Ph.D. program in education at Teachers College. Russell based this program on his curricular reforms and included work in educational psychology, history of education, and philosophy of education. In addition, students were expected to complete two practica in specialized areas, take graduate work outside of education, and write a dissertation that demonstrated "power of independent thought and capacity to advance knowledge" (Cremin, 1978, p. 14). Cremin (1978) points out, however, two elements in the curriculum Russell developed at Teachers College that did not align with his original idea of professional education. First, Cremin notes, the practica undertaken by the students seemed "much more closely related to professional knowledge than technical skill" (Cremin, 1978, p. 14). Second, Cremin (1978) suggests that the dissertations produced at Teachers College at the time focused more on a "historical and statistical approach [rather than a technical approach] to the institutions and processes of education" (p. 14). Cremin's criticisms are important in that they highlight the beginning of the confusion over doctoral preparation in education.

At Harvard College, a different story of professional preparation in education was occurring at about the same time. In 1865 Thomas Hill, then president of Harvard College, while considering the goal of Harvard College becoming a university, wrote about the distinction between liberal education and professional education. Hill wrote that liberal education served "the general perfection and improvement of the pupil" while professional education provided the "culture and instruction which fits...for some chosen walk of life" (Clifford & Guthrie, 1988, p. 3). Hill recommended that normal schools become a part of the university to provide a bachelor of arts in education that would raise teacher standards and establish the profession of teaching (Clifford & Guthrie, 1988, p. 3). In 1890, the new Harvard College president, Charles Eliot, a leader in championing "specialization to foster social usefulness" (Sullivan, 2005, p. 94), established a "normal course" and hired Paul Henry Hanus to coordinate the new teacher education program. Eliot, despite his strong belief in professional education, did not intend to create a burgeoning teacher preparation program at Harvard, however. Instead, his intention was to have greater influence over high schools by disseminating proven educational ideas (Powell, 1980) in the greater Boston area school districts and their governing bodies. Hanus did not agree with Eliot's vision and received little support from Eliot as he attempted to expand the role of the normal school at Harvard College.

In addition to a mismatched philosophy with Eliot, Hanus encountered much difficulty working with a faculty that self-identified themselves in other fields such as history and philosophy (Powell, 1980; Clifford & Gutherie, 1988). Many faculty members denied that education could be a science. Josiah Royce (1891), for example, argued that "pedagogical formulas will seldom prove sufficient" for the control and

education of children" (p. 121). Teachers, in Royce's view, were naturalists, possessing a gift for teaching rather than requiring training (Royce, 1891). Frustrated, Hanus turned his own work to a new area— administrative and bureaucratic issues found in the growing public education sector. He proclaimed himself an expert in school superintendency and educational administration (Clifford & Guthrie, 1988) which were both largely unrecognized areas within academia at the time. He believed strongly in educational research, a trait that should have won him favor with Lawrence Lowell, who succeeded Eliot as president to Harvard in 1909. Lowell, however, disliked Hanus and did everything he could to push him out (Powell, 1980). As a result, Hanus had a difficult time raising the status of education at Harvard and, while on leave in 1911-1912, was replaced by Henry Holmes as head of the division of education (Powell, 1980).

In 1920, after much effort to raise \$2 million dollars including a \$500,000 gift from the General Education Board, the Harvard Graduate School of Education was established under Henry Holmes who was named its first Dean (Powell, 1980). Holmes was not an advocate of research, nor did he hold a Ph.D., however, he wanted to increase Harvard's role in the professional training of educators. One of Holmes' first successes was the establishment of the doctorate of education, or Ed.D., for students who had had a successful teaching experience, and possessed a "working knowledge of biology, psychology, and the social sciences" (Cremin, 1978, p. 15), and who sought a higher position within the school system. The program of study comprised five areas of education plus the study of social theory in education, history of education, and educational psychology. The dissertation served to teach the student to conduct an independent investigation utilizing existing knowledge and producing a "constructive

result of importance and value" (Cremin, 1978, p. 15). The purpose of the Ed.D. was to offer a rigorous course of study that would enhance candidate's prior knowledge and skills and better prepare them to lead as school practitioners (Cremin, 1978).

Holmes saw great promise for his graduate school by training older, experienced male teachers who aspired to become school administrators. Namely, Holmes saw the need for the independence of the Graduate School of Education from the Harvard School of Arts and Sciences. This he believed, would "signify acceptance of education's professional claims, [and] would be a potent lure to attract more graduate students" (Powell, 1980, p. 133). Holmes believed that the establishment of the Doctorate in Education (Ed.D.) and the Master of Education (Ed.M.) would profoundly mark the separation of education from the arts and sciences as well as "symbolize education's prestige and autonomy" (Powell, 1980, p. 137). Many of Holmes' colleagues, however, worried that the new degrees would be viewed as less valuable than the Ph.D. and the Master of Arts (A.M.). These concerns caused Holmes to work to keep the Ph.D. as well, but Lowell who believed in academic decentralization at Harvard, saw little reason for two degrees and "gave monopoly of the Ph.D. to the School of Arts and Sciences" (Powell, 1980, p. 137) and control of the Ed.D. to the Graduate School of Education.

Cremin (1978) offers two observations regarding the Harvard Ed.D. curriculum; First, he notes the "paucity of course offerings" (p. 15) in comparison to the offerings at Teachers College. Second, Cremin (1978) suggests the degree requirements of the Ed.D. were quite similar to those of the Ph.D. at Teachers College. The only exception was that the dissertation for the Harvard Ed.D. offered a wider range of topic possibilities. Upon closer examination of actual dissertations from the two institutions, Cremin (1978) found

there was a great deal of similarity between dissertations produced at the two schools during the 1920s.

The reality of what was occurring at Harvard supports Cremin's claims. Throughout the 1920s, numerous Harvard students and faculty were unclear about the nature of the Ed.D., which had been "designed to serve similar ends [as the Ph.D.] despite rhetorical claims that its purposes were professional rather than scholarly" (Powell, 1980, p. 154). The Graduate School of Education rarely explained the difference between the two and never offered the distinction that the Ph.D. served research intentions while the Ed.D. served professional intentions (Powell, 1980). At the same time, the School touted the Ed.M. as the terminal degree for practitioners. In actuality, the definition of the Ed.D. was developed to "create the appearance of a functional difference between the Ed.D. and the Ph.D. when in fact no such difference existed" (Powell, 1980, p.154).

A third key event in the development of doctoral programs in education was the creation of an Ed.D. in 1934 at Teachers College under President William Fletcher Russell, the son of James Earl Russell. The younger Russell desired to incorporate his father's central curriculum ideas into this new degree. The result was the Teachers College Ed.D. which was a companion degree to its Ph.D. The Ed.D. involved three years of coursework, written and oral examinations, and a project report. The courses included work "covering issues common to workers in the educational field" (Cremin, 1978, p. 15) which initially meant foundation courses such as history, philosophy, and psychology. Later, however, the program incorporated courses in "educational administration, guidance, and curriculum and instruction" (Cremin, 1978, p. 16). The final project reports were to cover topics beyond those of the Ph.D. dissertation and often included

investigations of curriculum development and administrative and institutional reform issues (Cremin, 1978, p. 16).

Cremin (1978) suggests that as professional preparation programs developed at these two institutions, James Earl Russell had "high aspirations to create a profession of education comparable to the professions of law and medicine" (p. 19), but they gradually diminished over time, and the four central program components lost meaning and purpose as other program components were defined. The general culture requirement was often assumed, but not mandated. The special scholarship requirement was initially enforced in the Ph.D. programs, but not in Ed.D., and ultimately was removed from the Ph.D. programs. The technical skill requirement was "acknowledged rhetorically, but neither honored nor enforced programmatically" (Cremin, 1978, p. 16). The final requirement, professional knowledge, was the one that remained intact, but minimally in a set of core courses—history, philosophy, and psychology of education. The ultimate disconnect between preparation and apprenticeship "wreaked havoc with the integrity and coherence of the Russell model" (Cremin, 1978, p. 16). Furthermore, Cremin (1978) suggests that students who returned for graduate work had learned their professional roles while in practice and returned largely for paper credentials rather than actual training. The program model created by Russell resulted in a "fragmentation of the professional curriculum and a loss of coherence among its parts" (Cremin, 1978, p. 16).

Between 1900 and 1940 many institutions, including Berkeley, Stanford, and Michigan, followed the steps of Columbia and Harvard and established schools and colleges of education offering graduate study and two doctoral degrees. Despite this growth, however, many schools of education struggled to establish their identity as a

professional school and were perpetually engulfed in debate over the professional training degree. Several reasons contributed to the debate. First, offering two doctoral degrees resulted in constant conflict between the "demands of theory and those of practice" (Clifford & Guthrie, 1988, p. 49). Ellwood P. Cubberley of Stanford, who in 1897 saw no division between the academic or theoretical and the professional or vocation needs of education, later changed his view as difficulties in the school of education grew. By 1923, Cubberley was attempting to quell the debate between theoretical and practical training once and for all by stating, "the distinctive function of a university is, not action, but thought" (Cubberley, 1923 in Clifford & Guthrie, 1988 p. 91). James Earl Russell articulated similar sentiments regarding the university and cautioned that "academic and professional workers are uneasy colleagues" noting that academics are concerned with what "the subject he teaches will do for the student" and the professional teacher is concerned with "what the student can do with the subject" (Russell, 1924, p. 210).

Second, the advancement of professional training was further complicated as schools of education found themselves overwhelmed by academic demands from schools of arts and sciences. Graduate education, under the guidance of arts and science faculty, traditionally offered the Ph.D. Both the school of arts and sciences and its faculty had difficulty relinquishing their expertise in this area or acknowledging the professional degree. Clifford and Guthrie (1988) note that the academic profession "resisted the campaigns of professional schools to offer doctoral degrees independent of the administrative control of graduate schools" (p. 148). Despite these protests, some schools of education were able to gain independence. Stanford, for example, established its Ed.D.

in 1927 under the control of its school of education. Harvard and Columbia also managed to keep governance of the Ed.D. separate from the Ph.D. and housed in their respective schools of education. Berkeley's School of Education, however, was unable to keep its Ed.D., established in 1921, from the control of the School of Arts and Sciences (Clifford & Guthrie, 1988).

Third, from the inception of both doctoral degrees in education, unclear goals and similar programmatic content have confused the degree purposes and plagued professionalization efforts. Cremin (1978) suggests that early development of professional training in education solidified the foundation for the persistent confusion between the Ph.D. and the Ed.D. Cremin (1978) notes that James Earl Russell's notion of professional training for teachers was in truth a program aimed at preparing educational leaders. In this regard, Cremin (1978) insists Russell missed the opportunity to fully establish a professional career beyond that of teacher. He goes on to suggest that a major difference between professional training in education, opposed to its counterparts in law and medicine, was that much of the curriculum was often found outside of the professional school. The general cultural components were frequently taught at the undergraduate level, while the special scholarship component relied on study in academic departments outside that of education. Professional knowledge and skills were the only components that remained solely within the schools of education (Cremin, 1978, p. 12). Finally, and perhaps a more crucial point, was the fact that the "non-professional graduate schools" (Cremin, 1978, p. 12), such as the arts and sciences, were developing alternative programs in education that focused on scholarly inquiry into the problems of education. The Ed.D. was in direct competition with Arts and Sciences Ph.D. degrees that focused on education, such as philosophy and economics, and challenged the knowledge base of the doctorate in education.

Finally, the professoriate contributed greatly to the difficulties of developing professional education in education. James Earl Russell was keenly aware of the tensions at Teachers College between "professors of academic [disciplines] and [those with] professional orientations" (Hazlett, 1989, p. 17). The academic professors, he observed, valued the "cultivation and expansion" (Hazlett, 1989, p. 17) of systematic knowledge. The professional professors, on the other hand, concentrated on training and job skills. He recognized that the differences between these two groups manifested themselves in various aspects of the college and made realizing a profession of education more difficult. He once noted that as an administrator supervising the two groups, "he was lucky if he could get on without bloodshed" (Hazlett, 1989, p. 17). By 1924, Russell "deplored the merging of [academic and professional workers] in the same institution" (Clifford & Guthrie, 1988, p. 91).

Consequently, as schools of education continually struggled with these issues, the distinction between the two degrees grew and enhanced the challenges of creating a profession. The central problem in distinguishing the two doctoral degrees was the distinction between the "high prestige of research [degrees] when compared to professional practice [degrees]" (Clifford & Guthrie, 1988, p. 150). Compounding this problem were degree requirements that were the same, dissertation topics that were similar, and students who increasingly chose the Ph.D. or transferred shortly after entering their Ed.D. programs.

By the late 1950s, the American Association of Colleges for Teacher Education was called upon by academics to establish clear distinctions between the two degrees (Clifford & Guthrie, 1988). Ultimately, the lasting confusion and obvious similarities between the two degrees, led Levine (2007) to contend, "from the very beginning, the clear differentiation between the degrees [has been] blurred" (p. 40). Defining what a doctorate in education represented became virtually impossible with uncertainty that perpetually "fragmented the field" and "loosened the bonds between professional practice and professional education" (Clifford & Guthrie, 1988, p. 117).

The Ed.D. vs. Ph.D. Debate

Several studies and articles have attempted to make sense of the two doctoral degrees in education. Some have drawn conclusions that call for the elimination of one or the other. Yet, despite considerable attention, very little reform of either degree has happened, and the debate continues today. The following section presents a review of the seemingly endless discussion.

As early as 1930, Professor Walter Monroe of George Washington University undertook a survey of doctoral preparation in education (Freeman, 1931). His survey identified six institutions that offered the Ed.D. as a supplement to or substitute for the Ph.D. degree—Boston University, Harvard, Johns Hopkins, University of Southern California, and Stanford. Monroe found that these institutions frequently "set up somewhat different requirements [than those] for the traditional requirements for the Ph.D." (Freeman, 1931, p. 1). In his book, *Practices of American universities in granting higher degrees in education: A series of official statements*, Freeman (1931) built upon Monroe's survey and included statements from thirteen doctoral granting institutions that

awarded the Ph.D. in education through their graduate school of arts and sciences and seven institutions that awarded the Ed.D. through their schools of education. The intent of the study was to outline the differences in the degree requirements between the Ed.D. and the Ph.D. For core requirements, Freeman (1931) found that the foreign language requirement, originally required of both degrees, had been largely eliminated from the Ed.D. In addition, professional experience was required for all Ed.D. students but not for Ph.D. candidates. Regarding the inquiry requirement, the study concluded that the culminating thesis for the Ed.D. was expected to "organize existing knowledge instead of discovering new truths" (Freeman, 1931, p. 1), which was the expectation for the Ph.D.

Consideration of the differences between the two degrees surfaced again in the late 1950s. The American Association of Colleges of Teacher Education (AACTE) sponsored a study by Ludlow (1964) on doctoral education in response to concerns about the superiority of one degree over the other. At the time, it was generally understood that the Ph.D. "was intended to be an academic-research degree" and the Ed.D." was intended to be a practitioner professional degree" (Ludlow, 1964, p. 22). To confirm or deny this understanding, Ludlow (1964) surveyed doctoral recipients from ninety-one institutions over a two-year period, 1956-58, to examine the abilities, career motivations, and job satisfaction of both Ed.D. and Ph.D. recipients. Ludlow (1964) found that no significant differences in intelligence or in the abilities and achievements in certain types of professional positions existed between holders of the two doctoral degrees.

In 1966, Brown was funded by AACTE to conduct a follow-up to Ludlow's (1964) study. His goal was to fully understand the similarities and differences of the holders of both degrees. Brown (1966) believed, "the success of the nation's educational

system is in no small measure in the hands of these professionals holding the doctorate degree" (p. 1). By surveying students from 1963-64, he sought to understand the motivations and characteristics of doctoral recipients and to compare his findings to those of Ludlow (1964). He discovered an increase in degrees awarded and a growing body of students interested in pursuing doctoral studies in education. He also discovered that more than half of those surveyed went back to the job they had prior to entering the program. In comparison to Ludlow's (1964) study, Brown (1966) found that more degrees were awarded, programs had been shortened, the average age of recipients had stayed the same, and more men than women had entered doctoral studies.

Despite the fact that concrete evidence produced from both of these studies demonstrated very little distinction between the two degrees, little was affected by this information. The debate was quiet from the mid-1960s until the early 1980s when Anderson (1983) wanted to understand the distinction between the two doctoral degrees.

Anderson (1983), in response to an issue of degree differentiation in his academic department at the University of Washington-Pullman, undertook a survey to "ascertain the similarities and differences between the Ph.D. and the Ed.D." Though he looked mainly at programmatic requirements and employment patterns of graduates for both degrees, he discovered much more about the distinction between them. Initially, the survey revealed few differences between the two degrees. Rather, what Anderson (1983) found was a strong similarity for admissions, preparation, and graduation requirements for both degrees. In looking at the culminating project, Anderson (1983) found a "substantial difference between the two degrees in the acceptance of a practical problem for the Ed.D. as a substitute for a basic research study" (p. 56). Anderson (1983) also

discovered that both the number of institutions offering the two degrees and the number of students receiving both degrees had grown over time. Citing the earlier study by Monroe, Anderson (1983) found that in 1930, only six institutions offered the Ed.D. By 1982, 128 institutions were offering the Ed.D.; 86 of those 128 institutions offered both the Ed.D. and Ph.D. Finally, though his survey did not seek to investigate the philosophical reasons behind the differences between the two degrees, he discovered that the "Ph.D. is [considered to be] a scholarly degree, preparation for which is oriented toward the conduct of research, while the Ed.D is [viewed as] a professional degree preparation for which is orientated toward practice" (p. 57).

By the late 1980s, the debate had turned to whether or not both doctoral degrees were necessary for the field of education. In their book, *Ed Schools*, Clifford and Guthrie (1988) looked at schools of education at leading universities in America and suggested the need for drastic and dire reform. Seeking to fully professionalize education, they suggested that schools of education should focus on preparing teachers and educational leaders rather than on producing research. The most important recommendation was to eliminate the Ph.D. in favor of the professional practice Ed.D. as the degree of choice for educators, and proposed that the field of education focus on professional training rather than on creating knowledge and generating research. The reasoning behind this bold statement stemmed from Clifford and Guthrie's (1988) insights and their belief that "productive professional training... might hold the promise of maintaining and perhaps enhancing the effectiveness of the teacher workforce" (p. 37).

In a paper presented at the American Educational Research Association (AERA) annual conference, Brown (1991) responded to Clifford and Guthrie (1988) by arguing

that eliminating either degree was absurd. Tracing historical data, Brown (1991) explained that interest in obtaining an Ed.D. increased from the 1920s through the 1950s. However, in the 1960s interest decreased largely as a result of the push for more scientific research and the increase in federal funding for such studies. By the 1970s, the number of Ph.D. graduates surpassed those obtaining the Ed.D. The steady decline in the number of Ed.D. recipients prompted Brown (1991) to question the survival and utility of the degree. In a study consisting of 42 institutions, he interviewed faculty and students about program characteristics, employment ambitions, and degree distinctions. Brown (1991) concluded that doctoral programs at schools of education are "structurally well within the tradition of doctoral programs throughout the university" (p. 15). Interviews with deans, faculty, and students indicated that although the degrees are similar in all areas except the type of research taught and completed, there was "little dissatisfaction of a general sort with the fact that the Ph.D. is the more popular degree" (p. 24). He concluded his argument by dismissing the Clifford and Guthrie (1990) call for eliminating the Ph.D.

In 1998, Deering again took up the debate and called for the elimination of the Ed.D. He noted that while the original purpose of the Ed.D. was to "improve the skills and add to the knowledge of the field-based educator," (p. 242), the perpetual confusion between the two needed to be resolved with the elimination of the Ed.D. He examined the two degrees at fifty institutions that were members of the Holmes Group to illustrate the difference between the two degrees by examining the treatment of the dissertation, the types of research taught and utilized by each degree program, and the hiring patterns of Ed.D. and Ph.D. graduates respectively at the 50 schools of education. Deering (1998)

found that by comparing the dissertations the key difference was the common understanding of the purpose of each degree—the function and form of a Ph.D. dissertation serves to create knowledge, while the Ed.D. dissertation is said to investigate practical issues. In practice however, Deering (1998) found that the "distinction is of little consequence" given that students in both degree programs produce comparable dissertations using both quantitative and qualitative methodology.

Finally, Deering (1998) demonstrated that graduates from across all types of institutions—from large prestigious research universities to smaller less renowned colleges—holding both degrees are hired at schools of education. With these conclusions, he agreed that the Ed.D. should be eliminated. He also accused schools of education in perpetuating the continuing confusion stating "by offering the two terminal degrees that are more similar than different, colleges and departments of education unwittingly cause confusion among students and faculty undermining the standing of all terminal degrees in education" (p. 247).

In 2006, Shulman, Golde, Bueschel, and Garabedian once again engaged the debate over the distinction between the Ed.D. and the Ph.D., however they argued not for the elimination of either degree, but rather for strengthening of both degrees. They urged schools of education to confront the problems of the education doctorate or "risk becoming increasingly impotent in carrying out their primary missions—the advancement of knowledge and the preparation of quality practitioners" (Shulman et al, 2006, p. 25). The authors assert that the Ed. D. "has failed to do its job" (p. 27). They argue that training for practitioners more closely resembles training for research scholars in Ph.D. programs and the Ed.D. is currently defined by "subtraction, with fewer

requirements than the Ph.D. and much less emphasis on full-time study and residency" (Shulman et al, 2006, p. 27). The result is a degree now known as the "Ph.D. lite" (Shulman et al, 2006, p. 27). As a solution, the authors proposed the creation of a degree that would prepare practitioners at the highest levels, the *Professional Practice Doctorate (P.P.D.)*. They admitted that the name of this new degree was not the central concern, but offered it as a way to strengthen doctoral training and to clearly delineate between the two degrees (Shulman et al, 2006). Shulman et al. (2006) then challenged members of the Council of Academic Deans from Research Education Institutions (CADREI) to distinguish the education doctorate by looking at assessments of professional practitioners and by thinking about how schools of education could unite to "reclaim" the Ed.D. (Shulman et al, 2006). The authors contend that professional doctoral preparation should value the work experience and part-time status of its students, and should teach applied research methods in a manner that is equally rigorous as how Ph.D. students learn to produce scholarly research.

In response to this call to "reclaim" the education doctorate and make a clear distinction between professional training and scholarly output, Levine (2007) responded by stating that it is an "impossible mission for schools of education" to do (p. 43), but a distinction between the two degrees would be beneficial for the field of education. Levine (2007) pointed to six disincentives that he maintained will prevent schools of education from making this distinction. First, practitioner-driven programs help to keep the "school of education boat afloat financially" (p. 43). Preparing scholars is time consuming and costly where as training large numbers of practitioners is more cost effective. Second, Levine (2007) pointed to the ease and availability of gaining state approval to award the

Ed.D. by "masters granting institutions that want to raise their statures by awarding doctorates." The Ed.D. is a way to accomplish this task. Third, the Ed.D. typically remains under the control of the school of education and is a means for securing autonomy (Levine, 2007). Fourth, the Ph.D. is perceived as more prestigious, thus students pursue it regardless of whether or not they plan to pursue research careers (Levine, 2007). Fifth, to keep in line with other professions such as law and medicine, education desires to grant its own degrees (Levine, 2007). Finally, Levine (2007) pointed out, politics and inertia inhibit schools of education from change. The reality, according to Levine (2007), is that the Ed.D. serves academic, political, and autonomy-related purposes for schools of education.

In spite of Levine's (2007) list of disincentives for changing the Ed.D., twentyfive institutions responded to the Shulman et al. (2006) call for reclaiming the education doctorate. In the Carnegie Project on the Education Doctorate (CPED), twenty-five institutions collaborated to define and develop a new professional practice doctorate that aims to produce highly-qualified practitioners to serve our nation's education system. Perry and Imig (2008) report that after the first year of the initiative, "creative thinking and deep reflection among peers" (p. 45) have proven successful. The pilot efforts to redesign the Ed.D. obliged each institution to review the core curriculum, signature pedagogies, practical experiences, and the capstone experience of professional preparation, and brought faculty from the participating colleges of education to the table to examine these issues collaboratively. In the next few years, Perry and Imig (2008) "anticipate having several proofing sites to serve as examples of how we might better prepare future stewards of practice" (p. 48).

The above historical review is meant to provide context for the background and reason for the CPED initiative. The object of this study, however, was not to continue the debate between the two degrees. Rather, this study aimed to understand CPED as a reform effort. It aimed to study how the process of transforming the Ed.D. took place at three CPED institutions, and to learn more about the role that faculty played in facilitating this change. In the next section, I outline the topic, purpose, problem, guiding research questions, and significance of this study.

Case Study Proposal

Topic

This study applied Rogers' *Diffusion of Innovation* model to three universities to learn more about the change process in schools of education and the role of faculty in this process. Rogers (1995) defines diffusion as "the process by which an innovation is communicated through certain channels over time among members of a social system" (p. 10). It is a communication process whereby information about an innovation is shared between individuals with the goal of altering the structure or function of a social system. The diffusion of an idea may be a spontaneous process or it may be a planned process, both of which are mechanisms used to spread new ideas.

The diffusion process involves four elements—the innovation, communication channels, time, and the social system. Innovation is an idea that is "perceived as new by an individual or other unit of adoption" (Rogers, 1995, p. 11). It is the seeming newness of an idea that encourages the individual to decide whether or not to adopt the innovation. The actual idea does not have to include new knowledge; rather it is something an individual is familiar with but has not yet chosen to make a decision on (Rogers, 1995).

Hall (1991) further explained that innovation is "not synonymous with change. Change is merely a shift from one practice to another. By contrast, innovation is purposeful change, directed change, which self-consciously attempts to improve, reform, make new. Innovation is an attempt to improve quality and service; the quality of a project must be better than before; a service must be improved for the same consumers or must serve more and different people" (p. 7).

The next element, the communication channel, is the "means by which messages get from one individual to another (Rogers, 1995, p. 18). The third element time, is a strength of diffusion research (Rogers, 1995). It includes the innovation-decision process by which individuals pass from initial understanding of the innovation to its full adoption. Time also refers to how long it takes an individual to decide to adopt (adapt, or reject) the innovation, and the rate of time it takes the full system to adopt (adapt, or reject) the innovation (Rogers, 1995). Finally, the social system element consists of the "interrelated units that are engaged in joint problem-solving to accomplish a common goal" (Rogers, 1995, p. 23).

The diffusion of innovation model was chosen as the theoretical framework for this study to provide a better understanding of the process of communicating the new ideas of the CPED design-concepts for the redesign of Ed.D. programs at three schools of education. This model provided a lens to examine how the ideas have been introduced, how they have been communicated throughout the college, how the CPED principal investigator played a role in the communication process, and how the formal and informal social systems at the school or in the department either supported or hindered the implementation of the redesign efforts.

The innovations being diffused are the design-concepts that were generated from the CPED initiative and were meant to be the foundation of the new professional practice programs at each CPED institution. These design-concepts included signature pedagogies, laboratories of practice, attention to the scholarship of teaching, and the redesign or strengthening of the capstone. The CPED initiative arrived at these designconcepts by examining the work on professions by the Carnegie Foundation for the Advancement of Teaching. One of these concepts is *signature pedagogies* which are "the types of teaching that organized the fundamental ways by which future practitioners are educated for their new profession" and include teaching how "to think, perform, act with integrity" (Shulman, 2005, p. 52). Another concept is *laboratories of practice* that are "structured experiences, designed to teach ways of doing [and] provide an important opportunity for students to view work in situ and to work alongside practicing professionals" (Perry & Imig, 2008). A third concept is the *scholarship of teaching* which is the "public account of some or all of the full act of teaching—vision, design, enactment, outcomes, and analysis-in a manner susceptible to critical review by the teacher's professional peers. It involves question-asking, inquiry, and investigation, particularly around issues of student learning" (Hutchings & Shulman, 1999). Finally, a fourth concept is the *capstone* which, as described by CPED, is a culminating project, different from the traditional dissertation that will demonstrate understanding of core professional knowledge and the application of this knowledge to problems of practice (Perry & Imig, 2008).

Rogers (1995) explains that the process of diffusion innovation is frequently guided by a change agent who has a central role in influencing the decisions of others to

understand and adopt the innovation (Rogers, 1995). This study also investigated how (or if) CPED faculty (those faculty assigned by their home institutions to be the principal investigator and to attend CPED convenings bring knowledge back, and guide the change process at their home institution) did or did not serve as change agents guiding the process of redesigning their home institution's Ed.D. programs.

Problem Statement

Preparing highly effective school principals and classroom leaders is the key to addressing the myriad problems that face schooling in the United States. Closing the persistent "achievement gap" in learning between diverse racial and ethnic populations while competing with the best schools in the world demands new capabilities and dispositions. It also demands new thinking about every aspect of leadership development. Schools of education are the settings where this process needs to happen. They are the means for the preparation and professional development of such leaders. To fulfill that role, however, there exists the need to re-envision the role of education schools and to transform everything about their curriculum, delivery, research, and practices. The CPED initiative is one means to do this.

Change within institutions of higher education, like any other organization, is a difficult task, especially when ideas come from outside of the institution, such as the CPED initiative. Adopting and implementing outside reforms in an established context frequently requires a great deal of information, communication, and collaboration between the change agent and the organization. Much effort on the part of key institutional members is necessary to persuade colleagues that the change is beneficial to both the institution and its members. Understanding how the change process takes place

within schools of education and the roles that faculty assume, lend insight to the success or failure of change reforms that stem from broad national discussions.

Statement of Purpose

The purpose of this study was to employ the framework set forth by Rogers'

(1995) *Diffusion of Innovation* model to understand how three participating CPED schools of education, their academic departments, and their faculty adopted, adapted, or rejected the design-concepts identified above. The study also intended to investigate the ways in which CPED faculty from those institutions described and understood their role in designing, revising, and influencing the diffusion process.

Research Questions

The following questions guided this study.

- 1. What factors make schools of education decide to adopt, adapt, or reject innovative ideas to reshape or redesign their Ed.D. programs?
- 2. What factors of the institutional social system or environment influence the adoption of the Ed.D. redesign?
- 3. How do individual faculty members (CPED principal investigators) describe and understand their role in designing, revising, and influencing the Ed.D. redesign process?
- 4. Are there commonalities between the three institutions?

Significance of the Study

The findings from this study are significant in four ways. First, the findings

strengthen the empirical foundation of Rogers' Diffusion of Innovation model by

presenting three examples of how programmatic change is implemented in schools of

education. Second, the study enriches the knowledge base of investigations on

innovative education leadership programs and how those programs are designed. Third,

the study provides research-based insight for peer schools of education into the ways that

these institutions bring crucial programming issues, such as the distinction of the Ed.D.

from the Ph.D. degrees, to the forefront of their agendas and engage faculty in change efforts. Finally, the study offers a greater understanding of individual faculty roles in the change process.

As colleges and schools of education continue to grapple with the distinction between the two doctoral degrees, an intricate understanding of how change is implemented at the local level may facilitate the design, implementation, and perhaps, the success of degree distinction efforts at other academic institutions.

The next chapter offers a brief history of the major change efforts at schools of education over the last century as well as an extensive review of the *Diffusion of Innovation* model and other change models that have stemmed from this tradition. The final section of chapter two reviews the literature on faculty involvement and roles in institutional change.

Chapter 2: Literature Review

Introduction

In this chapter, I present a review of the four areas of the literature that inform this study of institutional change and the role of faculty in the change process. First, I offer a brief history of change efforts in education to establish that change has been a constant in schools of education. Next, beginning with a summary of the history of communication change models, I describe Rogers' *Diffusion of Innovations* model which guided this study. I then review several studies to demonstrate how Rogers' model has been employed to understand change in a higher education setting as well as offer a brief summary of the change models that have stemmed from Rogers' model. Finally, I discuss the literature that explores faculty roles in institutional change.

Context: Change in Schools of Education

Since the inception of schools of education, there have been repeated efforts to refashion, refocus, and redesign them, and the primary stimulus for many of the change efforts has been the need for qualified teachers to staff America's schools. Throughout the 20th century, commissions were formed, study groups impaneled, and professional societies created to promote change efforts to improve schools of education and their teacher and principal training programs. This section supplies a brief overview of some of the major change efforts by government and foundations to enhance the role that schools of education play in preparing and sustaining teachers, principals, and other school personnel. This section considers several, but not all, efforts to improve schools of educations,

and philanthropic foundations in reforming schools of education. Each of these efforts represented a "kind of social change" (Rogers, 1995, p. 6) where new reform ideas were conceived, dispersed, accepted or rejected, and then implemented. The consequences of these processes aimed to change schools of education and their preparation programs.

The Carnegie Foundation was one of the first sponsors of a major initiative to transform normal schools at the start of the 20th century (Learned & Bagley, 1920). Providing funds requested by the then governor of Missouri, Elliot W. Major, for a study of teacher education, the Carnegie Foundation and William Learned took an extensive look at normal schools in that State and asked, "What should a normal school be?"(Learned & Bagley, 1920, p.185). The study reviewed the history, purpose, and functions of five Missouri normal schools and conducted 15,000 interviews with students and educators. Learned believed this study would provide "guidance on how teachers should be educated nationwide" (Imig & Imig, 2005, p. 61). The study concluded that the "sole purpose and concern" of normal schools should be to prepare "public servants for its public schools" (Learned & Bagley, 1920, p. 200). Furthermore, Learned boldly recommended that the normal schools should require four years of study to become a qualified teacher (Imig & Imig, 2005).

During the 1930s and 1940s, philanthropic foundations advanced most of the major reform efforts. The General Education Board (GEB) of the Rockefeller Foundation was particularly active. The GEB awarded grants to the Stanford University School of Education for the study of subject area teacher training in language arts and social studies. Several reports resulted from this work however, there was little affect on teacher education at the national level (Clifford & Guthrie, 1988). Additionally during this time,

the GEB was active in the development of graduate education granting funds to Chicago, Harvard, Teachers College at Columbia, and Michigan to advance graduate study in education. The Kellogg Foundation also supported the advancement of research at the University of Michigan. The growth in graduate education and research with support from foundations helped to advance the field of education as a profession. However, Clifford and Guthrie (1988) have argued that such foundational monies contributed to the promotion of "a certain sameness rather than clearly defining alternatives" (p. 81) of graduate study in professional training.

The 1950s and 1960s witnessed a greater effort to establish education as a profession with reforms that were intended to create standards, advance research, and to professionalize teaching. In the early 1950s, the National Education Association (NEA) established the National Commission on Teacher Education and Professional Standards (TEPS) and advanced an initiative to examine teacher and professional standards around the nation. The goal of this initiative was to "develop definitive statements that would serve as guides for action programs at the local, state, and national levels by TEPS and other professional organizations and individuals toward the complete professionalization of teaching" (Lindsey, 1961, p. ix). TEPS intended to advance professional standards, improve teacher education, regulate accreditation of teacher education programs, outline teacher certification requirements, and improve the identification, admission, and retention of professional personnel (Lindsey, 1961). The establishment of TEPS resulted in two important events. The first was the move by states to the "approved-programs" approach for licensing teachers" which not only protected the public from unprepared teachers, but also established protection for teachers from "unfair competition" (Bradley,

1999, p. 39). Second, and the initiative marked the first attempt by teachers to gain a voice in professional training (Bradley, 1999, p. 39).

A more sustainable effort in teacher preparation developed later with the cooperation of the Federal government and several professional organizations. Teacher certification had historically been under the control of individual communities until the rapid growth of state education departments during the early 20th century. This expansion prompted discussion over what represented teacher education and eventually led to the development of an accrediting body to standardize training programs. In 1952, the Federal government collaborated with the American Association of Colleges for Teacher Education (AACTE), the National Commission on Teacher Education and Professional Standards (TEPS), and the National Association of State Directors of Teacher Education and Certification (NASDTEC) to form the National Council for the Accreditation of Teacher Education (NCATE), the "first national accrediting organization for education schools" (Bradley, 1999, p. 38). The accreditation movement was a direct result of "attempts to monitor and enhance [teacher education] program quality" (Tamir & Wilson, 2005, p. 333) and put forth a sustained effort by government and the profession to change education schools. Initially NCATE was not met with enthusiasm by colleges and schools of education, but over time the organization "forged closer working relationships with the states, most of which now use the national accrediting body's standards for teacher preparation in evaluating programs" (Bradley, 1999, p. 39).

In other ways the Federal government played a prominent role in changing education schools. The Cooperative Research Act of 1954 was a governmental effort to advance research in the field of education through funding higher education institutions

and state governments to conduct research. Specifically the Act authorized the commissioner of the U.S. Office of Education to enter into "contracts or jointly financed cooperative arrangement with universities, colleges, and state educational agencies for the conduct of research, survey, and demonstration in the field of education (U.S. Congress, 1954 in Venezky, 2002, p. 26). Education schools were the primary beneficiaries of these grants and contracts.

At the same time other efforts from the government were advancing research in education and establishing standards. The Kellogg Foundation was collaborating with the American Association of School Administrators (AASA) to change school administration programs. Kellogg provided AASA a ten-year, \$5 million grant to develop training programs for the development of educational administrators at eight regional centers— Chicago, George Peabody, Harvard, Ohio State, Stanford, Teachers College at Columbia, the University of Oregon, and the University of Texas (Lagemann, 2000). As a result of this grant, the movement to establish education administration as an area of study and a professional field of study was reinforced. Funds were also provided to establish the University Council of Educational Administrators (UCEA) in 1956, and the journal *Educational Administration Quarterly* which was launched in 1964. Both entities were used to promote ongoing or continuous change.

