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NATIONAL LOUIS UNIVERSITY

INSTITUTIONAL EFFECTIVENESS AND A CULTURE OF EVIDENCE: ACCOUNTABILITY CORNERSTONES FOR THE COMMUNITY COLLEGE IN THE $21^{\rm ST}$ CENTURY

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT

OF THE REQUIREMENTS FOR THE DEGREE

DOCTOR OF EDUCATION

IN

COMMUNITY COLLEGE LEADERSHIP

BY

TERESA RENEE MCKINNEY

CHICAGO, ILLINOIS

MARCH 2011

Community College Leadership Doctoral Program Dissertation Notification of Completion

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Title of Dissertation	Institutional Effectiveness and a Culture of Evidence: Accountability Cornerstones for the Community College in the 21st Century.
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Luchungs	Date March 17, 2011

DEDICATION

This dissertation is dedicated to my brother, *Jón David Parker*. Kenji Miyazawa once said that we must embrace pain and burn it as fuel for our journey. Your death has been the catalyst for my journey and the fuel for my soul. I miss you so very much, although you're never very far away because I see your reflection every time I look at your son, Joshua. He is my "third son" and I will always keep my promise to take care of him. Now that you're gone, the world has a hole in it, but my promise to you makes me walk around it and endure. I know that you and Dad are looking down on us now. I love and miss you both dearly. Love, Tareen

To my children - *Jordan, Darion, Kennedy and Lauren*- I love you more than life itself. I hope that I impart to you the courage to withstand difficult circumstances, laughter to feed the soul, and love to endure it all. You are my greatest creations. My love for all of you is like oxygen for my soul.

To my husband – *Kerry*. I give my deepest expression of love and appreciation for the encouragement that you have given and the sacrifices you have made during this doctoral program. In the words of Ralph Waldo Emerson, "what lies behind us and what lies before us are tiny matters compared to what lies within us." Within us lies a love that has endured time. From high school sweethearts to the present, we have lived, we have loved, and we have laughed. I am so happy that God has blessed me by allowing me to marry my best friend. Always and forever yours, Terry.

.

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After enduring the most trying years of my life in 2006 and then again in 2010, I have come to realize that everything happens for a reason. Nothing happens by chance or by means of good or bad luck. Illness, injury, love, lost moments of true greatness and sheer stupidity all occur to test the limits of your soul. Without these small tests, whether they are events, illnesses or relationships, life would be like a smoothly paved, straight, flat road to nowhere. As human beings, we are tested on a daily basis. There is no flat road, but rather a twisting path which can take us on a journey through the cold wilderness. But I'm here to tell you that weeping may endure for a night, but joy comes in the morning. So now, I give thanks to all who stood by my side as I wept, as I laughed, as I lived joyously.

To the Almighty God, El Shaddai - I give thanks for breathing life into my soul. Your spirit dwells within me and I thank you for including me in your divine plan. I thank you for the ocean when all I asked for was a little rain. I thank you for the garden you gave me, when all I asked for was a flower. And most of all, I thank you for my family and friends, when all I asked for was love.

To my mother, Linda Parker - Most people look to movie stars and celebrities when they seek a role model. But I never had to look that far. My role model was just down the hall. You are the quintessential woman, mother, and Christian. You've taught me about faith, hope, and love. You said if someone loves you, love them back unconditionally, not only because they love you, but because they are teaching you to love and opening your heart and eyes to things you would have never seen or felt without them. You told me to make every day count. Appreciate every moment and take from it everything that you possibly can, for you may never be able to experience it again. And you taught me about

faith through abiding by the word of God- *He staggered not (Abraham) at the promise of God through unbelief; but was strong in Faith, giving glory to God.* You are my inspiration, my strength, my voice of conscious. You taught me to always strive for the best and to NEVER stand in someone else's shadow when it's *my sunlight that should lead the way.* I love you more than any words could ever express and I thank you for being the best mother anyone could ever have. I am truly honored to be your child.

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ABSTRACT

This study explores the complexity of accountability demands that have emerged in the 21st century from a variety of community college stakeholders. As community college leaders attempt to foster a new accountability culture within their institutions to quell these demands, questions regarding how to go about creating effective systems for continuous quality improvement emerge. This research focused on discovery, insights and understanding from the perspectives of community college leaders engaged in this process, reveals proven strategies to address these and other concerns while improving institutional effectiveness. This qualitative inquiry used a case study methodology to disentangle these issues through a thorough exploration of the perceptions of the research participants.

Six participants were selected through a process of purposeful sampling based on their exemplary reputation for implementation of continuous quality improvement strategies at Academic Quality Improvement Plan (AQIP) community colleges. In addition, enhancing transferability of the findings, maximum variation criteria was employed regarding the location of the colleges in the North Central Region Midwestern states, and diversity of the institutions representing rural, suburban and urban-centered colleges of various sizes (annual student FTE). The principle instruments for data collection included face-to-face semi-structured interviews, documents, and field notes. Data analysis techniques such as categorizing, coding and theming of information gathered from multiple data sources followed.

The findings revealed three elements are required in order to achieve sustainable change within an AQIP community college. These three elements are: (a) a clear vision and

a plan shared by the college *leaders;* (b) an accommodating organizational *culture;* and (c) a supportive *infrastructure* for the change (technology, software, process, and procedures). The McKinney Model for Institutional Effectiveness Implementation will assist with the complex endeavor of incorporating these interrelated elements throughout the implementation of institutional effectiveness at community colleges.

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CHAPTER 1

INTRODUCTION

The academic landscape of higher education institutions in America has experienced momentous changes and continuous challenges as accountability demands have increased from a variety of stakeholders. According to the U.S. Secretary of Education's Commission on the Future of Higher Education's Report, *A Test of Leadership: Charting the Future of U.S. Higher Education* (2006), higher education is undergoing a significant transformation in terms of what it means to be accountable. Although demands for greater accountability began some twenty years ago for K-12 education, community colleges are now also paying closer attention to how they can and should use data to make decisions about policies, programs, and planning initiatives in order to validate continuous improvement efforts.