To enhance graduate education and teacher preparation, the Ford Foundation launched a major education reform effort in the 1950s and 1960s to develop the Master of Arts in Teaching (MAT), a fifth year program for teacher preparation. Grants were furnished to several colleges and universities in several states. The Foundation also funded work at Stanford on microteaching and teacher technical skills and funded a

statewide effort in Arkansas to transform teacher education. The results of these reforms provided the basis for performance-based teacher education. Bush (1987) has called the endeavor the "closest approach to a substantial reform of teacher education" (p. 14) that took place between the turn of the century and the 1980s.

There were repeated efforts to identify and study the problems in education. In the 1960s, the Carnegie Foundation for the Advancement of Teaching funded James Conant, then president of Harvard University, to study teacher education. Fearful of the role the Federal government was attaining through mandates and specialized accreditation, his team visited seventy-seven institutions in twenty-two states and collected data about teacher education programs. Despite having an extraordinary amount of data, Conant's conclusions "were predictable" (Lagemann, 1989, p. 202) suggesting that teacher preparation programs not be regulated because of the absence of agreed upon standards. In his book, *The Education of American Teachers*, he contended that "because there were no universally recognized principles of education, courses in education should not be mandated" (Lagemann, 1989, p. 202). He did believe, however that "practice teaching" and the special methods work combined with it" (Lagemann, 1989, p. 202) warranted attention and should remain part of teacher education. Conant's book was widely read and considered to be a "frontal attack on the integrity of education as a science and a profession" (Lagemann, 1989, p. 202).

The Federal government continued the pursuit for improved research on education and standardization of programs during the 1960s. To advance research, the Federal government funded regional educational laboratories and research and development centers that served to focus on education much like what had been done previously for

business and agriculture (Bush, 1987). This effort gave momentum to performance-based teacher education. Aspiring to improve teacher preparation standards, the Education Professions Development Act (EPDA) was passed in 1967, the purpose of which was to find better ways to connect pedagogy and academic content in teacher training and to address recruitment issues. This program had difficulty reaching its full potential because it "aggravated unresolved tension over what is necessary for good teaching" (Earley & Schneider, 1996, p. 310).

By the late 1960s, states and the Federal government, in cooperation with professional organizations, had a great deal to say about teacher preparation and the condition of schools of education. During the debate over the Higher Education Act of 1965 for instance, lobbyists and teacher organization leaders expressed their contempt for colleges and schools of education (Walker, 1978). Congress listened to this outcry and stated that "the nation doesn't need colleges of education" (Walker, 1978, p. 5). Instead, members of Congress advocated that professional organizations could do a better job of preparing teachers (Walker, 1978). It was a tumultuous time, one that Walker (1978) noted "the very existence of schools of education [was] threatened" (p. 5). During this decade, the Federal government also became very active in finding better ways to ensure that schools had high-quality teachers.

The major effort of the U.S. Department of Education during the 1970s was to move forward the concept of performance-based criteria and educational objectives. Working with professional organizations, the Department sought to clearly define what "performance-based" meant. The American Association of Colleges for Teacher Education (AACTE), in a1970 report identified one-third of state departments of

education were using performance-based criteria for their teachers (Volger, 1973). As a result, AACTE developed a challenging directive to transform education schools through Competency-Based Teacher Education (CBTE). The characteristics of the initiative were:

- 1. Competencies to be demonstrated by the student are derived from conceptions of teacher roles;
- 2. Criteria for assessing competencies should be aligned with competencies themselves and made public;
- 3. Assessment of competencies uses student performance as the primary source of evidence;
- 4. Student's rate of progress in a program is determined by demonstrated competencies; and
- 5. Instructional programs are intended to develop and evaluate student competencies (Volger, 1973).

At the time, it was understood that competency-based teacher education held much promise for the renovation of teacher education in America. Hall and Houston (1981), noted that after the program's first ten years it was the longest sustained effort to transform teacher training, however, they noted CBTE was never "fully implemented, [nor was] it fully tested" (p. 15).

Beginning in the late 1960s, the Federal government also funded the Teachers Corps, a field-centered training program designed to provide instruction, in-service training, continued professional development and pre-service training (Walker, 1978) to aspiring teachers. The project lasted for fifteen years, consumed millions of dollars, and was the "largest single effort in teacher education" (Bush, 1987, p. 15) to date. The Teacher Corps program produced several reports that discussed and proposed innovative ideas for the preparation of teachers. One such idea was the linking of higher education with elementary and secondary schools for initial teacher preparation and professional development (Earley & Schneider, 1996). The project provided funding to colleges and universities to revise their teacher preparation programs. Unfortunately, only 9% of all institutions with teacher education programs were funded, thus the initiative amounted to nothing more than a "demonstration or pilot program" (Earley & Schneider, 1996, p. 309) and was eventually terminated under the Regan administration and its policy of "block granting" Federal funds to states.

One final and important effort of the 1970s was the then nascent National Institute of Education (NIE) six-year study conducted by the Far West Laboratory of Educational Research and Development. The study was known as the *Beginning Teacher Evaluation Study* and it examined teacher behaviors, academic learning time, and student achievement. The NIE used these data to develop and explore hypotheses about effective teaching behaviors for student learning. According to Bush (1987), the study was "more widely used by the teacher education community" (p. 15) than any other earlier study and shaped the discourse within schools of education.

In 1983 the Federal government published *A Nation at Risk*, a national report that described the poor state of American education. This publication set the course for educational reforms in the 1980s which saw the establishment of large-scale networks of educators funded by philanthropic organizations coming together to enhance or expand programs within schools of education.

In 1985, the Exxon Education Foundation sponsored the founding of a national network of educators, the National Network for Educational Renewal (NNER), under the direction of Dr. John I. Goodlad. The NNER was charged to conduct a comprehensive study of:

- 1. Conditions and circumstances of educating educators for the nation's schools;
- 2. Other professions to provide examples for education; and

3. School-university partnerships that would simultaneously improve schools and the education of education professionals (Goodlad, Sirotnik & Soder, 1990).

The study depicted the current educational context for education schools and offered a rich narrative of the history, moral underpinnings, and direction for schools of education. The results of this study served as the basis for the mission of the NNER to improve the quality of education and the quality of the preparation of educators. The NNER, Fenstermacher (2005) suggests, "became the beacon for those who sought a strong moral and democratic foundation for their teacher education efforts" (p.43). Though the Goodlad agenda "could not readily be adapted to a national policy movement," his message was received by over 23 NNER member institutions and offered a "perspective different from other initiatives at the time" (Fenstermacher, 2005, p. 43). The NNER continues to exist in modified form to the present time.

In 1986, the Carnegie Corporation Task Force on Teaching as a Profession published a report, *A Nation Prepared: Teachers for the 21st century*, which called for a "vital revolution in the teaching profession" (Bush, 1987, p. 13) as a response to the *Nation at Risk* report. The Task Force attested that unless the teaching profession possessed "high skills, capabilities, and aspirations, any [education] reforms will be short lived" (Carnegie Forum on Education and the Economy, 1986, p. 2). The report outlined eight goals:

- 1. To create a national board for professional teaching standards;
- 2. To restructure schools to provide a professional environment for teaching;
- 3. To restructure the teaching force;
- 4. To require a bachelors degree in arts and sciences as requirement to study teaching;
- 5. To develop a new professional curriculum at the graduate level leading to the Master of Arts in Teaching (MAT);
- 6. To mobilize national resources to prepare minority children;

- 7. To connect incentives for teachers to improve school wide student performance; and
- 8. To make teacher salaries and career opportunities competitive, (Carnegie Forum on Education and the Economy, 1986, p. 3).

One of the most important results from this report was the Carnegie Corporation decision to support the development of a National Board of Professional Teaching Standards (NBPTS) which put forth a set of principles of accomplished practice (Shulman & Sykes, 1986). The goal was to create a national system (not Federal) for recognizing and promoting exceptional teaching. Concerns arose over time, one of which was the "impact [that] national certification could have on teachers in different geographical locations and minority groups" (Futrell, 2005, p. 30). With nearly 100,000 teachers National Board Certification, the initial apprehensions have been overcome, but as Futrell (2005) notes, there is still "much work to do" (p. 31). She urges the need for teacher access to programs, support structures, and environments that encourage professional skills, abilities, and knowledge (Futrell, 2005, p. 31).

The publication *A Nation Prepared* was also instrumental in the development of The Holmes Group. With support from the Carnegie Corporation and funding from the Ford and other foundations, The Holmes Group was established with the purpose to "simultaneously reform the education of educators and the reform of schooling" (Lanier, 2007, p. 188). It was an alliance of 100 research universities that advocated five goals:

- 1. To make the education of teachers intellectually sound;
- 2. To recognize differences in teachers' knowledge, skills, and commitment to their education, certification, and work;
- 3. To create standards of entry into the profession and education requirements that are professionally relevant and intellectually defensible;
- 4. To connect our own institutions to schools; and
- 5. To make schools better places for teachers to work and to learn (Lanier, 2007).

The Holmes Group addressed these goals over ten years and produced three books known as the *Holmes Partnership Trilogy* that promoted the need to "radically upgrade standards and programs" (Bush, 1987, p. 13) for teacher education. The works asserted that without substantial changes in preparation of the teaching force, schools could not be improved. They also recommended changing the "nature of teaching and the distribution of teaching tasks and rewards" (Judge, 1987, p. 19) before realistic and sustainable attempts to change the professional status of teachers could be made.

The Holmes Group wanted to "achieve for the education of teachers what Abraham Flexner had accomplished for doctors" (Fullan, Galluzzo, Morris, & Watson, 1998, p. vi). Though questions have been raised about the impact of the Holmes Group efforts on teacher education, other major accomplishments can be identified such as the establishment of schools for professional development, the enhancement of the status of schools of education, the strengthening of minority representation within education school faculty, and stimulating partnerships between schools of education and local public schools (Fullan et al, 1998).

In the 1990s, large and small foundations from Bell South to Panasonic invested monies to transform schools of education. The Philip Morris Foundation provided one of the most noteworthy of these efforts with their investment of \$500,000 for the restructuring of the College of Education at the University of Tennessee-Knoxville (Wisniewski, 1996). The restructuring of that institution paved the way for other "curricular reforms and fundamental changes in the teaching/learning/assessment process" (Wisniewski, 1996, p. 16). Wisniewski's innovative reform efforts were also central to his agenda as president of the American Association of Colleges of Teacher

Education (AACTE). Elected in 1994, Wisniewski believed that all schools of education could be reformed just as had been done at Knoxville. He called for a redesign of all schools of teacher education and their accreditation by the National Council of Accreditation of Teacher Education (NCATE). Of AACTE's seven hundred institutional members, 250 were not then accredited by NCATE, but Wisniewski's proposal was defeated in 1995 as AACTE opted to value its "broad-based community over elitist leadership" (Howey & Zimpher, 2005).

A different approach to changing schools of education was realized with the reauthorization of the Higher Education Act of 1965. It represented an effort by the Federal government to use punishments and penalties to introduce new practices by education schools. Specifically, Title II of the Act ordered Federal and state governments to "hold institutions of higher education accountable for preparing teachers who have the necessary teaching skills and are highly competent in the academic content areas in which the teachers plan to teach" (U.S. Department of Education, 1998). Schools of education and academics alike viewed Title II as a personal assault on education. Russo and Subtonik (2005) however, pointed to the fact that the impact of "the 1998 education school accountability requirements were neither as miraculous nor as destructive as some had imagined," rather, in actuality, the Act did propose a "clear opportunity for some colleges of education and higher education institutions to reflect on their programs and consider improvements" (p. 57).

In 2001, the No Child Left Behind Act (NCLB) reauthorized the Elementary and Secondary Education Act (ESEA) of 1965 which was the main Federal law overseeing education from kindergarten through high school. NCLB had four main principles—

creating accountability for results, offering more choices for parents, establishing greater local control and flexibility for school districts, and developing an emphasis on doing what works based on scientific research. The Act was signed into law in 2002 under President George W. Bush. Three major "ramifications for the teacher education community" (Cochran-Smith, 2005, p. 68) came with NCLB. First, NCLB required all teachers to be highly-qualified which meant they must hold a bachelors degree, possess state certification or a passing score on a licensure exam, and show evidence of competency in their subject-area. This first ramification was problematic in that NCLB focused more on subject knowledge than pedagogy. One of the unintended consequences of the Act was that within a few years of its enactment few teachers who met the definition of 'highly-qualified' were teaching students in poor areas (Cochran-Smith, 2005). Second, expensive high-stakes testing was put into place to ensure the annual success of schools through state-testing for grades three through eight. States committed an "enormous amount of time and resources to complying with NCLB's mandates, particularly in developing testing and data collection systems" (DeBray-Pelot & McGuinn, 2009, p. 29). The Federal government pressed this agenda even though it had not been made clear that student test scores were directly related to teacher quality (Cochran-Smith, 2005). Finally, NCLB established separate goals for minority students in an effort to bring new attention to the inequities of providing quality education to all. While there is still much to be written about the effects of NCLB on changes in schools of teacher education, scholars, such as Valli and Buese (2007) have already demonstrated that this law has had significant impact on teacher roles in the classroom. Bracey (2008) has also suggested that curriculum pacing, curriculum alignment, data-related tasks,

ESOL instruction, and tutoring have become required professional skills that have been added to the roles required of teachers. Using a value-added model of student achievement and teacher performance and attributing these to the effectiveness of the education school ushered in an enormous investment in data gathering and analysis.

Finally, the Carnegie Corporation, reverted back to an older model of change, one of creating demonstration sites, when it launched the *Teachers for A New Era* initiative in 2001. This initiative was the culmination of nearly a century-long effort by external agencies and institutions to transform and change schools of education. Eleven schools and colleges were selected to each receive \$5 million, over the first three years of the initiative. Institutions were asked to match these funds and were given five years to implement three design principles:

- 1. Teacher education programs should be guided by a respect for evidence;
- 2. Faculty in the arts and science disciplines must be fully engaged in the education of prospective teachers; and
- 3. Teaching should be recognized as an academically taught clinical-practice profession (Nataraj Kirby, Sloan McCombs, Barney, & Naftel, 2006, p. xiv).

The Rand Corporation, as well as independent scholars, have conducted shortterm evaluations at several of the TNE locations. At this point in time, evidence of change is still being determined. It is fair to say, however, that many of the questions that TNE set out to answer about the transformation of teacher education are "unlikely to be answered for [many] years" (Nataraj Kirby, Sloan McCombs, Barney, & Naftel, 2006, p. 28) suggesting the difficulty of change.

This brief overview of several major change efforts in schools and colleges of education over the last century highlights that much time, capital, and effort has been given to reforming education schools. Though there have seen some advancements in the areas of standardization and professionalization, some scholars believe such advances are actually failures. For example, Levine's assessment of many of these attempts at reform was that little had been accomplished and that schools of education remained much the same as they had been when they were created—seemingly impervious to change (Levine, 2005). Wisniewski (1995) claimed that schools of education remain in the past. He argued "Despite our change rhetoric, we continue to replicate programs and activities more rooted 100 years in the past than even one year into the future" (p. 53). Lanier (2007) concluded that many reform efforts "end with [only] the publication of a report" (p. 189). She asserted as a leader of the Holmes Group, that any large-scale reform efforts imposed from above or outside of an organization, "without the concurrence and collaboration of those who must implement them, have limited and unpredictable effects" (p. 189).

Thus, despite one hundred years of attempts, the consensus seems to be that there has been very little, if any change or reform of colleges and schools of education. A possible reason may be that we have had little understanding of how the change process happens, who are the key players, and what factors influence this process in schools of education. The next section will offer an understanding of some of the major change models that have developed over the last sixty years and describe how they have been applied to educational settings.

Overview of Change Models

The change literature is comprehensive and extends across many disciplines. Because "no one is immune to [change] forces" (Kotter, 1996, p.18) we have seen over the last several decades a multitude of publications that study and prescribe how to

accomplish change within organizations. Despite this proliferation most researchers (Fullan, 2001; Cooper & Zmud, 1990; Kotter, 1996; Levine, 1980) have concluded that there are three broad phases of the change process. Most of the change literature examines organizational change within these phases.

The first phase of the change process is *initiation*. Initiation consists of the steps that lead up to the decision to institute a formal change and may include a mandate from an agency, such as government agencies, an accreditation agency, or central university administration. Initiation may also be the introduction of an innovative idea that addresses an existing problem. During this first phase, support for the change is mobilized and the innovation is adapted⁵ to meet the needs of local context in preparation for full adoption and implementation of the idea. Levine (1980) has divided this phase into two stages—the recognition of needs and the planning and formulating solutions stages. Kotter (1996) has explained this phase in four distinct parts—establishing the need for urgency, creating a guiding coalition, developing a vision and strategy, and communicating the change vision.

In the second phase, *implementation*, Fullan (2001) notes that the relationship between phase one and two is "loosely coupled and interactive" (p. 67). During the implementation phase, organizational members have their first experiences with the innovation, or new idea. It is during this second phase that members are allowed to utilize or interact with the innovation to learn more. For example, the implementation of educational change frequently "involves change in practice" (Fullan, 2001, p. 39), where members must use new materials or methods to determine their validity. Also during this

⁵ In change literature, adoption means the acceptance or embracing of the innovation by a person or organization. Adaption, on the other hand, generally refers to altering an innovation to fit the surrounding conditions or context and making it more feasible for adoption by a person or organization.

phase, organizations quickly realize that change is multifaceted and contains many pieces. Innovation often brings the possibilities of adapting new materials or methods to meet local conditions as well as to carefully consider the needs, concerns, and beliefs of the institutional members (Fullan, 2001, p. 39). To aid this process, Fullan (2001) suggests that the more factors supporting implementation, the more likely a change in practice will be achieved. Such factors may include the characteristics of an innovation (need, clarity, complexity, quality, practicality), local stakeholder roles (district, community, principal, teacher), and external factors (governmental, national, other agencies). Together these factors form a "system of variables" (Fullan, 2001, p. 71). Levine (1980) has referred to this phase as the trial period. Kotter (1996) has divided this phase into two stages—empowering broad-based action and generating short-term wins—that both aim to remove obstacles to ensure use of the innovation and gain buy-in from organizational members.

In the third and final stage, *continuation*, organizational members make the decision to continue with the innovation or to abandon it. Fullan (2001) notes, "the problem of continuation is endemic to all new programs irrespective of whether they arise from external initiatives or are internally developed" (p. 89). Members must decide if they will incorporate the new idea, make it part of their routine, and institutionalize it into their culture. On the other hand, members may decide to eliminate the innovation for reasons that may include incompatibility or failure to be effective. In this final stage, a decision is made about whether the change becomes "built in as an ongoing part of the system or disappears by way of [a] decision to discard [it] or through attrition" (Fullan, 2001, p. 50). Levine (1980) has named this final stage of the innovation process the

'institutionalization or termination' stage. Similarly, Kotter's (1996) final two stages have the same goals—consolidating gains, producing more change, and anchoring new approaches in the organizational culture.

Fullan (2001) cautions that the change process requires "participation, initiativetaking, and empowerment from the beginning," but notes that actual change often doesn't get "activated until the change process has begun" (p. 91). Fullan suggests that this threephase change process is not as simple as one might assume. The change process encompasses many design and implementation components. In the next section, I will delve more deeply into the components of each of these phases. First, I will outline a brief history of change theory.

Roots of Change Theory

Ellsworth (2000) traced the roots of the change literature to what he calls "two philosophical ancestors" (p. XVII). The first is the diffusion of innovation tradition which was born in Europe in the early 20th century. Diffusion refers to the channels through which an innovation is communicated over time to the members of a social system (Rogers, 1995). In 1903, Gabriel de Tarde, a French lawyer, began to question why certain innovations would spread abroad while others did not. His work defined what we understand today about the adoption of innovations. He called this process the *Laws of Imitation*. Imitation, Tarde claimed, was a basic human behavior. "Invention and imitation are, as we know, the elementary social acts," he professed (Tarde, 1969, in Rogers, 1995, p. 40). Tarde's early work was not revisited until the 1940s when Ryan and Gross became interested in the diffusion of hybrid corn seed in Iowa. Viewing the process with a sociological lens, Ryan and Gross looked at four key aspects of

diffusion—the innovation (hybrid corn seed), the role that communication played in spreading the innovation among farmers, the distribution of the rate of adoption among farmers, and the characteristics (personal, economic, etc.) of each farmer (Rogers, 1995). Ryan and Gross's studies led to Rogers' identification of diffusion of innovations as a field of study in 1962, and the publication of the first edition of his seminal work by the same name. The *Diffusion of Innovations* model is discussed in more detail below.

The second tradition of building change model theory is the general systems theory established in the 1950s. This tradition finds its roots in the personal journal of Ludwig von Bertalanffy which was published in 1956. The central idea behind systems theory is the "importance of a global perspective that accounts for a myriad of components and interconnections in [a system]." The focus of systems theory is on process rather than on specific changes and details the importance of including all parts of an organization or system as well as the entire community that is affected by or involved with the system (Jenkins, Reigeluth, Carr, & Miller, 1998). Systems theory was mainly located in the management sciences until Bela Banathy applied the theory to education in 1973 with his book *Developing a Systems View of Education*. Few authors took interest in his work, however, until Reigeluth and Garfinkle (1994) applied Banathy's work to educational settings. Following Banathy's original work, Reigeluth and Garfinkle (1994) explained that systems thinking presents a "holistic approach" beginning with "a fuzzy image of the new system and proceeds to add progressive degrees of clarity" (Reigelth, 1995, p. 324) through understanding the needs and values of the new system and of the functions and subsystems of the current system. Reigeluth and Garfinkle (1994) also emphasized the importance of understanding the difference

between "systemic" and "systematic" in this process. Systemic change frequently involves replacing the whole system. Whereas, systematic change is more piecemeal, fixing only part of the system. Systemic change stresses that a change in part of the system affects all the related parts and invokes change throughout the system.

Another important goal of the systems approach is the understanding and engagement of all stakeholders in a process that defines what the community will be and will need in the future. This process asks the stakeholders to imagine "the big picture rather than focus on small Band-Aid issues" (Reigeluth, 1995, p 325). In this model, leaders of change have a central role in bringing the elements of a system together. Mumford (2005) asserts that the systems model, recognizing the importance of power and leadership in the change process, "reaffirms that change leaders need to be aware of all stakeholders and constituents likely to be affected by change" (p. 65). As result of Reigeluth and Garfinkle's clear application of a systems approach to educational change, Skyttner (2005) concluded that the use of systems theory in education was in direct reaction to "a need to solve real world problems" (p. v) in American education.

Ellsworth (2000) recognized the important influences that the systems tradition had on understanding change. He said, "Change is an inherently systemic process and must be treated as such" (p. 38). However, Ellsworth (2000) also acknowledged, that while these two traditions each have an important role in how to understand educational change, and while there exists great potential for these two traditions to be used together to design and implement educational change, the change research field has seen "little in exchange among these classical camps" (p. 21). Agreeing with Fullan's (2001) view that the factors affecting the implementation of change do not work in isolation, rather they

are a "system of variables" (p. 71) or part of a dynamic process of interaction over time that determines the success or failure of the innovation, Ellsworth's (2000) review of the change literature combines both traditions to show the "holistic perspective" (p. 45) of change.

While there is inherent value in applying a holistic approach to understanding change in higher education, this study utilized the *Diffusion of Innovations* model (Rogers, 1995) as an organizing frame to capture the processes through which institutions adopted, adapted, or rejected the Carnegie Project on the Education Doctorate (CPED) design-concepts by focusing on the components of communication change theory. Diffusion theory has been a widely used framework in educational change research because of its methodical sophistication and its capacity to undergird research in innovation (Dill, 1978). In this study, *Diffusion of Innovations* theory offered a means to investigate the individual elements and factors that affected how change took place within the school of education or department at the three institutions of higher education. Therefore, the remainder of this literature review focuses specifically on the *Diffusion of Innovations* model and the change models that have grown from this tradition expanding and defining the components of change.

Communication Change Models

Rogers (1995) explained change as a "specialized instance of the general communication model" (p. 6) which provides the necessary components of how ideas are communicated, and describes how participants share information with each other in an effort to reach a mutual understanding. This process is a two-way interaction. In the diffusion communication process, the messages that are shared between two participants

are about a new idea. For example, a *change agent* (the first participant) brings a new idea (the *innovation*) to the intended *adopter* (the second participant). The *channel of communication* between them is known as the change process. This interaction is not linear, rather the change process occurs in a unique environment filled with conditions and resistance that interact with and affect the design of the change process as well as distort how the innovation appears to the intended adopter (Ellsworth, 2000). Rogers' *Diffusion of Innovations* model was the foundation of communication change theory. From his work, many scholars have branched off and elaborated on the individual components of his model. The following provides a comprehensive overview of Rogers' model, critiques of his model, and a summary of those scholars whose work has extended from this model.

Diffusion of Innovations Model

Everett Rogers began his research on innovation diffusion during his doctoral program at Iowa State University. In 1957, his dissertation investigated agricultural innovations and their diffusion to rural communities. With this work he argued for "a generalized diffusion model" (Rogers, 2003, p. xvii) which led to the first edition of his book *Diffusion of Innovations* in 1962. Since this first edition, Rogers' book has been printed four additional times and diffusion of innovation studies have expanded from 405 studies in 1962 to more than 5,200 studies in 2003 as noted in the book's fifth edition. Studies have moved beyond the fields of rural sociology and agriculture to include communications (where it is has been most widely utilized), marketing, geography, sociology, information technology, library sciences, and education. Sahin and Thompson (2006) identified additional disciplines where this model has been used as a framework

for understanding change including political science, public health, history, and economics. The use of this model in a wide variety of fields is not only impressive, but also practical because "diffusion theories provide a framework through which professionals can understand the process by which new technologies are disseminated" (Holland, 1997, p. 391).

With the expansion of diffusion theory into other fields the types of innovations studied have also broadened. In education for example, innovations have often referred to technological innovations, but the increased use of this framework to study how new ideas are adopted by individuals and organizations has allowed the idea of innovation to be expanded beyond educational technology to include outreach programs for faculty (Fear, 1994). Harvey-Smith (2005) also employed this framework in two case studies that sought to understand how the program *A Learning College for the 21st Century* which was a "framework for change for the learning revolution in higher education" (p. 49), was diffused in two community college student development divisions. Looking more broadly, Birbaum (2000) employed diffusion of innovations to understand the survival of management fads in higher education.

Indeed, this is one of the most prominent models employed to identify characteristics of innovation and to classify of the types of adopters. Unlike other models, such as the *concerns-based adoption model* developed by Hall and Hord (1987) which focused strictly on the adoption process, diffusion of innovation "looks at both the adoption and the diffusion of an innovation" (Sahin & Thompson, 2006, p. 82). Holland (1997) points out the importance of this model, stating that it describes the "process by which innovations are adopted, the criteria that individuals use to access each innovation

and the types of individuals who are likely to adopt an innovation through the process of dissemination" (p. 394).

The *Diffusion of Innovations* model is "largely a communication process, an information seeking and processing activity" (Kautz & Larsen, 2000, p. 12). Rogers (1995) describes diffusion as the "process by which an innovation is communicated through certain channels over time among the members of a social system" (p. 5). He illustrates diffusion as a type of communication whereby the message or new idea is shared between two participants with mutual understanding. Rogers (1995) affirms that diffusion is "a kind of social change, the process by which alteration occurs in the structure and function of a social system" (p. 6).

Elements of the Diffusion of Innovations Model

Rogers' (1995) outlines four essential components of his model—the innovation, communication channels, time, and social system. An *Innovation*, is an "idea, practice, or object that is perceived as new by an individual or other unit of adoption" (p. 11) and has the function of solving a problem or improving a situation. Fullan (2001) argues that all innovations "worth their salt call upon people to question and, in some respects, to change their behavior and their beliefs—even in cases where innovations are pursued voluntarily" (p. 40). Rogers' (1995) primary contribution to the study of innovations was the identification of the attributes of innovations and the way in which these attributes affect the rate of adoption among intended adopters. He describes five characteristics of innovation that attract or repel adopters—*relative advantage, compatibility, complexity, trialability,* and *observability*. Holland (1997) observed, "The importance of each

characteristic changes according to the individual and the innovation; however, relative advantage is frequently found to be the most significant among adopters" (p. 391).

Relative advantage is the extent to which the innovation in question is perceived as being better than the tool or current practice it is replacing (Rogers, 1995, p. 212). This characteristic is important because it determines if the adopter sees any benefit to accepting the innovation. The types of advantages relate to the values of the adopter and may include the degree of economic profitability where the innovation reduces the cost of production, the amount of the initial cost, the ability to decrease discomfort, the social prestige that comes with the innovation, the ability to save time or effort, and the immediacy of rewards for the individual or organization.

Relative advantage may be affected by *overadaption* of an innovation, or the decision to adopt when those knowledgeable of both innovation and context recommend rejection (Rogers, 1995, p. 215). Preventive innovations see little immediate advantage because the reward may be simply the saving of an organization or it may come long after the adoption. Incentives are controversial in the adoption of innovations, yet they are also common. Incentives may be direct or indirect, but are used to increase relative advantage of the innovation and hence, the rate of adoption (Rogers, 1995). It is the change agent's job to manage relative advantage by "preventing too much adoption of an innovation, as well as speeding up the diffusion process" (Rogers, 1995, p. 215).

Compatibility is a characteristic that looks at the congruence of the innovation between the values, experience, and perceived needs of the intended adopters (Rogers, 1995, p. 224). The innovation may be compatible or incompatible with the sociocultural values and beliefs belonging to the adopter, or with previously introduced ideas, or even

with the needs of the client for innovation (Rogers, 1995, p. 224). Cultural values, as demonstrated below in the work of Zaltman and Duncan (1977), decrease compatibility between the innovation and the organization. Rogers suggests useful strategies for change agents who are seeking adoption of an innovation among their clientele. For example, naming an innovation is a creative way to affect the compatibility to an organization (Rogers, 1995, p. 236). Positioning the innovation to create perceived or shared understanding among organizational members is also an effective means of creating compatibility. Market research has revealed that "an individual will behave toward a new idea in a similar manner to the way the individual behaves toward other ideas that are perceived as similar to the new idea" (Rogers, 1995, p. 237). Rogers also suggests paying close attention to indigenous knowledge rather than to assume it has nothing to offer. "Change agents," Rogers (1995) observes, "often commit the empty vessels fallacy by assuming that potential adopters are blank slates that lack a relevant experience with which to associate the new idea" (p. 240). This occurs, according to Rogers, because most technocrats believe that the newness of the idea is so far away from traditional thinking that it will not be understood.

Complexity depicts "innovations that are seen as difficult to understand or adopt will diffuse more slowly, as few will voluntarily embrace change that makes their lives more difficult (Rogers, 1995, p. 242). Hall and Hord (1987) have developed an "innovation configuration component checklist" to make innovations clearer for adopters. They argue that basing an understanding of an innovation solely on its perceived attributes may serve the change agent in planning change, but the potential danger is that the innovation is defined by perception rather than the reality of what it is (p. 111).

Trialability is the extent to which a prospective adopter can "try out" an innovation before committing to full adoption (Rogers, 1995, p. 243) and provides the means to test a product or idea before fully adopting it. Trialability may serve to quell concerns among adopters. Finally, *observability* explains the extent to which adopter can see innovation being used by others (Rogers, 1995, p. 244). Like trialability, observability presents the opportunity to see the innovation in action before adoption and serves as a means of persuading an adopter to accept the change. Along the lines of trialability and observability, Rogers (1995) also mentions the possibility of *reinvention*, or the degree to which an innovation is or can be changed or modified by a user in the process of its adoption and implementation" (Rogers, 1995, p. 17).

With this knowledge of innovations, it is necessary to next understand how the new idea is communicated between adopters. *Communication channels* provide the means for communicating the innovation from one person to another. If one person who has knowledge of an innovation and wishes to spread it to another who has not heard of, or adopted the innovation, a communication channel is necessary to connect the two (Rogers, 1995, p. 18). Such channels are the way in which the message is passed from one individual to the other and may be accomplished through mass media such as radio, television, or interpersonal, face-to-face exchanges.

In respect to interpersonal exchanges, Rogers' work highlights the role of *heterophily* and *homophile* populations in human communication. Heterophily (unalike) and homophile (alike) describe the degree to which two individuals are "similar in attributes, such as beliefs, education, social status" (Rogers, 1995, p. 19) and how each population type affects communication channels. Rogers (1995) found communication is

more effective when two people are homophilous. However, diffusion research has frequently determined that adopters are more likely to be heterophilous and that the change agent generally holds the most knowledge and technical competency. The degree to which a clientele is similar or different will affect the types of strategies the change agent will employ to increase adoption.

Likewise, the number of individuals who have adopted the innovation is crucial. *Critical mass* in the adoption process happens when enough individuals have adopted the innovation that the innovation can be self-sustaining. Critical mass is achieved through communication networks or "interconnected individuals who are linked by patterned flow of information" (Rogers, 1995, p. 308).

Rogers (1995) recognized that the element of *time* is seen throughout the diffusion process and is evident in the innovation-decision process as a person moves from "knowledge of the innovation through to its adoption or rejection" (Rogers, 1995, p. 20). Time is also relevant in describing the whether individuals are early or late adopters, and how time affects the rate of adoption and "usually measured as the number of members of the system that adopt the innovation in a given time period" (Rogers, 1995, p. 20).

The *innovation-decision process* is a series of actions and choices that occur over a period of time and through which an individual passes from "the first knowledge of an innovation, to forming an attitude toward the innovation, to making a decision to adopt or reject the innovation, to implementing the new idea, to confirming or rejecting the adoption of the decision" (Rogers, 1995, p. 161). Starkweather and Kardong-Edgren (2008) label this process as a 'period' because of the length of time required to pass through the innovation-decision [cycle]" (p. 2). The *innovation-decision process*

generally has five stages through which the adopter passes—knowledge, persuasion, decision, implementation, and confirmation. *Knowledge* is the exposure to an innovation and understanding of its functions; it may also be awareness of its existence, *how-to knowledge* which details the information necessary to utilize the innovation properly, or knowledge about the "functioning principles underlying how the innovation works" (Rogers, 1995, p.166). Most change agents work within the realm of *awareness knowledge* by introducing the innovation to his or her peers. Rogers (1995) disagrees arguing that a change agent might "play their most distinctive and important role in the innovation-decision process if they concentrated on *how-to knowledge*, which is probably most essential to clients in their trial of an innovation" (p. 166).

Rogers (1995) supposes that the *attitude or beliefs* held by an individual about the innovation may have "much to say about his or her passage through the *innovation-knowledge process*" (Rogers, 1995, p. 167). Sahin and Thompson (2006), on the other hand, argue that limited knowledge or uncertainty of an innovation can influence faculty members' opinions and beliefs about the innovation. Kautz and Larsen (2000) suggest looking further outside this process. They found that diffusion is not only understood as "starting to look at the process when the first knowledge is consciously spread or when the first adopters take up an innovation [but rather] the events and decisions occurring previous[ly] to this point also have a considerable influence upon the diffusion process" (p. 16).

Persuasion is the next step in the innovation-decision process and involves the forming of a favorable or unfavorable attitude towards the innovation. Rogers (1995) describes this stage in the process is where a person becomes more "psychologically

involved" (p. 168) with the innovation. As an individual thinks through the innovation, he or she might imagine or think hypothetically about how it will apply to a current or future situation. It is during this stage that the person considers the advantages and evaluations of the innovation (Rogers, 2003). Kautz and Larsen (2000) have found that interpersonal communication channels are best used during this stage because of the personal involvement of the adopter.

Decision is the stage where a commitment to adopt or reject an innovation takes place and reflects a decision to either fully use the innovation or not to adopt the innovation at all. During this stage, the characteristics of the innovation play an important role. For example, "most individuals will not adopt an innovation without trying (trialability) it first on a probationary basis in order to determine its usefulness in their own situation" (Rogers, 1995, p. 171). If the innovation is adopted, it is generally because the adopter can see some relative advantage to herself or her organization. *Rejection*, though fatal for the innovation, comes in two types. An adopter may actively reject the innovation, which means she considered the adoption, but the final decision was to reject, or an adopter may also passively reject the innovation which means she has never fully considered adoption of the innovation. In this sense, Rogers views rejection as a form of resistance to the adoption of an innovation.

Implementation is to put the innovation to use and until such time, the adoption process is merely a "mental exercise" (Rogers, 1995, p. 172). Since implementation requires a behavior modification, at this stage problems often occur, specifically when the adopter is an organization rather than an individual. Generally, this happens when the

implementers are a different set of people within the organization other than those who made the decision to adopt the innovation (Rogers, 1995).

During implementation, *re-invention* or adaption may occur and is how the innovation "changes and evolves during the diffusion process"(Rogers, 1995, p. 174). Re-invention offers flexibility and reduces the amount of errors during implementation thus, "adopters generally think that re-invention is a desirable quality" (Rogers, 2003, p. 180). The result of re-invention is an innovation that more appropriately meets the needs of the organization or of the adopters. Rogers (1995) explains six reasons why re-invention occurs:

- 1. Innovations can be complex and difficult to understand;
- 2. Adopters lack full knowledge about the innovation;
- 3. The innovation is abstract;
- 4. Innovation is implemented to solve too many problems;
- 5. Local pride of ownership of the innovation; and
- 6. Change agent encourages adopters to fit the innovation to their needs (p. 179).

Re-invention is a reflection of adopter behavior and a "process of social construction"

(Rogers, 1995, p. 179) within organizations.

The *confirmation* stage represents the time of reinforcement of the innovation based on positive outcomes that stem from the implementation process. The adopter "seeks reinforcement of the *innovation-decision* already made or reverses a previous decision to adopt or reject the innovation if exposed to conflicting messages about the innovation" (Rogers, 1995, p. 181). It is here that late adopters may decide to discontinue the innovation in favor of another type of innovation, *replacement discontinuance*; or because of dissatisfaction with the innovation, *disenchantment discontinuance* (Rogers, 1995). Rogers' innovation-decision process offered a crucial element to change theory because it intricately detailed the process through which an adopter will pass as she considers whether or not to adopt the innovation. Berquist (1992) suggests that Rogers has made a large contribution to the change literature with this process. He says, "Taken together, Roger's five-stage chronology represents a quite different portrait of planned change than found in the literature and experiences of many who support the rational planning process" (Berquist, 1992, p. 203).

The final element of the *Diffusion of Innovation* model is the *social system* within which diffusion takes place and is a "set of interrelated units that are engaged in joint problem-solving to accomplish a common goal" (Rogers, 1995, p. 23). It includes the various organizational structures, key players such as opinion leaders, change agents and adopters, types of decisions, and overall consequences that affect the diffusion of innovation. Social structures include the way in which units of a system are arranged, the norms and behaviors that govern a social system and the communication networks through which information is passed. Within these structures are several key players in the innovation-decision process.

Opinion leaders and *change agents* provide information and advice about the innovation. *Opinion leadership* describes the "degree to which an individual is able to influence other individual's attitudes in a desired way with relative frequency" (Rogers, 1995, p. 27). Conversely, a *change agent* is the "individual who influences clients' innovation-decisions in a direction that is desirable" (Rogers, 1995, p.27). These two players may be inside or outside of the social system, but generally possess more technical experience with the innovation than those they are trying to influence. Rogers

(1995) suggests, "the opinion leader's influence in a social system may vary not only on the basis of his or her innovativeness relative to the norms of the system, but also on the basis of the nature of the innovation that is diffusing" (p. 296). However, Linquist (1978) revealed that most innovation diffusion research found that "the best route into an organization or community is through opinion leaders, those persons to whom others turn to for advice" (p. 5). Kautz and Larsen (2000) have also stressed the importance of the opinion leaders. They argue, "[A] change agent's success is related [in part] to the extent to which they work through opinion leaders" (p. 14).

The change agent is the individual who affects the decisions of others in the

innovation-decision process. Rogers (1995), similar to others (Hall & Hord, 1987; Fullan,

2001; Zaltman & Duncan, 1977) identify seven roles that pertain to a change agent.

- 1. To develop a need for change by creating an awareness of the need to change behaviors;
- 2. To establish an information-exchange relationship; a rapport between the change agent and his clients and allows him to be accepted by his clients;
- 3. To diagnose and analyzing problems and determining why alternatives may not solve the difficulty;
- 4. To stimulate the client to change through facilitating interest in the innovation;
- 5. To translate an intent to action by influencing the clients behavior;
- 6. To stabilize adoption and prevent discontinuance at the implementation stage; and
- 7. To achieve a terminal relationship. The change agent should seek to develop the clients' ability to be their own change agent and renew their behavior (p. 337).

The success of the change agent depends greatly upon the amount of communication and

timing exerted during diffusion. The change agent role requires a keen awareness of

one's surroundings and understanding of the organization with which they are working.

Change agents must be aware of their own social position, of the compatibility of the

innovation the client needs, and must possess empathy for the client's situation (Rogers, 1995).

Rogers (1995) defines three types of innovation-decisions that are made in the social system. The first is *authority*, where decisions are made by a few individuals at the top and handed down. These decisions are generally the fastest way to reach a full rate of adoption of an innovation, but do not guarantee implementation (Rogers, 1995). *Collective* decision-making is a democratic process where many constituents are involved in the decision and may be the slowest route to innovation adoption. Finally, *optional decision-making* describes when an individual makes a decision "independent of the decisions by other members of the system" (Rogers, 1995, p. 372). Optional decisions are also faster than collective decisions. Rogers (1995) adds fourth type of decision, *contingent* decision-making where an individual may make a decision only after his organization has decided to adopt or reject the innovation.

Collective and authoritative decisions traditionally take place within organizations. Berquist (1992) contends that "when an organization introduces any change, it generally does so because it anticipates improvement in some aspect of the organization" (p. 175). Rogers' (1995) model was originally applied to individuals, however, he has expanded his work to include organizations. Rogers (2003) defines an organization as "a stable system of individuals who work together to achieve common goals through a hierarchy of ranks and a division of labor" (p. 404). Organizations are structures that have predetermined goals, prescribed roles, authority structure, rules and regulations, and information patterns (Rogers, 2003, p. 404). Rogers (1995) points to earlier studies that researched innovation within organizations and found that the size of the organization is directly related to its innovativeness. Later he found that innovativeness is also related to the individual leader characteristics, internal characteristics of organizational structures, and external characteristics of the organization. Individual leader characteristics refers to a leader's attitude toward change, internal characteristics include the degree of centralization of power and control, the complexity of members' specializations and knowledge, the formalization of rules and regulations, the interconnectedness of the units and the organizational slack or uncommitted resources available (Rogers, 1995). External characteristics refer to the organization's openness to outside influence.

Rogers (1995) observes that innovation within an organization is a five stage process beginning with an organization engaging in *agenda-setting* defined as the "identifying and prioritizing [of] needs and problems and searching the organization's environment to locate innovations of potential usefulness to meet the organization's problem" (Rogers, 1995, p. 391). Next, the organization *matches* the problem to an innovation and determines how well they fit together. The members then "attempt to determine the feasibility of the innovation in solving the organization's problem" (Rogers, 1995, p. 394). Together, the agenda setting and matching phases represent the initiation of innovation within organizations. Third, the organization will then *redefine*, or restructure; the "innovation is re-invented to accommodate the organization's needs and structures more closely and the organization's structure is modified to fit with the innovation" (Rogers, 1995, p. 394). This "mutual adaptation" must occur because an innovation is never a perfect fit to an organization and allows for a greater degree of creativity (Rogers, 1995, p. 395). Once re-invented, the organization will clarify the

innovation as it is put to use more widely and the meaning of the new idea becomes clearer to all organizational members. After widespread use, the organization begins a process of *routinizing* the innovation so it becomes a regular part of daily activities (Rogers, 1995).

In discussing innovativeness within organizations, Rogers (2003) introduces the idea of *champions*, individuals "who throw [their] weight behind an innovation [to] overcome indifference or resistance that the new idea may provoke in an organization" (p. 414). A champion has an important role in the innovation process and are commonly individuals who are not so much powerful, but those who are "adept at handling people, an individual skillful in persuasion and negotiation" (Rogers, 2003, p. 415). Rogers (2003) suggests that the "exact characteristics [of an idea champion] depend on the nature of the innovation and the organization" (p. 417). Berquist (1992) has called for greater understanding of the "change curve" in organizations, which he says demonstrates the immediate "deterioration in performance and morale [among organizational members that] is likely [to happen] when a new idea is introduced" (p. 177). Berquist (1992) proposes the development of successful change strategies that may well include the presence of this curve are crucial to innovation success in organizations.

The consequences of innovation emulate "the changes that occur to an individual or to a social system as a result of the adoption or rejection of an innovation" (Rogers, 1995, p. 30). Rogers (2003) remarked that little research has been done on the consequences of change. In fact, even within the innovation-decision process, change agents do not pay attention to consequences, however, Rogers (2003) contends that there is much to be gained from taking a comprehensive look at the consequences of

innovation-decisions. Emphasizing this idea, Rogers (1995) outlines three types of consequences that affect the individual or organization. *Desirable* or *undesirable* consequences are the functional and dysfunctional affects of the innovation. *Direct* and *indirect* consequences are the immediate consequences versus those affects that occur less obviously. Finally, the *anticipated* and *unanticipated* consequences are those that are expected versus those that were not considered prior to adoption.

Ellsworth (2000) argues that the final component of the social system element is perhaps Rogers' greatest contribution. This piece characterizes the *types of adopters* of innovations. "Innovativeness is the degree to which an individual or other unit of adoption is relatively earlier in adopting new ideas than the other members of a system" (Rogers, 1995, p. 22), thus the adopter categories are determined by the innovativeness or "degree to which an individual or other unit of adoption is relatively earlier in adopting new ideas than other members of a social system" (Rogers, 1995, p. 261). Rogers (1995) has identified five types of adopters that are present in his work on the diffusion of innovations. The first and rarer adopter is the *innovator*. She is the venturesome individual who is able to cope with a high degree of uncertainty about the innovation as it is being adopted. Following the innovators are the *early adopters* who are in greater numbers within the organization and are spread among the larger social system. This category holds more champions and is generally targeted by change agents due to the fact that they move more easily through the innovation-decision process. *Early majority adopters* will adopt the idea before the majority of members in a system, and change agents frequently develop their interpersonal networks among early majority adopters. Late majority adopters generally consist of one third of adopters and are, as a group,

much more skeptical than those that come before. *Laggards* are the last group to adopt the innovation and are exceedingly attached to previous decisions and methods and frequently reference how 'things have been done' in the past. Kirton (2003) developed a similar model, though he calls adopters, *adapters*. He asserts that "[all] people are selective in the changes they accept or reject" (Kirton, 2003, p. 229) thus the decision to change is cognitive and more a matter of problem-solving than Rogers' model demonstrates.

How these categories of people determine the adoption of an innovation can be charted, according to Rogers (1995) who proposed that the "adoption of an innovation usually follows a normal, bell-shaped curve when plotted over time on a frequency basis" (p. 257). The *S-shaped curve*, which shows adopter distribution, exhibits that at the start there are fewer adopters, yet as more individuals adopt the innovation, the distribution rises and then slows again as the remainder adopt the innovation. This adoption distribution is not a given, however as Rogers (1995) indicates. Rather, "the shape of the adopter distribution for an innovation ought to be regarded as an open question" (p. 261). Kautz and Larsen (2000) discovered something similar in their work on software dissemination. They assert, "Normal frequency distribution of the adopter categories given by Rogers may allow a prediction of the progress of the diffusion process" (p. 14).

This summary of Rogers' *Diffusion of Innovation* model is meant to provide a short but concise understanding of the individuals, process, and elements of the diffusion model. In the next section, I highlight some critiques of Rogers' model.

Critiques of Rogers' Model

Rogers' Diffusion of Innovation model has enjoyed more than forty years of recognition as one of the strongest models of change theory. It is not without criticism, however. As researchers expanded the study of diffusion to various types of innovations in many different fields, feedback indicates that Rogers' model may not always be the ideal change model. Leon (1996), for example, alleged that research on diffusion has ignored the fact that "each group of stakeholders has [a] different reference framework that "constrains" the way the innovation is accepted and diffused" (in Kautz & Preis-Heje, 1996, p. 96). Mody and Lee (2003) have also expressed concern over Rogers' treatment of stakeholders. *Diffusion of Innovations* was hailed as a means to study the process of modernizing developing countries in the mid-1960s to mid-1970s. However after fifteen years of diffusion attempts, few modernization indicators were reached (p. 93). Mody and Lee (2003) attributed this failure to the fact that Rogers' model was "reinforcing business as usual" (p. 95) with media strategies that focused on the young, well-educated, wealthy men in developing nations, rather than on lower class or less educated individuals. Diffusion, negated "supporting change through a more equitable flow of information" by neglecting the sharing of information on "grassroots problems and grassroots solutions from the bottom up and horizontally" (Mody & Lee, 2003, p. 96).

Scholars who have applied the diffusion model to organizational change agree that the model does not account for all organizational dynamics. McMaster and Vidgen (1996) found that the diffusion model ignores the "soft human issues" that come into play when implementing a new innovation. They concluded that often the diffusion of

innovations fail because the individual aspirations of decision makers and managers frequently "take precedence over organizational interests" (p. 129). Robertson, Swan, and Newall (1996) found drawbacks to applying Rogers's theory to inter-organizational networks. They argued that Rogers portrays the diffusion process as "a simple, linear, sequential process driven by the needs of adopters [but does not actually] address the dynamics of the relationships between adopters, suppliers and potential adopters" (p. 150). Kautz and Larsen (2000) agree with Robertson et al. (1996) arguing that Rogers explains the diffusion process as a "simple and sequential process which is largely driven by the needs of potential adopters which are assumed by the supply agencies, nor does the model adequately address the dynamic relationship between all stakeholders involved" (p. 24). Kautz and Larsen (2000) further explain that though Rogers' model outlines adoption in organizations, it largely emphasizes the role of the individual rather than the "fact that organizations undergo constant change." [They urge] "organizational development and the maturity of the potential adopter population [must be considered]" (p. 24).

In trying to follow the consequences of innovations, other researchers have questioned the ability of Rogers' model to address whether or not an innovation has been fully diffused. Fischman and Kemerer (1993) remarked that in most studies of innovation, Rogers concentrates almost entirely on the adoption of the innovation. They consider the "more telling question may be whether the innovation ever becomes fully assimilated within the organization, where assimilation might be defined as state of widespread, routinized and/or effective use (p. 28). Attewell (1992) argues that Rogers' diffusion model does not fully address the details of the diffusion process in business

computing. He suggests that full diffusion requires a blend of expertise with individual and organizational learning to facilitate adoption.

Finally, other studies have come to question the depth and breadth of Rogers' attributes of innovations. Holloway (1979) for instance, identified status and prestige separate from relative advantage, and found little distinction between effect of relative advantage and compatibility (p. 27). Kearns (1992) work sought to find additional key attributes of innovation and identified twenty more, in addition to those previously identified by Rogers.

As these critiques suggest, no single change theory will provide a full understanding of all types of change in all types of settings. However, as a means to gaining broad understanding of the change process, Rogers' model continues to be informative because it provides a lens through which one can observe the many components of the change process in many different settings and organizations. For this reason, Rogers' *Diffusion of Innovations* was chosen for this study.

Extensions of Rogers' Model

As an outgrowth of Rogers' *Diffusion of Innovation*, several change models have developed from this general communications model. Each has taken a specific component of communication change theory and expanded its empirical base to demonstrate its role in the change process. Table A provides a demonstration of how these communication change models have stemmed from Rogers' *Diffusion of Innovations* model and below is a brief summary of each model.

Innovation: Attributes of new idea	Communication Channels: Exchanges of information	Time: Innovation-decision process; intended adopter categories; rate of adoption	Social System: Structures; norms; opinion leaders; change agent; types of decisions; consequences
Hall & Hord's Concerns-Based Adoption Model: Innovation component checklist		Ely's Conditions of Change: Type o necessary for adoption of innovation	f conditions or environment
		Hall & Hord's Concerns-Based Adoption Model: Stages individual adopters pass through as the innovation is implemented	Fullan's Meaning of Educational Change: Characteristics/strategies of individuals that promote change
		w's Change Agent's Guide: Stages in an individual organization Zaltman & Duncan's Strategies for Planned Change: Social, cultural, psychological resistance	enange

Table A: Demonstration of communication change models stemming from the Rogers' model.

Ely: Conditions of Change Model

Ely's (1976) *Conditions of Change Model* suggests that the environment "in which the innovation is to be introduced can play an equally important role in determining a change effort's success" (Ellsworth, 2001, p. 66). Ely (1976) contends that certain conditions of an organization are "necessary for change to be successful" (Ely, 1990, p. 301). His work focused on the micro, or localized, routine changes in library management and revealed eight conditions, or environmental factors, that are necessary for change to happen within an organization. The necessary conditions an organization must have are a general dissatisfaction with the *status quo*; a knowledgeable and skilled workforce; a committed personnel; a willingness to participate by all adopters; sufficient time for all adopters to learn about, adopt, and routinize the change; rewards and incentives for adopters; evident leadership; and visible support from all key players and stakeholders.

Ely's (1976) attention to the organizational context has been crucial to the study of change. Hall and Hord (1987) expanded Ely's notion and found that different contexts create different constraints on what change agents can and cannot achieve. They explained that "context is critical to understanding the change process [because it] can create opportunities for the facilitator" (p. 15). Other researchers (Berquist, 1992; Kezar & Eckel, 2002a)have affirmed that a solid understanding of the change process comes from micro-level or context-based data which will help the change agent to understand why, and under what circumstances strategies work at a particular institution at a particular time.

Fullan: Meaning of Educational Change Model

Fullan's book *The New Meaning of Educational Change*, originally published in 1991, provides a comprehensive understanding of the concepts of change agent and change agency. In this work he identified five basic qualities of a change agent that include possessing technical qualifications for the task at hand; having the administrative ability to allocate time to detailed matters; possessing interpersonal skills and empathy; having motivation and drive; and possessing leadership abilities. In his later work, Fullan (1993) expanded these qualities to include having personal vision building, inquiry skills, mastery of innovation, and a collaborative nature.

Fullan (1993) defines a change agent as one who is "self-conscious about the nature of change and the change process" (p. 12). This person has the role of "establish[ing] a link between a perceived need of a client system and a possible means of satisfying that need" (Fullan, 2001, p. 187). Fullan (1993) asserts that all stakeholders of an organization should be agents of change. This "stakeholder-as-change-agent"

notion has allowed researchers to understand the multiple types of organizational members that might, at one point or another, be change agents.

This model suggests that the "activities that are typically associated with or especially effective for change agents come from their particular role" within an organization (Ellsworth, 2000, p. 41). Though Fullan's (2001) work takes place within PK-12 education settings, he offers valuable insight for identifying various stakeholders that might take the role of change agent in the change process in any organization. Fullan (2001) also suggests that stakeholders acting as agents of change and working together across roles will result in more productive change in organizations. "The challenge is to begin: to reach out, to establish areas of common interest, and to move forward" (Ellsworth, 2000, p. 97).

Havelock and Zlotolow: Change Agent Model

Havelock and Zlotolow's (1995) book, *A Change Agent's Guide*, presents a practical 'how-to' guide for understanding the stages of planned change and is an elaboration of Havelock's original book, written in 1973 with Teacher Corps funding. This substantial piece of work has "remained sufficiently stable" (Ellsworth, 2000, p. 137) in the annals of change literature. Early on, Havelock (1973) defined the change process as "how the change or innovation comes about" (p. 5) through the work of the change agent. He outlined four primary ways in which the change agent might act in this process:

- 1. As a catalyst to overcome the inertia of an organization;
- 2. As a solution giver who knows how to propose and deliver change;
- 3. As a process helper to help the process from beginning to end; and
- 4. As a resource linker bringing together needs and resources (Havelock, 1973, p. 7-9).

To further facilitate the change agent's role in the innovation process, Havelock

and Zlotolow (1995) developed a seven-phase model of planned change that crafted the

acronym C-R-E-A-T-E-R—care, relate, examine, acquire, try, extend, and renew. The

care and relate phases prepare the organization to be receptive to change. The examine,

acquire, try, and extend phases serve to move the innovation into the organization.

In the change process, Havelock and Zlotolow (1995) have also identified "five

traps to into which an inexperienced change agent is likely to stumble" (p. 86). They are:

- 1. Analysis paralysis where the change agent spends too much time on diagnosis;
- 2. Avoidance or denial where the client wants to spend too much time on diagnosis;
- 3. Destructive confrontation where the change agent presents a diagnosis that is demeaning or threatens clients;
- 4. House diagnosis where the change agent has a specialty which appears as the major cause of trouble; and
- 5. Fire fighting where the change agent races from symptom to symptom without looking for causes (Havelock & Zlotolow, 1995, p. 86-88).

To avoid such pitfalls, Havelock and Zlotolow's (1995) manual recommends a diagnostic inventory that guides the change agent to accurately gather information about the problem to be solved. Offering the same final piece of advice that Rogers (1995) suggested, Havelock and Zlotolow (1995) explain that the role of the change agent will come to an end and it is in the change agent's best interest to begin to think about that transition early in the change process. That is, the change agent must "turn [his] attention to the question of disengaging and moving on (Ellsworth, 2000, p. 136). To achieve this outcome, Havelock and Zlotolow (1995) recommend a gradual detachment process that begins when the change agent has a strong indication that the original problem is nearly solved (*problem-centered*); the change agent may move on when the new innovation has

been accepted by leadership and is being diffused throughout the organization (*innovation-centered*); the change agent disengages when she is convinced that the system is successfully generating self-renewal capacity (*system-centered*) (Havelock & Zlotolow, 1995, p. 167).

Hall and Hord: Concerns-Based Adoption Model

Beginning with the work of Hall, Wallace, and Dossett in 1973, Hall and his colleagues developed a model known as the *Concerns-Based Adoption Model (CBAM)* which advocates that "effective change facilitators must understand how his or her clients perceive change and adjust what he or she does accordingly" (Hall & Hord, 1987, p. 5). The model centers on the innovation adopter and his or her concerns and behaviors towards the innovation. Hall and Hord (1987) illustrate that the concerns of the individual adopter evolve and focus on different issues over time.

Hall and Hord (1987) applied this model to various school settings to better understand how change could be introduced and facilitated among school personnel. In their findings, they outlined some basic, but specific assumptions about the change process:

- 1. A change facilitator must understand the point of view of the participants as they are involved in change;
- 2. Change is a process not an event;
- 3. Much will occur during the change process;
- 4. Innovations come in all shapes and sizes;
- 5. To change something, a person has to change first; and
- 6. Everyone can be a change facilitator (Hall & Hord, 1987, p. 8-10).

They suggest that under these assumptions a change facilitator will use informal and systematic ways to probe individuals and groups to understand their point of view. They recommend three diagnostic dimensions or developmental stages, to allow the change facilitator to understand intended adopters. The stages are individual concern for change; levels of use of the innovation; and the configurations, or operational forms, the innovation takes.

The strategy behind this model is to "collect and summarize the data that entails identifying the basic components of an innovation, and within each component, identifying the variations that describe how individuals might use the components" (Hall & Hord, 1987, p. 116). It is a model that "describes what [clients] do with the innovation-related materials and processes daily, rather than narrowly addressing the innovation as described by the developer" (Hall & Hord, 1987, p. 116). Ellsworth (2000) praised their work for "describing what is important to intended adopters and [giving the change facilitator what is necessary for] helping them through change" (p. 157).

Zaltman and Duncan: Strategies for the Planned Change Model

Zaltman and Duncan's work focuses on the role of resistance in the change process. This is one important area upon which Rogers' model does not elaborate. Rogers' model simply understands resistance as rejection of an innovation. The early work of Linquist (1974) and the more recent work of Zaltman and Duncan suggest that understanding the role of resistance in the change process is crucial. To frame the role of resistance in this study of change in three schools of education, the following section discusses in more detail the work of Zaltman and Duncan.

In early work on in diffusion theory, Linquist (1974) described seven barriers that higher education institutions may face when implementing change:

- 1. Major academic changes that threaten secured positions;
- 2. Colleges and universities that are vivisected into diverse and isolated subgroups;
- 3. Academic power that is dispersed among pluralistic interested groups;

- 4. Prevalent academic values that oppose much current innovation;
- 5. Measuring the relative advantages and future context for academic innovations that is extremely difficult;
- 6. A majority of faculty that are isolated from teaching-learning research, theory, and practices conducted elsewhere;
- 7. Few adaptive mechanisms that are available to fight organizational inertia" (Lindquist, 1974, p. 327).

Linquist's work was useful to the field; however, it was incomplete (Ellsworth, 2000).

In the late 1970's, Zaltman and several of his colleagues began to look more closely at the ways in which organizations resist change. As they took on the task to understand strategies of change, they realized that without resistance, "little discussion of [change] strategies would be necessary (Zaltman & Duncan, 1977, p. 59). Ellsworth (2000) stated that "what Rogers is to innovation attributes promoting adoption, Zaltman and his colleagues are to attributes and conditions of hindering it" (p. 166). They developed a continuum of change strategies that ranged from minimal to maximum external pressure and included educative, persuasive, facilitative, and power. They observed that a change agent would be likely to utilize any one of these strategies to accomplish the desired change (Zaltman & Duncan, 1977). Zaltman and Duncan (1977) ultimately defined resistance as "any conduct that serves to maintain the *status quo*" (p. 63).

To understand resistance, Zaltman, Florio and Newell (1977) explained, "it is important to distinguish between resistance whose premise is that a proposed change is the wrong solution to an acknowledged problem and resistance whose premise is that the proposed change is irrelevant because there is no corresponding problem" (p. 30). Their work sought to understand the causes of resistance and began with an understanding of the work of Lippitt (1974), who originally outlined four categories that both facilitate and hinder change within organizations: *peer-authority relations; personal attitudes towards innovations; characteristics of utilizing the innovation; and physical or temporal arrangements that come with the innovation.* While these were self-explanatory, Zaltman and his colleagues pushed to reveal deeper roots of resistance in organizations. Ultimately, they identified four categories of resistance that "disrupt change efforts and distort adopter perceptions of innovations" (Ellsworth, 2000, p. 44).

The first form of resistance is *cultural*, which is rooted in traditional value systems and includes *values and beliefs*, *cultural ethnocentrism*, *face saving*, and *incompatibility* of a cultural trait with change. *Values and beliefs*, observe Zaltman and Duncan (1977), are "frequently religious" but also include work ethic, competitiveness, or fatalism" (p. 68) and are the values and beliefs of both the individuals within an organization and of the organization itself, and may possibly be entrenched "trust in traditional ways of doing things" (Zaltman, Florio, & Newell, 1977, p. 31) or a complete absence of cultural attitudes and values.

Cultural ethnocentrism offers a second form cultural resistance to change and refers to the way in which one believes their own culture to be better than that of others. In the change processes, clients will frequently approach an innovation from the perception that their own or their organizational culture is superior and they will maintain that "nothing from the change agent's world could be of use" (Zaltman & Duncan, 1977, p. 69). Ellsworth (2000) provides a noteworthy example where "university faculty will resist a pragmatic adaptation to theory [because it was] suggested by a practitioner" (p. 169). However, this notion of cultural ethnocentrism is two-fold. On the other hand, the change agent may also believe "his own culture to be superior to that of the client system [and may] project this belief, consciously or unconsciously, which will frequently provoke resistance from the client" (Ellsworth, 2000, p. 168). Zaltman, Florio, and Newell (1977) allege, "communication of such feelings may be direct or unintentional," but equally produce resistance from the client (p. 34).

A third form of cultural resistance is known as *saving face*, which describes a means of defending traditional practices by the client base. Innovations are "often perceived as carrying an implicit assumption that the tool or practice they are replacing is inferior" (Zaltman & Duncan, 1977, p. 70). A change agent who argues that current practices are wrong or cannot solve the new problem is essentially being confrontational and will not be able to persuade those who are already grounded in a firm culture to change.

Incompatibility of a cultural trait with change is the final form of cultural resistance. Zaltman and Duncan (1977) describe this form as "one of the most frequent causes of resistance to change" (p. 73) which suggests that if an innovation does not correspond or is not adaptable to current beliefs or traditions, the innovation will be resisted at all levels. Zaltman and Duncan (1977) propose that a change agent who faces cultural barriers can reposition the innovation so that it will be less threatening to the culture. Levine (1980), on the other hand, asserts that "a cultural match between innovation and existing values in the organization is important" (p. 14).

The second major form of resistance to change consists of *social barriers*, or the characteristics of how individual adopters react as members of a social system. Zaltman and Duncan (1977) identified five examples of social barriers. First, *group solidarity* suggests that adopting the innovation would result in hardship for other members.

Zaltman et al. (1977) explain, "Solidarity involves the issue of interdependence [and] a high degree of in-group identification" (p. 34). This idea of solidarity is related to cultural ethnocentrism and assumes that no one outside the client system could understand the system well enough to "produce an innovation of value to it" (Ellsworth, 2000, p. 171).

Conformity to norms describes how individuals in a system accept rules or norms in exchange for the benefits of the system. Conformity to such norms encourages, or even requires, behavior that resists outside ideas. Zaltman et al. (1977) explain, "Norms provide stability and behavioral guidelines that define what individuals can expect from one another" (p. 35) and from the system. *Conflict and factionalism* acknowledge that a divided organization is unlikely to foster meaningful change for the full organization. That is, "Any change adopted or espoused by one faction in the conflict may be automatically rejected by other factions" (Zaltman et al, 1977, p. 35). Finally, *group insight* describes the "members' imperfect awareness of their own interpersonal processes and their lack of a frame of reference in which to judge their performances and their possibilities for improvement" (Zaltman & Duncan, 1977, p. 75).

The third form of resistance to change is *organizational*. Zaltman et al. (1977) maintain, "certain structural characteristics of organizations facilitate the initiation of change or innovation, but operate to restrict the implementation of change" (p. 36). Organizational resistance implies that there is an "an absence of Ely's requirement that knowledge and skills exist" (Ellsworth, 2000, p. 167) in an organization before change can be implemented. Zaltman and Duncan (1977) have outlined five examples of organizational resistance in their work.

First, threats to power, or the influence of various parts (i.e. members,

departments, resources) of an organization are considered to be strong forms of resistance to change. Ellsworth (2000) points out, "Real change isn't as simple as introducing a new tool or method [but rather] disturbances to traditional powers may result in impressions of winners and losers" (p. 174). Careful understanding of positional and power structures is necessary to foster change that does not threaten those that wield power within an organization. Second, *organizational structure* implies that the "structure of an organization in terms of authority patterns, channels of communication, division of labor, rules and procedures, etc. [must] be compatible or supportive of change (Zaltman & Duncan, 1977, p. 76). Such structures are necessary because "innovation may require extensive communication or even collaboration between subunits or individuals who previously operated independently (Ellsworth, 2000, p. 175). Organizations that have "highly standardized and routinized" (Zaltman et al, 1977, p. 36) ways of doing things may inhibit the change process.

Third, *inadequate communication* illustrates a lack of clear flowing information both up and down the chain of command that can cause resistance to change. Inadequate communication may be the norm in a particular organization or it may be a function of the "gatekeeper, or person who has sufficient control over a channel of communication" (Zaltman et al, 1977, p. 38). The fourth organizational structure that impedes change is the *organizational climate* for change. If there is an "absence of a pervasive and sustaining philosophy of change in a social system the result will be the lack of any systematic support for encouraging and reinforcing the desire and willingness for change" (Zaltman et al, 1977, p. 39). The necessary climate for organizational change should include the recognized need for change by the members of an organization, the openness or willingness to change, and a perceived ability or potential for change (Zaltman & Duncan, 1977). Ellsworth (2000) offers an important irony for the change agent, that is, "to understand that there exists some evidence [of a] need for change is negatively correlated with the other two dimensions [openness and potential]" (Ellsworth, 2000, p. 176). The climate conducive to change requires all three conditions.

The final organizational form of resistance is *technological resistance*, or the instance when a "client system lacks the institutional knowledge to understand, accept, or apply the innovation (Zaltman & Duncan, 1977, p. 80). This barrier has been observed more recently in the adaptation and use of information technology in secondary and post-secondary educational institutions (Kenny, 1992; Kautz, 1996; Hannan, 2005; Roberts, 2008).

The fourth form of resistance is the *psychological* nature of an individual. Psychological resistance may come in the form of differing innovation perceptions between the client and the change agent. Problems may arise when the client and the change agent see the need for change, but "do not share [a] common perception about its nature and causes" (Zaltman et al, 1977, p. 38). Alternatively, there may be a lack of clarity on the part of the change agent and he may not have been clear about the "behaviors required to implement a change or innovation" (Gross et al, 1971 in Zaltman et al, 1977, p. 40). Within some individuals there may also be an inherent desire to maintain levels of stability, which is known as *homeostasis*. Zaltman and Duncan (1977) discovered that "many innovations force the systems in which they are introduced to adapt in ways that are far from comfortable" (p. 83). Mumford (2005) concurred

observing that some intended adopters "resist change because it calls for them to rework or redefine a process they may be very comfortable with" (p. 67).

Commitment, is both an organizational and psychological form of resistance insofar that it can be seen in a client's reluctance to abandon tools or practices in which significant resources have been invested (Zaltman & Duncan, 1977, p. 83). *Conformity* is considered psychological as well and stems from the cultural and social values and beliefs held by an individual which may cause them to resist change. Both commitment and conformity may also stem from insecurity or the "uncertainty and anxiety about one's ability to perform" (Zaltman et al, 1977, p. 40).

The final form of resistance to change comes from the *attributes of the innovation* itself, which includes examples such as the communicability of the innovation, or the "ease with which its pertinent information can be disseminated;" relative advantage; source of the innovation; underlying theory; compatibility; and the size of the decision making body (Zaltman et al, 1977, p 41). Stensaker and Norgard (2001) disagree recognizing that an innovation will be successful if it satisfies the needs of the adopter better than the existing solution.

Since Zaltman and his colleagues have opened the door to understanding the forms of resistance to change, several other authors have focused the role of resistance in planned change strategies. Fullan (2001) highlights, "in a culture of change, emotions frequently run high. And when they do, they often represent differences of opinion[and] people express doubts or reservations and sometimes outright opposition to new directions" (p. 74). He concludes that those who do resist should be respected because they often have ideas that the change agent might have missed or they may be crucial to

the politics of implementation. "Ignoring [resisters]," Fullan (2001) cautions, "will take its toll" (p. 42). Mumford (2005) warned that any change "orchestrated from the top and imposed on individuals at the bottom is likely to be resisted" (p. 67). He goes on to recommend reducing resistance by communicating change "at all levels so individuals will see the needs and benefits and have some ownership of the change process" (p. 67). Hall and Hord (1987) suggest that resistance maybe be used as an indicator that the adopter population has become aware of the innovation and learned enough about it to experience personal concerns (in Ellsworth, 2000, p. 179). Heifetz and Linksy (2002) have observed, "People do not resist change, per se. People resist loss" (p. 11). Johnson (1969), however, has argued that resistance is actually a necessary impetus for change because it means the adopter population has become aware of and is formulating opinions about the change process (in Ellsworth, 2000, p. 180).

The work of Ely, Fullan, Havelock and Zlotolow, Hall and Hord, and Zaltman and Duncan represent how Rogers' *Diffusion of Innovation* model has served as a foundation in communication change theory. These scholars have extrapolated individual change components and elaborated on their function and influence in the change process. Their work and subsequent studies have guided the understanding of the depths and breadth of the change process within organizations. The next section provides examples of studies that have used Rogers' model as a lens to understand change in institutions of higher education.

U.S. Higher Education and Innovation

This section will offer several examples of how Rogers' work has been applied to institutions of higher education and provide a background for use of his model in this

study of change in three schools of education.

American higher education has been subject to unrelenting waves of innovations from its inception. The stimulus for innovation has resulted from demands for change from a wide range of stakeholders that include governmental agencies and policy-making bodies, accreditation agencies and professional societies, philanthropic foundations and business and commercial groups, and more recently, from organized groups of private citizens. Academic, professional, and research interests have also called for change in every aspect of higher education in the US.

Lynch and Mitchell (2005) observe that calls for "change in higher education [have] evolved [from] both the internal and external environments of the academy" (p. 165). Internally, leaders are increasingly requesting self-examination in order to respond to outside pressures for change (Gee & Spikes, 1997). Reform agendas have been as diverse and widespread from full university reforms to smaller departmental or curricular reforms. Externally, the current climate and national discussion of higher education has resulted in demands for increased accountability and greater transparency regarding the role of higher education in preparing future generations. Beatty and Page (2007) have observed, "higher education has moved into a new millennium in which a college degree has become the rule instead of the exception, unlike any other time in history" (p. 193). With this greater responsibility comes greater accountability (Spellings, 2007). environment replete with change including: increasing competition from alternative providers, resource constrains, the growth of nontraditional students, greater accountability to government and the public, new learning strategies for improved learning outcomes and increased technology demands (Beatty & Page, 2007, p. 194). Indeed, some have suggested that the "the dance of change in the academy reflects an evolution in [society]" (Lynch & Mitchell, 2005, p. 165). Each reform agenda that comes along is hastened by changes in the larger social environment (Rudolph, 1977; Boyer, 1990; Gumport, 2001).

With each "new assault on the university, the academic community turns ever more inward, away from reality, away from the future" (Hall, 1991, p. 1). Some researchers have suggested that institutions of higher education cannot change. Shelton and DeZure (1993) have described higher education as a "dinosaur, long-lived, but slow to move and change" (p. 28). Eckel, Hill, Greene and Mallon (1999) have labeled the academy as "change adverse" (p. 3), and Thelin (2000) stated that "changing [the undergraduate] curriculum is harder than moving a graveyard" (p. 9). Still, innovation and change do take place in institutions of higher education. Such reforms take many shapes and have frequently followed patterns consistent with the work of Rogers' *Diffusion of Innovations*. Broadly, Levine (1980) describes several forms of innovation occurring at universities throughout history. They include the establishment of new colleges, creating innovative enclaves within existing colleges, adopting holistic change within existing colleges, combining several piecemeal change efforts within existing colleges, and creating peripheral changes outside existing colleges (Levine, 1980, p. 4).