While national dialogue, discourse and debate by post secondary leaders are taking place focused on this complex and intricate issue of accountability, many questions remain unanswered. How do community college leaders foster a new accountability culture within their institutions? How do community college leaders create effective yet usable internal accountability structures and systems? Who is the right leader to guide the establishment of the college's accountability initiative? How is the accountability system embedded and sustained within the organizational culture? When and how are the stakeholders involved in the process? Answers to these and many similar questions, could open a Pandora's Box of uncontrollable costs, illogical and unsustainable accountability systems, and gathered data that grows exponentially but remains unused by anyone at the institution.

As accountability pressures emerge amidst complex demands, community college leaders should be able to open this rhetorical Pandora's Box and unravel the intricacies of

quality, internal efficiency and sustainability through deliberate and thoughtful processes. Data collection, analysis and assessment can and should be continually in use to facilitate the ability to create and sustain an internal culture of evidence-based practice to improve institutional effectiveness. This study will shed light and insights on how and in what ways community college leaders craft institutional effectiveness (IE) processes to facilitate continuous quality improvement.

THE RESEARCH PURPOSE

The Purpose Statement

The purpose of this study is to identify how and in what ways community college leaders craft institutional effectiveness strategies to facilitate continuous quality improvement.

The Driving Questions

The driving questions arising from the purpose are the following:

- 1. What factors prompt community colleges to engage in a planned process to improve institutional effectiveness?
- 2. Are specific organizational culture characteristics or dynamics evident as community colleges engage in a planned process to improve institutional effectiveness?
- 3. What are the preliminary steps taken by community colleges to establish a plan of institutional effectiveness for systemic continuous improvement?
- 4. How and in what ways did community college leaders facilitate and support the implementation of an institutional effectiveness process for systemic continuous improvement?

SIGNIFICANCE OF THE STUDY

This study explores the complexity of both leadership and cultural influence on an institution's ability to build and sustain cultures of evidence for improved institutional effectiveness. The research will focus on discovery, insights and understanding from the perspectives of community college leaders which offers the greatest promise of making significant contributions to the knowledge base and practice of education. Considering the gaps in the literature regarding the impact of leadership, organizational culture and institutional capacity for data driven decision making, this study will present an opportunity to disentangle these issues through a thorough exploration of the perceptions of research participants at exemplary Academic Quality Improvement Program (AQIP) community colleges. Institutions on the cusp of deciding whether to move to a more deliberate institutional effectiveness process for systematic continuous improvement or those making little progress in similar endeavors, can benefit. Understanding how leaders fostered and implemented their college's IE engagement, what difficulties were experienced and how these were overcome will provide a successful roadmap for others as they undertake their journey.

BRIEF LITERATURE REVIEW

Cultural Dynamics in Higher Education

Pressure for community colleges to measure effectiveness as a means of accountability has long come from a number of sources. Trudy Banta (1994), Vice Chancellor for Planning and Institutional Improvement and Professor of Higher Education, Indiana University-Purdue University, described the demand for accountability as a "noose tightening around higher education institutions (p. 1)." As increased pressures for

transparency and accountability have emerged, higher education institutions have found it difficult to change their longstanding traditions and practices to address the myriad of external demands for improved institutional effectiveness. The resistance to organizational change and the lack of data-driven decision making processes have led many to wonder about the dynamic between an institution's culture, and leadership ability to implement effective change management strategies for improved performance.

Most would agree that the values and organizational dynamics of higher education are unique and especially problematic for making organizational cultural change. At their core, higher education institutions do not function like corporations, hospitals, or any other type of for-profit or nonprofit organization (Birnbaum, 1988). Higher education institutions and community colleges in particular, have become deeply entrenched in protecting current departmental systems, division silos, and maintaining the status quo as opposed to embracing a universal vision and mission for the organization. These cultural traditions tend to slow the process of change and demand specific strategies that address the elements of academic culture.

While incremental change has been documented in higher education, few instances of systemic, organizational transformation appear in the literature. Instead, higher education systems have been traditionally viewed as organized anarchies (Cohen & March, 1974) and characterized as loosely coupled systems. Karl Weick (1982), organizational theorist and Distinguished University Professor at the Ross School of Business at the University of Michigan, asserted that "change in loosely coupled systems is continuous rather than episodic, small rather than large, improvisational rather than planned, accommodative rather than constrained, and local rather than cosmopolitan" (p.390).

Change in this type of system diffuses slowly with its decentralized decision-making, limited impact of leaders across institutional silos, and localized adaptation within subunits.

Barbara Curry (1992), Assistant Professor at the University of Delaware and noted researcher on topics related to organizational change and the influence of leadership on the change process, described change in higher education institutions as a three stage process. These three processes consist of mobilization, implementation, and institutionalization. The process is not linear; in fact, the three stages are noted to be interwoven throughout the process of change. The most successful outcome of this model was noted as the institutionalization stage defined as "the point at which an innovative practice, having been implemented, loses its 'special project' status and becomes part of a 'routinized' behavior of the institutional system" (pp. 10-11). This institutionalization process is achieved at varying degrees over a period of time, with several layers of implementation required and described as structural, behavioral, procedural, and cultural.

While Curry's (1992) model adds to the organizational change literature, Adrianna Kezar (2001), Associate Professor for Higher Education at the University of Southern California, notes that a widely accepted change theory has yet to be developed applicable for higher education. She instead focuses on six categories of change models: evolutionary, teleological, life-cycle, dialectical, social cognition, and cultural. For purposes of this study, which seeks to explore how community college leaders craft institutional effectiveness strategies to create an internal culture of evidence, it is essential that the sixth model, which includes the nuances of organizational culture, be examined.

Although many educational leaders want to transform the educational environment overnight, Wolverton et al., (1993) warns against leaders focusing on quick results, bottom line mentality, and dependence on decision making by decree. Instead, higher education institutions should work within the culture while challenging its comfort zone in order to change the culture (Chaffee and Sherr, 1992; Eckel et al., 1999). Although paradoxical to imply that changing one's culture in ways considered congruent to its current inefficient one, researchers found that change processes not compatible with an institution's cultural norms and standards were in the end, ineffective and short-lived. Of particular importance is framing change in the language, values and context of institutional culture with which the stakeholders are familiar (Curry, 1992).

While faculty are ultimately responsible for fostering student learning, changing the organizational capacity for informed decision making, continuous quality improvement, and conditions which lead to change across departmental boundaries, remains the central task of the leaders of community colleges. Leaders able to effect change do so through the creation of a culture of inquiry (Earl and Katz, 2002) where each individual habitually seeks evidence on which to base decisions. By forming a culture of deep inquiry and skillful listening, leaders can strengthen the foundation from which all institutional decisions stem and eventually form cultures of evidence supportive of institutional effectiveness endeavors.

Theory of Organizational Culture and Leadership

To date, the most widely used organizational culture framework is that of Ed Schein (1988), Sloan Fellows Professor of Management Emeritus at MIT. Adopting a more functionalist view, Schein describes culture as a pattern of basic assumptions, invented,

discovered, or developed by a given group as it learns to cope with both external and internal stimuli. This "culture" exits on three very distinct planes and is subsequently taught to new members as the correct way to think and react to problems faced by the organization. The first plane is *artifacts*-organizational attributes that can be felt, heard and observed as individuals enter the culture. These attributes are difficult to measure. The second plane is *values*-espoused goals, ideals, norms and standards usually measured through organizational climate survey questionnaires. And lastly, Schein believes that within the third plane are *underlying assumptions*-phenomena that remain unexplainable when outsiders attempt to discover the values of the organization.

According to Schein (1988), senior leaders are the principle source for the generation and re-infusion of an organization's ideology, articulation of core values and specification of norms. Leaders have additional challenges as they are also responsible for the creation of means and opportunities for continuous quality improvement within the organization. New ideologies and values must be communicated effectively, internalized by employees, and translated into effective methodologies for improving performance while working within the culture to create and or maintain the organizational characteristics which reward and encourage collective effort and progress towards institutional effectiveness. *Figure 1* illustrates Schein's (1988) Organizational Culture Theory: Uncovering the Levels of Culture.

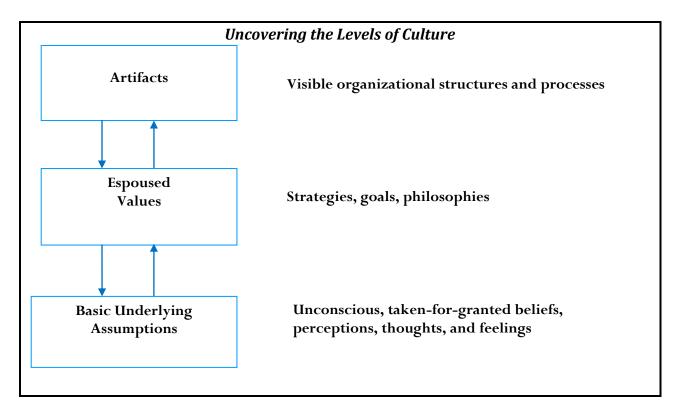


Figure 1 Schein's Levels of Culture Note. Schein, E. H. Organizational Culture. (1988). Sloan School of Management Working Papers, Massachusetts Institute of Technology.

As leaders look to implement improvement strategies, it is imperative that they utilize data to develop a culture of organizational learning stemming from a regular flow of information from data. Leaders must be cognizant of the fact that the integration of data into the decision making process requires both a change in the culture as well as in the data management infrastructure to support lasting change. The structure of the data management system should reflect the vision of the organization and propel the institution toward organizational learning and growth. While the possibilities for cultural change and improvement may be endless, the budget and resources are not. According to Nancy Dixon (1999), researcher from George Washington University, organizational learning is the process by which an organization attains information to change and implement action.

This organizational learning occurs as a social and dynamic process as knowledge is distributed across individuals and departments and becomes embedded in the culture, values, artifacts and underlying assumptions of the organization (Senge, 1990).

According to the Center on Educational Governance, there are six steps to take for educational systems looking to implement continuous improvement strategies. These six steps are: (a) build a foundation for data driven decision making; (b) establish a culture of data use and continuous improvement; (c) invest in an information management system; (d) select the right data; (e) build organizational capacity for data driven decision making; and (f) analyze and act on data to improve school performance, (Datnow, Park & Wohlstetter, 2007). The literature suggests that data can serve as the catalyst to propel organizational learning and improvement efforts through the creation of cultures of evidence. The intent of this study is to explore the complexity of both leadership and cultural influence on an institution's ability to build and sustain cultures of evidence for improved institutional effectiveness.

DESCRIPTION OF THE STUDY DESIGN

Qualitative Paradigm

When deciding on whether to employ a qualitative versus quantitative research design, there are a number of issues to consider. Quantitative research is described as an inquiry into a social or human problem based on testing a theory composed of variables, measured with numbers, and analyzed with statistical procedures, in order to determine whether the predictive generalizations of the theory are true (Creswell, 1994). Conversely, qualitative research attempts to establish how people interpret their experiences and the

world around them through a wide and deep-angle lens to understand a phenomenon in all its depth and richness in context-specific settings.

Each approach has different epistemological assumptions and theoretical goals for answering specific research questions. While quantitative tends to *quantify* phenomena by asking 'how long' or 'how many,' qualitative research is deemed appropriate for answering research questions aimed at discovery of *who*, *what*, *when*, *where* and *how*, such as the driving questions of this study. In deciding between a qualitative and quantitative approach, one must consider the nature of the research questions being posed as well as the role of the researcher. While quantitative researchers *use* tools, such as surveys and questionnaires to collect numerical data, qualitative researchers *are* the tool of the study as the analysis of the data is subjective and socially constructed. Creswell (2007) states,

"Qualitative research begins with assumptions, a worldview, the possible use of a theoretical lens, and the study of research problems inquiring into the meaning individuals or groups ascribe to a social or human problem. To study this problem, qualitative researchers use an emerging qualitative approach to inquiry, the collection of data in a natural setting sensitive to the people and places under study, and data analysis that is inductive and establishes patterns or themes. The final written report or presentation includes the voices of participants, the reflexivity of the researcher, and the complex description and interpretation of the problem and it extends the literature or signals a call for action," (p. 37).