Linquist (1978) followed the work of Rogers and developed a comprehensive set of change strategies which are widely used to examine change in higher education organization literature. He outlined five strategies necessary for change that include senior administrative support, collaborative leadership, robust design, staff development, and visible actions that build upon Rogers' change agent strategies. He further observed that a key component of change in higher education is the increased cosmopolitan perspective of faculty members. Berquist (1992) further expounds on this assertion clarifying, "if faculty members have connections with colleagues from comparable institutions, then they tend to be more open to new ideas (attitude change) as well as to be more knowledgeable about how to implement these new ideas (process change)" (p. 196).

Birnbaum's (2000) study of the life cycle of business-generated management fads in higher education led him to go beyond Rogers' model to focus more closely on the consequences of diffusion. He discovered a five-stage process of diffusion consisting of *creation, narrative evolution, time lag, narrative devolution,* and *dissonance resolution. Creation* describes the need for new management to solve a proposed problem. Next, a *narrative evolution* spreads narratives of successful implementation of the new innovation and the innovation is hailed. During *time lag,* there exists a certain amount of time between the dissemination of the innovation and the reaction by the user. By *narrative devolution,* skeptics within the institution challenge the original creation narrative, and finally, a *dissonance resolution* occurs and adopters then account for the failure to protect the *status quo* and traditional, ideological views. Birbaum (2000) asserts that management fads have diffused from their original sector into higher education through Rogers' interpersonal communication channel.

In the adoption of information technology by higher education systems, several authors have found Rogers' work useful. Moore's (1996) study of the adoption of information technology by end-users learned that the "subjective norm and attitude have significant effects on a potential adopter's behavior" and with this, confirmed the link between this behavior and the characteristics of the innovation" (p. 144). Hannan (2005) looked at innovation in learning technology in three British institutions and concluded that "innovating can be a rewarding experience" (p. 984) if the institution supports the greater goals of the innovation both rhetorically and in practice. Sahin and Thompson (2006) studied how education faculty interpret instructional computer use and used Rogers' model to develop their study. They confirmed Rogers' adopter categories and also found that administrative support and faculty development are crucial to the success of innovations.

Researchers have also applied Rogers' model to other areas of higher education innovations. Starkweather and Kardong-Edgren (2008) looked at how simulations are infused into the undergraduate nursing curriculum through the characteristics of innovations. They determined that understanding these characteristics as they related to simulations and communicating them to the faculty facilitated diffusion of the innovation. Stensaker and Dahl Norgard (2001) investigated the relationship between innovation and standardization in Norwegian universities over a thirty-year period and how the universities adapted to external pressures for innovation and standardization as an identity formation process. They concluded that institutional identity is an important factor in organizational change and that "innovation, rather than standardization is seen

as the necessary condition for organizational survival" (Stensaker & Dahl Norgard, 2001, p. 474).

Other studies have researched change in higher education, but have not employed Rogers' model. Bolman and Deal (1991), for example, developed four frames, or lenses, that represent the different ways one can view any organization. The lenses are identified as structural, human resources, political, and symbolic, and provide the researcher with a means to probe the process of implementing change within organizations. Berquist (1992) has gone a step further to define four distinct academic cultures that exist in American higher education that affect the process of change—a collegial culture, a top-down managerial culture, a developmental or change-oriented culture, and a negotiating culture where decisions are continually bartered. Each culture has bearing on the ability for change to be planned and implemented.

Hannan, English, and Silver (1999) researched innovations in teaching and learning in higher education and found that institutions are moving toward "directed innovation" (p. 288). They suggest institutions are driven by the need to "maximize the [return on] investment... to compete with other providers...and [to do so] with a tendency towards more standardized curriculum, and the possibility of more individualized pedagogy" (Hannan et al, 1999, p. 288).

Despite the many studies done on change and innovation within institutions of higher education, gaps remain in our understanding of how this process occurs, who is involved and why, and what institutional, cultural, and organizational factors affect the implementation and survival of change. Kezar and Eckel (2002b) suggest that the literature on change in higher education examines only the content, outcomes related, and

conditions associated with change. What the literature lacks, they suggest, is emphasis on the change processes, or how the actual work of creating and making change happen in higher education. Other scholars have asked for more research on the characteristics of higher education institutions to understand why in an atmosphere of relatively "low innovation resistance" (Levine, 1980, p. 173) and "constant innovation activity" (Clark 2004, p. 234), innovations do not survive when facing pressure for standardization. Kezar & Eckel (2002b) suggest "the broad writing in current change literature on higher education may mask information helpful to advance institutional change on a specific campus" (p. 435).

Other scholars have suggested a broader use of integrated change models when examining higher education change. Kenny (1992), after examining the diffusion of educational technologies in schools of education concluded that solely a systems approach is not enough to sustain change. Effective use of diffusion of innovation theory and practices needs to be considered as a concrete method for reorganizing higher education systems. Kezar and Eckel (2002b) also concluded from a study on sensemaking and interrelated strategies in transformational change at higher education institutions the importance "for researchers of combining multiple conceptual models for understanding change processes" (p. 295).

Finally, the literature urges that "one-size" change models do not fit all institutions. The Kerr-Carnegie model of reform developed by Clark Kerr and the Carnegie Foundation for the Advancement of Teaching deduced from a 12-year project that no institution is a carbon copy of another, nor should it be (Clark, 2004, p. 183). This model offered a "transferable logic in how to think about reform and change in higher

education [which says change should] begin by shifting attention to the institutional level, focus on development from past to present to possible futures and take it from there" (Clark, 2004, p. 183). The goal of the model is to allow institutions to freely develop their own solutions to problems and to combine both their past traditions with future norms. Kezar and Eckel (2002b) echo this sentiment by asserting that current change strategies are generic and leave leaders wondering if a particular strategy can be applied to their individual campus. The plans behind most change strategies in higher education are "that each strategy is enacted similarly on each campus and that nuance and context do not much matter" (p. 435).

With this summary of change and innovation in higher education, I wish to establish that not only is Rogers' *Diffusion of Innovation* model actively utilized by higher education researchers, but there still exists a gap in the change literature as it applies to higher education. Additional studies on how Rogers' model applies to the different areas of higher education can contribute much to the literature on change. In the next section, I will address the literature that examines the role that individual faculty members have played in the change process at institutions of higher education.

Faculty as Change Agents

In this section, I aim to connect the literature on change agents to the literature on faculty involvement or faculty leadership in higher education. To accomplish this connection, I first provide a reminder of the definition of change agent. I then review examples of studies that locate faculty as change agents in higher education.

The definition of a change agent has evolved from early scholars who discussed the role of the 'social change agent' in the change process to clearer definitions of

characteristics and strategies of such individuals. Originally, Lippitt, Watson, and Westley (1958) defined the social change agent as the individual who possessed the personal skills to guide clients through the step-by-step processes of change within their organizations. Their research focused largely on change agents in the field of agriculture. Several years later, scholars such as Rogers and Shoemaker (1971) and Havelock (1973) began to apply the concept of change agent to organizations and identified the characteristics of an individual who fostered change in organizations and the types of strategies he utilized to convince colleagues to adopt new ideas. Rogers and Shoemaker (1971) determined that credibility among peers, the ability to create a need for change, and the ability to develop solutions were key characteristics possessed by a change agent. They further suggested that change agents must have a deep understanding of "their clients' needs, attitudes, and beliefs, and their social norms and leadership structure, if programs of change are to be tailored to fit in the clients' [organization]" (Rogers & Shoemaker, 1971, p. 239). Over time, Rogers (1995) refined this definition to outline seven roles the change agent must go through as he "provides a communication link" (p. 336) between the innovation and the adopters:

- 1. To develop a need for change by creating awareness of the need to change behaviors;
- 2. To establish an information-exchange relationship; a rapport between the change agent and his clients that allows him to be accepted by the client;
- 3. To diagnose a clients' problems by analyzing and determining why alternatives will not solve them;
- 4. To create the intent within the client to change through motivating interest in the innovation;
- 5. To translate an intent into action by influencing the clients behavior;
- 6. To stabilize adoption and prevent discontinuance at the implementation stage;
- 7. To achieve a terminal relationship. The change agent should seek to develop the clients' ability to be their own change agent and renew their behavior (p. 337).

Other scholars (Hall & Hord, 1987; Fullan, 1991, 2001; Fullan & Hargreaves, 1992) later elaborated on the characteristics and skills of change agents and have essentially described this person as the key player in the diffusion of innovations and organizational change processes. For example, Hall (1991) places great importance on the role of the change agent by asserting that "the linkage between external pressure and internal change is made through individual leaders" (Hall, 1991, p. 13). Leaders are commonly organizational members who have entrepreneurial talents and skills and are able to "perceive the implications of prevailing social conditions and translate them into initiatives which bring about change" (Hall, 1991, p. 13).

In the study of change within higher education, relatively little work has been done to investigate how the definition of change agent relates to faculty who assume leadership roles in the organizational change process. In fact, educators are frequently seen as inhibitors to change. Zaltman, Florio, and Newell (1997) have told us, "Educators are often criticized for being among the most conservative professional groups in the face of change" (p. 29). Contrary to this generalized opinion, studies do exist that demonstrate faculty members taking action within their institutions. Evans (1982), for example, studied the resistance to information technology innovations at universities and found characteristics of faculty innovators in the practice-oriented disciplines. Farmer's (1990) study of King's College-London revealed several factors (providing psychological support, being credible, being politically astute, serving as a role model for change, recruiting a critical mass of decision makers, use of external opportunities) in individual faculty that both served to motivate and sustain change suggesting an active change agent

role. Smith's (1998) study forms of on peer review discovered that faculty will act as change agents within their own departments when change is necessary.

Faculty acting as agents of change within their institutions is not uncommon and, in fact is not as rare as the literature suggests, yet faculty have been characterized as unwilling to get involved and unwilling to change (Rhode, 2006). Thus scholars of change frequently overlook examples of faculty that do act within their institutions. Hall (1991) argues that there is a strong role for faculty to actively participate in change and by "exploring innovations intelligently, the roles of faculty need not undermine the academic profession, but actually bring new life and possibility to meeting important concerns of our institutions of higher learning" (p. 123). The problem may be that "faculty involvement in change is not clearly understood" (Schroeder, 2001, p. 8). With little research in this area, most of our understanding of faculty and how they approach change has been derived from assumption. For instance, many believe that faculty and innovation are opposing forces, yet Hall (1991) reminds us that "without faculty, there is no committed body which maintains the currency and rigor of the academic offering, provides important evaluative feedback to students, or sets expectations for a university degree" (p. 116). Faculty do, indeed have a crucial role in "fostering, initiating, and supporting change whether at the institutional or small unit level, such as departments" (Schroeder, 2001, p. 25).

For scholars who have researched faculty involvement in higher education change efforts, most have focused on leadership roles, such as administrative appointments. The general consensus among these scholars is that faculty leadership at both the formal level (such as serving on institutional committees) and at the informal level (such as

curriculum innovation) is diminishing (Schuster & Finklestein, 2006; Wergin, 2007, Shapiro, May, Frank, & Susskind, in press). Despite Boyer's (1990) call, nearly twenty years ago, for a more integrated definition of faculty and the many roles they have teachers, researchers, active members of universities- the fact of the matter is that faculty participation is not valued within the university setting and more often than not, faculty members opt out of involvement. O'Meara (2006) suggests that the primary reason that faculty do not become involved is that the traditional faculty reward structure does not incorporate this type of effort. Historically, the tenure process has made faculty involvement challenging. Wergin (2007) further explains that faculty involvement is confounded and made more problematic with increased academic capitalism, rising publication expectations, increasing teaching loads, and a rise in non-tenure-track faculty. The conditions for faculty involvement are limiting and becoming involved is more likely to damage professional ambitions and personal comfort. Hannan et al. (1999) noted faculty who do take an active role in their institutional interests are frequently in the "minority... and are unlikely to be effective with the majority" (Hannan et al, 1999, p. 288).

Despite such limitations, the following examples of research outcomes demonstrate the existence of groundbreaking work that seeks to understand how faculty assume change agency roles. These examples also demonstrate a very real need for more study in this area.

Several scholars have tried to define faculty roles within change. Neumann (1987) was one of the first scholars to look beyond the actions of the collective faculty to define individual faculty leadership in institutional operations. She observes, "the literature on

faculty's roles in college governance [has covered] many different topics in a variety of ways [but] considers faculty in formal groupings or collectivities as primary units of analysis. Faculty who act as informal leaders have seldom been examined" (Neumann, 1987, p. 2). In her conclusion, she reveals the difficulty of defining faculty leadership between college leaders and faculty because of the differing expectations each have of faculty. Kerr's (1995) work in understanding faculty and institutional change notes that although grassroots change does occur, these change efforts may be met with resistance. He cautions, "institutional changes are coming in areas under faculty control or influence [and] these changes will come in the face of much faculty hesitation and even some resistance" (Kerr, 1995, p. 75- 76). He goes on to recognize that some faculty were the agents of change. He names them "inventing faculty" and suggests "the inventing faculty member almost instinctively knows that internal change will come more easily if he obtains the external support of a foundation or Federal agency" (Kerr, 1995, p. 76).

Other scholars have examined the characteristics of faculty as change agents. Perlman, Gueths, and Weber (1988) apply the notion of *intrapreneurs* to the academy as a means to understand faculty involvement in change. *Intrapreneurship* is explained as entrepreneurship turned inward; the process by which people bring to fruition their ideas within complex bureaucracies. Perlman et al (1988) call it the "new conceptualization of innovation or organizational change" (p. 3). Acting in similar ways to a change agent, intrapreneurs develop and implement ideas within their institutions. They must know their organization well and must focus on results, not bureaucracy. Their functional goal is to move their institution to better adapt to a changing environment and to new requirements for productive, life-giving ways, and to position the institution for a

productive future (Perlman et al, 1988, p. 15). Stating that higher education cannot afford to wait for public policy to come to the rescue, Perlman, et al. (1988) call for more faculty intrapreneurs to solve the problems of higher education (p. 6). Middendorf (1998) studied how academic support specialists could engage faculty in change processes and revealed several characteristics that faculty change agents possess including credibility, tenure, openness to new ideas, a congenial nature with colleagues, a collaborative worker, and widely respected. By drawing on lessons from business and applying them to higher education, Hawkins and Winter (1997) identified the following characteristics and abilities of successful change agents (p. 241); a sense of purpose, solid vision; flexibility, action-oriented, persuasive, and strategically connected.

The extant literature has also facilitated an understanding of the steps faculty, acting as change agents, take to create organizational change. In 1998, Taylor coined the phrase "lone rangering" to refer to faculty who are "energetic, early adopters of innovation, and who are motivated by a desire to improve the accessibility and quality of their teaching" (p. 272). He explains that academics as innovators largely work as lone rangers, "in isolation from their colleagues and certainly unimpeded by administrators" (Taylor, 1988, p. 272). Though lone rangering has done little to change the broader institutional context, it has been a popular concept in the development of innovative teaching practices (Taylor, 1998). He developed a five-stage process for the fostering of faculty as change agents that included an *orientation* of faculty to consider innovative approaches that are consistent with university expectations; *training* on how to adapt new ideas into practice; *evaluative or reflective exercises* to ensure successful implementation; *innovation redevelopment* to fit the organizational environment; and *institutionalization*

of the innovation for sustainability. Taylor (1996) understands, however, that lone rangering is a "radically bottom-up approach to innovation, but [it is one] that needs to be institutionalized for innovation to be successful" (p. 273). Wergin (2007) examined "leadership in place," or grassroots leadership, which he defines as "having the opportunity, the ability and the courage to sense the need for leadership in the moment and seizing the opportunity" (p. 224). These leaders, he explains, "have no expectation that their leadership will lead to long-term changes in their professional roles. They see a need for leadership and they step forward and respond; and then they step back" (p. 224).

Most recently, Kezar and her colleagues have begun to address the need for more understanding in the area of faculty as change leaders. In particular, they investigated grassroots leadership among faculty. Kezar, Carducci, Bertram, Gallant, and Contreras McGavin (2007) suggest, "Faculty members who work directly to advance the institutional mission of teaching, learning, and at some institutions, research, represent the core human resource of higher education. They are the stewards of campus leadership and decision making" (p. 14). Kezar et al. (2007) admit that faculty grassroots leadership is not natural in institutions of higher education. However when they examined why some faculty do get involved, they discovered that "faculty members are more likely to undertake leadership roles if they feel they can be effective" (p. 16). The authors suggest that faculty leadership must be further fostered from university administrative leadership. Their contention was that "faculty leaders are far more successful when their efforts are supported or adopted by the administration" (Kezar et al, 2007, p. 20). This bottom-up leadership effort, when combined with top-down leadership, can prove to be a powerful combination for institutional change (Kezar et al, 2007). In regard to higher education

reform, Kezar et al. (2007) urge researchers to understand that "faculty leadership is necessary for high-quality teaching, innovative curriculum, cutting-edge research, intellectual enrichment, student engagement, improved student outcomes, greater faculty citizenship, a more democratic environment, a campus more responsive to community needs, and other important outcomes" (p. 21).

In a recent study that examines the emergence of faculty grassroots leadership in the context of one P-20 partnership project (an effort to coordinate school learning from nursery school to collegiate education) Shapiro, May, Frank, and Susskind (in press) found that grassroots faculty involvement is more likely to occur if reform strategies are aligned to faculty culture and institutional priorities. In research universities, in contrast to other Carnegie classifications, fostering grassroots faculty leadership is challenging because of the demand placed on faculty to produce quality research and the pressures from the outside to be accountable for student learning. Under these sorts of constraints, Shapiro et al (in press) note that "grassroots leadership efforts among faculty [will be] threatened" (p.15) because faculty will protect their own career before getting involved.

In another recent study by Kezar and Lester (in press), they describe the actions taken by faculty change agents and the aspects of campus environments that support grassroots faculty leadership. They suggest that this type of study is necessary because there exists "no national data that suggest the level to which faculty perceive themselves to be involved in leadership activities and creating change" (p. 20). Their study demonstrates certain campus conditions or characteristics that can constrain the forces of change—part-time and contingent faculty trends, rising publication standards etc.— which diminish faculty leadership. As a means to promote faculty involvement, they

suggest counting leadership as service; creating campus networks; addressing dysfunctional departmental dynamics; fostering role models; supporting faculty who question or challenge decisions; ensuring flexibility; autonomy; and altering contingent faculty contracts to include service and leadership (Kezar and Lester, in press). In their conclusion, the authors make a plea for more studies to "explore ways to make faculty leadership more viable and supported on campus" (Kezar and Lester, in press, p. 29). Eckel et al. (1999) agree and propose that "influential faculty members with no official power may be more important to changing the curriculum than the president [of colleges and universities]. Because of this mandated, top-down change is not suited to the way change really happens. Colleges are more like networks than hierarchies. Powerful leadership is not restricted to the top" (p. 8).

Viewing faculty as influential and powerful in support of institutional change is a relatively new, yet it is important. The above review of faculty roles in institutional change suggests that faculty change agency does exist on college and university campuses. More research is necessary to both understand the faculty who take on these roles, what those roles are, what characteristics and strategies define them their roles, and the environments that foster their involvement.

Conclusion

In conclusion, this literature review intended to serve as a guide for this study of change in three schools of education and of faculty roles in this process in three ways. First, I have described in detail Rogers' *Diffusion of Innovations* model which is an appropriate model for this study of change because it provides a broad framework, and includes all of the components of communication change models, including the innovation, communication channels, time, and social system and offers a heuristic theoretical framework for this study. Second, this literature review demonstrated that Rogers' model has proven to be a useful theory for the study of change and reform within institutions of higher education. Finally, this literature review suggests that the role of change agent is a viable one for faculty members who wish to be engaged, but that more work must be done to clearly understand their roles.

This study will contribute to the existing literature by offering empirical evidence of how an innovation, CPED design-concepts, is diffused within three schools of education and of the roles individual faculty members play in the diffusion of innovation process. The methodology utilized in this study is described in the following chapter.

Chapter 3: Research Design and Methodology

Introduction

The purpose of this study was to glean a clearer understanding of how schools of education and their academic departments adopt, adapt, or reject innovations, and how faculty in a change agent capacity describe and understand their role in this process. I examined the institutional change process utilizing Rogers' Diffusion of Innovation model and its four elements of change: the defining of the innovation; the means of communicating the innovation; the time necessary to adapt, adopt, or reject the innovation; and social system into which the innovation is being introduced. This study was conducted as an embedded, multiple-case study (Yin, 2003) consisting of two units of analysis. The first unit of analysis was the academic department or college where responsibility for the adoption, adaptation, or rejection of the Carnegie Project on the Education Doctorate (CPED) design-concepts was located. The second unit of analysis was the individual faculty member who served as the principal investigator for the CPED initiative. I investigated the ways in which this faculty member was identified by the institution, the roles and responsibilities assigned to him/her, and how he/she described and understood this role in designing, revising, and influencing the diffusion of CPED design-concepts. To further understand the change process, I engaged in a multiple-case study design, selecting three institutions that were involved in the CPED initiative, and investigated each institution individually. I then examined the findings across the institutions to identify commonalities that served to understand how the change process occurs in schools of education and the roles that faculty have in that change process.

What follows is a rationale for the use of qualitative methodology for this study, in particular, detailing why a case study design is the best qualitative approach for understanding the diffusion process and individual faculty roles in change. Following the rationale, I describe the context, setting, and sampling to set the stage for this study and I delineate the methodological design of the study, including the data collection and data analysis procedures. Finally, I conclude this chapter with a brief discussion of the validity, significance, and limitations of this study.

Rationale for Multiple-Case Study Methodology

Creswell (1998) defines qualitative research as "an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem. The researcher builds a complex, holistic picture, analyzes words, reports detailed views of informants, and conducts the study in a natural setting" (p. 15). Following this definition, qualitative methods generate results and theories that are understandable and credible, offer formative evaluations for improvement of educational practice and engage in collaborative investigation with practitioners or study participants (Maxwell, 2005). The goals that guide the research of a qualitative study in education allow the researcher to create a "richly, layered descriptive account" (Wolcott, 1994, p.13) of context and meaning-making.

In this study, I aspired to understand how colleges and schools of education and their academic departments adopt, adapt, or reject innovations and how faculty in a change agent capacity describe and understand their role in this process. For several reasons, employing a qualitative, multiple-case study approach is an appropriate methodology for understanding these questions. First, because this study explored the

many components that affect the institutional change process, but did so using a limited number of cases, the study aligned itself with the general understanding of qualitative research. Second, the study focused on the *hows* and *whys* of the change process in an academic context describing what happened at each institution relative to the Ed.D., and discovering reoccurring themes and relationships rather than validating the themes across varying populations. Finally, as Stake (1995) emphasizes in education, "cases of interest are people and programs" (p. 1). Employing a case study approach allowed me to delve deeply into each institution to answer the questions about the change process in that particular school of education. Utilizing a multiple-case study approach afforded me the ability to compare and contrast across institutions developing patterns that led to better understanding of the change process in academia and the role that faculty change agents play.

According to Yin (2003), the case study is a form of empirical inquiry that allows the researcher to "investigate a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (p. 13). Merriam (1988) adds that the decision by the researcher to focus on qualitative case study "stems from the fact that this design is chosen precisely because the researcher is interested in insight, discovery, and interpretation rather than hypothesis testing (p. 10). Multiple-case study methodology fit this study because it both allowed for a vivid description of processes and roles at each particular institution as well as for identification of commonalities across the three institutions. Data came from observations, interviews, and review of documentation collected at each case site. Findings from this study offer a "rich, thick description" (Merriam, 1988, p. 11) that

documents the events that transpired during the institutional change process at three individual institutions and suggests common elements that affect change across all three.

In this multiple-case study, each case was bounded by time (from the decision to join CPED to the summer of 2009), focused on a specific change effort (CPED designconcepts and the distinction of doctoral degrees in education) and the faculty member (CPED primary investigator) involved in that change, and was situated within each institution's physical, social, historical, and economic setting (Creswell, 1998). The study deductively developed an understanding of the ways in which schools of education make decisions and design change processes. The study then inductively tested these concepts across three institutions to gain a better understanding of similarities of change efforts and faculty involvement in schools of education decision making.

Yin (2003) purports that a "case study in education seeks to understand specific issues or problems of practice" (Yin, 2003, p. 23). This study speaks to the notion of studying problems of practice because it interrogates how decisions happen in practice and how individual faculty members facilitate such decisions across three schools of education. Yin (2003) also asserts that when developing a research question the case study is the appropriate design when "a *how* or *why* question is being asked about a contemporary set of events over which the investigator has little or no control" (p. 9). In this study, I examined three institutions involved in the CPED initiative that were redesigning their Ed.D. programs. I studied two units of analysis—the school of education or the academic department, and the faculty member who serves as the CPED principal investigator. To reach the *hows* and *whys* of my study, I asked the following research questions:

- 1. What factors make schools of education decide to adopt, adapt, or reject innovative ideas to reshape or redesign their Ed.D. programs?
- 2. What factors of the institutional social system or environment influence the adoption of the Ed.D. redesign?
- 3. How do individual faculty members (CPED principal investigators) describe and understand their role in designing, revising, and influencing the Ed.D. redesign process?
- 4. Are there commonalities between the three institutions?

Context of the Study

History of the CPED initiative. Following nearly two years of planning, the Carnegie Foundation for the Advancement of Teaching and the Council of Academic Deans from Research Education Institutions (CADREI) assembled two-dozen schools and colleges of education to engage in a national, inter-institutional dialogue aimed at improving the preparation of advanced educational practitioners. The initiative focused on redesigning the education doctorate (Ed.D.) into a more definitive professional practice degree that develops *stewards of practice* in doctoral education—professional practitioners who are committed to the highest standards and prepared to take on the greatest challenges of teaching in and leading schools, serving as administrators and clinical faculty in colleges and universities, and leading organizations that serve education. To accomplish this task, twenty-five institutions were invited to dialogue, contemplate, and define what a steward of practice should know, value, and be able to do, as well as to design the course of study and experiences that can develop this type of practitioner. The name of the initiative was the Carnegie Project on the Education Doctorate (CPED).

CPED Initiative design and process. CPED was a three-year initiative that began in January 2007 and was scheduled to end in December 2009. The initiative brought

together teams of two individuals from twenty-five institutions to bi-annual convenings⁶ and throughout the year participating home faculty were involved via the project website where institutions posted progress reports, discussed planning ideas, and collaborated on research projects. The two-person teams from each institution represented a broad cross-section of the faculty at each of the participating schools of education. In addition to one faculty member, each team brought either a currently enrolled graduate student or a second faculty member. The teams convened twice a year to deliberate on the form and function of the professional practice doctorate. They then took the results of these deliberations back to their home institutions to share with faculty who piloted new professional practice programs in one of three "strand" areas—school leadership, organizational leadership, or teacher education.

The initiative was divided into three phases; *concept and design* (year one), *experimental* (year two), and *deliberation and dissemination* (year three). In the conceptual and design phase, CPED institutions convened to engage in a serious and a sustained manner with one another. Drawing upon their experiences to-date, the teams began to define and describe a new professional practice degree program. Organized into strands to accommodate work already underway in the several different fields, teams engaged one another in an exploration of the possibilities and challenges of the experimental programs. Faculty and graduate students drew heavily from pilot work already in progress on their campuses and shared that work with others. Each team also began a documentation process to chart their challenges and describe their accomplishments. On-going efforts to design new capstone experiences and core

⁶ The "convening" is a signature term of the Carnegie Foundation for the Advancement of Teaching. It signifies that the gathering is different than a typical meeting and has the central feature of "coming together" (Carnegie Foundation for the Advancement of Teaching Internal Document, 2000).

curricula, new assessments and laboratories of practice, organize new modes of instructional delivery and candidate expectations served as the substance for bi-annual convenings.

In the second year, CPED teams and their home institutions entered the *experimental* phase and individual campuses piloted the new programs. Naturally-forming, inter-institutional relationships enabled participating teams to have and be "critical friends." These campus-based experimental programs were viewed as "design experiments" with current practitioners and others engaged in examining every facet of the program and pressing the agenda of change and transformation. The teams finished the second year experimenting with innovative designs for their new professional practice programs.

The final year was slated to be the *deliberation and dissemination* phase of the pilot projects. As the initiative entered its third year, CPED institutions remained committed to engaging with one another in the critical examination of goals and outcomes. They were determined to work collaboratively to produce new programs that could serve as models for other schools of education. During the culminating stage of the project, the information gathered and the models developed were expected to be disseminated to other organizational members of CADREI. The National Academy of Education, the American Educational Research Association, University Council of Educational Administrators, the American Association of Colleges of Teacher Education, and others serve as stakeholders. Their meetings and websites were to be used to facilitate the widest possible dissemination of the successes and challenges of

refashioning, strengthening and transforming professional practice doctorates in education.

Throughout this three-year process, each institution and its team members were asked the basic question, "*What are the knowledge, skills, and dispositions that professionals working in education should demonstrably have?*" At each institution the home faculty teams were mapping backward from the answers to this question to determine what types of assessments, teaching, clinical experiences, and scholarship would meet the needs of future practitioners. By the end of the project, the CPED initiative was expected to identify the central issues that confront schools of education as they transform programs and develop a set of design principles for further work and to produce several institutional examples that others can look to as models of exemplary practice.

Conversations and progress were centered around four design concepts; creating capstones for assessment, identifying a signature pedagogy, constructing laboratories of practice, and developing a scholarship of teaching and learning particular to the professional practice doctorate that have grown out of the expansive work of Lee Shulman, president emeritus of the Carnegie Foundation for the Advancement of Teaching. Shulman has long challenged schools of education to improve every facet of their programs urging that the education field must develop "a robust and distinct professional practice doctorate with a distinctive scholarly base" (Shulman et al, 2006, p. 25). Each of the participating institutions accepted these ideas and engaged colleagues in a full-ranging debate about ways to incorporate them into the redesign of their graduate education programs. Between convenings, teams were asked to complete annual progress

reports as well as several pre-convening work assignments that demonstrated their thinking and anticipated actions around the redesign of their professional practice doctorate.

Membership. In October 2006, the Carnegie Foundation for the Advancement of Teaching issued a call for proposals to the deans of the Council of Academic Deans from Research Education Institutions (CADREI) to join an effort that would focus on redesigning the professional practice doctorate in education. Twenty-three institutions responded with proposals that included a detailed description of current programs, intended pilot projects to be undertaken as part of the initiative, action steps, and institutional support. All twenty-three institutions were admitted. Over the course of the first year, two institutions dropped out due to financial or programmatic constraints and four others joined. The initiative had twenty-five participating institutions by the end of the first year. Twenty-two were public (with one institution representing a larger statesystem) and three were private. Of the twenty-five, four institutions were working to redesign their professional practice doctorate in all three strands; one was focusing on teacher leadership; two were focusing on teacher and school leadership; two were focusing on organizational leadership; one was focusing on teacher and organizational leadership; and fifteen were focusing on school leadership. The CPED initiative did not strive to have an even distribution in each strand, but rather sought institutions that were committed to working on redefining professional practice training for all levels of education practitioners.

Study Sample

The value of a case study is its inherent attention to the "uniqueness, complexity, and contextual embeddedness of individual events and phenomena" (Schram, 2003). Therefore, the selection of cases should be geared toward achieving a balanced and varied sample from which there exists the opportunity to learn more about the research problem (Stake, 1995). Creswell (1998) advises that the type of case be "promising and useful," but also "shows different perspectives on the problem, process, or event" (p. 62). In this multiple-case study, I employed *purposeful sampling* to obtain a sample of three institutions that were both balanced and varied. Purposeful sampling is based on the "assumption that one wants to discover, understand, and gain insight; therefore one selects a sample from which one can learn the most" (p. 48). In purposeful sampling, the research defines a set of criteria that make it necessary for a case to be included in the study.

Of the twenty-five CPED institutions, a subset of three institutions were identified for this study through utilizing the following set of criteria:

1. *Type of institution*: CPED had twenty-two public and three private institutions among its members. For diversity, I intended to include at least one private institution. The other two public institutions were distinguished by their governance structures—whether they were within a strong state-system or were outside such a system.

2. *Length of time in CPED*: Each institution was a member of the CPED initiative from its inception in January 2007 and had a two-year perspective on the goals of the initiative as well as made progress in their own thinking and action around the

redesign of the Ed.D. and its distinction from the Ph.D. In addition, the institutions selected had completed all annual progress reports and all CPED documentation including an original proposal and convening pre-work.

 Completion of work: Each institution was engaged in a pilot effort that served as the "test" for their programmatic redesign that took one of two forms. It was either an actual program up and running with students participating, or it was a departmental or school redesign committee that was working together to develop a new program.
 Proximity to researcher: Due to a limitation of time and funding, sites selected were within relative close proximity to the researcher.

Two public institutions and one private institution were selected and given pseudonyms to protect the identities of participants. They were the Hersh State Graduate School of Education, the Stull State School of Education, and the Michaels University School of Education. Descriptions of these three institutions can be found in chapter four.

At the CPED October 2008 convening, I met with the principal investigators of six institutions and administered a pre-study survey (see Appendix A) based on the above criteria which helped me to determine the key characteristics of an institution and to identify three to serve as cases for this study. Each institution had two units of analysis and a specific change timeframe that "bounded" (Guba and Lincoln, 1981 in Merriam, p. 86) the study of each case and afforded a full understanding of how the diffusion process occurred in the early stages of the change effort.

The first unit of analysis at each institution was the school or academic department that was seeking to adopt the CPED design-concepts and distinguish their Ed.D. from their Ph.D. I observed and learned about the process of adoption, adaption, or

rejection of CPED design-concepts. As I viewed the process, I also sought to learn more about the CPED primary investigator, or faculty member, and how the actions, communications, and self-perception of this person created the need for change and facilitated the change process. At each school of education, I interviewed ten people including the primary investigator, faculty, deans, and graduate assistants. The primary investigator identified faculty members at their institution who had been involved in or were possibly affected by the design process in an effort to provide a wide-range of views regarding the change process.

Data Collection

Creswell (1998) contends that case study involves the widest array of data collection as the researcher attempts to build an in-depth picture of the case. He lists four sources of data that are common to case studies, from which I employed three documents, interviews, and observation. Each source was selected to help produce a rich, in-depth, descriptive case of the change process and of the role of the primary investigator as a change agent. Prior case study work in innovation and faculty leadership in higher education (Hannan et al, 1999; Clegg, 2002; Kezar et al, 2007) have also utilized similar data collection methods.

Data sources included documentation, including work submitted to the CPED as part of the initiative, and internal institutional documents or materials that demonstrated the internal progress of the pilot work; interviews with the dean, the principal investigator, graduate assistant (if applicable) and the home faculty; and field notes or observations of interactions, locations, meetings, and communication between institutional members. Merriam (1988) points out, "Methodological triangulation

combines dissimilar methods such as interviews, observations, and physical evidence to study the same unit" (p. 69). These three sources of data supported the triangulation of my findings. After all data were collected and analyzed, a case report was written for each institution (see chapter 4) and then a cross-case analysis was conducted (see chapter 5).

Document collection. I collected two types of documentation from each institution. First, I reviewed the initial proposal to join CPED, all annual progress reports, and all convening pre-work from each school of education. Second, I received documents that were identified as relevant to the dissemination of information regarding the redesign of the Ed.D., the distinction between the Ed.D. and the Ph.D., the communication of CPED knowledge and design-concepts, and the overall change process. This documentation included email correspondence, website links, meeting notes, memos, handouts, and forms related to program development. Each document was entered into a document summary spreadsheet to help situate each piece of material into the context of the study (Miles & Huberman, 1994). The document summary spreadsheet includes the date and person who created the document, a brief description of the document, a brief summary of the contents, the significance of the document, and a primary contact person for additional questions.

Interviews. The second source of data collected was from interviews conducted with the principal investigator, the dean, and six to eight home faculty. At two of the institutions, the graduate assistant assigned to the project was also interviewed. Each interview was guided by a semi-structured protocol (see Appendix B) that contained open-ended questions related to research questions for this study. Consent for interviews

was obtained in writing (see Appendix C). The principal investigators were interviewed two times, once during a pre-survey and once at their home institution. All interviews were audio-recorded and included questions asking how participants perceived the CPED ideas, how the change process was communicated, how long the decision to adopt, adapt, or reject took, and what environmental factors had a role in facilitating or impeding the change. A contact summary form (Miles & Huberman, 1994) was created for each informant to facilitate organizing the data. Interviews were transcribed and then returned to participants for review and clarification.

Field notes. The third source of data was from recorded field notes taken while visiting the three institutions as well as during the CPED convenings. Field notes were generated from observing meetings or conversations between institutional members as well as from general observations from the institutional setting. Field notes offer context to and a deeper understanding of the other data collected. For example, observing a faculty meeting where program design was discussed added to the understanding of the social system and the environmental factors at that institution that may have affected the decisions to adopt the CPED design-concepts. Field notes were recorded on an observation protocol sheet (see Appendix D). This sheet also provided space for researcher reflections such as personal thoughts, ideas, impressions, and prejudices. These data were also coded and analyzed.

Table B demonstrates which type of data collection facilitated answering the central research questions. A detailed table of the relation between interview questions and research questions is included in Appendix E.

Research question	Data Collection Type
What factors make schools of education decide to adopt, adapt, or reject innovative ideas to reshape or redesign their Ed.D. programs?	Observations, documentation, interviews
What factors of the institutional social system or environment influence the adoption of the Ed.D. redesign?	Observations, documentation, interviews
How do individual faculty members (CPED principal investigators) describe and understand their role in designing, revising, and influencing the Ed.D. redesign process?	Interviews, observations
Are there commonalities between the three	Observations, documentation,
institutions?	interviews

Table B: Research questions in relation to data collection methods.

Data collected were stored in computer files and in binders. Materials were organized by institution and divided into three sections: documents and document summaries, interview transcripts and contact summary sheets, and observation summaries which included field notes and researcher reflective notes.

Time- line for data collection. The data for this study was collected at each institution between April and June 2009 when I traveled to each. Access to each institution was obtained with a letter of invitation to the Dean (see Appendix E). Each institutional visit lasted 2-3 days and consisted of approximately 10 interviews, observations of faculty meetings regarding the CPED pilot project, and collection of relevant documentation.

Role of the researcher. In qualitative studies, the researcher is the primary instrument of research who can "respond to the situation by maximizing opportunities for collecting and producing meaningful information" (Merriam, 1988, p. 37). In other words, the researcher must be able to make the most of each data collection opportunity and focus on creating meaning and understanding about the individual case. Merriam

(1988) describes the traits necessary to be a high-quality case study researcher as being tolerant to ambiguity, sensitive to local context, and to be able to communicate well with the participants. Conversely, she mentions, "the investigator as human instrument is limited by being human" (p. 37).

My role as program director with the CPED initiative afforded me several advantages as a researcher conducting this study. First, I am familiar with the initiative including the goals, the design, and the progress. I believe that there needs to be a distinction between the Ed.D. and the Ph.D. and have worked with the CPED initiative in my role as program director under this assumption. Second, my role as program director offered the access to data collection opportunities—the meetings, collection of documents, and interviews. Finally, my role allowed me to relate well with participants, to assist them in identifying document evidence and meetings relevant to this study. I was also well-known at each institution because of my role as the program director.

On the other hand, being so close to the CPED initiative presented challenges when my role turned to researcher. As a human instrument who possess a broader knowledge of the initiative, I had to continually dialogue with myself to check my biases and presumptions about each institution and to remind myself that my role was to learn about the change process not the CPED accomplishments made at each institution. I was able to keep myself focused on the purpose of this study by first recognizing my personal goals (to complete a deeper study about a project with which I am invested), my practical goals (to find the successes and failures of institutional change), and my intellectual goals (to understand the institutional change process at the local level). I kept a running journal that communicates my personal experiences around these goals and helped me to identify biases that might have affected my understanding of the change process. Overall, I am confident that my constant self-checking and interpersonal dialogue made this study richer because it forced me to be keenly aware of my two distinctive roles as program director and as researcher.

Data Analysis

According to Marshall and Rossman (1999), "data analysis is the process of bringing order, structure, and interpretation to the mass of collected data. It is a messy, ambiguous, time-consuming and fascinating process that does not proceed in a linear fashion...it's not neat and is a search for general statements about relationships among categories of data" (p. 150). They note that the analytic procedures generally fall into six phases—collecting and organizing the data; generating categories, themes and patterns; coding the data; testing the emergent understandings; searching for alternative explanations; and writing the report (p. 152).

The data analysis for this study followed similar procedures in a four-step process that included initial coding; categorical analysis; *memoing*; and case reports. A cross-case analysis was conducted as the final step to identify overarching themes across institutions.

The data collected was organized first by institution and then by type (documents, interview transcripts, and field and reflective notes) then saved in both electronic and hard copy formats. Data was then entered into a qualitative software program called *Nvivo* for ease of coding.

Initial coding categories were generated from the theoretical propositions discussed in Rogers' *Diffusion of Innovations* model outlined in chapter two. Theoretical

propositions give "priorities to the relevant analytic strategies" (Yin, 2003, p. 112) and subsequently serve as a platform for coding. Two colleagues were asked to examine the codes to ensure that the coding structure was reliable. Data from each specific institution was then reviewed and coded according to the codes generated from the theoretical propositions as well as by codes that did not fit the deductive coding scheme, but were present in the data.

Once all of the data was coded, a categorical analysis was performed on the data set from each institution to reveal a deeper meaning within the data. Categories were developed to describe phenomena present in the data and their properties and dimensions (Strauss & Corbin, 1998, p. 124) were defined. Coded data was moved into these categories, as subcategories, to begin to answer questions about the larger domains. Coding was checked and some data was recoded as connections emerged. Categories and subcategories were then related to one another to identify the conditions, actions, interactions and consequences of each phenomenon (Glauser & Strauss, 1967) and to relate structure with process which began to develop themes and patterns about the data. This deductive process of coding and re-coding continued until the data for each institution had "run its course—when all of the incidents can be readily classified, categories are saturated, and sufficient numbers of regularities emerge" (Miles & Huberman, 1994, p. 62).

Once the data coding was saturated, an interpretive process was initiated to create relational statements that linked the themes and patterns (Glaser & Strauss, 1967) that emerged from the data. These statements were related to the research questions and theoretical propositions which allowed for bolder assertions about the data and a

development of stronger themes. *Memoing*, a process of writing up ideas that emerge from examining the relationships between codes, was then used to identify the interactions among themes and statements (Miles & Huberman, 1994) from each case. Memos are written as an intrapersonal check to help tie various data elements together. Memoing was utilized to develop broader constructs about each case and to identify outlying themes as they were revealed in the data.

Third, case reports for each institution were constructed in order to clarify the shape and direction of emergent themes and patterns. Miles and Huberman (1994) suggest that narrative writing serves several purposes. First, it will "force [the researcher] to be less mechanistic and more coherent;" second, it "provides an opportunity for expansion [and] explanation of why variables are related;" third, it creates a product that can be given back to the participants or to a colleague for "reaction and revision" (p. 161). The case reports for this study were derived from an organized outline constructed from the research questions.

The final step of data analysis entailed an examination across the three case reports to identify similarities and differences between the three institutions. This inductive, cross-case analysis revealed overarching themes that inform us about how change takes place schools of education, while also providing constructive evidence and ideas about the roles that faculty play at the local level for leading and implementing change. While qualitative research findings are not intended to generate general outcomes, rich, descriptive cases such as the three developed in this study provide the reader with a "naturalistic generalization" or "conclusions that [are] arrived at through

personal engagement in life's affairs" (Stake, 1995, p. 85). The transferability of these findings relies on the thick description that is provided with each case.

Standards of Quality and Verification

To verify the validity of this multiple-case study, I employed four tests "commonly used to establish the quality of any empirical social research" (Yin, 2003, p. 33). These tests are *external validity, construct validity, reliability,* and *internal validity*. Below is a summary of each as they related to my study.

External validity is tested during the research design phase of the study. It tests whether or not the findings can be generalized to others (Yin, 2003). Typically, a tactic used to test external validity ensures that the study can be grounded in a broader theory. This study met these criteria because it was grounded in Rogers' *Diffusion of Innovations* model. Data collected was coded using theoretical propositions derived from this model and findings were compared to Rogers' model to ensure comparability of results or to explain outliers.

Construct validity is tested during the data collection phase and seeks to ensure that the researcher has established "correct operational measures" (Yin, 2003, p. 34) for the phenomenon being studied. Case study methodology typically tests construct validity by using multiple sources of evidence, establishing a chain of evidence and having key informant review draft case study reports. In this study of change processes and roles, I employed three methods of data collection. Evidence was established in the coding and categorizing processes as well as in the memoing and narrative analysis procedures employed during data analysis. I also used member checks (sharing interview transcripts with interviewees to clarify; share emerging themes and outliers with key informants) and

peer reviews (have one or two peers review my coding categories and emerging themes) to ensure that my findings were supported by the data.

Reliability demonstrates that the "operations of a study can be repeated" (Yin, 2003, p. 34). Demonstrating that others could potentially repeat the study eliminates researcher bias and errors in a research study. Reliability is tested during the data collection phase and is reinforced by using case study protocol and a case study database. This study used semi-structured interview protocols and structured procedures for collecting documentation and field notes. All data collected was stored in a database where each item was cataloged. An analysis of these data was also conducted using the *Nvivo* software program.

Finally, *internal validity* is achieved during the data analysis phase and establishes a "causal relationship" (Yin, 2003, p. 34). Internal validity is verified by creating patterns in codes and building explanations from those patterns. In this study, I utilized theoretical propositions as initial codes and developed categories and relational statements to find patterns and themes in the data that explained the change process and the role of faculty members as change agents at each institution.

Employing these commonly used maneuvers for case study methodology, confirmed the validity of the study.

Limits and Significance

This study was limited by several factors. First, the institutions involved in CPED each self-selected to be a part of this project. Though a broad call for participation was announced to the 158 institutions that are members of CADREI, twenty-three originally responded. The additional members were added by their asking to join the project and by demonstrating their willingness to examine and redesign their education doctorate. Out of this group of participants, I had a limited pool from which to draw my cases. In addition, each institution came to the initiative with a general willingness to change their programs and some had already begun the process at the start of CPED. Second, because of time and funding limitations, I had to choose institutions that were close in proximity and access.

Despite these limitations, the findings from this study are significant in understanding change processes and roles. Merriam (1988) explains that a case study "because of its strengths, is a particularly appealing design for applied fields of study such as education. Educational processes, problems, and programs can be examined to bring about understanding that in turn can affect and perhaps even improve practice" (p. 32). This study supports Merriam's assertion in four ways. First, the findings strengthen the empirical base of Rogers '*Diffusion of Innovation* theory by presenting three examples of how programmatic change is implemented in institutions of higher education. Second, the findings enrich the knowledge base of inquiries on innovative school leadership programs and how those programs are designed. Third, the findings provide a research-based experience for schools of education that gives insight into the ways that institutions bring crucial programming issues to the forefront of their agendas and engage faculty in change efforts. Finally, the findings contribute to greater understanding of individual faculty roles in the change process.

Chapter 4: Exploration of the Change Process at Three Schools of Education

Introduction

This chapter presents the case reports from the three schools of education investigated in this study—Hersh State Graduate School of Education, Stull State School of Education, and Michaels University School of Education. A brief summary of Rogers' *Diffusion of Innovations* model will be provided and then each case will be described.

Theoretical Framework

This study utilized Rogers' *Diffusion of Innovation* model as a guide to learn more about the change process in three schools of education and the role of faculty in this process. Rogers (1995) explains the diffusion of innovations as "the process by which an innovation is communicated through certain channels over time among members of a social system" (p. 10). It is a communication process whereby information about an innovation is shared between individuals with the aim of altering the structure or function of a social system. The diffusion process involves four elements—an innovation, the communication channels through which information about the innovation passes, the time frame for making the innovation-decision, and the social system in which the decision is being made.

In examining the change process, the innovation, or new idea, is viewed through the eyes of the adopters with particular attention paid to how they view the attributes of the new idea—its advantage over the *status quo*, its compatibility with the organization, its complexity to implement, its ability to be tried or tested, its ability to be observed, or its ability to be reinvented. The communication channels are the means through which the

new idea is communicated to others. This idea is best communicated in homophilous, or similar, groups of people rather than heterophilous, or dissimilar, groups. The time component explains the innovation-decision process or the steps one passes through to make the decision to adopt, adapt, or reject the innovation. These steps include gaining knowledge about the new idea, forming of a persuasive attitude towards the innovation, engaging in activities that help form a decision, implementing the innovation, and confirming the decision. In this process some adopters accept the innovation before others, while some never accept it. The social system is the interrelated units of an organization that come together to solve a problem. This includes the members, or units of the system, the leaders, the change agents as well as the norms and context of the system. All have an affect on the change process. Finally, the consequences of the innovation are the results of the innovation-decision. These take many forms and are inevitably shaped by the diffusion process.

The diffusion of innovation model was chosen as the theoretical framework for this study to provide a better understanding of the process of communicating the new ideas of the CPED design-concepts for the redesign of Ed.D. programs at three schools of education. The purpose of this chapter is to explore evidence that these three Schools of Education— Hersh State University, Stull State University, and Michaels University advanced in changing their Ed.D. program and in distinguishing the education doctorate from the Ph.D. during the early stages of the CPED initiative.

The chapter is divided into three case reports, one for each institution. Within each report, I first present the institutional context to provide background knowledge about each institution and school of education. I then present an outline of the CPED

innovation as it was understood by members of the institution and a brief description of the time frame of change to set the stage for deeper exploration of the change process. Next, I describe the *hows and whys* of the process at each institution. That is, I explain crucial factors such as how and who made the decision to join CPED, what contextual factors influenced the decision, what agenda was set, what support was given, who the stakeholders were, what the individual understandings of the Ed.D. and the Ph.D. were, what the institutional philosophy behind the change was, how individuals perceive the change process, what about the change attracted or repelled faculty, how faculty learned about the process.

I then explore the process and outcomes of change. In this section, I investigate the change agenda, the processes and strategies of change utilized, the individual roles, and the outcomes of the change process. Conceptual maps of the change process at each institution can be found in Appendix G. In addition, to support the understanding of the timeframe in which these cases were studied, Table C below outlines the timeline of the CPED initiative. A cross-case analysis will be offered in chapter five.

2006	February	May	October
	CADREI Meeting	AERA Meeting	CADREI Meeting
	Shulman presents findings	Shulman et al. present	Calls for proposals to join
	from CID & discussion	Reclaiming the Education	CPED
		Doctorate/published in	
		Educational Research	
2007	January	June	October
	CPED members admitted	First CPED convening in	Second CPED convening in
	Year I Conceptual & Design	Palo Alto, CA	Nashville, TN
	Phase		
2008	Year II: Experimental Phase	June	October
		Third CPED convening in	Fourth CPED convening in
		Palo Alto, CA	Los Angeles, CA
2009	Year III: Deliberation &	June	October
	Dissemination	Fifth CPED convening in	Sixth CPED convening in
		Palo Alto, CA	Pittsburgh, PA

Table C: CPED Timeline

Hersh State University

"It just made a lot of sense to me. It was really my initiative. For me, it is a big initiative." –Dean <u>Institutional Context</u>

Hersh State University is a mid-Atlantic, public, land-grant institution. Hersh State was originally founded as a private university then converted to a state institution in the middle of the twentieth century. The Carnegie Foundation for the Advancement of Teaching categorizes Hersh State as a large four-year, primarily residential institution that has very high research activity. Its graduate instructional programs are labeled as *comprehensive doctoral*. In the 2008-2009 academic year, the institution enrolled approximately 34,696 students, had an operating budget of \$1.9 billion, and an endowment of \$510 million. Hersh State is governed by a Board of Governors which reports to the State and has general supervision over the control, conduct, management, and administration of the university. A second body, the Board of Trustees, is an advisory board that holds fiduciary responsibility for land and assets owned by the university before it became a public institution.

The Graduate School of Education (GSE) is one of fourteen schools located on the central campus. The GSE is a financially autonomous unit, responsible for generating its own revenue through enrollments and grant activity. It enrolls approximately 1057 students and is ranked in the top 40 colleges and schools of education by *US News and World Report*. Situated in the center of the campus, the GSE building houses all faculty and administrative offices and a small number of classrooms. The School includes a Dean, two Associate Deans, and fifty-seven faculty members who are divided into three academic departments. The Dean reports to the Executive Vice President for Academic

Affairs. Within the GSE, three department chairs oversee twenty-seven programs and report to the Dean. Faculty governance is strong and union based. All major decisions concerning the academics and management of the School must pass a school-wide faculty vote. In addition, the State Higher Education Commission must also approve new programs.

The GSE offers sixteen masters of education degrees (Ed.M.). At the doctoral level, the GSE has eleven programs—four Ph.D.s, and seven Ed.D.s. Since the 1930s, the GSE has offered the Ed.D., and, until recently, long held the status of offering the only Ed.D. in the State. In the late 1990s, the University granted the GSE permission to offer the Ph.D. and the four perceived to be strongest programs in the school were identified to offer a Ph.D. Since the introduction of the Ph.D., however, individual program definitions have "heavily favor[ed] research over practice in both degrees" resulting in a "patchwork quilt" of doctoral education with few distinctions between the two degrees and a common emphasis that "heavily favors research over practice" (Institutional Proposal for CPED, 2006).

Innovation and Timeframe

At the Hersh State GSE, the CPED initiative was understood as a two-fold innovation—it was both an effort to draw a distinction between the Ed.D. and Ph.D., and an effort to develop a new, school-wide Ed.D. degree. In response to questions from other schools at Hersh State regarding the credibility of GSE dissertations and declining enrollments, the CPED initiative was seen as a means to make a clear distinction between the two doctoral degrees by defining separate mission and goals statements for each. Second, utilizing the defined mission and goals for the education doctorate, the GSE

sought to develop a new, school-wide Ed.D. It was believed that these two efforts would also result in the strengthening of the existing Ph.D.⁷ The new Ed.D. program served as the CPED pilot program, the primary program that would consider adopting the CPED design-concepts and serve as the model for distinguishing the Ed.D. from the Ph.D.

In February 2006, the Hersh State GSE Dean heard Lee Shulman speak about the need to reclaim the educational doctorate at the CADREI Spring meeting. In May, the Dean held a one-day faculty retreat. The Ed.D. was an agenda item. Prior to the retreat he gave the GSE faculty members the Shulman et al. (2006) article, *Reclaiming Education's Doctorate*, and asked the faculty to complete a questionnaire regarding the GSE doctoral education (Ed.D. and Ph.D.). In response to the question that asked if faculty would be interested in creating new programs or discontinuing/combing current programs, 35 faculty responded yes, five answered no, six were unsure, and three didn't respond. When asked about interest in modifying current programs to cater to executives, 28 answered yes, 15 responded no, five were unsure and one didn't respond. A final question asked if faculty answered yes, 15 answered no, 7 were unsure, and two didn't respond. At the retreat, three hours were given to discussing "how we can do this" and, according to the Dean, there seemed to be sufficient interest among faculty.

When the call for proposals to join CPED was made in October 2006, the Hersh State GSE Dean decided to apply and recruited two senior faculty members to develop a proposal that demonstrated the GSE's intent to further investigate the possibility of creating a new Ed.D. degree that would be different from their traditional Ed.D. and

⁷ Because this study focuses on the Ed.D., the changes being made regarding the Ph.D. at Hersh GSE will not be discussed further.

clearly distinguishable from the Ph.D. degree. The Hersh State GSE was admitted into the CPED initiative in January 2007 and in June the Associate Dean, a faculty member, and one graduate student traveled to the first CPED convening.

Upon returning from the convening, the three members outlined an action plan that would programmatically distinguish between the Ed.D. and the Ph.D. within the Hersh State GSE. The Dean formally asked the faculty member to serve as the primary investigator (PI) for the CPED initiative and provided funds to support the graduate assistant full-time. Between Summer 2007 and Spring 2009, the PI and the graduate assistant, under the advisement of the Dean, developed and executed a change agenda that sought to have school-wide participation and resulted in what the Dean has called an "organic" Ed.D. program design. Faculty input contributed to the development of separate mission and goals statements for the Ed.D. and the Ph.D. Both were voted on and unanimously approved by the GSE faculty.

Three design committees were then tasked with defining a central curriculum core for the new school-wide Ed.D., identifying concentration areas, and developing a final capstone experience. A steering committee, made up of the primary investigator, the associate dean, and three faculty members and two professionals, advised the design process. As committees met regularly to shape the design, school-wide retreats and meetings as well as individual department and faculty meetings were held to gather feedback and input on the process. In May 2009, a new, school-wide Ed.D. program was presented to the faculty for a final vote. The proposed degree included a new twentyfour-credit core curriculum, a new twenty-four-credit concentration in one of five areas,

and a new twenty-four-credit capstone/dissertation experience⁸. The faculty voted unanimously to approve the new program which will be launched in summer 2010.

This brief background and chronology serves to provide context to the change process in the Hersh State Graduate School of Education. In the next section, I further investigate the change process with a closer examination of how and why the adoption/change process took place, what institutional and environmental factors influenced the process, and what type of role the PI played in the process.

The How and Why: A Dean's Legacy, Vision not Control

The decision to join the CPED initiative and to distinguish the Ed.D. from the Ph.D. was made by the Dean. His decision to join was influenced by institutional, local, and national factors. First, the Graduate School of Education traditionally only awarded the Ed.D., which was considered to be a research degree. Twelve years ago, when the Ph.D. was welcomed into the School, confusion between the two degrees arose. According to the Dean, a "shift in dissertation topics to problems of practice attracted criticism [that resulted in a] declining image and diminishing credibility for the GSE among other schools [within the university]." Coupled with this perception was a steady wane in student enrollments that was as a result of other institutions offering less expensive programs and students who earned degrees in shorter time frames. "I can show you the numbers about how our admissions and enrollments are going down. The institutional data shows the decline," explained the Associate Dean, "which means the students we have ain't gonna be around here forever." Students admitted to the GSE in the mid-1990s were 60-70 per year. In the early 2000s, the number dropped to 20-30 per

⁸ Details of the new program are outlined in the case report outcomes section.

year, and during the past three years increased to only 30-40 per year. With positive feedback from the faculty survey and retreat discussions, the Dean felt the idea of changing the Hersh State GSE Ed.D. was feasible.

The national context also influenced the Dean's decision. Participating in CADREI, the Dean learned about the Carnegie Initiative on the Doctorate (CID) which had sought to strengthen the Ph.D., and resulting commentary regarding a reconceptualization of the Ed.D. He said, "[During this time] I didn't really talk to colleagues about what I was learning, [but this discussion] kind of crystallized things for me. With so many people criticizing education in terms of the professional preparation I thought Shulman was exercising great leadership and vision." The proposal to join CPED was presented at successive CADREI meetings and offered an opportunity for the Dean to engage in an initiative that he saw as a good fit for the Hersh State GSE.

Given the many contextual factors that were influencing the GSE, the CPED initiative came at a good time and provided a window of opportunity for the Dean. He viewed the CPED initiative as an important opportunity for him to advance the GSE under his tenure. He remembers the decision to join CPED and to distinguish the Ed.D. as his priority. He said, "Yes, it was more or less my decision. My vision, I would say." His strong desire to pursue this initiative led to the GSE's application to join CPED. Once the application was accepted, he appointed a strong faculty member to head the initiative. He recalled, "[I picked her because] I thought she is clearly one of the school's informal leaders." The Dean also supported the initiative by applying to the university for an academic excellence grant to support a graduate assistant for the project. With GSE

funds, he bought a course release for the PI, funded several faculty retreats, and paid to send the PI and the graduate assistant to bi-annual CPED convenings for three years.

In the early stages of this change process, the GSE faculty comprised the largest group of stakeholders in the creation of a new Ed.D. degree. The GSE had a culture of "academic silos" (or faculty isolated by department or discipline), according to the Dean. Shifting faculty thinking about the purpose of the Ed.D. away from the traditional Hersh State GSE perceptions and about the prototype of potential students, along with changing the ways faculty communicated and collaborated was a challenge. Though early on faculty seemed interested in making changes, as agendas were set and actions took place, many faculty questioned the impact of changes on their own programs and workload and became less interested in participating. The PI labeled the shifting environment as "balkanized." Faculty retreated into the identity of the land-grant institution, claiming their responsibility was service to the State and to their "traditional" student body who, faculty believed, had chosen certain programs because of distinct offerings and key faculty. The primary investigator described the magnitude of the challenge in following way,

"This is the first time we have tried to do something that is school-wide, not just focused on a few programs, but on every program. Right? So that is huge. Everyone has a kind of stake in it."

At the Hersh State GSE, the understanding of the difference between the Ed.D. and the Ph.D. was mixed among faculty. Specifically, two general notions were present distinction was good, but difficult; and distinction could serve to define student preparation and career objectives. First, many faculty believed that while the distinction

was a good idea, the degrees were too "entangled," as one faculty member described it, to succeed in differentiating them. Another suggested that because the degrees were so similar, making a distinction made him "uneasy". After an informal look at dissertations from both degrees over several years, he concluded, "I don't know that having a different set of initials after the person's name has anything to do with the quality of the work."

Another group saw clear purpose in distinguishing the two degrees by defining the Ph.D. as the research degree, and the Ed.D. as the practice degree. The Associate Dean felt the distinction would strengthen each degree by "making the research degree more research-oriented and the practice degree more practice-oriented." The Dean felt the distinction would give some of his newly tenured, "world-class" faculty access to Ph.D. students who were interested in research. A faculty member who joined the Hersh GSE after serving as an educational practitioner for many years felt that "if you have two programs you ought to be able to tell them apart." He suggested,

"there are two basic components to the work that a graduate school of education gives itself with students. One is to develop people's ability to understand, contribute, read, and use research. [The other is] to develop leaders who are able to apply that research and to have an influence on practice in a positive way leading to improving student achievement."

The graduate assistant for the project suggested that clearer distinctions between the degrees would help students understand which degree they were earning.

The institutional philosophy behind the distinction and the new degree was developed to bring together these mixed understandings. The Dean and the PI proposed that the faculty develop mission and goals statements for each degree. After several months of work, the faculty unanimously approved mission and goals statements for the two degrees programs that clearly distinguished the Ph.D. as a research degree and the Ed.D. as a practice degree. For the new Ed.D. program the faculty voted for a program mission that would "create educational leaders who are change agents" and for a Ph.D. program that would "prepare scholars to make significant contributions to education by conducting research and creating new knowledge."

As the process moved forward, many faculty perceptions of the distinction came to be grounded in the mission and goals statements for the two degrees. Perceptions about the new Ed.D. program, however, were mixed. The decision to develop a school-wide Ed.D. rather than pilot a single program "came late" in the process, according to the Dean. He expressed that not all faculty were in agreement with this decision. He explained, "I think there are some people who are very attached to their existing Ed.D.s who do not want them to change and would be perfectly happy to try this new-fangled thing as a pilot." With faculty development and approval of separate mission statements for each degree, the Dean was insistent that developing a new, school-wide Ed.D. was a "rational process" and one that he wanted "the faculty to follow through with." Several faculty members suggested they were waiting to see what the final product would be. An assistant professor said, "I kinda think a lot of this is going to be the devil in the details and we just have to go forward and see what will happen." A tenured professor similarly commented, "We haven't gotten down to the brass tacks of it, although we've talked a lot. I don't know to what extent people have really come to terms with this."

Three characteristics of the CPED initiative had attracted the attention of the Hersh State GSE faculty. First, the initiative seemed more appealing than the *status quo*

*t*o many. That is, the CPED initiative provided the opportunity to distinguish the two degrees and clarify faculty roles in working with students in each degree. A faculty member explained that working with students in the current structure she was

"feeling like I was, I am, killing myself getting people through the dissertation process, for no application in their lives beyond this program. The idea of preparing people for something that has some relevance to their real lives would make me feel a lot better about putting the effort in."

Another faculty member suggested the new degree would allow them to focus on how inquiry played a role in preparing practitioners. He said, "I felt like the Ed.D. before was making half-assed researchers, right? So we were in the business of having people do research who aren't really that good at doing research. Now we can change that." The graduate assistant explained that a key component of the new degree was networking and community. She said,

"We've stressed that if we prepare leaders to be change agents, we're creating a network for our future students; develop[ing] labs of practice with outside organizations, develop[ing] programs that can be part of our core strand, that can be part of the dissertation because now we have people in schools who are alumni who understand the process. It creates a larger community which I think we need at [the Hersh State GSE]."

The new program was viewed as a means to clarify faculty roles and provide opportunities for preparing students who were interested in becoming practitioners.

Second, some felt the new degree was too complex to design and execute. While working in committees to develop the components of the new degree faculty had trouble

with the uncertainty of the design process. The PI explained, "[The faculty would ask] 'how many credits do I have to play with?' I would say, I don't know. They would respond, 'Then how can I design this concentration?" A senior faculty member was concerned with the execution of the program. He asked, "Would we move to a trimester system?" Another faculty member questioned the executive-design of the program and whom it would attract as students. She said, "I just can't imagine who those people are [that want an executive doctorate]. Teachers don't have a lot of money and they don't gain financially from getting doctorates, they just don't." Moving from traditional definitions of doctoral programs to a new design was viewed as a complicated process.

Third, the Hersh State GSE adapted CPED design-concepts to their local context. "We started participating in CPED, but a lot of the ideas have been developed locally [at Hersh State GSE]," recalled the Associate Dean. The graduate assistant mentioned, "we don't really use the design concepts in the way that CPED envisioned us having those conversations. We've moved from the big conversations to the specifics in terms of design-concepts." Rather, the Hersh State GSE was designing an interdisciplinary, executive-style Ed.D. with a core and several concentrations which was both welcomed as well as questioned. "I like the idea of Ed.D. students being able to draw on knowledge from across the GSE. It's not like I'm opposed to interdisciplinary work, but there's got to be some kind of rigor there," demanded a junior faculty member. At a faculty meeting, discussions centered on themes—technology, equity, change—that could bridge theory and practice divisions as a way to design the core. Reshaping the Ed.D. to fit both the Dean's vision and student needs as well as to satisfy faculty needs was a large part of the process at the Hersh State GSE.

Evidence suggests that there were two types of resistance that affected the process of change in the Hersh State GSE—faculty and departmental understanding of the distinction between the two degrees coupled with resistance to the proposed new program; and faculty understanding of programmatic and workload policies. On the one hand, some faculty members and departments did not agree with the distinction of the two degrees and the move to develop a school-wide Ed.D. degree. A long history within the field of education of confusion between the two degrees and a tradition of offering the Ed.D. as the primary research degree at the Hersh State GSE had faculty entrenched in the belief that change would be problematic. A faculty member expressed this sentiment saying,

"You know like many reform attempts, it's riddled with problems, not necessarily having to do with the process, but just the idea of separating the Ed.D. and Ph.D. I think it is really complicated and I definitely don't have confidence in it."

Others expressed concern for existing programs. "I want to know what is going to happen with the students and existing programs," one faculty member demanded. Another articulated a similar concern stressing, "[Our department continues] to get applications every semester. Our students are not interested in this executive-style kind of program. I don't know what's gonna happen to our program." One entire department refused to join conversations or contribute any feedback claiming that a new degree would not work for their department. The Dean, when asked what sorts of strategies he utilized to move the process through these types of resistance, answered, "I have a negative incentive of closing admissions to programs. That has gotten a lot of people's

attention." In this respect, the Dean was exerting his power to try to move recalcitrant faculty along in the process.

A second group of faculty was not against distinguishing between the degrees, but rather against the programmatic and policy changes that came with a new degree. One junior faculty member conveyed his concern about the structure of the new degree. He said, "The whole thing would be more palatable to some people if the core was smaller and the concentration was bigger." A senior faculty member expressed reservations about the effects of a new program on faculty workload. He probed, "A lot of questions have to be answered about personnel and scheduling. You know all of the administrative stuff that goes along with a major change like this." In response to this resistance, the Dean remarked that the decision to design a college-wide Ed.D. degree "has caught some people short. Some people are angry and say, 'wait a minute, I never said we would do this.' But I honestly don't understand the division of opinion." For many, the change was perceived as too rapid and they remained concerned about how the new degree would affect their current teaching style and load.

Knowledge about the distinction and new design at the Hersh State GSE was presented to faculty in the form of presentations about CPED convening discussions and Shulman's work on the design-concepts. In addition, a faculty member that was central to the change process at the University of Southern California (USC) was invited to Hersh by the PI and the Dean to present to the faculty. According to the PI, this information was somewhat influential in getting faculty onboard with the change. "I read Shulman's work [and] the way I interpret it is that those two pieces of our work—research and practice ought to exist in both programs," commented a tenured faculty member. Another

suggested that CPED has not been influential, stating, "I haven't seen particularly useful data coming from CPED." Several others recalled the visit from the USC faculty member, but had little to say about the visit's influence. "They brought the guy from Southern California," recalled a senior faculty member. Another said, "The only example [of how to do this] has been the University of Southern California which is sort of a poster child."

Despite efforts to provide faculty with information about broader conceptual issues that surrounded the changes, faculty did not request more information from outside of Hersh State University to help them understand the intention of the new degree. Instead, the faculty were mostly interested in learning more about the policies and outcomes that would affect their role and the role of their departments in the in the new degree. Concerns from many faculty were related to teaching structures, the feasibility of offering a school-wide program, and how the change would disrupt individual department structures and offerings. A tenured faculty member was bothered by the core course offerings. He expressed concern that

"someone is going to have to teach [the core] and they might not be competent or feel themselves competent in dealing with all this stuff that is included in the core."

Others questioned the goals of the new program. A junior faculty member questioned the end goal of the program for preparing leaders, a concept with which he was not comfortable. He said as the process for defining the outcome of the Ed.D. program proceeded, "there was talk of preparing leaders without defining what leaders are."

Feedback from faculty came in a variety of forms—verbal, email, public and private comments— and offered both criticism and constructive ideas. Both the PI and the Dean welcomed faculty feedback and input into the process. This feedback was acknowledged and frequently incorporated into the design, though strong concerns about the why or how of the change did not stop the process from moving forward. Rather, concerns were integrated into the communications process. The PI repeatedly addressed such concerns by presenting old or new knowledge and information about the change process to the faculty in group and individual meetings. The PI described this struggle one of trying to work conceptually while continually being confronted with the practical— as "a process of going back and forth; the concrete versus the process." She said working with faculty in this process

"is great because they are open to talking about working together, but it is a constant back and forth. If I give too much that is concrete, then they are angry that it is not what they think it should be. If I don't give enough concrete, they are pissed because they cannot tell what it is going to be. So it is a 'no-win' situation in some ways."

Process and Outcomes: Change in a Balkanized Environment

The process of change in the Hersh State GSE had three characteristics transparent, open, and inclusive—according to the Dean and the PI. They both described the change process as one of transparent and open communication with all faculty invited to contribute. "I very much need to keep lines of communication open," explained the Dean. "I put things in writing, emails, summarize ideas along the way. It's a heavy lift." Some faculty, however, have not viewed the process in the same way. A newly tenured faculty member said,

"We had a meeting last month where we voiced really serious concerns. The Dean's [follow-up] email said 'we had a great conversation and we're moving forward. We've agreed this, this, this, this, and this,' none of which we had voted on. I think it's kind of being finessed which ultimately is not going to work."

The Dean began the change process by utilizing the structures of governance to gain faculty support. He brought the idea to the faculty and gave them over a year to develop and vote on the mission and goals statements for each degree. This vote, in the Dean's view, represented a faculty decision to differentiate between the degrees and to develop a new Ed.D. He explained, "By adopting two very distinct mission statements, the faculty have made this decision." The processes that followed established an agenda that would distinguish the two degrees by giving every department that wanted a research degree their own Ph.D. and by developing a school-wide Ed.D. that would prepare "scholarly practitioners."

The design of this new Ed.D. became a central task of the School and was guided by the PI. The Dean chose the PI "based on her interest and her buy-in to the vision and her [willingness] to work on it." The PI facilitated the Dean's vision and worked hard to foster the notion of an open and communicative process. She shared information and gathered input at town hall meetings, faculty retreats, faculty meetings, department meetings, one-on-one conversations, and utilized email and a website that contained frequently asked questions regarding the new Ed.D. She believed she had a central role in the change process, but saw that role as "changing over time" and becoming more

expansive. "At first, I did a whole rah-rah thing," she recalled, "but now I have created a structure where we are not just meeting and saying 'that committee over there, you do it.' I have tried to create a very democratic, open process of thinking about change where we come back and discuss ideas."

As a result of this democratic mind-set, faculty members from across the GSE were recruited into one of four design committees that worked to develop core courses, concentration areas, a capstone, and administrative structures. Progress in these committees was reported back to departments and faculty through emails and meetings. The seven-member steering committee (the PI, the associate dean, and three faculty members and two professionals) oversaw the broader agenda and advised the PI on ways to proceed.

Though the PI and the Dean served as the primary sources of information regarding the change process, they frequently engaged key supportive faculty to bring information to and converse with disgruntled faculty members. One such senior faculty member recalled,

"I go to these meetings, right? And I come back after the meetings and I talk to the guy who is in the next office. I talk to one of the guys across the hall and down the hall are two other faculty, and I talk to them about what went on in the meeting."

This type of peer-to-peer communication is something new in the Hersh State GSE. The PI explained,

"Communication is very problematic in our building because everything is done within departments and programs. The structure and culture of our organization has worked against some of this, I think."

To counteract this culture she frequently devised new ways for faculty to come together and work on designing the new program. One such example was a design-day retreat which she described as a

"Community dialogue, [that was] not in a faculty meeting, not in a town hall, but a design day, one where we were designing something together. It was also a good way for people to move forward because we were not reacting to something, but rather creating something together."

Evidence indicates that the PI had two key roles in the Hersh State GSE change process. The first was a leadership role, where she influenced the process and design by bringing people together and facilitating discussion and moved the agenda forward. In her efforts to bring together fragmented faculty, she developed many pleasing-type strategies, such as individual meetings, open discussions, and restructuring meeting agendas to accommodate concerns, that allowed discontented and opposing faculty to be heard. "I think of moving forward in a way that will please people," she explained, "So I try and always come up with a solution and present it to them and get their feedback and sometimes that solution comes from them, sometimes from the steering committee."