Creswell (2007) goes on to suggest that the following criteria be utilized when determining the appropriateness of a qualitative paradigm. These criteria include: (a) when a problem or issue needs to be explored; (b) when we need a complex, detailed understanding of the issue; (c) when we want to understand the contexts or settings in which participants in a study address a problem or issue; and (d) when quantitative measures and the statistical analyses simply do not fit the problem (pp. 39-40).

This study will explore the phenomenon involving how leaders facilitate the change

process to a culture of evidence through an interpretive lens, grounded in the lived experiences of community college leaders. It gathered from interviews rich information and a detailed understanding of the attitudes, perceptions and lived experiences of the community college leaders. Finally, the utilization of a qualitative research design is more suited for this study as it is exploratory research suited to the investigation of social phenomenon with minimal, *a priori* expectations in order to develop explanations of the phenomena.

Case Study Method

A case study was the selected methodology to address the research purpose and driving questions. Patton et al, (2003) reveal that "the ultimate goal of the case study is to uncover patterns, determine meanings, construct conclusions and build theory," (p. 67). According to Yin (2003), "the distinctive need for case studies arises out of the desire to understand complex social phenomena" because the "case study method allows investigators to retain holistic and meaningful characteristics of real-life events," (p.2) such as cultural change and decision-making processes for example.

Merriam (1988) defines a qualitative case study as an intensive, holistic description and analysis of a single entity, phenomenon or social unit. Case studies are particularistic, descriptive and heuristic, and rely heavily on inductive reasoning in handling multiple data sources such as interviews, documents, artifacts, surveys, and descriptive statistics. The selection of the case is purposeful and intentional because it is appropriate for this research purpose to identify how and in what ways community college leaders craft institutional effectiveness strategies to facilitate continuous quality improvement. By understanding the respondents' realities, the researcher was able to capture the

phenomena, based on study participants' own words and perceptions of their reality. This specificity of focus makes it an especially good design for investigating practical problems, issues or concerns.

The case study is a particularly good means of educational evaluation because of its ability to explain the causal links in real-life interventions that are too complex for the survey or experimental strategies (Yin, 1984). Stake (1995) is in agreement with Merriam and Yin regarding the use of case study in qualitative research. He believes there are three primary reasons for using case studies: (1) to better understand a particular case, (2) to illustrate an issue or phenomenon, or (3) to extend understandings of a phenomenon and develop theory.

A case study is bounded, differentiating it from all others. This case study is bounded by a select number of Midwest exemplary AQIP community colleges, the leader of those colleges involved with implementing IE, at their college and the purpose of the research.

Site Selection

Several criteria shaped the process of selecting the study sites. Awareness that all community colleges are bounded by institutional effectiveness, accreditation, and accountability mandates, led to the focus on AQIP institutions. These institutions were situated in the states of the Midwest Region and were participants of AQIP.

Participant Selection

Merriam (1998) defines purposeful sampling as an assumption that "the investigator wants to discover, understand, and gain insight and therefore must select a

sample from which the most can be learned" (p.61). The Vice President typically serves as the Chief Academic Officer of the college and normally leads or coordinates all academic, strategic planning endeavors. In general, they provide the vision and leadership for all accreditation, program evaluation and accountability issues. As this study is interested in informed data driven decision making strategies in postsecondary education, it seems most feasible to study this phenomenon from the leadership position most adept at collecting and analyzing institution specific data for improved effectiveness planning.

Data Collection

For this study, three methods of data collection were employed: interviews, documents, and field notes. The primary data collection technique was semi-structured interviews with Academic Vice Presidents (or designee) that facilitated the transition of their college to cultures of evidence for continuous quality improvement. The semi-structured nature of the interview allowed for flexibility while still maintaining a baseline comparison for participant responses through posing similar questions and allowing for probing follow-up questions. This added detail encouraged responses that were rich and contextually specific to that college's setting and leadership.

Demographic data was collected regarding the employee, including ethnicity, age, role at the college, length of employment at the institution and gender. This data for the study was collected using a web based survey tool (Survey Monkey.com). Field notes were also used to add to the richness of the data collected. These notes included reflections and observations of the participant interviews as well as other pertinent research experiences.

Data Analysis

As qualitative research is concerned with social phenomena, its methods of inquiry

and analysis deal with non-statistical design. As such, it tends to rely on an inductive process in which themes and categories emerge through analysis of data collected typically through interviews, observations and artifacts. As these themes and categories emerge through an interpretive technique known as coding, each data segment is labeled with a "code" consisting of a word or short phrase that interprets meaning to data segments consistent with theoretical frameworks found in the literature and research objectives.

DEFINITION OF KEY TERMS

Terms critical to understanding the study are defined below:

ACCREDITATION

Accreditation by nationally recognized agencies provides objective, public assurance that an institution has been found to meet clearly stated requirements and criteria. The accreditation process results in an evaluation of the entire institution in terms of its mission. Accreditation establishes standards, or criteria, to assess the formal educational activities of the institution, evaluate governance and administration, financial stability, student personnel services, institutional resources, student academic achievement, institutional effectiveness, and relationships with constituencies inside and outside the institution (USDE, 2008).

ACTION PROJECTS

AQIP Action Projects create a foundation for an institution's improvement initiatives and should demonstrate the organization's commitment to quality. AQIP institutions must commit to 3-4 projects that will propel the college toward continuous quality improvement. At least one action project must relate directly to Helping Students Learn (HLC, 2010).

AQIP

The Academic Quality Improvement Program (AQIP) is a *reaccreditation* process used by the Higher Learning Commission of the North Central Association of Colleges and Schools. It is structured around quality improvement principles and processes and involves structured goal setting, networking, and accountability activities (HLC, 2010).

CONTINUOUS QUALITY IMPROVEMENT (CQI)

Approach to quality management that emphasizes the organization and its systems. It focuses on "process" rather than the individual; recognizes both internal and external "customers"; promotes the need for objective data to analyze and improve processes (Cornesky, 1990).

CULTURE OF EVIDENCE

A commitment to the collection and analysis of data to improve student outcomes (Brock, Jenkins, Ellwein, Miller, Gooden, Martin, MacGregor & Pih, 2007).