Though opinions about the new Ed.D. design were not always favorable, the PI's colleagues appreciated her leadership and demonstrated tremendous respect for her efforts. One faculty member noted, "I think [the PI] has been really good about communicating with us in faculty meetings and by emails. I would never want to lead a

huge change in a faculty." Another faculty member commented on the PI's ability to keep communication open. She said, "[The PI] spends a lot of time in faculty meetings trying to dispel people's anxieties."

This leadership role involved planning, organizing, communicating with various people, and often "putting out fires" in the process. She admitted that this has been a hard job for her, one for which she was not well prepared. She proclaimed, "I've not worked with academics like this before. I can't say that I have found it extremely pleasurable for a lot of the time." She also recognized her limitations in working with stubborn faculty and enlisted the Dean for support. "Oh yea," she proclaimed, "I can't do without the Dean's support."

The PI's second role was one of obligation that kept her moving forward with the change process. She described her role as the PI as a duty. "I could have said no. I didn't. I didn't think it was my right to say no. I thought I should help do this because I believe in it," she justified. Though her family, her writing, her own career has been put on hold for much of the past three years, she committed her time to seeing this effort through to the end. She declared, "I will be here to make sure that it goes well, because I can't not. It's not right for me to leave this or to facilitate this and then not be there [when it begins]." This role of obligation has come, according to faculty perceptions, with little authority. "She has all this responsibility without the authority," one faculty member stated. In addition, this role came with much stress. Just before the faculty vote to approve the new degree she expressed a sense of being overwhelmed. "Weeks like this, I don't sleep because I am so caught up in making sure that things work."

Despite the efforts of a tireless and creative PI, the change process was influenced and shaped by a diverse population of faculty who were not all on board with the proposed change. Opinions varied as to whether a critical mass of faculty was behind the new Ed.D. design. Several faculty were fervently tied to their discipline and academic departments and refused to join the design process claiming it would destroy their department and their work. Others were insistent that change was too slow and waited for the details to emerge before expressing an opinion. And still, another group of faculty enthusiastically supported the distinction and new Ed.D. design. "I am one of the major advocates for it," noted a tenured faculty member.

As the 2008-2009 academic year was coming to a close, the change process in the Hersh State GSE reached its final phase. The new Ed.D. design was completed and approved with a unanimous faculty vote in May 2009. Despite what may have seemed like a slow process to some, others recognized this major accomplishment. "We have come a long way," one faculty member praised. Another said, "I think it's been a really messy process, but I also think we've gotten a lot a done."

The Hersh State Graduate School of Education had developed a new degree based on a mission and goals statement that seemingly distinguishes the Ed.D. as a degree for scholarly-practitioners who will practice in PK-16 settings. The new Ed.D. degree, which will be launched in 2010, is a three year program and includes a twenty-four credit core sequence that is "organized around four areas: Leadership, Organizations and Change; Social Context; Learners and Learning; and Inquiry" (Hersh State Graduate School of Education Institutional Brochure, 2009). The degree also includes a choice of five concentrations, twenty-four credits each—design and evaluation of learning materials and

settings; educational leadership; education, culture, and society; special education; and teacher leadership. The "dissertation experience" is a year-long, twenty-four credit process that requires students to identify and investigate a problem of practice systematically using relevant research literature and inquiry methodology" (Hersh State Graduate School of Education Institutional Brochure, 2009). In the short-term, the next steps for the Hersh State GSE Ed.D. will include finalizing course offerings and faculty assignments, and recruiting new students. In the longer-term, both the Dean and the PI have expressed hopes for establishing a new culture of collaboration and communication in what the PI has called "a balkanized faculty."

Stull State University

"I kept promoting CPED as a lever to give us some cover while we try to get things together."-Director Institutional Context

Stull State University is a Southern, public, land-grant institution. Stull State was founded in the late 1800s as an agricultural and mechanical college and has grown to be the State's largest public institution. The Carnegie Foundation for the Advancement of Teaching categorizes Stull State as a large four-year, primarily residential institution that has very high research activity. Its graduate instructional programs are labeled as *doctoral, STEM (Science, technology, engineering, and mathematics)* dominant. In the 2008-2009 academic year, the institution enrolled approximately 27,619 students, had an operating budget of \$1.038 billion, and an endowment of \$520 million. Stull State University is governed by a Board of Visitors which is appointed by the State's Governor. This Board is a public corporation and is controlled by the laws of State's General Assembly.

The School of Education (SOE) resides within the College of Liberal Arts and offers graduate-level education to approximately 1600 students. It is ranked in the top 90 colleges and schools of education by *US News and World Report*. Situated in the center of campus and spread across three buildings, the School includes a Director, two Associate Directors, three unit Chairs, and sixty-six faculty members. Graduate programs in educational leadership are also offered at five satellite centers around the state. Three of the satellites house a handful of faculty members although most courses are taught by faculty who travel to the centers. The School is overseen by the Director who reports to the Dean of the College of Liberal Arts, but it is also governed academically by policies of the Graduate School. Within the School of Education, Program Directors oversee nineteen programs and report to their unit Chair and to the School Director. Faculty governance happens primarily within each unit, however, significant academic reforms are brought to a full-school faculty vote.

The School of Education offers many degrees—16 M.A.s, 17 Ph.D.s, 2 Ed.D.s, 1 Ed.S., and several certificate programs. Since the 1970s, the Ed.D. has been offered as the primary doctorate degree in education at Stull State SOE because the University would not permit the School to offer the Ph.D. (with the exception of one Ph.D. in Educational Research). In the late 1990s, the Graduate School allowed the SOE to offer the Ph.D. and many programs switched to the Ph.D. because it was the only doctorate that was recognized by the State Council of Higher Education. Since that time, however, the two doctoral degrees have been treated similarly in terms of course offerings and student preparation. The only difference between the two doctoral degrees has been six additional credits for the Ph.D. and a two-year residency requirement for the Ph.D. and a

one-year residency requirement for the Ed.D. "Students could literally decide which degree they wanted to be awarded based on how long they could be on campus," explained the primary investigator (PI).

Innovation and Timeframe

In the Stull State SOE, the CPED initiative was known among faculty as the "Carnegie Project" or the initiative to draw a distinction between the Ed.D. and the Ph.D. In response to harsh criticism regarding the perceived weakness of dissertations and unclear purpose of the Ed.D. from the new Dean of the College of Liberal Arts and the Dean of the Graduate School, the CPED initiative served the SOE as a rationale for defining the purpose of the Ed.D. and clarifying policies that govern the degree. Efforts were made on two levels. First, a school-wide charge to develop definitions and programmatic ideas around the CPED design-concepts was undertaken with the hope of eventually creating a school-wide Ed.D. Second, the Educational Leadership Ed.D. program undertook steps to "clean up" their program and the policies that governed the program. The Educational Leadership Ed.D. served as the CPED pilot program, the primary program that would consider adopting the CPED design-concepts and served as the model for distinguishing the Ed.D. from the Ph.D.

In 2005, the School Director was appointed from within the faculty to reorganize the school, to clarify policies, to bring isolated departments together, and to increase the School's national visibility. The Director put together a task force of faculty and asked them to develop a plan to increase national visibility. As a member of CADREI, she attended the February 2006 meeting where Lee Shulman spoke of issues concerning the quality of the education doctorate. Upon returning from that meeting, she began speaking

to the faculty about improving their Ed.D. as a means to "gain favor" with the College and Graduate School Deans. In October 2006, when calls to join CPED were made, she decided to apply. The Stull State SOE was admitted to CPED in January 2007 and sent two faculty members to the first convening in June. Over the summer of that year, the Director decided that the effort needed a central liaison and in the fall the Program Director for the Educational Leadership program was asked to head up a school-wide Ed.D. discussion as well as discussions within his own department.

Over the next year and a half, the PI worked with the Director to organize two efforts. First, at the school level, he organized task forces to discuss the development of a central core, to consider the notion of laboratories of practice, to talk about alternative dissertation experiences, and to consider program residency definitions and requirements with the goals of better defining the Ed.D. and of considering the feasibility of designing a school-wide Ed.D. Much of this work resulted in reports that were shared with all faculty members. At the same time, he coordinated the effort to redesign and better define the Ed.D. in Educational Leadership by organizing meetings and discussions with faculty who taught in the program. Changes that were made to this program were done so incrementally with the admission of each new cohort at the five satellite centers around the State.

In 2008, when the Graduate School revised its policy on residency requiring that all doctoral students (including Ed.D. students) spend two years on the main campus much of the School discussion turned to refuting this policy. This new policy caused tension in the SOE because the majority of its Ed.D. programs were delivered to working professionals at one of the five satellite centers situated around the State. Students in

these programs did not travel to the main campus. According to the SOE faculty and Director, requiring students to come to the main campus for a two-year period would be detrimental to the Ed.D. programs. First, because working professionals—teachers and principals—could not take a two-year leave of absence which would then cause student enrollments to sharply decline. Second, the nature of a degree for practitioners suggested that the students needed to be in the work setting to be able to practice, learn, and investigate issues of practice.

By early Spring 2009, the Director, under the advisement of the primary investigator, called for a new configuration of the school-wide task force, calling it the Carnegie Professional Doctorate Task Force, and charged it to answer the following clarifying questions by May 2009—What is the purpose of the Ed.D.? What is the purpose of the Ph.D.? How does each of the degree programs address the issues of core curriculum, internships, capstone experience's and residency? How does the Ed Specialist interface with the Ed.D.? How would/could a hybrid Ed.D. program be *configured?* While the school-wide task force was busy with its job, the Educational Leadership program was solidifying changes it had made to its program including shortening the program to three years, reconfiguring course delivery, reducing the number of doctoral students who hadn't finished their degrees, creating a 10-year rotation plan that would stagger the admission of new cohorts for the five satellite centers, and developing alternative dissertation options. According to the Educational Leadership faculty, the distinction between the Ed.D. and Ph.D. has been made in their program simply by determining that the program would only offer Ed.D.s whereas in the past it offered which ever degree the student requested. At the same time the program has

"cleaned up" program policies such as the number of credits offered, rubrics that governed preliminary exams, and policies regarding time to degree.

This brief background and chronology serves to give context to the change process in the Stull State School of Education. In the next section, I further investigate the change process with a closer examination of how and why the adoption/change process took place, what institutional and environmental factors influenced the process, and what type of role the primary investigator played in the process.

The How and Why: Gaining Favor and Getting Cover

The decision to join the CPED initiative was made by the School of Education Director. Her decision was made in reaction to pressure from the College and Graduate School Deans to clarify the Ed.D., to clean up School policies, and to increase national visibility for the SOE. The Director explained,

"When the new Dean came in, she wanted to have a very strong graduate school with very clear directives about how we are supposed to operate. When she looked at education, we were all over the place. We had a huge number of students in the pipeline in the ed leadership program, way more students than we could reasonably serve. And their dissertations were not strong, not what you would consider academic dissertations."

Influenced by the work of Lee Shulman, she brought the idea of distinguishing the Ed.D. under the Carnegie Foundation name as a means to improve the School's image. She recalled,

"I was starting to talk with people and saying what do you think about if [CPED] can help us? I wanted to figure out something that made some sense. We were not really in good favor with the Graduate School. We were getting more pressure from them to clean up various things and, I said, well here is a way to do that that cannot only get us the kind of national stage that we were trying to do, but it is going to give us the kind of leverage we need to be able to have the programs we have, to be able to do something different with our Ed.D."

Two aspects of the institutional context greatly influenced the decision to distinguish the degrees, according to the School Director. First, the SOE had a long history of reform and reorganization. Over time, it had been housed under various divisions of the University including agriculture and arts and sciences. In recent years, the School was again reorganized and merged into a division of liberal arts. A major goal of the reorganization was to increase the School's national visibility and research production. The Director of the School was appointed from the faculty during the early 2000s and was asked to design the reorganization and achieve national recognition. She remembered,

"One of the things I was asked to do was to improve our *US News* rankings. We went from a college of education 4-5 years ago, ranked between 19th and 24^{th,} to falling off the screen when they started splitting us up and dispersing us. We lost visibility and people and grant possibilities. The decline was amazing."

Second, the largest Ed.D. program in Educational Leadership, was seeing a decline in student enrollments at two of its five satellite centers. The School of Education had a deeply seated mission of service to the State and as prospective students were choosing to attend programs at their "rival institutions," faculty felt they were not

remaining competitive enough to serve the citizens of their State. "[We] don't have the numbers [but] we are supposed to be servicing the State," commented the PI.

Given this institutional climate, the CPED initiative came at a good time and provided a window of opportunity to the Director. She explained, "Carnegie gave us a little bit of evidence that we were on the road to creating clearly articulated programs that had expectations for rigor." One faculty member noted, "I do think the Carnegie effort has been something of a catalyst without which maybe we would not have done some of these things." In terms of the Educational Leadership program, the PI believed that CPED was an enhancement to a process they had already decided to undertake. He said, "I think the timing was good because if the Carnegie project had not come along, we still had an Ed.D. to reorganize so we were going to do it one way or another."

To commence the CPED initiative in the Stull State SEO, the Director offered money to entice faculty to join the task forces. "I said, if you work on this working group I will give you an amount for your professional development funds per year. Out of it I want proposals for doing this," she explained. Once accepted to CPED, she carefully appointed the primary investigator. "I saw what the Ed Leadership Program Director was doing and knew he had some national visibility," the Director said, "So I asked him to head this." She also supported the project with a graduate student and \$15,000 for three years for the PI to travel to CPED convenings and to conduct on-campus meetings.

In the early stages of this change process, evidence indicated three primary stakeholders—the Director, the faculty (namely those that taught in Ed.D. programs), and the Ed.D. students. The Director, as the one charged with improving the School, had bet her success in improving the School on the Carnegie name. "I brought Carnegie in and

used that as my lever," she explained. The President and Provost supported the idea of joining CPED. The Deans of the College and Graduate School, however, were not as enthusiastic because they had little understanding of the Ed.D. Still, the Director believed that "Carnegie has created connections and some credibility of what education is about at [Stull State]."

The faculty who taught, or wanted to teach, in the Ed.D. programs were another major stakeholder group. In particular, the faculty who taught in the Educational Leadership program had great interest in this process because their program was the largest Ed.D. program and changes to the degree would have the most affect on their program. One Educational Leadership faculty member said, "There is some implication for the faculty" and indicated that policies around student load, types of dissertations, and length of program have affected faculty roles and responsibilities in this program.

Another group of faculty, those wishing to develop off-campus programs, were also stakeholders. Graduate School policies were much easier to enforce on new programs making development of innovative off-campus programs difficult to get approved. A faculty member interested in developing a new off-campus program inquired about policies governing such programs and encountered difficulty. He recalled, "I wanted to ask [the Graduate School Dean] about doing a field-based residency and she turned around and increased the restrictions on residency."

Finally, many faculty in Educational Leadership felt the students were a third group of stakeholders. "I think the main [stakeholders] are the students. They are definitely impacted [by the changes]," expressed a faculty member at a satellite center.

Resolving policy issues in the Ed.D. and making a clear distinction would clarify their program of study, requirements for residency, and the degree they would earn.

At the Stull State SOE, the understanding of difference between the Ed.D. and the Ph.D. depended upon which program one taught in. Historically, the School only offered the Ed.D. which was a research-oriented degree. "Because of the fact that we had used the Ed.D. as if it were a Ph.D., the distinction between the two was always murky," a faculty member noted. In the 1990s when the Ph.D. became available to the SOE, many programs switched to offering only a Ph.D. as the research degree. Faculty in these programs tended to view the Ed.D. as a "Ph.D. lite." Those who taught in the current Ed.D. programs understood the Ed.D. to be a practitioner-oriented degree. However, until the discussion of the distinction occurred, students could choose whether to be awarded the Ed.D. or the Ph.D. at the end of their program. With the aim of better distinguishing the degrees in these programs, faculty ultimately claimed, "If you are going to have different goals and outcomes, then the training that you receive should be aligned with those future goals and outcomes."

The institutional philosophy behind the distinction was foremost the "cleaning up" and "clarifying" of the Ed.D. for the Graduate School. Along these lines, the Stull State SOE had been working for two years to develop a clear definition of the Ed.D. and the policies, such as residency, that govern the degree. In a January 2009 memo to the SOE faculty, the Director charged the Carnegie Professional Doctorate Task Force

"to develop the written document that represents the School of Education's stance on these two degrees at a level that clearly communicates to the university community, potential and current students, and the general public."

In the Educational Leadership program, faculty believed service to their students, who were generally practitioners, was the underlying reason for the distinction. The program was a large producer of the PK-12 leadership in the State and the faculty strongly believed their mission was to prepare these practitioners with a clear and concise program that was delivered in convenient ways for the students. To continue their mission, the faculty expressed dedication to developing more programs in rural areas of the State that did not have established preparation programs.

Perceptions of the distinction varied between the School and the Educational Leadership program. In the School, faculty and administrators saw few results of two years of task force meetings other than reports and further discussions. "As I interpret it, we are still not at the stage of words rolled out to everybody, and the faculty fully considering it," explained an SOE administrator. In the Educational Leadership department, the PI explained that much has come about because of CPED in terms of changes made to its Ed.D. program. Such changes were namely administrative and policy-oriented. Faculty in the program saw little as a result of CPED, or they expected more. A tenured faculty member commented, "The Carnegie initiative, I don't see as having a whole lot of influence. The program hasn't really changed anything in terms of content." A junior faculty member did not see the kinds of efforts that he had anticipated. He said, "I would like for us to consider a lot of the course options in the Ed.D. because I think there are some things that could stand some changing. But less of that has happened."

Three characteristics of the CPED initiative attracted the attention and support of the Stull State SOE faculty. First, the initiative provided an alternative to the *status quo*

by offering protection and connection. That is, the CPED initiative provided "cover" by protecting the SOE from harsh criticism and curtailments from the Graduate School while it sought to define the Ed.D. and the policies that governed it. The primary investigator explained,

"The Carnegie project has worked because of the image. Our Provost and President are behind this 100%, but I don't think they understand what we are doing. But it is the 'Carnegie project' and so it is going to go. I mean, they will continue to support it."

In addition, CPED connected Stull State SOE to peer institutions around the nation. "We can participate in dialogue with some other institutions," observed an SOE administrator. In this respect, CPED offered a means to bring the Stull State SOE onto the national stage.

Second, CPED was attractive because it was a compatible means to achieve policy clarification for the Graduate School. The several CPED design-concepts provided a plan for action. A faculty member suggested, "We saw it as fitting-in with what we were trying or wanting to do and what were starting to do." At both the School and the Educational Leadership program levels, the design-concepts offered a frame upon which conversations of change were constructed.

Third, to a lesser degree, CPED was attractive because of the option of reinventing or reshaping the existing program in Educational Leadership. Faculty were able to "restructure the course sequence," remarked an Educational Leadership faculty member. In addition, the committee that discussed laboratories of practice suggested that the Educational Leadership program move to externship experiences which "are designed

to be special problem solving clinics" for part-time students. Also, a long-term goal of developing a school-wide Ed.D. remained in effect.

Two types of resistance to change affected the process in the Stull State SOE—a difficult institutional environment and contention from the autonomous nature of the faculty. The pressure from the Graduate School to clarify the distinction between the two degrees and create a national presence had essentially established a bureaucratic environment with an agenda engulfed in conflict over policy and fights for territorial control between the Graduate School and the School of Education. As a result, the distinction between the degrees continued to be a matter of clarifying policy, such as should there be different residency requirements for the Ed.D. than for the Ph.D., rather than a deeper discussion of purpose and content for the education doctorate. In addition, the Dean of the College controlled the budget and maintained a top-down position in terms of funding and resources. According to the PI, strict bureaucratic structures limited the University's understanding of the Ed.D. and Stull State's critical role in educating much of the State's school leadership population. An example of this bureaucracy was a critical issue that arose for the Educational Leadership program during the spring semester. The Dean of the College decided to close down one of the satellite centers with the 2011 retirement of a key faculty member who is permanently located at this center. The Educational Leadership faculty spent countless hours constructing a response that expressed that they "have grave concerns with the possible closing of" the satellite center and attempted to show that the center was the most productive and financially fruitful of their five centers. At the time of this study, the faculty were in the process of submitting their response to the Graduate School. With little understanding of the purpose and goals

of the Ed.D., according to the Director, the University administration viewed its role more as one of policing the SOE than of supporting the education doctorate and the SOE faculty.

Such pressure and control from the University led to a second type of resistance a faculty that perceived themselves as autonomous and believed they should have the right to make numerous program decisions was being thwarted by a Dean and Graduate School that had other ideas. This perceived autonomy was asserted in two ways in the Stull State SOE. On the one hand, as mentioned above, the general faculty response to pressure from the Graduate School was to attempt to control their programs by arguing reasons for off-campus residency and to fight the top-down control of their programs by the Graduate School. On the other hand, the history of constant reform and structural changes to the School of Education left the faculty fragmented. "We have a very independent group of faculty," noted the Director. A faculty member commented, "In 2005, there was again a reorganization of or a repositioning of the School of Ed. I think we are still finding out who we are and what we want to be when we grow up." Individual programs were spread across three buildings on the main campus, and in the case of the Educational Leadership program, spread around the State. Faculty worked in silos and were protective of their work and their territory. A senior faculty member suggested, "Once we have an answer, which is our own program, there is a resistance to look at anybody else's answer or even to permit them to do something different." Another commented that certain units "didn't see [the distinction] as a priority [worthy of] getting some things resolved and [putting together] a better plan for this." In actuality, the faculty sought autonomy, but didn't really have it in part because they were

fragmented from years of reorganization. Their fight to gain control and autonomy reduced any commitment to a school-wide design and consequently fueled the control by the Graduate School as the SOE continued to struggle to come to a consensus.

Information about the CPED initiative and the distinction of the Ed.D. at the Stull State SOE was limited to presentations about the design-concepts and convening summaries given by the PI. Within the School, the initiative was known as the Carnegie Project, but few faculty members could explain specifically the work of CPED. When one faculty member was asked what his understanding of CPED was, he responded, "My sense was that the Carnegie project was figuring out what the hell the difference was between the two degrees." A faculty member in Educational Leadership proposed the following distribution of faculty understanding.

"I think if you went down the hall and said to every single person 'tell me about the Carnegie project' you'd probably have about 50% who could speak to it intelligently. And you'd have 50% who would either give you a blank look or say I don't know enough to comment."

Despite a limited understanding of CPED, faculty did not seek more information. Their understanding remained very localized to the needs of the School or their department. The Director, as well as the PI, invited feedback and input at meetings and through email communications. In the Education Leadership department, some faculty expressed that they wanted more from the process. An assistant professor lamented that he would have "liked to have seen more work done on course content" during the process. Commentary was also invited on progress and task force reports that were circulated via email, but the Director felt not much response was received. She said,

"there are a lot of folks that aren't very vocal. Part of it is that we have 35% of the school that is either new or untenured." When asked whether he and his colleagues felt comfortable giving input, a faculty member replied,

"[We] have had the opportunity to do it and I assume that everyone has taken advantage of it. I certainly feel like I have received the information that I needed and when I have given feedback it has been well received."

Within the Educational Leadership program, feedback helped to shape programmatic changes such as number of program years and sequence of inquiry courses. The faculty in this program had a history of good communication and collaboration that allowed them to deliver one program in five sites around the State. Because of this collegiality, feedback fueled conversation and helped move changes forward. At the School level, however, some felt that feedback slowed the process. One faculty member described the change process at the School level this way,

"I have always felt that the best way to kill something in education was to give it to educators because it will never get to the next level. We'll screw around with it and never get rid of it. That is what we do as academics."

Process and Outcomes: Cleaning-up and Clarifying

The process of change in the Stull State SOE had two avenues of action—schoolwide and within the Educational Leadership program. The PI, who claimed his role was "to shake things up and to get these people either out or on board," coordinated both efforts. At the School level, the PI advised the Director to put together four school-wide task forces to discuss and develop programmatic expectations around a central core idea, laboratories of practice, capstones, and residency. Each task force developed a report of their work and those reports were shared with the School for commentary. The Director gave suggestions to the PI, but had a less visible role in these meetings, namely "trying to promote [them] and then staying out of the way. I try to get folks to go to the meetings," she explained. In addition, the Director sought advisement from her PK-12 Superintendents' Advisory Board regarding the distinction of the Ed.D and received "a lot of support from the field."

The Educational Leadership program invited its full unit into discussions at "Friday forums" to gather ideas and suggestions for improving its Ed.D. Though these meetings were not mandatory, there was regular attendance and faculty from satellite centers were brought in via videocam. Key Educational Leadership faculty were assigned specific tasks for clarifying policies and programmatic structures such as designing alternative dissertations, developing preliminary exam scoring rubrics, and creating a rotation schedule for the admission of cohorts at the five centers to reduce faculty advising loads. The PI coordinated this effort and also worked to "clean up" a 10-year roster of doctoral students who had not yet graduated.

In this two-level change process, evidence indicates that the PI had three key roles. The first role was as liaison to the CPED initiative. When asked what this role meant, he answered,

"It means that I decided instead of sending different people to the [CPED] convenings we would send the same person and I thought that should be me to keep things on track. My role, I think, is too take whatever we feel is applicable, workable, from the Carnegie dialogue/discussion and insert it into our Ed.D. program."

His colleagues agreed. "[The PI] is the liaison between the Carnegie people and us. He provided a background for us and a notebook. We have had some meetings and break out sessions on it."

Within the Educational Leadership program, the PI served as coordinator of the effort and spent a great deal of time "cleaning up" issues related to student time to degree, delivery of programs, and the sequencing of courses. He communicated with his peers regularly via email, Skype and videocam sending updates and engaging in discussion regarding changes. The current Program Director suggested, "Clearly [the PI] is the champion for the internal revisions that we have made."

At the School level, his role was that of advisor to the Director and helping her guide the school-wide agenda and actions. The Director valued his input and frequently sought his advice. For example, after a year of task force meetings and reports, the SOE was no closer to having a distinction and residency definitions ready for the Graduate School. She consulted the PI asking, "How do you want to handle this year? He said, 'Let's get one task force to produce a document that everyone can live with.' 'Great,' I said." In her mind, the PI had a key role in the changes in the SOE. "[The PI] is leading the way, thank goodness. He is a real trooper," she said. The faculty also viewed the PI as central to the CPED process at the Stull State SOE. A senior faculty member responded when asked who was leading the change process, "Clearly [the PI] for the Carnegie project. He is the champion."

Opinions varied as to whether a critical mass of faculty was behind the effort to create a distinction. Within the Educational Leadership program, the majority of the faculty wanted a clear definition of the Ed.D. as a practitioner's degree as well clear

policies that would allow them to situate residency at each of the five satellite centers. Though some faculty might have hoped for more pedagogical and philosophical changes to the degree program, in general most agreed that sufficient change had taken place. "I may have approached the project very naively thinking we were going to start from scratch and reevaluate everything and come up with a brand-new, sparkling product," commented a faculty member at one of the satellite centers. Within the School of Education, there was less evidence of a critical mass supporting a school-wide Ed.D. program and more evidence of concern over a controlling Graduate Dean. One senior faculty member expressed his concern with the Dean's authoritative, controlling nature. He said, "Until she gets hit by a truck I think little will change. She is very traditional, and this is a top-down university. She has fit into that mold nicely and she runs it her way."

As the 2008-2009 academic year was coming to a close, change in the Stull State School of Education was taking two forms. School-wide efforts to define the Ed.D. and develop clear policies had not yet been completed, but these were being developed by the newly appointed Carnegie Professional Educational Doctorate Task Force. Another outcome of the process was a cross-unit conversation around a School issue, something that had been difficult to do in the past. The Director admitted, "Though we have not made a lot of progress at the SOE level, I think people are talking about it; have made a few dotted lines between the three different units." A faculty member who agreed commented that conversation was a big outcome to the process and that CPED was "stretching people's thinking about what [the Ed.D.] might be."

In the Educational Leadership program, change to the existing Ed.D. program was made relatively quickly, focusing mostly on programmatic and policy concerns and less on academics and philosophical underpinnings, as one faculty member pointed out, "We are still offering much of the traditional courses that we offered in the other program." In the coming years, time will reveal if participation in the CPED initiative has contributed to the School of Education's goal of clarifying its degrees and increasing its research reputation. In the short-term, the Educational Leadership Ed.D. will serve as the definition of an education doctorate for the School of Education at Stull State.

Michaels University

"The change process has been evolutionary, not revolutionary." – Faculty member Institutional Context

Michaels University is a mid-Atlantic, private, religious-affiliated institution. Michaels was founded in the late nineteenth century by a religious order and is grounded in a tradition of "serving God through serving students" (Michaels University Institutional Website, 2009). The Carnegie Foundation for the Advancement of Teaching categorizes Michaels University as a medium four-year, highly residential institution that is also a doctoral granting, research university. Its graduate instructional programs are labeled as *doctoral and professions* dominated. In the 2008-2009 academic year, the institution enrolled approximately 9722 students, had an operating budget of \$249 million, and an endowment of \$161 million. Michaels University is governed by both a Board of Directors and the religion's Corporation. A lay president oversees day-to-day operations.

The Michaels University School of Education (SOE) was founded in the early 1900s and offers both undergraduate and graduate programs. Currently, approximately 768 are enrolled in the graduate programs. It is ranked in the top 110 colleges and schools of education by *US News and World Report*. Situated in the center of an urban campus, the School includes a Dean, two Associate Deans, three department Chairs, and fifty-six faculty members. The Dean reports to the Provost. Within the School, Program Directors oversee twenty-five programs and report to three department Chairs. Faculty governance is handled by an executive committee comprised of the department Chairs. Larger or contentious issues are brought to a school-wide faculty vote.

The School offers both undergraduate—teacher preparation in five areas— and graduate education—13 MS.Ed. and certificate programs, 2 Ph.D., and 2 Ed.D. degree programs. Doctoral education has been offered since the late 1990s, when both the Ed.D. in Leadership and the Ph.D. in Counselor Education and Supervision began. Presently, the Ed.D. is offered in two programs—Instructional Technology, a program that seeks to prepare its students for professional careers in designing and delivering on-line programs, and in Leadership, a program that seeks to prepare innovative educational leaders. The latter accepts a new cohort of approximately 30-40 students every three years. The Ph.D. is offered in School Psychology and Counselor Education and Supervision. The distinction between the two doctoral degrees has been relatively clear since their inception at Michaels. The Ed.D. has served practitioners while the Ph.D. has served aspiring academics or researchers. The larger issue of concern has been the role of the Michaels SOE in preparing Ed.D. candidates. The faculty at Michaels, for example, have questioned whether their Ed.D. programs adequately prepare educational leaders for today's and tomorrow's schools. The Dean explained, "We are asking what does an Ed.D. program need to look like today to be effective?"

Innovation and Timeframe

In the Michaels SOE, the CPED initiative was defined as a three-pronged change effort. First, the SOE sought to redesign their Ed.D. in Leadership according to the Shulman definition of the Professional Practice Doctorate— "an extremely demanding, rigorous, respectable, high-level academic experience that prepares students for service as leading practitioners in the field of education," (Shulman et al, 2006). This program has served as the CPED pilot project, the primary program that would pilot the CPED design-concepts and serve as the model for distinguishing the Ed.D. from the Ph.D. Second, inspired by the work of the Carnegie Initiative on the Doctorate (CID), the Foundations and Leadership department also wanted to develop a new Ph.D.⁹ Finally, the SOE sought to study the process of change using design-based research principles¹⁰ to "really look at what we do," according to the SOE Dean.

In 2005, a Foundations and Leadership faculty member was on sabbatical and encountered the work of the Carnegie Initiative on the Doctorate (CID). He began formulating ideas about how this work might play out in the development of a new Ph.D. program for his department. At the same time, the Program Director, the new Dean and the new Associate Dean for Graduate Studies were discussing the need to revisit the Ed.D. program in Leadership. In Spring 2006, proposals for a new Ph.D. and for a revision of the Ed.D., both in Foundations and Leadership, were brought to the Michaels SOE faculty and, as a result, several doctoral working groups were formed to consider the feasibility of each proposal. At the 2006 AERA annual meeting, two members of the

⁹ Because this study focuses on the Ed.D., the changes being made regarding the Ph.D. at the Michaels SOE will not be discussed further.

¹⁰ According to Joseph (2004), design-based research "approaches research in education by using intervention to provide insight into real-world contexts" (p. 235).

Foundations and Leadership department encountered the Shulman et al. (2006) piece, *Reclaiming the Education Doctorate*, and formulated and idea to redesign their existing Ed.D. around the authors' definition of the Professional Practice Doctorate.

Later that year, the Dean attended the October CADREI meeting and learned of a session to discuss the forthcoming CPED initiative. She immediately flew a faculty member from the Foundations and Learning Department to the meeting to learn more with her. When they returned to Michaels, the Dean and the faculty member presented what they had learned to the rest of SOE faculty. Together the SOE faculty and Dean decided to apply to the CPED initiative. The Dean then asked that faculty member to serve as the primary investigator to the initiative. He assembled an administrative support team and together prepared a proposal for admission to CPED. In January 2007, Michaels University was admitted to CPED and in June sent the primary investigator and Associate Dean attended the first convening.

Upon returning to the Michaels SOE, the PI reorganized the administrative support team into four working groups around the CPED design-concepts and invited faculty from across the School to participate. He also assembled a coordinating committee made up of members of the Foundations and Leadership Department to oversee the redesign of its Ed.D. The initiative was called "*CPED* @ *Michaels*." Over the next two years, the design-concept working groups met regularly, documented discussions, and challenged ideas while the coordinating committee gathered ideas for the redesign of its Ed.D.

By Spring 2009, the coordinating committee decided that rather than redesign the existing degree, it would be better to start from scratch. With input from the working

groups, they drafted an outline for a new Ed.D. program which will be finalized in the 2009-2010 academic year. Students will be recruited for the 2011 cohort. In addition to the decision to design a new Ed.D. degree, the SOE, as a result of working-group discussions, influenced the development of new institutional norms for working together. The primary investigator explained, "What we have been trying to do is to introduce into the culture of the school what we call, the culture of argument." This 'culture of argumentation' is one where claims regarding programmatic change made by faculty must be supported with evidence or challenged by others. This new culture has supported the SOE identity and mission—caring, leadership, and *scholarship* for schools— which the faculty adopted together a few years earlier.

This brief background and chronology serves to give context to the change process in the Michaels University School of Education. In the next section, I further investigate the change process with a closer examination of how and why the adoption/change process took place, what institutional and environmental factors influenced the process, and what type of role the primary investigator played in the process.

The How and Why: Continuous Improvement

The decision to join CPED and redesign the Ed.D. was made by the Dean and by a vote of the faculty. While the Dean saw the CPED initiative as an opportunity for her School, she also recognized that it fit with both the School identity that had been articulated by faculty just a few years before as well as with current faculty research on doctoral education. She collaborated with the primary investigator and solicited input from the faculty body to determine if CPED was the right avenue for their change efforts.

When asked who made the decision, she responded, "We did. I did. I felt that it couldn't be a message just coming from the Dean."

This decision was influenced by three institutional factors. The first factor was the faculty's recent completion of what they have termed a School identity, or mission statement. The Dean, during her first few years at Michaels, challenged the faculty to develop an identity and mission for the School that would guide their work as educators. The result was an identity that was central to the University mission of "serving God through serving students" and was grounded in three central themes—caring, leadership, and *scholarship* for PK-12 schools. The Dean explained the importance of this identity to the functioning of the school. She said, "Everything we do is guided by that identity which the faculty built. The dean didn't build that. They did. It is theirs. They own it. They own the implementation of it."

The second institutional factor was the current work of faculty who were considering Shulman's work on the professional practice doctorate and the recent work of the CID on the Ph.D. The third institutional factor was the Dean's goal to broaden the research agenda of the School and to establish the SOE as an influential research institution. Upon arrival at Michaels, she had applied for admission into CADREI to achieve this goal. She commented, "I felt that if we were going to move the research agenda to a different level that we needed to be with Deans who were from major research institutions as well as from research-intensive institutions." Along with membership in CADREI came an invitation to join CPED. These three institutional factors placed the Michaels' SOE in an optimal position for change. A faculty member

noted, "This was good timing. The convergence of all of that has led us to rethinking some of our basic assumptions [about our work]."

Supporting the initiative was also a collaborative effort. The Dean garnered support from the Provost to fund a graduate assistant for the project. She, in turn, used SOE funds to provide travel money for the PI, one faculty member, and a graduate assistant to attend bi-annual CPED convenings for two and a half years. She was also planning to fund a national CPED convening at Michaels in October 2009. The School applied for and received outside funding to support annual meetings of critical friends, or peers from other institutions, who would collaborate and advise on the change process. Finally, the Department of Foundations and Leadership supplied resources, such as recorders and software, to conduct the design-based research process.

In the early stages of this change process, evidence of two primary stakeholders existed—the doctoral students and the faculty. According to SOE faculty members, the students were the largest stakeholders and would be greatly affected by the new Ed.D. program. Michaels prepares about 60% of the PK-12 leaders for the western portion of the State. Developing a program that would be "infused with social justice and with practical application," as a faculty member described, made student career needs a priority in the design of the new degree. The faculty members noted that reconsidering programs in an effort to meet student career needs was not a new practice in the Michaels' SOE. In fact, the SOE established a *Quality Council* which was charged with reviewing and changing programs regularly in order to improve student preparation. A senior faculty member described the *Quality Council*, as a group of "current learners, faculty, and alumni" who meet each semester to answer the question "how can we take

steps to improve the programs?" Placing student needs at the forefront of their work allowed Michaels SOE faculty to view their students as stakeholders in the change process.