INSTITUTIONAL EFFECTIVENESS

The extent to which an institution achieves its mission and goals (Alfred et al, 1999).

ORGANIZATIONAL CHANGE

Defined as an effort that consists of actual physical changes to operations and different emotional stimulation (Bernerth, 2004).

ORGANIZATIONAL CULTURE

The deep-rooted beliefs, values and assumptions widely shared by members of an organization which powerfully shape the identity and behavioral norms for the group (Schein, 1990).

AQIP STRATEGY FORUM

The Strategy Forum provides an institution with a supportive, facilitated peer review process that will stimulate and assist it in selecting, critically examining, and committing to selecting Action Projects that will drive quality improvement. Each AQIP institution participates in a Strategy Forum once every four years (HLC, 2010).

AQIP SYSTEMS APPRAISAL

The Systems Appraisal process involves five or more reviewers trained by the Higher Learning Commission that review the institution's Systems Portfolio. This team of reviewers will produce an Appraisal Feedback Report that identifies strengths and opportunities for improvement within, each of the AQIP nine characteristics. This Systems Appraisal occurs within the 8-10 weeks following submission of the Systems Portfolio (HLC, 2010).

AQIP SYSTEMS PORTFOLIO

The Systems Portfolio is designed to present an overview of the institution and details the major processes, programs and services used to accomplish the mission. AQIP institutions are required to assemble a Systems Portfolio every four years and answer questions under nine AQIP characteristics. Those nine characteristics are: (HLC, 2010).

- 1. Helping Students Learn
- 2. Accomplishing Other Distinctive Objectives
- 3. Understanding Students' and Other Stakeholders' Needs
- 4. Valuing People
- 5. Leading and Communicating
- 6. Supporting Institutional Operations
- 7. Measuring Effectiveness
- 8. Planning Continuous Improvement
- 9. Building Collaborative Relationships

TOTAL QUALITY MANAGEMENT

A business management strategy aimed at embedding awareness of quality in all organizational processes (Van der Post, Coning & Smit, 1997).

Organization of the Dissertation

Chapter 1 details the background of the study and its significance to the community college field. It is followed by a description of the research purpose and driving questions which guided the study. A brief literature review serves to highlight the pertinent theories and concepts used in order to situate this research. The study design was also described establishing for the reader a contextual framework for the research. Lastly, definitions of relevant terms were included to provide greater understanding of the research and subsequent implications of research.

Chapter 2 provides a review of the relevant literature and will serve as the lens or framework with which to view this study and its findings. The literature review will include an overview of: (a) American community colleges; (b) regional accreditation processes; (c) the primary theoretical concept espoused by Dennison and Mishra (1995); and Situational Leadership theory by Blanchard et al (1993). Finally, as this research sought to provide insights into how exemplary colleges inoculate the organizational culture to promote institutional effectiveness practices, research related to organizational implementation processes will be highlighted.

Chapter 3 provides an overview of the research design identifying it as a qualitative case study, situated within an interpretive paradigm. The methodology of the study is described in detail and includes the case selection criteria, data collection methods, analysis techniques, ethical considerations, and information regarding the researcher as the research instrument. A discussion on purposeful and maximum variation sampling is included as well as an explanation regarding the community college selection criteria of

site diversity representing rural, suburban and urban-centered colleges of various sizes (annual student FTE).

In Chapter 4, a rich description of the case colleges and the study participants will be presented affording a context for understanding the study findings. The data gathered was summarized in a series of tables and charts which indicated the a priori themes derived from the literature review. The following four major *a priori themes* will be presented in greater detail and served as an analytical lens in which the data was coded and subsequently analyzed: (a) reasons for engaging in institutional effectiveness; (b) implementation processes; (c) organizational culture; and (d) leadership.

Chapter 5 provides the presentation and analysis of the data obtained. The rich, thick data gathered from the multiple data sources were analyzed, and information provided by the study participants was the basis of the research findings, conclusions, and implications for community college leaders.

As this study seeks to answer how and in what ways community college leaders craft institutional effectiveness strategies to facilitate continuous quality improvement, insights from individuals responsible for these processes were obtained. Chapter 6 details the rich, holistic descriptions of the phenomenon provided by study participants. The findings are presented, their implications for community colleges and the McKinney Model for Implementation. In addition, recommendations for future research are included.

CHAPTER 2

LITERATURE REVIEW

INTRODUCTION

The issue of accountability throughout higher education has never been greater. Federal and state policymakers have championed this higher education accountability agenda sustained by a confluence of factors affecting the American public. These factors are varied and include: (a) public concerns about the rising costs of college; (b) skepticism about the accessibility of postsecondary education for low-income and minority students; (c) the lack of transparency regarding institutional performance, especially given the significant public investment in higher education; and (d) state and federal interest in ensuring an adequate and globally competitive workforce (Immerwahr & Johnson, 2007; Pickering & Bowers, 1990; Ruben, 2007; State Higher Education Executive Officers, 2005; U.S. Department of Education, 2006). The result of these factors is a growing effort from outside the higher education community to demand greater evidence of quality in higher education (Ewell, 2002). Federal and state policymakers have placed increased pressure on colleges and universities to provide evidence of institutional effectiveness in response to eroding public trust in the enterprise (Alexander, 2000; Allen & Bresciani, 2003; Brooks, 2005; Carey, 2006; Cole, Nettles, & Sharp, 1997; Peterson & Augustine, 2000; Shavelson & Huang, 2003). Specifically, sources of pressure for increased accountability include the federal government; particularly the U.S. Congress and U.S. Dept of Education; state governments through legislatures and state higher education agencies; and accrediting agencies.

Research related to accreditation and assessment in higher education indicates the importance of evaluating institutional effectiveness to improve practice and to meet external demands for accountability. Although the higher education literature cites accountability as a driving factor for assessment at colleges and universities, there is limited empirical research on the influence of external standards of accreditation at community colleges and the process by which these institutions craft institutional effectiveness strategies for continuous quality improvement. Therefore, a significant gap in the community college literature exists.