In addition to the students, the faculty had a stake in the changes taking place in the Michaels' SOE. Though the Ed.D. would be housed in one department, faculty from all departments were asked to participated in the design-concept working groups. Their deliberations in these groups developed a "new culture of interrogation and argumentation" that demanded that any claim, or reason, for action on the new Ed.D. be accompanied by evidence that supported the claim. This process challenged the faculty to critically examine their own practices. The Dean explained,

"We deliberately put our [CPED] initiative within the frame of interrogating our own practice. And we use that term, that is the term I used when I was introduced to the school. I said, "We will interrogate across the board what we are doing." Interrogating their work was a means by which the School could maintain its mission to serve students and its goal of continuous improvement in their programs.

In addition, the "new culture of interrogation and argumentation" was emerging as a new form of communication that complimented the School identity and mission. The PI explained, "[We are developing] a method by which we are trying to structure our communications."

At the Michaels' SOE, the understanding of the difference between the Ed.D. and Ph.D. was not as clear as the goals set for the design of the new Ed.D. Several faculty members at Michaels' SOE have Ed.D. degrees and while they understand the distinction between practitioner and researcher, they describe their own degrees as having been

research-based. Others suggested that a distinction between the two degrees should not exist because "with the inherent nature of education," argued a senior faculty member, "all doctoral education is field-based and practice-oriented." Across the School and within the goals of the design process, however, faculty understood that the new Ed.D. aimed to better prepare practitioners while the Ph.D. would be utilized to train researchers.

According to the Dean, the institutional philosophy behind the design effort was "to be able to differentiate [the Michaels'] Ed.D. from other institutions' Ed.D.s through the unique identity of the School at Michaels University." To do this, the PI and the Dean established two criteria for the effort. First, the design process was grounded in a school identity of caring, leadership and *scholarship* for PK-12 schools. The Dean believed work such as designing a new degree was central to this mission "because if you have children that are not being educated, wherever they are, how can you as a school of education feel comfortable?" she asked.

Second, the design process was an inclusive process. "It has been a school-wide experience," noted the Associate Dean. Input from all departments, even those that did not offer the Ed.D. was sought. All faculty were invited to join working groups and discussions and to give their input whether it be positive or negative. The reasoning behind this inclusion was that it would benefit the entire School. The PI explained, "The idea was that once we began to engage in these conversations, the benefit of those conversations [about the design-concepts] would accrue to all of the doctoral programs in the School." A faculty member expressed his enthusiasm for learning about his colleagues' work saying, "There are things about the school psych program, the

instructional technology program, and the counseling program that I had no idea they were doing and there were some really neat practices." The Dean also explained that the work being done was for the betterment of the school, for the "building for a school of education none of us will see."

Perceptions of the Ed.D. design-process were generally positive among the Michaels' SOE faculty. Many faculty believed the process was a good idea and indicated that they were willing participants in the school-wide working-groups that cultivated definitions of the design-concepts. However, the general consensus was that their work contributed most to the design of the new Ed.D. in Leadership and not to a school-wide effort. A few suggested the group discussions helped them to "to hear other colleagues and what they are doing" which fostered a sense of community. On another level, however, several faculty mentioned that though they were willing to participate, they were continually confused about the meaning of the design-concepts. A faculty member who was very involved in the process said, for him, it was difficult "to learn the new language because the terms quite often mean something different."

Evidence suggested that three characteristics of the CPED initiative attracted the attention and support of Michaels' SOE faculty. First, the initiative offered an alternative to the *status quo*. That is, the CPED initiative provided an avenue for the Michaels 'SOE to improve leadership preparation through development of a new degree that would permit Michaels "to be able to meet the needs of those professionals who seek to go into PK-12 leadership." The Associate Dean explained this notion saying, "Well, they were going to redesign the Ed.D. in Leadership one way or another, but membership in CPED

helped us to clarify how we were going to do that and made it more of a school-wide experience."

Second, the new design sought to develop better ties to area PK-12 schools and leaders thus enhancing faculty connection to practice and leading to enhanced research. In this sense, CPED presented a compatible avenue for constructing ties to the local education community. A faculty member who was enthusiastic about the notion of better connecting to the community explained, "[In the new degree] the faculty will continue the relationship after the students graduate and work with the practitioners in the field to continue to promote the areas they have identified."

Finally, adapting the CPED design-concepts to fit the Michaels' context was a central task of the working-groups. For two years, these groups developed definitions that suited the identity and mission of the School and sought to better prepare their students. An example of this adaption was the signature pedagogy group which changed it's name to "signature learning experiences" after long discussions about the role of learning being more central to the pedagogical method of a teacher.

Though resistance was not a strong part of the change process at Michaels' SOE, evidence revealed two types of subtle faculty contention. In one department, faculty demonstrated a strong connection to their own discipline and felt that their participation in school-wide discussions was pointless since their program would not be affected. This group did not disagree with the design process, rather they didn't see a need for their involvement. The Chair of that department recounted that her departmental colleagues continually asked her, "Why are we doing this again? How does this relate to us?" When asked what sort of consequences existed when faculty refused to join school-wide efforts,

the Dean suggested that due to the nature of the School, faculty would take care of such issues among themselves. She said regarding the difficult department, "Things are going to change with that group and the pressure will come internally first. The consequences will come from them to me, not me to them."

A second type of resistance was less obvious, but evident in some faculty. A small group of faculty that was interviewed both inside and out of the Foundations and Leadership Department had trouble understanding how they personally would be part of the new Ed.D. One such faculty member explained, "One of the things I grapple with in the meetings, in my mind, is how am I going to fit?" Faculty who were troubled by their role in the new degree did not hinder the process, however. Rather they expressed a willingness to wait and see how the final product would incorporate their work. A junior faculty member commented, "Moving forward, I don't know how it is going to affect me. But I will wait and see."

Information about the CPED initiative and the design of the new Ed.D. at the Michaels' SOE was presented by the PI, the Foundations and Leadership Department, and the working groups. The PI would share information from CPED convenings as well as key readings from the Carnegie Foundation's work on the doctorate with the SOE faculty. Discussions would take place in the working groups and departmental meetings around this information. The Foundations and Leadership Department organized an advisory group of faculty from peer institutions and current PK-12 educational leaders to meet annually and provide advice on the design process as well as give critical feedback to the SOE. Finally, the working groups would investigate the work being done at peer institutions and present ideas based on what they had learned. These discussions were

recorded and posted on Google-group and Blackboard WebPages to share with faculty members across the SOE.

While there seemed to be sufficient information about the process, some faculty members questioned the meaning behind the design-concepts. One faculty member commented, "I have heard folks talk about those [design-concepts], but I cannot say I have a clear understanding of exactly what those concepts mean." Despite this kind of confusion among a few faculty members, the communication process was an open process. All those interviewed expressed their opinion that there was sufficient information and communication about the process. A junior faculty member suggested the website was the best means of learning about the process. She said, "[You can] go on to the website which is open to any and all." Another faculty member commented, "Everybody gets updates. It is an open process and anyone can join." If there is a lack of understanding about the process, a junior faculty member suggested, it was not the fault of the process. He explained, "People have been invited to the process and what they don't know, or if they don't utilize the [web] site, it is their fault, not the fault of the system."

Feedback and suggestions about the process and the design-concepts was continually requested and welcomed by the PI and the Dean. Feedback supported the School's culture of argumentation and played a large role in the design process. Feedback was generally given through group or personal meetings and via electronic means to the Dean, the PI, and to the coordinating committee. Feedback included input on the process as well as contributions to definitions of design-concepts and the design of the new Ed.D. program. Communication was central to the change process in the Michaels' SOE. The

Dean explained, "[We told people] this is what we want to do and we want to involve people from across the School in the conversation. Because we felt that part of building the schema for thinking beyond your discipline is to engage in a process that is outside of your discipline."

Process and Outcomes: Evolution not Revolution

The process of change in the Michaels' SOE had deliberate purpose. According to a Michaels' document, "The work to date has focused on *beginning with the end in mind* [and is] viewed through the lenses of the CPED design-concepts." Given the three-year rotation schedule of the Ed.D. cohort group in Foundations and Leadership, the Michaels' SOE was able to set an agenda that could foster school-wide design discussions for two years and in the third year develop a framework for the new Ed.D. program. Over this timeframe, consideration of changes in the Ph.D. were underway and the design process for both degrees was documented. Having a two-year timeframe allowed the Dean and the PI to bring the notion of change to the faculty for discussion before confirming a School decision to join the CPED initiative. This deliberative strategy permitted time for gathering input, responding to concerns, and, ultimately, for making a School decision.

In the early stages of the discussions, the Dean was able to quell concerns through reiteration of the School identity and its goals for building a cohesive SOE community. She welcomed those who were oppositional. She explained, "I want to engage them. I understand that they are not sure they want to engage. But by the same token, the School is going to move and so if the [opposers] want to stand still, then [they] may look up and find the school is over here and [they] have no place."

Evidence indicates that the PI had three key roles in the change process. The first was that of shepherd as he guided the change process without dictating its path. For example, the PI was central in organizing the working groups around CPED designconcepts and starting their discussions. He then let each group work independently offering himself only as a resource. He recalled,

"I try to go to as many working groups meetings as I can. Not to engage in the deliberation, but basically to see what is taking place. I remind the convener that I am a resource, but not to feel they need to ask me anything."

The second role of the PI was that of a cultivator of culture. The PI initiated the process by establishing working groups that met at least once a month. Through discussions and deliberation, these groups fostered a new institutional culture communication that the PI termed a 'culture of argumentation'. He viewed himself as a natural change agent and recognized that he possessed a reputation among his colleagues as such. "I think people have come to expect that I am always looking for the next iteration of things," he clarified.

The third role of the PI was that of collaborator. The primary investigator collaborated a great deal with the Dean on developing an agenda for the SOE. Having once been interim-Dean, the PI was familiar with the structures of the School and goals of the University. He had even helped to establish the SOE long-term agenda when he was interim-Dean. In this change process, he has collaborated with the Dean in moving the CPED process forward by working to establish goals and an agenda for the Ed.D. design and school-wide involvement.

In each of these roles, the PI has earned the respect and cooperation of his peers. A senior faculty member suggested his strategy for organizing the working groups was vital to the success of '*CPED* @ *Michaels*.' He praised, "[The PI] was wise enough to get folks across departments to meet and to hammer out how we would proceed, what the key groupings would be, and that the process would be deliberative." A junior faculty member recognized the primary investigator's ability to bring ideas from across the School together in a way that benefitted the progress of the change process and fostered collaboration. "He can take those diverse and big thoughts and create a space for people to think about those big thoughts. He does not put limitations on us," she recalled.

In addition to the PI, members of the coordinating committee, who were also faculty in the Foundations and Leadership Department, had significant roles. Each one led one of the four design-concept working groups. In doing so, they participated in discussions and gathered information for the new Ed.D. design. The Foundations and Leadership faculty also played a central role in organizing the annual meetings of the Michaels' critical friends group and gathered outside input on the design process. Within the department itself, the faculty agreed to put the new Ed.D. design on every monthly meeting agenda. In turn, this entire process of information sharing and concept development through discussion at both the School level and the department level was documented by a graduate assistant who was recognized by a faculty member as "central to the process." Results of discussions were published in working papers and on the Google-group and Blackboard Webpages.

Faculty opinions suggested that the critical mass behind the change process was within the Department of Foundations and Leadership, where the new Ed.D. was going to

be housed. This group was most invested in the change and led the charge for schoolwide involvement. A tenured faculty member in the department said, "Because the germ of it started in the Department of Foundation and Leadership, it'll be just fine and will continue to move." Another faculty member suggested that outside of this department, "There is not a critical mass opposing it." A junior faculty member suggested that "there was school-wide support" for the change. However, given that the new program was housed in Foundations and Leadership, the faculty in that department were the most enthusiastic. One faculty member said, "It feels like a serious commitment to me, more than a sweeping movement."

Even without an identified school-wide critical mass behind the effort, observations suggested that Michaels enjoyed a collegial and supportive environment that allowed the process to move forward smoothly. Continuing discussion and an amply time frame were key strategies to gathering support for the change process in the Michaels' SOE. Such strategies were not difficult to employ in a relatively collaborative environment of faculty that shared a common identity and mission. In addition, being a private institution, the decentralized governance structures provided the SOE with the freedom to approach change openly, in their own fashion. "We have a lot of autonomy," suggested the Associate Dean. The environment of Michaels' SOE allowed for substantial and deliberative change.

As the 2008-2009 academic year was coming to a close, change in the Michaels' SOE was taking three forms. First, the Foundations and Leadership faculty were committed to designing a new Ed.D. rather than to retooling the existing Ed.D. in Leadership. This decision was hailed by many as a major accomplishment of the change

process. The Dean praised, "Quite on its own, the design team found it is not about redesigning [the Leadership Ed.D.]. They chose to dismantle this program and they are building a new Ed.D. program. They are interrogating that process. That is the single greatest accomplishment." The faculty credit this success to their involvement in CPED saying "[CPED] has provided us with a nice framework, a set of organizing principles, to proceed. We have areas of focus to move the conversation along." A draft design of the new Ed.D. was to be developed during Summer 2009. This new program would be finalized during the 2009-2010 academic year and ready to admit students for 2011.

Second, school-wide participation in the working groups contributed to the creation of a new culture of argumentation that complimented the School identity. This new form of communication continues to develop and grow among faculty. A senior faculty member suggested that this was a major shift in the culture. He proclaimed, "We have gotten people across departments to talk about things other than budgets, bitching, and boilers. They are talking about substantive educational issues." Another faculty member agreed, saying "I would say that a straight up victory is the momentum we have been developing both intra and inter departmentally." Establishing a new culture of communication was not an intended consequence of the process, rather it was something that grew out of the collaborative nature of the Michaels SOE. As this new culture of communication continues, it will likely grow and be shaped by the faculty.

Third, the faculty continue to study the change process at the Michaels' SOE. At the beginning of the effort, faculty set as a goal to gather a substantial amount of data about the design process. The PI believed this data would contribute to their aspiration to be a national leader in reclaiming the education doctorate. He said, "Because we are

collecting data, I think this is the reason we will be one of the successes [in CPED]. I think those data will speak to the move to differentiate the degrees." While gathering this data, the faculty have started to develop collaborative working papers that demonstrate more about the change process. The Associate Director also regarded the working papers as a success in defining faculty research agendas. He commented,

"There is a set of working papers, a lot of these ideas are documented there and should be able to be turned into some kind of publication that could go in some refereed journals or trade journals in which people can start hearing about why this stuff is important, how you do it and so on."

It is anticipated that in the months and years to come, the faculty of the Michaels' School of Education will be analyzing this data in an effort to better demonstrate the change process and provide evidence for the way in which to develop a professional practice doctorate. In the meantime, the faculty will be putting the final pieces of their new Ed.D. program together and continuing to foster their new culture of communication.

Summary

The purpose of this chapter was to provide a rich and detailed description of the change process and roles as they played out at three schools of education during the early stages of the CPED initiative.

At Hersh State University, the Dean of the Graduate School of Education saw his legacy as establishing two clear doctoral degrees, each with its own mission and goals. The new Ed.D. was designed in a contentious, but ultimately collaborative environment that resulted from the tireless efforts of a primary investigator who worked to build a transparent process. The result was a new, school-wide professional practice doctorate that sought to develop educational leaders as change agents. A secondary result from this program that spanned the School was the potential to create a collaborative community among isolated faculty.

At Stull State University, the School of Education was seeking cover from the continued scrutiny of the Graduate School Dean and the Dean of the College. The Director needed to gain favor with these leaders and the Carnegie name provided the means to do so. Within a fragmented faculty, SOE efforts to work together to develop definitions and policies for the Ed.D. were slow and discussions continue. Within the Department of Educational Leadership, change happened incrementally thanks to an organized and passionate primary investigator and a collaborative program faculty. The result thus far has not slackened leadership scrutiny, but has achieved limited change in a single program.

The Michaels University School of Education saw CPED as an opportunity to build upon a unique School identity and slowly develop a program that suited their mission. The process was collaborative, deliberative, and communicative, and brought an already collegial faculty closer together. Change has moved along the stated time frame and has been guided by a cooperative primary investigator who was invested in both his department's success and the success of the School. The result was the development of a new Ed.D., the creation of a new culture of communication, and a collaborative effort to study themselves in the change process.

In the next chapter, I will employ a cross-case analysis guided by the theoretical framework to answer the research questions and to better understand how organizational

change takes place in schools of education and the roles of individual faculty acting in a change agent capacity.

Chapter 5: Cross-Case Analysis and Discussion

Introduction

This chapter presents a cross-case analysis of the findings and results of the change processes studied at the three schools of education that took part in this study. In this chapter, the research questions will be answered looking across all three institutions and utilizing Rogers' *Diffusion of Innovations* model as a guide for understanding the change process and the roles of faculty in these particular institutions. To best understand this analysis, a brief summary of Rogers' model as it applies to organizations will be provided first. The cross-case analysis will then be presented. In concluding this chapter, implications of these findings will be outlined and discussed.

Theoretical Framework

While investigating innovations in organizations, Rogers (1995) suggested that the implementation stages "involved in putting an innovation into use in an organization" (p. 371) are the crucial stages for understanding how innovations are diffused in organizations. In organizations, the innovation is not immediately implemented after it is adopted. Rather, the implementation stage involves "a numbers of individuals, each of whom plays a different role in the innovation-decision process... and [in] mutual adaptation in which both the innovation and the organization change in important ways" (p. 372). Rogers (1995) defines an organization as a "stable system of individuals who work together to achieve common goals through a hierarchy of ranks and a division of labor" (p. 375). Within this organization is a set of predetermined goals, prescribed roles and tasks, an authority structure that governs the rules and regulations and a set of informal patterns that determine the practices, norms and social relationships within the organization (Rogers, 1995).

Rogers (1995) further suggests that the innovativeness, or willingness to innovate, by an organization, depends upon three independent variables—the individual or *leadership characteristics; the internal organizational structural characteristics*; and, the *external characteristics of the organization*. His definitions for each characteristic were broad. For example, his definition of leadership characteristics pertained only to the leader's "attitude toward change" (p. 380). Rogers also broadly defined several internal characteristics of an organization. These are explained in chapter two, but briefly are the degree to which an organization is centralized or formalized (both of which he views as negative influences on change); and the organization's complexity, interconnectedness, possession of organizational "slack", or size (all of which he views as positive influences on change). Rogers suggests that the external characteristics of an organization are the degree to which the organization is open to outside influence.

The cross-case analysis revealed change at all three schools of education fell within these three variables—leadership, internal characteristics, and external influence of organizational innovativeness. However, this study revealed that the traits of each variable expanded beyond Rogers' broad definitions and included specific factors that aid in the understanding of organizational change in schools of education. Below is a discussion of this cross-case analysis as it answered each research question.

Cross-Case Findings

Rogers (1995) has broadly defined three factors that affect organizational innovativeness—leadership, internal characteristics, and external characteristics. This

study discovered that the factors that affect the change process in schools of education fall into Rogers' three categories. However, these categories are more expansive than Rogers' suggests. In addition, this study revealed an additional crucial factor in the change process in higher education—the roles and strategies of faculty members acting as change agents. In the following cross-case analysis, this study's research questions are answered with an understanding of these factors. Findings that respond to the first research question suggest that several characteristics and actions by leadership as well as external factors played a significant role in the adoption of the innovation at each institution. Findings that answer the second research question suggest that internal factors such as institutional and local context and faculty influence played a significant role in shaping the change process. Finally, the findings that respond to the third research question suggest that the primary investigator at each institution took on specific roles and employed specific strategies in the change process that were shaped by the leadership, by internal factors, and external conditions.

RQ1. What factors make schools of education decide to adopt, adapt, or reject innovative ideas to reshape or redesign their Ed.D. programs?

The factors that were crucial to the change process at all three institutions were twofold—the leadership or Dean's role and the role that CPED played as an external influence.

First, I examine the role of leadership at all three institutions. Rogers (1995) spends little time defining leadership in organizational change. He simply explains that leadership is an independent variable that can be characterized positively by the leader's attitude toward the change (p. 380). In this study, leadership played a much larger role in the change process. Leadership was crucial in the type of decision that was made, the kinds of support that were given to the change process, and the agenda that determined the change. In answering research questions two and three, evidence suggests that leadership was also crucial in the way in which the faculty were treated during the process and in the selection of and power given to the primary investigator.

Decision type

Two types of decisions were present in this multi-case study—*authority and collective*. Rogers (1995) suggests that both authority and collective decisions are typical of organizations. He explains that an authority decision is made by one individual in the organization who holds power, status, and/or technical expertise. With this type of decision, the individuals within the organization have no influence over the decision and serve primarily to implement the decision. Whereas with a collective decision, Rogers (1995) explains, "choices to adopt or reject an innovation are made by consensus among the members of a system" (p. 28). Once the decision is made, "all units must conform to the systems' decision" (p. 28).

At both Hersh State and Stull State Schools of Education, an authority decision to join CPED and to make changes to the Ed.D. to distinguish it from the Ph.D. was made by the Dean (Hersh) and the Director (Stull). According to Rogers (1995), an authority decision is made by those who "possess power, status, [and/or] technical expertise" (p. 29). The Hersh State GSE Dean's power to make this decision came from his position and a twenty-plus year tenure at the School. He was selected in 2003 by his peers to represent them as the head of the School. The Dean's status came from his strong personal vision and desire to make this initiative his legacy. He admitted, "Yes, it was my

vision. It just made a lot of sense to me and it was really my initiative. For me it is a big initiative." According to the Dean, this decision had also raised his institution's status among national peers in CADREI and CPED and with the Hersh State Executive Vice President, to whom he reports. The Dean explained that his boss strongly supported this effort and would "push to make it happen" with the Higher Education Commission. To great extent, his technical expertise was gleaned from his interactions with Lee Shulman and his deep understanding of the CID project and its conclusions about the current state of the Ed.D. Attending CADREI meetings, the Dean remembered hearing Shulman

"talk about the work of the CID and the findings in respect to the Ph.D. in education. When he talked about redoing the Ed.D., in the 2006 publication in the journal *Educational Researcher*, that crystallized things for me. I thought Shulman was exercising great leadership and vision."

In contrast, at the Stull State SOE, though the decision was an authoritative one made by the SOE Director, the circumstances surrounding the decision suggest that the Director had less power and status, but possessed an equal amount of technical expertise. Though Director had the power from her position to make the decision to join CPED, she did so in reaction to pressure from College and Graduate School leaders and as a means to protect the School from continued criticism. Among her faculty and the College and Graduate School Deans she did not have the status to garner support to implement this decision in a way that brought about any meaningful, school-wide change. In addition, though she had technical understanding from involvement in CADREI and learning of Shulman's work, she was unable to leverage that expertise to move the School towards changes in the Ed.D. The limited understanding of the Ed.D. by her superiors indicated that only the Carnegie name was respected and served as a means to buy time. The Director explained, "I kept on promoting [CPED] as a lever to give us some cover while we try to get things together."

The decision at the Michaels' SOE was a collective one made after the Dean and a faculty member brought the idea to the wider faculty for a School decision. Though the Dean had the power to make the decision alone, she saw involvement in CPED as an opportunity to relate it to work that was underway in the Foundations and Leadership Department, to build upon the School identity, and to open doors for the School to be engaged in the national discourse and wanted faculty input and support. The Dean's status among her colleagues came from her philosophy of working together in an institution under a single identity and mission. She recalled, "And then we educated the faculty as a whole about CPED and what it was. We weren't asking anything at that point; we just wanted them to know how we would learn to try and do this." Even the Dean's technical expertise was collective in a sense. Upon learning about a CADREI meeting that would introduce CPED, the Dean flew a faculty member, who had been studying the work on the research doctorate that resulted from the CID initiative, to join her to learn more about the CPED project. One faculty member described the process in the following way, "My understanding is that the idea has come from leadership but we have been asked to engage it."

According to Rogers (1995), authority decisions offer faster implementation, which was the case at the Hersh State GSE. Rogers (1995) cautions, however, "although [these decisions are] made more rapidly, authority decisions may be circumvented during their implementation" (p. 29). Though this remains to be seen with the implementation of

the new degree at Hersh State, at Stull State, the faculty were less enthusiastic after the decision was made, and participated to the extent they felt necessary. Collective decisions, however, are slower to implement. This has been the case at the Michaels' SOE where three years into CPED, they were sill considering the design of their new Ed.D.

Garnering Support

After the institutional decisions to join CPED were made, each leader put forth varying degrees of support for the effort. This support and how it was utilized is also a demonstration of how leadership affected the change process. Rogers (1995) describes support for innovations in organizations as "organizational slack," or "the degree to which uncommitted resources are available" (p. 381).

At the Hersh State GSE, the Dean provided a relatively large amount of resources for the change effort. He offered a graduate assistant, bought a course release for the primary investigator, paid for the primary investigator and the graduate assistant to travel to six CPED convenings, and supported several faculty retreats and meetings over the three years. Since the GSE was financially independent from the rest of the university, this meant that it had to generate its own resources for the initiative. In addition, the Dean applied for an "academic excellence grant" from the university to support the graduate assistant position. Applying for and receiving these funds was "really forward thinking by the Dean," according to the PI. The funds not only provided additional resources, but also demonstrated university support for the change process as well.

The Stull State SOE Director also provided resources as a means to motivate faculty to facilitate the change. She recalled after making the decision she "offered [the

faculty] money. I said, 'If you work on this working group I will give you an amount for your professional development funds. Out of it I want proposals for doing this.'" She also provided \$15,000 for three years for support to the primary investigator to travel to six CPED convenings and to work on the Ed.D. in his department as well as guide the school-wide process, and to fund a graduate assistant. She recalled "three out of the four groups were able to make some headway," but by Spring 2009 the School was no closer to defining the Ed.D.

The Michaels' SOE Dean approached support for the initiative in a collaborative manner just as she did the decision-making process. She applied to the Provost for funds to support a graduate assistant. In this respect, she also sought university support for the initiative. The Foundations and Leadership Department also supported the effort to study the process and supplied resources for data collection and transcription. In this respect, the Dean had buy-in from the key department. With SOE funds, the Dean supported the primary investigator, the graduate assistant, and one additional faculty member to attend five CPED convenings. She also hosted the final CPED convening at Michaels to demonstrate to her faculty the Michaels' commitment to CPED, as well as to raise Michaels' visibility within the CPED initiative.

Rogers (1995) suggests that the amount of organizational slack that is given to an innovation is positively related to the organization's ability to change. In the three cases presented in this study, evidence suggests that not only the amount, but also the origin of the support is important. Garnering resources from outside the Dean's coffers, as in the case of Hersh State GSE and Michaels' SOE, had a positive affect on building buy-in to

the change process both inside the school and in the broader university community as well as.

Developing and Executing an Agenda

Rogers (1995) explains that in organizations, agenda setting and the matching of innovations needs to constitute the "information gathering, conceptualizing, and planning" (p. 394) for the implementation of the innovation. During this process, the organizational members "attempt to determine the feasibility of the innovation in solving the organization's problem" (p. 394).

The Hersh State GSE Dean set out an agenda that he hoped would have schoolwide participation and garner faculty input on the change process design. Implementing a faculty survey and holding a faculty retreat to discuss Shulman and Carnegie Foundation ideas were the start of an "open and transparent process." The primary investigator was asked to continue the process in the same fashion. She developed committees around design concepts as well as offered meetings, websites, and retreats that incorporated faculty input. This agenda resulted in what the Dean called an "organic" Ed.D. program design and what the primary investigator called a "democratic process."

On the other hand, the reactionary nature of the decision made by the Stull State SOE Director set the tone for the agenda that followed. She paid faculty to produce reports of "how to do this." She also identified the CPED initiative as a means to provide "cover" from an interfering Graduate Dean more so than to provide an opportunity to rethink the Stull State SOE education doctorate. While this was not the intention of the CPED initiative, the Director saw that CPED was a feasible fit for solving the SOE's need to respond to the College and Graduate School Deans and to gain national

recognition. This strategic agenda set by the Director clearly indicated her intention for joining CPED as a means to gain favor with those to whom she reported rather than clear means to rethink the Ed.D.

The Michaels' Dean collaborated with the primary investigator as well as gathered information from other CPED institutions to develop the best way to implement the agenda. The result was a collaborative process that included assembling several working groups comprised of faculty from across the School. The PI explained, "We moved from the administrative support team to putting together working groups and a coordinating committee and consulting with our research advisory committee to make this happen." The agenda directly supported the goals of the Dean by encouraging the cooperative nature of the School's identity, by working to distinguish the Michaels' Ed.D. from other programs in the State and by sustaining a school-wide research agenda.

At each institution, the separate agendas determined how CPED would be implemented at each institution. Rogers (1995) calls this "symbolic planning" (p. 394) because the agenda serves a broader purpose within the institution. While the decision at Hersh State GSE was authoritative, the Dean attempted to create a collaborative agenda and implementation process to allow CPED to be "matched" (Rogers, 1995, p. 394) to the needs of the GSE and its faculty while also supporting his vision for the School. At Stull State, the agenda of creating task forces fit the authoritarian decision made by the Director and served as a reaction to criticism and a means to provide cover while the SOE scrambled to define the Ed.D. and its policies. At Michaels, the agenda of developing interdepartmental working groups and discussions sustained the collaborative and deliberative nature of the School and its decision to join CPED.

Carnegie Project on the Education Doctorate (CPED)

The second crucial factor that played a role in the change process at all three institutions was the influence of the CPED initiative. Rogers (1995) broadly suggests that an organization's innovativeness is positively related to its openness to external influence. Evidence at all three institutions indicated that the CPED initiative was not only the innovation that was adopted, but also offered an opportunity for each institution to address a local problem, a pathway to distinguishing the Ed.D., and a degree of prestige that made the change process appealing.

At Hersh State, the establishment of CPED came as the Dean was formulating his strategic vision for the GSE. He viewed CPED as an important opportunity for him to advance the GSE under his tenure by addressing a long-standing history of confusion between the two doctoral degrees. The initiative provided a framework—four designconcepts and a guiding literature—which the Dean was able to use for creating an agenda for change. In addition, the Dean felt CPED provided the chance for his institution to engage in national discussions that he believed "showed great leadership."

At Stull State, the CPED initiative offered the Director "cover" from Graduate School criticism and time to "clarify policies." The framework also provided a pathway for action and allowed the Director to show that she was doing something to improve the SOE by formulating task force groups around each of the design-concepts. Most importantly, the Carnegie name that was attached to the CPED initiative allowed the Director to demonstrate an effort to improve the School's national visibility. She explained CPED as "a way to get us the kind of national stage that we were trying for."

At Michaels, CPED offered the SOE a timely compliment to faculty efforts to redesign the Leadership Ed.D. and design a new Ph.D. Again, the CPED initiative offered a framework upon which working groups and discussions could be formulated. Naming the project "CPED @ Michaels" was also a creative way to "increase social prestige" (Rogers, 1995, p. 219). The initiative confirmed the Dean's quest for membership in CADREI and exposure to strong research institutions. She saw CPED as a means to move the SOE research agenda to a different level by putting Michaels with "major research institutions as well as research-intensive institutions" on a national arena.

At all three institutions, CPED was an impetus for addressing the state of the education doctorate. CPED provided a plan for action that was not strict and could adhere to the institutional structures and context. Finally, CPED offered the relative advantage (Rogers, 1995) of a means to gain status both within each institution as well as outside among peer institutions.

The actions and roles of leadership coupled with the timing, action, and prestige of CPED were central factors in the change process at each school of education. Though change did not happen in the same way at each institution, understanding these factors and how they have been operationalized gives insight to how change takes place in schools of education in institutions of higher education. The next section looks deeper into the roles of context and faculty influence as key environmental factors that affect change schools of education.

RQ2. What factors of the institutional social system or environment influence the adoption of the Ed.D. redesign?

Each institution displayed evidence of both social system and environmental influences over the change process. These factors, however, were not conditions necessary for change, as both Rogers (1995) and Ely (1976) would suggest. Instead, these factors both caused and affected the change process and included financial, historical, and political factors. Rogers' definitions of internal organizational structural characteristics, for example, are limited to the positive or negative conditions necessary for adoption to happen within an organization. Some of the factors found in this study do fit within Rogers' (1995) definition, such as complexity, however, they do not hold the same meaning. Organizational complexity, for example, describes the degree to which an organization's members posses a relatively high level of knowledge and expertise" (Rogers, 1995, p. 380). As we will see below, this variable was viewed as resistance at one institution.

In addition, Rogers work does not wholly account for the role of resistance. In this study, resistance had a part in shaping the process at each institution. To fully understand the role that resistance has played at each institution, the work of Zaltman and several of his colleagues has been used for this analysis. Their work was an expansion of Rogers' earlier work on diffusion and identified four categories of resistance—cultural, social, organizational, and psychological—that can "disrupt change efforts and distort adopter perceptions of innovations" (Ellsworth, 2000, p. 44). Zaltman and Duncan (1977) ultimately defined resistance as "any conduct that serves to maintain the *status quo* in the face of pressure to alter the *status quo*" (p. 63). The analysis below examines the

environmental and social system influences that were central to both causing and affecting the change process at the three schools of education in this study.

Environmental Causes

At Hersh State, the need for change in the GSE stemmed from diminishing enrollments and a deteriorating campus image. First, in a state institution governed by state regulation, the GSE was unique in that it was financially independent from the rest of the university with its revenue generated from student enrollments and grants. In the last few decades, the GSE had lost its status as the only doctoral granting institution in the State and, as a result, the number of students declined. After a 10-year analysis of enrollments was conducted, a documented decline provided a window into the future. The Dean aptly noted regarding this decline, "the trend line is approaching 0."

In addition to declining enrollments, the GSE endured a poor image among peer schools and colleges at Hersh. Historically the GSE awarded the Ed.D. which was treated as a research degree. When the Ph.D. was offered to the GSE in the late 1990s, confusion between the two degrees emerged, particularly in terms of the quality of dissertations. Over time, pressure from other schools as well as from upper administration forced the GSE to consider the quality of their degrees. The Dean explained that in the last few years, the need to raise enrollments converged with the effort to raise the quality of the degrees and pushed the need for change. He said, "Before [we got the Ph.D.], it was all about money. Then [after we got the Ph.D.] it was about quality for about fifteen years. Now it is both. We have to have high-quality degrees, but we also have to have an economic model."

In contrast, the Stull State SOE was not financially independent. Though enrollments in Educational Leadership Ed.D. were declining at some of the satellite centers, the upper administration was more concerned with building a strong national reputation that stemmed from research that potentially would bring in grant money and raise *US News and World Report* rankings. Since the Ed.D. was not meant to be a research degree, and its dissertation quality was perceived as poor, the Deans of the College and Graduate School did not understand how the degree would contribute to improving the SOE. They imposed high expectations and strict policies on the School. The Director recalled, "We were told we had to become nationally recognized in STEM and Ed Leadership." This organizational climate of closed-mindedness and unwillingness to change (Zaltman & Duncan, 1977) left the Director faced with trying to raise the image and status of her School rather than focusing solely on the redesign of the Ed.D.

At the same time, the Stull State faculty in the Educational Leadership program were concerned about enrollments, not only for financial reasons, but also because the faculty held a strong belief that as a State institution their role was to provide preparation for the State's PK-12 school leaders. They had a clear vision of the purpose of the Ed.D.—to prepare practitioners. The program was offered in the State at five satellite centers to complete this vision. As other Ed.D. programs emerged around the State, faculty were driven by their vision and mission to consider ways to improve and expand their degree. In the time frame studied, the need for change at the Stull State SOE came from institutional pressure and a desire of one department to strengthen their practitioner degree.

At Michaels, the environmental causes were somewhat different. The Dean was also looking to enhance the status of the School by improving the research quality and image. However, this quest was not driven by institutional pressure. Rather it was a combination of her own vision for the School coupled with a faculty drive for program quality that stemmed from an institutional mission to serve students. The Dean, who had arrived to Michaels a few years earlier, had set as a goal to create a cohesive and academically strong School. This vision was driven by a faculty-developed identity and mission statement which, in turn, drove all future initiatives. The Dean explained, "Everything we do—how we hire, how we promote, what initiative we get involved with, what partnerships we make outside and inside—everything we do is guided by that identity which the faculty built."

In addition to this mission, individual faculty work on both the Ed.D. and the Ph.D. had already been underway. This work was important because it was faculty led and suggested that change could be generated in a grassroots, bottom-up fashion. The combination of the Dean's vision, the unique School identity, and the current faculty work on doctoral education set the tone for an environment receptive to change. "When the opportunity to put together the proposal for CPED presented itself, we were in pretty good shape to do that," suggested the PI.

Environmental Affects

Though many different environmental factors caused change at each institution, similar environmental factors affected the change process as well. At Hersh State, faced with the need for change, the Dean sought to enact his vision for the Ed.D. The conditions that affected his ability to create change came from three institutional factors. First, the GSE had control over the Ed.D. which allowed the Dean to make changes with little consideration of broader university policies. Second, the Dean had support from the Executive Vice President for Academic Affairs, to whom he reports. Both of these factors made getting approval fairly easy. When asked if he needed approval to change the degree he answered, "We do. But with respect to the Ed.D., my boss says what we are proposing is ambiguous. We'd have to notify people, but notification is an easy lift."