This study is significant as it adds to the body of knowledge regarding the process of implementing institutional effectiveness at community colleges. As little is known of how community colleges initiate and guide their change efforts in order to create responsive institutional effectiveness strategies, the results of this study will provide a deeper understanding of the implementation processes leaders employ. *Figure 2* illustrates the focus of the research study which includes the demands on community colleges for improved institutional effectiveness, the process or strategies by which institutional effectiveness may be achieved, and an overview of institutional effectiveness success at exemplary colleges.

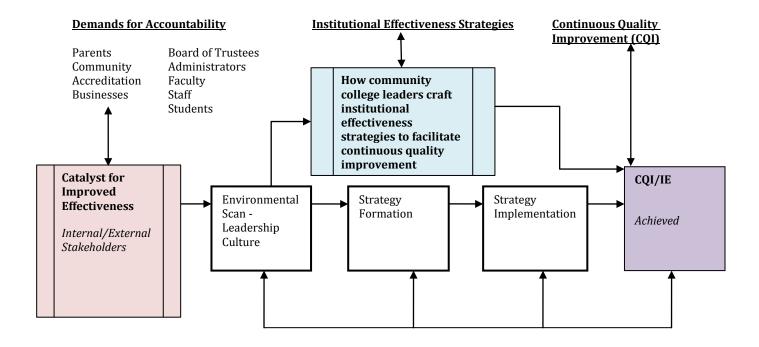


Figure 2 Conceptual Focus of the Study. Note: Copyright Teresa McKinney, 2010.

This chapter provides a review of current research relevant to this study. The conceptual framework used to situate the research is comprised of the concepts of organizational culture and change, accreditation of higher education institutions and Situational Leadership theory. An overview of the community college system focusing on its historical underpinnings, multiple mission pillars, and enrollment growth serves as the contextual construct for the research. The impetus of accreditation for higher education institutions amid demands for accountability and quality driven colleges, lays the foundation for later discussions on the concept of institutional effectiveness adoption, implementation, and sustainability. Infused within the institutional effectiveness construct, are the concepts of organizational culture and change management strategies needed to successfully undertake and fulfill an institutional effectiveness endeavor. Finally,

applicability to community college leaders guiding the effectiveness process for continuous quality improvement.

THE AMERICAN COMMUNITY COLLEGE

Described as the gateway to higher education (Cohen & Brawer, 2003), American community colleges have served a democratizing function since their inception in 1901 with the founding of Joliet Junior College (Coley, 2000). These colleges not only provided students with an opportunity to earn credits for the first two years of a four-year bachelor's degree, but with their lower tuition costs, community colleges also gave students the means to save money while learning in a supportive, close-to-home environment.

Community colleges allow students to access educational opportunities leading to associate degrees and/or certificates and they offer continuing education and personal development classes for the broad spectrum of adult learners (Cohen & Brawer, 2003).

From their humble beginning in the early 1900s through their initial expansion years of the 1960s, community colleges have emerged as a unique and important component to higher education in America. Initially focused on the provision of general liberal arts studies, these institutions gradually evolved during the Depression of the 1930s when community colleges began offering job-training programs as a way of easing widespread unemployment (Brint et al, 1989). The transformation of junior colleges into community colleges continued after the population growth of the World War II generation. As an educational provider for the entire community, the community college has opened its doors to all who could benefit particularly the underserved, under-prepared and underrepresented. These unique institutions remain flexible and nimble responding to the needs

of the communities in which they reside. Over the years, community colleges have adapted their programs and services to the needs of diverse learners, the emerging needs of the communities served, and to changes in the environment (Cohen & Brawer 2006).

In general, community colleges value and overtly foster open access and equity, affordability, comprehensiveness, and community building (Coley, 2000). These institutions strive for equal access through open admissions policies and removal of barriers to higher education for the traditionally underserved. Cohen and Brawer (2003) attribute the community college tradition of universal access to the American philosophy of opportunity for advancement for all individuals, regardless of social stratum, and to the mid-twentieth century initiative to establish localized institutions serving the educational needs of their surrounding communities. The pursuit of universal access and the tradition of community service have resulted in community colleges enrolling a broad spectrum of students not likely to be served by other segments of the higher education system.

According to Cohen & Brawer (2003), "no other countries but the United States have formed comprehensive community colleges," (p. 26). They attribute this to the "belief that all individuals should have the opportunity to rise to their greatest potential" (p. 26).

The distinctive contribution of community colleges to American higher education is their adaptive, transmutable mission (Alfred et al, 2007). They represent higher education's local, front-line interface with society. To fulfill their missions, comprehensive community colleges provide: (a) academic transfer and general/liberal education; (b) career and technical education (vocational degrees and certificates); (c) adult, continuing, and community education; (d) developmental, remedial classes; and (e) business and industry services (Coley, 2000). There is no doubt by offering five varying curricular

functions or missions for the community college, this system is most adept at serving the individuals in its community in a myriad of ways.

Currently the largest and fastest-growing sector of higher education in the U.S. with 1,173 regionally accredited community colleges located throughout the country, these institutions serve more than 11.7 million students, or approximately 43 percent of all U.S. undergraduates (American Association of Community Colleges, 2010; Cohen & Brawer, 2003). These numbers are depicted in *Figure 3* which shows the expanse of community colleges across the nation.



Figure 3 Community Colleges in the United States Note. AACC, 2010, www.aacc.nche.edu,

Since 1901, at least 100 million people have attended community colleges making these institutions a vital part of the postsecondary education delivery system (Coley, 2000). Without community colleges, millions of students would not be able to access the education they need to be prepared for further education or the workplace. There is no doubt;

community colleges are often the access point for education in any given geographic area and a catalyst for economic development (Cohen and Brawer, 2003). Acknowledging this truth, United States President, Barack Obama, proposed the American Graduation Initiative in 2009, a \$12 billion federal investment to substantially expand the capacity of the nation's community college system (Brandon, 2009). If funded, it represents a historic new federal investment in the largest and fastest growing segment of higher education, the community college system.

Today, community colleges are recognized as an American creation that placed publicly funded higher education within close-to-home facilities for over a hundred years. Since then, they have been inclusive institutions that welcome all who desire to learn, regardless of wealth, heritage, or previous academic experience. The process of making higher education available to the maximum number of people continues to evolve. Continued recognition, growth and expansion also brings forth increased demands for accountability as the government and other stakeholders are looking to colleges and universities as vital components of economic development and growth (Alfred et al, 2007). As policy makers increasingly view higher education's role in the larger context of globalization and economic prosperity, community colleges are tasked to design constructive accountability systems with measures that focus on continuous quality improvement strategies (Coley, 2000).

Challenges Facing Community Colleges

Contemporary community colleges face a new reality in which the only predictable constant in their environment is change. Calls for reformative change, demands for increased accountability and greater organizational transparency are no longer unique to

four year colleges and universities. Community colleges are also experiencing greater external demands of accountability from their stakeholders (Alfred et al, 2007). These stakeholders require a more substantive approach to accountability, an approach that yields better results and is embedded into the very fabric of the community college's organizational culture. Assisting to guide and support these accountability initiatives, institutions need data that is dependable, targets problem, issues and concerns, and mobilizes the will, resources and institutional mission to improve performance. Therefore, initiating, communicating, and facilitating purposeful and meaningful change to enhance a variety of quality improvement efforts is one of the most important functions community college leaders can undertake (Alfred et al. 2007). Now more than ever, community college leaders must create and promote a culture of evidence which permeates throughout their organizations. Defined as a systematic, data-driven, comprehensive approach to improving institutional effectiveness, an embedded culture of evidence, seeks to enhance and improve decision making and thus institutional performance (McClenney, 2003). While a few community colleges have begun to immerse themselves and their organizations into the assessment of academic programs, many institutions have yet to plan, develop and implement a systematic process for data collection and analysis for continuous quality improvement that is pertinent for the overall functionality of the institution (Alfred et al. 2007). Accreditation, at its core, seeks evidence that institutions are striving to achieve continuous quality improvement (Eaton, 2003). Insights into the accreditation and quality assurance movements assist to ground today's accountability initiatives within the community college milieu.

ACCREDITATION AND QUALITY ASSURANCE

Accreditation Overview

Increased demands for accountability have served as the catalyst for community college leaders to show tangible proof of their continuous quality improvement efforts. In the United States, accreditation serves as the primary mechanism for ensuring the quality of higher education institutions (Eaton, 2003). According to the U.S. Department of Education (2008), accreditation is defined as,

The process used in U.S. education to ensure that schools, postsecondary institutions, and other education providers meet and maintain, minimum standards of quality and integrity regarding academics, administration, and related services. It is a voluntary process based on the principle of academic self-governance (U.S. Dept. of Education, 2008).

Since accreditation is a voluntary process relying on the integrity of the institution to demonstrate the established standards for quality, it encourages and facilitates continuous assessment and quality improvement as well as affording a means of accountability to stakeholders and the general public.

The notion of accreditation and standardization applied to an education system in the United States began as early as 1784 (New York State Education Department, 2008). Created by state statue, the Regents of the University of the State of New York were a precursor to contemporary accrediting legislation and organizations. The Regents, empowered to act as trustees of Columbia College (originally chartered as King's College in 1754) and of every other college and academy incorporated in the state thereafter (New York State Education Department, 2008), were required by law to visit and review the

work of each college in the state. This body was mandated to then register the curriculum of each institution and report to the legislature.

Another type of catalyst for accreditation was promulgated by the growth of American colleges during the second half of the nineteenth century. At this time, teachers' colleges, land-grant colleges, women's colleges, black colleges, and various specialized institutions were developing without common standards for curriculum development, admission and degree requirements. The rapid, unregulated growth produced more than an increase in the number of new higher education institutions. It also produced public pressure for the establishment of some type of rating or evaluation system (Newman, 1996). More traditional colleges and universities began to call for government evaluation as a way to limit competition with what they construed as inferior institutions. In 1884, members of the Massachusetts Classical and High School Teachers Association, in cooperation with Harvard University President Charles Eliot, formed the New England Association of Schools and Colleges (Parsons, 2010). This marked the beginning of what would come to be known as the regional accrediting associations. In founding order, the six regional accrediting agencies are: the New England Association of Schools and Colleges founded in 1885; the Middle States Association of Colleges and Schools founded in 1887; the North Central Association of Schools and Colleges and the Southern Association of Colleges and Schools founded in 1895; the Northwest Association of Colleges and Universities established in 1917, and the Western Association of Schools and Colleges created in 1924 (Middle States Commission, 2009). These agencies sought to establish quality standards to address public concerns regarding the excellence of higher education

institutions. The regional higher education accrediting agencies and the states, territories, and countries to which they serve and are responsible for reviewing, are listed in Table 1.

Table 1 States and Territories Allocated to Higher Education Regional Accrediting Agencies

Accrediting Agency	States and Territories			
Middle States Association	New York	New Jersey	Pennsylvania	Delaware
	Puerto Rico	District of Columbia		
New England Association	Connecticut	Maine	Massachusetts	New
	Vermont	Rhode Island		Hampshire
North Central Association	Arkansas	Arizona	Colorado	Wyoming
	Indiana	Kansas	Michigan	Iowa
	North Dakota	Nebraska	Ohio	Minnesota
	Wisconsin	West Virginia	Illinois	New
	Missouri	South Dakota		Mexico
Northwest Association	Alaska	Idaho	Montana	Oregon
	Utah	Washington	Nevada	
Western Association	California	Hawaii	Guam	American
	Palau	Northern Marinas Islands	Micronesia	Samoa
Southern Association	Virginia	Florida	Georgia	Kentucky
	North Carolina	South Carolina	Alabama	Tennessee
	Mississippi	Texas		

Note. Adapted from CHEA Conditions of Accreditation, 2007

By the 1930's, accreditation had become an established component of the higher education landscape. While the six regional associations differ in size, traditions, and character, they provide the basic framework for accreditation with their foci on issues such as: (a) appropriateness of the institutional mission and objectives; (b) effectiveness of the

institution in meeting its mission and objectives; (c) adequacy of financial and physical resources; (d) instructional space, laboratories, libraries, and offices; (e) effectiveness of management, (f) administrative structure and function; (g) quality of faculty; and (h) adequacy of personnel and student services offered by the institution.