At Stull State, in addition to the pressure to raise status of the SOE, the Director was faced with the challenges that came from a long history of institutional reorganization. Over the last decade, the School of Education had been reorganized and housed in several colleges and departments. With each reorganization came new goals and expectations for the School. The Director explained that with the latest reorganization into the College of Liberal Arts, "the School was born with some pretty high expectations." Constant reorganization had also fragmented the faculty and created an environment of departmental silos and faculty isolation. Within this pressure-filled and fragmented environment, the Director was expected to implement changes that would improve the School.

At Michaels, the environmental factors were more conducive to change. Three factors in particular affected the ease of change at Michaels. First, as a private institution, the SOE enjoyed a high level of autonomy and was able to redesign its programs without approval from outside of the School. Second, the religious nature of the institution fostered a sense of community and identity that centered on "service to God through service to students." Finally, the nature of the Ed.D. cohort admissions process (every three years) in the Department of Foundations and Leadership provided the Michaels'

faculty with ample time to deliberate and carefully develop and implement a plan of action.

Faculty Influence

In addition to the above factors, at all three institutions the role of faculty was a prominent environmental factor that affected the process of change. Hersh State, for example, had a strong faculty union that had influential governance in the institution. The role of the faculty influence in this change process was two-fold. First, the Dean was able to utilize faculty governance to his advantage by convincing his faculty to create and to vote approval of mission and goals statements for the two degrees. Any questions regarding the process after these were approved, were met with the Dean's message, "The faculty have come up with separate mission statements for both degrees."

Second, faculty were influential in the process by exerting resistance. Two types of resistance that were present in the Hersh State GSE can be best understood in the context of what Rogers (2005) terms *organizational complexity*. The notion of complexity is the degree to which members of an organization "possess a relatively high level of knowledge and expertise" (Rogers, 2005, p. 380). In the case of the Hersh State GSE, two types of high level knowledge were present in the faculty—knowledge of the ongoing debates regarding the distinction between the two degrees and knowledge of programmatic and faculty workload policies.

First, as academics in the field of education, many faculty at the Hersh State GSE were aware of the numerous national debates regarding the need to differentiate between the Ed.D. and the Ph.D. They were also aware of the lack of conclusive evidence to suggest that the Ed.D. should be a practitioner's degree. Watching as the Hersh State

GSE defined the new Ed.D. as a practitioner-only degree may have seemed inconsistent with the ongoing or previous debates or discussion within their field. The change was also inconsistent with the eighty-year history of the Hersh Ed.D. Such sentiments were perpetuated as some faculty did not "share common perceptions about [the] nature and causes" for the change in the Ed.D. (Zaltman et al, 1977, p. 38). With the Dean's message that the degree must change to attract more students, faculty may have also perceived the need for change as commentary that the current degree structures were inferior (Zaltman & Duncan, 1977, p. 70). According to Zaltman and Duncan (1977), arguments that current practices are wrong or won't solve the new problem will make persuading those who are grounded in a firm stance against the change difficult.

A second type of knowledge was faculty understanding of institutional policies and procedures around programmatic issues and workload. Faculty who have been at Hersh State for many years were aware of "how things are done." And while they may not have fully resisted change, the lack of information about how the process would affect their workload or performance caused them to "trust in traditional ways of doing things" (Zaltman, Florio, & Newell, 1977, p. 31). Faculty members who inquired about workload or class delivery structures and didn't receive clear answers were less willing to collaborate in the change process. In institutions of higher education, change and "innovation may require extensive communication or even collaboration between individuals who previously operated independently (Ellsworth, 2000, p. 175). By not having clear answers to policy and procedural questions, it was difficult for the PI to communicate changes and build a collaborative spirit. As a result, she spent countless

hours trying to build confidence in a program that could not be clearly conveyed to individual faculty members.

At the Stull State GSE, the faculty were very autonomous. Evidence from interviews with faculty and the Director as well as an understanding of the physical structure of the School (departments on the main campus were housed in three separate buildings and some faculty were located at three of the five satellite centers) suggests that faculty were focused on their own work and generally remained isolated in their own departments or areas of study. In fact, the Director had been trying to bring the faculty more together with the change process. She said, "I don't think I have been very successful [at creating] semi-permeable membranes between the three units." However, when the challenges from the Graduate School around residency policy arose, the faculty were more than willing to come together. In this respect, the faculty believed they should have the right to make numerous program decisions and worked together to reject topdown policies.

The autonomous nature of the Stull State SOE faculty also played a role in resistance to change. Two types of resistance were present at Stull State. The first is what Zaltman et al. (1977) have named *organizational climate* which in this case was characterized by an "absence of a pervasive and sustaining philosophy of change in a social system" (p. 39). The faculty body as a whole had little interest in distinguishing the Ed.D. because it did not affect all of their programs. The lack of faculty-driven efforts to draw the distinction between the Ph.D. and the Ed.D. resulted in "the lack of any systematic support for encouraging and reinforcing the desire and willingness for change" (Zaltman et al, 1977, p. 39).

The second type of faculty resistance at Stull State SOE came from two assertions of faculty autonomy. The first assertion created a sense of solidarity among the members of the SOE when they came together to dispute top-down administrative policies, such as residency, that imposed control over their programs. Zaltman et al (1977) has termed this type of behavior *group solidarity* and explains that it "involves the issue of interdependence [and] a high degree of in-group identification" (p. 34). Defining residency as "on-campus" affected the nature of off-campus, practitioner preparation degrees, as well as gave power over SOE programs to the Graduate School. The faculty sought to avoid such control from administrators and by working together attempted to impose their own control over their School.

The second assertion of faculty autonomy can be described as what Zaltman et al. (1977) explain as *factionalism*, or "a divided organization" (p. 35). Despite their agreement on faculty control of the School, they remained divided on the issue of the Ed.D. This factionalism stemmed from faculty who did not teach in Ed.D. programs and who placed little importance on the degree because it did not directly affect their work. Zaltman et al. (1977) explain, "any change adopted or espoused by one faction may be automatically rejected by other factions" (p. 35) which will make meaningful change unlikely. In the case of the Stull State SOE, the Ed.D. was seen as a degree primarily awarded by the Educational Leadership Department. The time and effort that non-Educational Leadership faculty spent working on the distinction was perceived to be a distraction from their own work and programs.

At the Michaels' SOE, the Dean recognized that faculty were central to change and put their needs at the forefront of change. She recalled that after having gone through

the development of a unique School identity, the faculty were "feeling a certain way. We need to take those feelings into account." To foster a new culture that supported a new School identity, the Dean and the PI invited faculty to provide input on the decision process to determine if change at that point in time was feasible. Faculty responses indicated change was possible. Many then joined the design process by becoming members of the working groups.

Though faculty involvement was school-wide, and supported by the mission and identity of the School, some faculty did express resistance to the process of change in two ways. *Cultural ethnocentrism* was the most evident form of resistance. This resistance came from a certain academic department that did not believe their role was necessary in the school-wide process because their particular area of education did not award the Ed.D. degree. There was a sense among the faculty in this department that an Ed.D. is a less rigorous degree. On faculty member explained it this way, "In my field, there tends to be a difference in the research activities of the Ph.D. which is viewed as more rigorous." Zaltman and Duncan (1977) explain that resistors of this type frequently approach an innovation from the perspective that their own "culture" is superior and will maintain that "nothing from the change agent's world could be of use" (p. 69). Faculty who resisted in this fashion were suggesting that CPED was not useful because Ed.D.s were not valuable in their area of education. In turn, they did not see value in giving time to discussions that would not affect their department directly. The Dean believed this resistance needed to be heard. She said, "As Michael Fullan says, 'One needs to pay attention to one's critics'. And that's what we do." According to Zaltman and Duncan (1977), one of the best strategies for dealing with cultural ethnocentrism is to reposition

the innovation so that it would be less threatening to the culture. By inviting resisters to give commentary, whether positive or negative, the primary investigator and the Dean suggested to all faculty that collaboration was valuable to the school. As a result, resisters were incorporated into the process.

A second and more subtle type of resistance present in the Michaels' SOE was *psychological resistance*. As the change process moved forward and faculty were actively engaged in the working groups, some faculty members began to question how they would fit into the final product and what would be the actual affect on their teaching and research. According to Zaltman and Duncan (1977), psychological resistance may stem from the fact that the adopter does not understand the behaviors that will be expected of him or her with the change. Gross et al. (1971, in Zaltman et al, 1977, p. 40) also suggested that the intended adopter might resist because he or she may not be clear about the "behaviors required to implement a change or innovation." But the new Ed.D. program at Michaels had not yet been implemented, therefore this kind of resistance has not yet fully surfaced.

Evidence at each institution suggests that specific environmental and social system factors had an influence over the change process. In contrast to Rogers (1995), however, these factors were not necessarily conditions that were essential for change to happen. Rather, environmental factors such as low enrollments, administrative pressure and products of faculty research were causes for change. In addition, social system factors such as faculty resistance and historical context affected the change process by shaping it as it progressed. The next section considers what roles and strategies the

primary investigator assumed in a change agent capacity under such environmental conditions and influences.

RQ3. How do individual faculty members (CPED principal investigators) describe and understand their role in designing, revising, and influencing the Ed.D. redesign

process?

At each school of education, a primary investigator was selected to serve as the link between CPED and the home institution. In each case, this person had specific roles and strategies that were shaped by both the leadership and the institutional environment. According to Rogers (1995), "Change agents would not be needed in the diffusion of innovations if there were no social and technical chasms between the change agency and the client system." Evidence at each institution suggests that the primary investigator was selected not only to serve as a bridge between the initiative and the school, but also to maintain the appearance that the initiative at each institution was faculty led. The selection of each primary investigator was a strategic one made by the leadership.

Rogers (1995) identifies seven roles that a change agent might have during the change process. The seven roles are:

- 1. To develop a need for change by creating awareness of the need to change behaviors;
- 2. To establish an information-exchange relationship; this is a rapport between the change agent and the clients and allows him to be accepted by the clients;
- 3. To diagnose problems by analyzing the problems, and determining why alternatives won't solve the problems;
- 4. To create an intent in the client to change through motivating interest in the innovation;
- 5. To translate an intent to action by influencing the clients behavior;
- 6. To stabilize adoption and prevent discontinuance at the implementation stage; and

7. To achieve a terminal relationship. The change agent should seek to develop the clients' ability to be their own change agent and renew their behavior (p. 337).

Evidence at each institution suggests that once the primary investigator was selected as the main facilitator of change, he or she then took on various roles each identifiable within Rogers' definitions.

Change Agent Selection

The Hersh State SOE Dean selected the primary investigator after the change process had a slow beginning. He felt the process required leadership from within the faculty. He explained that he selected the PI particularly because "of her interest and her buying-in to the vision and her agreeing to work on it." He also viewed her as an informal leader who was knowledgeable and passionate. He said, "I had a lot of respect for [the PI]. I had known her work and thought she is clearly one of the School's informal leaders. She understands what is going on in [PK-20] schools and the needs that people have." The Dean invited the faculty member to serve as the primary investigator and asked her to assume her role with a similar vision of implementing an open, transparent, communicative change process. And though the PI expressed much frustration during the process, the Dean insisted that she possessed much power in the change process. He said, "She thinks she has no power. But she is wrong in that. Look at what we have gotten done. That is more or less her work."

At Stull State SOE, the Director selected the primary investigator because of his work in a national leadership organization. She said, "I saw what [the PI] was doing and knew he had some national visibility. The Associate Director of the School recommended that we try to recruit him here. So we went after him." Once the PI was selected, the

Director gave him much of the responsibility for change. She said, "[The PI] is leading the way, thank goodness. He is a real trooper." Over time, the PI had taken on much of the change work and the resistance that came with the process. The Director explained, "[The PI] has been beaten around in this process. He has hit some strong personalities. I owe him for all of his work on this."

The Michaels' SOE Dean selected a faculty member who she knew had begun to investigate options for reform in doctoral education and she brought him into the process before the request for CPED proposals was announced by CADREI. She recalled, "I invited [the PI] when [CADREI] presented. I flew him there and said I want you to hear this as well." The Dean engaged the PI as an equal, working together to bring the rest of the faculty onboard. She said, "[Together] we said, "this is what we want to do and we want to involve people in the conversation. And then we educated the faculty as a whole about CPED and what it was." The Dean then let the PI guide the change process stepping in only "to remind us of why we do what we do."

Change Agent Roles and Strategies

In the Hersh State GSE, the PI had two roles which gave her a foundation to be successful in moving the change forward—one of leadership and one of obligation. In a leadership role, she was able to establish an "information-exchange relationship" (Rogers, 1995, p. 337) with other faculty by creating an environment of open communication and information sharing. She worked with faculty to create a mission and goals statement or "intent" (Rogers, 1995, p. 337) for the new Ed.D. and then translated that intent into a committee structure that produced designs for each facet of the new degree. Establishing an open and communicative process was key in her success as a

change agent. As a result, she had a good relationship with her colleagues and was seen as a credible leader. She attributed her ease of facilitation to her position sandwiched between the Dean and the faculty. She commented,

"I have been able to get some stuff done because I am an insider— not a full professor, not an administrator, and not an Ed admin/traditional leadership person— but in some ways an outsider too, as I have not been in any major leadership stuff in schools."

The second role the Hersh State SOE PI assumed was a role of obligation to the innovation and change process. She stressed that this role came from a "deep understanding of and belief in" the Ed.D. as a means to better prepare school leaders. Rogers (1995) suggests that change agents must possess a high degree of expertise regarding the innovation. In the case of the Hersh State GSE, the PI not only possessed information gleaned from three years of working with CPED and her national colleagues, she possessed a strong sense of responsibility for making this change happen. She sacrificed much of her own work and personal life to make the change happen. As the new Ed.D. degree program headed towards implementation, she was rethinking whether or not to take her sabbatical leave because she wanted to be involved in the process. "I have made a commitment to the dean to split my sabbatical so that I will come back in the summer," she said. "I will be there for the first cohort to come in. I will be here to make sure that it goes well, because I can't not." This sort of commitment on her part was central to this major School change. As she moves forward with the new degree, she will have to learn to heed Rogers' (2005) caution, "to develop self-renewing behavior on the

part of the clients" (p. 337) and allow the Hersh State GSE faculty to take ownership of the new degree.

In the case of the Stull State SOE, the decision to join CPED met the institutional need for "cover" from the Graduate School's criticism. Rogers (1995) suggested that for a change agent to be successful in communicating an innovation, the innovation "must be selected to match the client's needs" (p. 336). The PI's role was shaped in this context and took three forms—liaison, advisor, and coordinator. As a liaison, the PI would attend CPED convenings and gather information that would allow him to "develop a need for change" (Rogers, 1995, p. 337). He brought that information back to his colleagues and held "Friday forums," gave out notebooks of documentation, and in turn established the SOE's place in the CPED national discussion.

In addition, the PI advised the Director on a plan that meant to "translate intent into action" (Rogers, 1995, p. 337). The Director, in turn, created an agenda that established task forces charged with establishing the feasibility of developing a schoolwide Ed.D. grounded in the CPED design-concepts. As an advisor, the PI was only able to affect action at the School level indirectly (Rogers, 1995) through the Director. With no direct authority at the School level, the PI was not able to establish a school-wide "information–exchange relationship" or help to "diagnose the problem" (Rogers, 1995, p. 337).

The Stull State PI's final role, coordinator, was his most successful role. In this capacity, he developed an understanding for the need for changes to existing policies and programmatic problems in the Educational Leadership Ed.D. He was able to establish an "information-exchange relationship" (Rogers, 1995, p. 337) among the program faculty

because of regular faculty communication regarding the delivery of satellite programs. As a result, faculty willingness to address issues such as course sequences and advising loads eased his ability to coordinate and implement an action plan for changes to the existing Ed.D. in Educational Leadership.

The change agent's three roles had varying impact on the change process. While success was claimed by the faculty in the Educational Leadership program, change continued to be difficult at the School level. The nature of the program environment versus the School environment had a significant impact on the roles, strategies, and success of the primary investigator at the Stull State SOE.

At the Michaels' SOE, the PI had three roles in the change process—shepherd, collaborator, and cultivator. By soliciting feedback and involvement of faculty from across the School, the PI was able to shepherd the process by "developing a need for change" (Rogers, 1995, p. 337) through faculty discussions and by establishing an "information-exchange relationship" that was trustworthy, credible, and grounded in the School identity. Rogers (1995) argued that for the connection between the innovation and the organization to be effective, "feedback from the client system must flow through the change agent... so that it appropriately adjusts its programs to fit the changing needs to clients." In the Michaels' SOE change process, providing feedback about the process and the design-concepts was a central component of the process. A junior faculty member described the inclusion of faculty in the process in the following way:

"So if people feel like, you know, the whole process is transparent, they are being involved from the beginning, they feel good about the communication, they feel part of the process. People will always support [change] in that situation. So I

think people feel like their opinions are being valued. Like in this case, [the PI] sends us an email [seeking our participation]. That's the type of collaboration. They want to hear from everybody. The involvement of everyone."

As a collaborator, the PI at Michaels was invited to work together with the Dean to engage the faculty in determining the problems they wanted to address with the CPED initiative and in creating the intent to change. The PI recalled, "The Dean and I wanted to involve faculty that represented all doctorate programs from all departments in the schools so that we could gain perspectives outside of foundations and leadership." Together they were able to bring faculty on board and to translate intent into action (Rogers, 1995).

Finally, the Michael's PI cultivated a new culture of communication to compliment the unique School identity. Rogers (1995) contends that a change agent's success for innovation adoption is positively related to the extent to which he or she engages in communication activities. In the case of Michaels' SOE, the PI built upon the unique School identity to establish communication structures that had not only been inclusive of the faculty, but also were evolving into a new and unique culture of argumentation. He explained, "So part of what we have been trying to do is to introduce into the culture of the school what we call, the culture of argument."

Evidence at each institution suggests that the primary investigator served different roles that were shaped by the power given to them by the Dean or the Director. These roles were also shaped by the institutional social systems and environmental influences. Goals for change, types of agendas, and faculty influences all affected the types of strategies the PI used to keep the change process moving forward.

Recommendations for Change Studies in Schools of Education

Though this study has examined only a portion of the change process at three schools of education, the multiple case analysis has revealed much about the processes and roles of change in schools of education. The following three recommendations have been gleaned from this analysis and are offered to institutions that are considering engaging in a change process to restructure their education doctorate.

First, change agendas within schools of education must take into account the dually governed (Birbaum, 2000) nature of higher education. That is, the role of faculty governance structures combined with administrative policies. Therefore, change agendas must be comprehensive and inclusive. The decision to redesign the Ed.D., even if it is coming from the Dean, should be accompanied by a wide-range of knowledge that supports the need for change—statistics about the institutional history, enrollments, and finances, for example. This knowledge should provide a full understanding of the implications of change for the institution, for its degrees, and for the field of education. This information should also include a clear understanding of any outside influences, such as the Carnegie Project for the Education Doctorate, and the expectations and goals of this influence.

This information will provide the background and context for the need for change and give faculty evidence to examine as they consider the need for change at their institutions. Faculty should be invited to respond with alternative knowledge to be included in the process of developing a plan of action. Change in schools of education, as seen at both Hersh State and Michaels, is more successful when input is sought from

faculty at the beginning of the process. Faculty input and feedback should also be included as the process continues.

Second, leadership must be both supportive and collaborative. Leaders of schools of education must support the change effort and must be collaborative in the process. This includes garnering support from upper administration that is visible, financial, and demonstrates an institutional commitment to change. This also includes gaining support from faculty for the need and action for change. In doing so, leadership should demonstrate a genuine effort to make change that is collaborative including faculty in every step of the process.

Finally, this study has demonstrated that the role of the change agent is an important one. Having a faculty member who is respected among their peers, but shows interest and ability in administering a change plan is crucial. The selection of this person must be intentional and central to fulfilling the change goals. This person must have clear roles and responsibilities as well as a clear line of power and resources to build a collaborative and deliberative change process.

Implications for Future Research

The findings from this study have implications for Rogers' (1995) *Diffusion of Innovation* model, for the literature that studies faculty in change agent roles, and for the future of the education doctorate.

First, Rogers' work on change in organizations is limited and focuses mainly on business or for-profit organizations. Though his work has been applied to school settings, these studies mostly investigate how individuals adopt innovative practices, such as use

of technology in classrooms, and do not examine the school as an organization that is adopting change. In addition, Rogers' work on organizations does not account for dually governed organizations like schools of education. Without full understanding of the role of faculty autonomy and governance in universities, important factors for understanding change in schools of education may be overlooked. Therefore, much more empirical evidence is needed to better understand how the unique governance structure of the university– both administratively and faculty governed— influences and plays out in the change process at schools of education.

Additionally, Rogers's theory does not explain the role of resistance to change to the extent that Zaltman and his colleagues do. Recognizing the purpose and types of resistance, particularly those that stem from faculty and governance structures, has a significant affect on understanding how change takes place in schools of education and the types of strategies that change agents use. Therefore, to best understand organizational change, it is necessary to expand outside of the Rogers model. Future studies should consider employing a multi-theory lens.

Second, this study adds to the scant literature that investigates faculty in leadership and change roles. This study suggests that faculty who assume these roles are not as uncommon as was once thought. Further investigation is needed around the reasons why faculty assume leadership roles in change, the strategies they employ, their needs in leadership positions, their effectiveness, and how they are perceived.

Finally, since the early 1900s, research that has sought to distinguish the Ed.D. from the Ph.D. has focused primarily on the types of curriculum, the structure of dissertations, and the career aspirations of graduates. CPED is the first effort that has

attempted to distinguish the two degrees through understanding of the purpose of the Ed.D. and development of programs that serve to prepare practitioners. In the coming years, as the twenty-five CPED institutions design and implement their CPED-influenced Ed.D. degrees, a greater understanding of the change process and how this initiative plays out at the various institutions will be necessary to further understand the factors that influence change and the roles of faculty. Additional studies on the ability of national efforts to influence the way schools and colleges of education define their role in the preparation of educational leaders will also be needed.

Conclusion

This study has examined the process of change at three schools of education that were members of the Carnegie Project on the Education Doctorate. It employed a multiple case study method and applied the theoretical lens of Rogers' *Diffusion of Innovations* model as a means to understand how change happened in the early stages of this initiative. The findings reveal that though each institution was exposed to the same CPED design-concepts, the change process was different at each institution. Many factors influenced both the decision to adopt change as well as the processes of implementing change. The factors might have been significant to local context, or they might have been influential from outside. In addition, many people were involved in change processes. School of education leaders had central roles in initiating change while individual faculty members assumed leadership roles to direct the process. In addition, faculty members exerted influence over the process through expressions of resistance. Overall, this study indicated that change in schools of education, much like in many organizations, is an evolutionary process, one that is shifted and shaped as it moves along.

Appendix A

Pre-survey Questionnaire

<u>Institution</u>

- 1. Type of institution
- 2. Governance structures
- 3. Primary department for CPED pilot
- 4. What are your institutional goals for CPED?

<u>Influences</u>

- 1. How do faculty perceive design-concepts?
- 2. How compatible are they to current programs, dept, and culture?
- 3. How are they understood?
- 4. How useful has piloting a program been in developing understanding?
- 5. How useful has seeing examples of others institutions been?
- 6. What types of communication have been employed?
- 7. Who made decision to be a part of CPED?

PI Role

- 1. What strategies have you used to get others involved/supportive?
- 2. Have you encountered resistance? What kind?
- 3. What has been the institutional process of introduction and decision to incorporate the design-concepts?

Overall

How will you know when you are successful?

Appendix B

Semi-Structured Interview Protocol

1. What made your school of education decide to adopt, adapt, or reject these innovative ideas to reshape or redesign your Ed.D. programs?

- **a.** What context (national and/or institutional) has led to this decision to redesign the Ed.D.? Why now?
- **b.** What is your understanding of the difference between the Ed.D. and Ph.D.?
- **c.** Who decided to redesign the Ed.D.?
- d. What is the individual and institutional philosophy behind the redesign?
- e. Who are the stakeholders involved and/or affected by the redesign?
- f. What type of support is being garnered to create change?
- g. What is your perception of the Ed.D. redesign?
- h. What attributes of the Ed.D. redesign has affected your decisions to adopt, adapt, or reject the change?
- i. What processes (communication and structural) have taken place that have led to your and the overall decision to adopt, adapt, or reject Ed.D. redesign in the early stages of the change?
- j. What knowledge about the Ed.D. redesign has influenced your/others decisions to adopt, adapt, or reject the change?
- k. What more have you or others asked to know about the redesign?
- 1. What strategies are taking place to create momentum and move the Ed.D. redesign process forward?
- m. What strategies are taking place when process is "stuck" or slowed?
- n. Are some faculty adopting the ideas before others?
- o. How easily are you/others buying-in or not? How likely are you/they to adopt?
- p. How quickly is the institution implementing change?
- q. What outcomes of the Ed.D. redesign process can be seen in the early stages of change?

2. What factors of the institutional social system or environment have (or are) influenced the adoption of the Ed.D. redesign?

- a. What environmental or institutional history, values, or cultural factors affect the adoption process?
- b. What institutional factors persuade your/others decision to adopt, adapt, or reject the design-concepts?
- c. Who has a critical role in the process?
- d. What strategies does this person(s) use to drive the process?
- e. Is there a critical mass behind the Ed.D. redesign change effort?
- f. Is there evidence of barriers to change such as resistance from faculty, conflicting values, or state of institutional inertia? If so, how is this influential in the Ed.D. redesign process?
- g. What means/avenues are provided for you/others to give feedback?
- h. Do you/others feel they are heard?
- i. How is feedback incorporated or acknowledged in the process?

3. How do you/the CPED principal investigator describe and understand you/their role in designing, revising, and influencing the Ed.D. redesign process?

- j. Do you/they feel you/they have a key role in the change process?
- k. How do you/they feel about their involvement with the change process?
- 1. What actions do you/they take?
- m. What forms of communication do you/they use with their peers?
- n. How do other faculty understand your/their role in the Ed.D. redesign?
- o. What roles do you/they have in influencing the Ed.D. redesign adoption process?

Appendix C

Informed Consent Form

Project title: Adopting CPED Design-concepts: A case of process and roles

Investigator name: Jill A. Perry, Doctoral Student, University of Maryland, College Park **Purpose**: This is a research project being conducted by Jill A. Perry at the University of Maryland, College Park. I am inviting you to participate in this research project because you are either a CPED faculty member, home institution dean, faculty member, or student. The purpose of this study is to understand the processes of adoption of CPED design-concepts at CPED institutions and the ways in which CPED primary investigators at those institutions describe their role in designing, revising, and influencing the adoption process. You are being asked to participate in this interview because I believe you have an opinion, or current or historical knowledge about the process at your institution or of the role of your CPED faculty member in influencing the adoption of CPED design-concepts in the designing or revising of your Ed.D. program.

Procedures: The procedures involve participating in an interview with me.

I will conduct an open-ended question interview with you that will last no more than 60 minutes. In addition, I will observe meetings at each institution. In the open-ended questions, I will ask that you speak freely and openly and respond as you wish. I will be audio-taping the interviews and taking notes to help me remember what you say. CPED faculty will also be observed at bi-annual meetings. Follow-up interviews with participants will take place if necessary. If you are a CPED faculty member or participate in institutional meeting related to the CPED project, you may also be observed and photographed. Photos of observations may be used in PowerPoint or web-based presentations. I may also ask you to provide documents for review which may include: meeting notes, organizational charts, strategic plans, memorandums and other relevant reports or documents.

Confidentiality: I will do my best to keep your personal information confidential. To help protect your confidentiality, interviews will be conducted in private, audio-taping and transcriptions of audiotapes will be only heard by me or by my advisors. To protect your identity, I will use pseudonyms. I will save all transcriptions on my password-protected computer and will lock paper copies in a cabinet to which only I have access. If I write a report or article about this research project, your identity will be protected to the maximum extent possible. As mentioned above, if I receive your permission, I may use photos for display with my final project Powerpoint or web-based presentation. Data will be kept through the duration of my doctoral program and after all possible publications/articles have been generated from my work (approximately 5-7 years). After that time, data will be destroyed—tapes erased, transcriptions and photos shredded, computer files deleted.

Risks & Benefits: There are no known risks associated with participating in this research project. This research is not designed to help you personally, but the results will contribute to the further understanding of faculty roles in institutional change.

Freedom to Ask Questions & Withdraw: Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify. Jill A. Perry, of the University of Maryland, College Park, is conducting this research. If you have any questions about the research study itself, please contact Jill A. Perry at: 301-204-2644 or at jperry5@umd.edu. If you have questions about your rights as a research subject or wish to report a research-related injury, please contact: Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; (e-mail) irb@deans.umd.edu; (telephone) 301-405-0678. This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.

Statement of age of subject and consent: Your signature indicates that you are at least 18 years of age; the research has been explained to you; your questions have been answered; an you freely and voluntarily choose to participate in this research project.

Printed Name:	Signature:
Email:	Date:

Appendix D

Observation Protocol

Name of Institution:		
Description of Setting:		
Time:	Date:	
Participants:		
Descriptive Notes: (description of participants and setting, reconstruction of dialogue, review of particular events and activities		Researcher reflections & field notes: (personal thoughts, ideas, hunches, concerns, notions, prejudices, and impressions)

Appendix E

What factors make - What context (national and/or institutional) has led to this decision to redesign the Ed.D. ? Why now? decide to adopt, adopt, or reject innovative - What is your understanding of the difference between the Ed.D. and PhD? ideas to reshape or redesign the Ed.D. ? - What is your understanding of the difference between the Ed.D. and PhD? programs? - What is the individual and institutional philosophy behind the redesign? - What is to up recreption of the Ed.D. redesign? - What is your proception of the Ed.D. redesign? - What is your proception of the Ed.D. redesign? - What is your proception of the Ed.D. redesign? - What is to your and the overall decision to adopt, adapt, or reject Ed.D. redesign in in the early stages of the change? - What is more have you or others asked to know about the redesign? - What strategies are taking place when process is "stuck" or slowed? - Are some faculty adopting the ideas before others? - How waity are you/others buying-in or not? How likely are you/they to adopt? - What tactors of the institutional factors persuade your/others decision to adopt, adapt, or reject the design-concepts? - What institutional factors persuade youu	Demonstrati	on of which interview questions address the research questions
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Demonstration of which interview questions address the research questions

Appendix F

Letter of Invitation to Schools of Education

Dean X School of Education

Dear Dean X,

I am the Program Director of the Carnegie Project on the Education Doctorate and currently a doctoral student at the University of Maryland-College Park. I am completing my dissertation on the topic of <u>the adoption of the Carnegie Project on the Education Doctorate (CPED) design</u><u>concepts and the role of faculty in the adoption process in CPED member schools of</u><u>education</u>. I invite your institution's participation in this multi-case study.

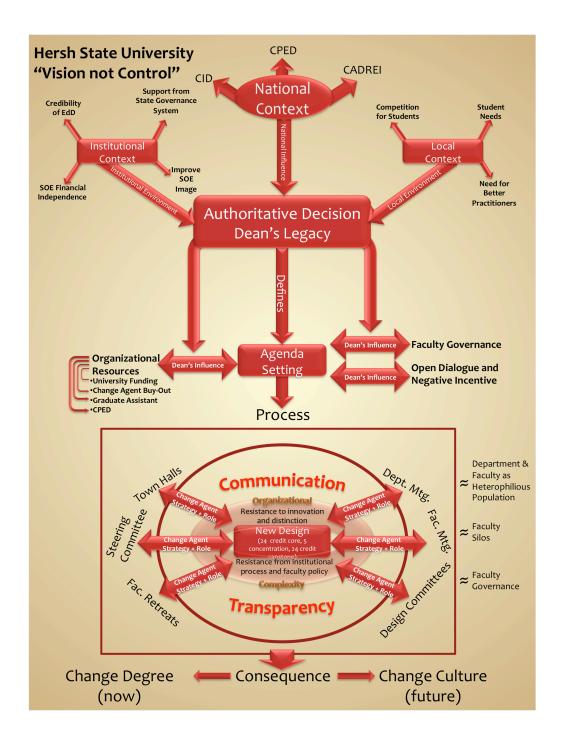
Your institution was selected utilizing purposeful sampling from the twenty-five CPED member institutions. The criteria for selection of your institution was based on 1) the type of your institution, 2) the length of time your institution has participated in CPED, 3) your institution's completion of CPED work, and 4) the proximity of your institution to the researcher. In addition, a pre-study survey was conducted with your CPED principal investigator around or during the October 2008 CPED convening. The principal investigator provided information that assisted me in determining if your institution met the above criteria.

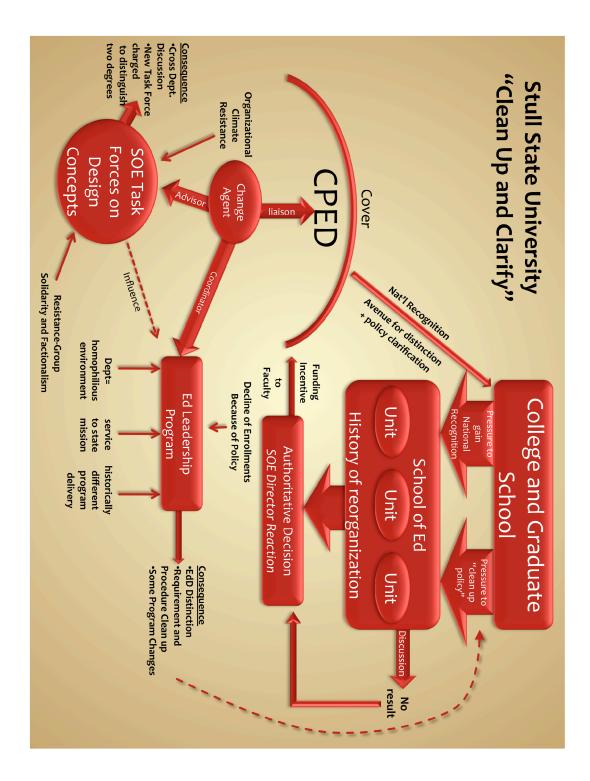
For the purposes of this study, data will be collected by a triangulation of methods to include: indepth-interviews that will be guided by open-ended interview questions, observations of faculty meetings regarding CPED, and document analysis. For the interviews, I would like to conduct one-hour interviews with you, your CPED principal investigator, and 4-6 additional faculty members and graduate assistant who have a role in the development and design of your CPED pilot effort. If you agree, I will work with your CPED principal investigator to indentify the 4-6 additional faculty members. In addition, I would like to observe at least one faculty meeting that will discuss the development of your CPED pilot project. Finally, I will analyze the CPED work and documentation already submitted to the project, but I will also request any institutional documentation that you or your CPED principal investigator feel is pertinent to this study. If you agree, to plan the site visit (dates, interviews, observations) I will work directly with the CPED principal investigator. If you have any additional questions regarding this study, please contact me via the information below or either of my co-advisors, Dr. Tom Weible at (301) 405-3583/tweible@umd.edu or Dr. David Imig at (301) 405-7850/dimig@umd.edu. Pending your approval, I would like to conduct my site visit during the months of April, May or June 2009. I thank you for taking part in this important study and for providing the opportunity to share the lessons you have learned with other institutions currently seeking to redesign their professional practice doctorate.

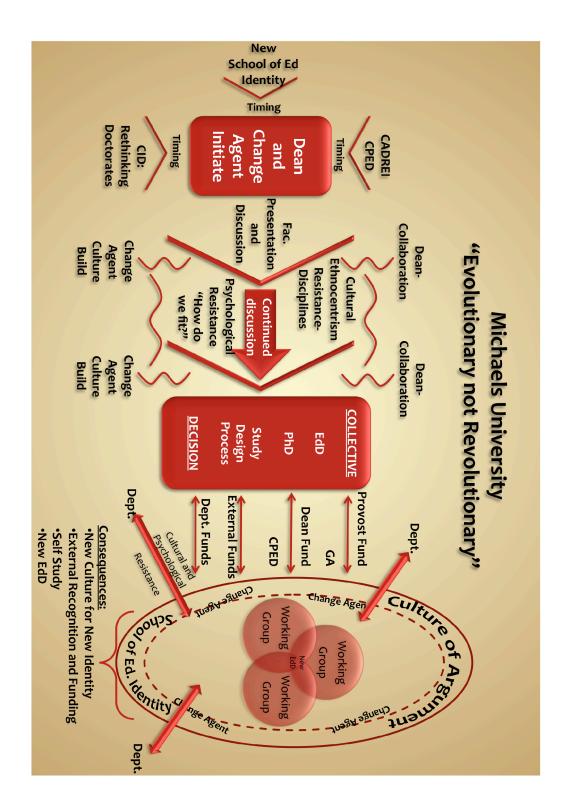
I look forward to hearing from you. Warm regards, Jill A. Perry Program Director, Carnegie Project on the Education Doctorate Doctoral Candidate, University of Maryland jperry5@umd.edu

Appendix G

Conceptual maps of the change process at Hersh State Graduate School of Education, Stull State School of Education, and Michaels University School of Education







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