Legislation enacted from 1952 – 1965 continued to strengthen the development and maturation of higher education institutional accreditation in the United States. In 1952, Congress passed the Veteran's Readjustment Assistance Act, which mandated the U.S. Secretary of Education (previously known as the Commissioner of Education) to publish a list of federally recognized accreditation associations. This legislation implicitly asserted that accrediting agencies were the most reliable source for determining the quality of education and training. Thus, began the reliance for accreditation on non-governmental entities. Continuing today, the entities which conduct accreditation are associations comprised of institutions and academic specialists in specific subjects, who establish and enforce standards of membership and procedures for conducting the accreditation process (U.S. Dept. of Education, 2008).

In 1965, Congress enacted the Higher Education Act (HEA) to bolster resources for colleges and universities and provide financial assistance for those wanting to continue with their postsecondary education. The U.S. Department of Education (2010) elaborates on the role the HEA 1965 legislation had on accreditation by stating:

Most institutions attain eligibility for Federal funds by holding accredited or preaccredited status with one of the accrediting agencies recognized by the Secretary, in addition to fulfilling other eligibility requirements. For example, accreditation by a nationally recognized institutional accrediting agency enables the institutions it accredits to establish eligibility to participate in the Federal student financial assistance programs administered by the U.S. Department of Education under Title IV of the Higher Education Act of 1965, as amended (http://www2.ed.gov/admins/finaid/accred/accreditation_pg3.html#Recognition).

The prominent tenets of the 1965 HEA legislation included one, Title III, specifically relevant to accreditation:

- a) Title I of the act provided for the funding of extension and continuing education programs;
- b) Title II of the act allocated the funds to increase institutional library collections as well as the number of employed qualified librarians;
- c) Title III of the act focused on strengthening "developing institutions" that have not yet met minimum standards for accreditation;
- d) Title IV of the act assisted students with undergraduate scholarships, loans with reduced interest rates, and work-study programs;
- e) Title V of the act concentrated on improving the quality of teaching; and,
- f) Title VI provided financial resources to institutions to improve undergraduate instruction.

The original 1965 Act was part of a domestic agenda created by former President Lyndon B. Johnson entitled the "Great Society." After much delay, *o*n August 14, 2008, President George W. Bush signed the Higher Education Opportunity Act (HEOA) into law reauthorizing the Higher Education Act (HEA) of 1965. This complex and lengthy legislation covers a variety of programs and regulations related to student aid, accreditation, and other various issues. It also created a considerable amount of new reporting and federal regulatory requirements. The Act calls for increased accountability and accreditation which was one of the most controversial topics in HEA reauthorization. This increased accountability involves such elements as student achievement, transparency in accreditation, restructuring the National Advisory Committee on Institutional Quality

and Integrity (NACIQI), and respect for the institution's stated mission (U.S. Department of Education, 2008).

Characteristics of Accrediting Organizations

Accrediting bodies have common characteristics but differ in scope, sponsorship, and structure. Three major types of accrediting agencies exist in the United States: (a) regional agencies, which accredit the majority of traditional public and private postsecondary academic institutions and encompasses a comprehensive review of all institutional functions; (b) national agencies, which accredit proprietary and technical institutions; and (c) programmatic agencies, which accredit programs and institutions that prepare students in specific fields such as law, and medicine (Eaton, 2003). As this study is focused on community colleges, it is essential to frame the research in terms of the accrediting agencies responsible for the review of community colleges in this nation...regional accrediting organizations (CHEA, 2007).

The Regional Accreditation Process

The impetus for accreditation arose in the United States as a means of conducting peer evaluation of higher education institutions and programs. In its simplest form, accreditation can be defined as a quality control mechanism (CHEA, 2007). In a more complex form, accreditation can be defined as a process in which an institution evaluates its educational mission, goals, objectives, and activities and seeks an independent peer judgment to confirm that it is achieving its goals and objectives, and that it is equal to comparable institutions (Eaton, 2003). Colleges and universities seek accredited status not only to ensure they are comparable to like institutions (peer-to-peer), but also as a means

of demonstrating their academic quality to students and the general public who have placed their trust in the reliability of these agencies. A geographical map (*Figure 4*) displays the six regional accrediting agencies providing a visual representation of the state assignment of agencies across the United States.

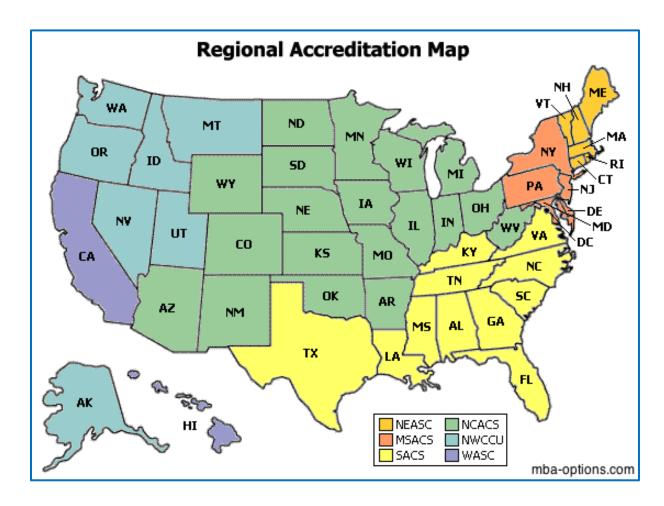


Figure 4. Map of Regional Accrediting Agencies in the United States. Note: Copyright MBA Options, Regional Accreditation Map. Source http://www.mba-options.com/regional-accreditation.html.

While each regional accrediting agency has its own standards, bylaws, and procedures, in general, the same prescribed regimen is utilized for institutions seeking accreditation throughout the country. Although this review process can be one of two

regimens, generically, this entails an institutional review that may range from once every few years to once every ten years and/or is described as ongoing (CHEA, 2007). The initial earning of accreditation for the institution is not entry to indefinite accredited status, but rather grants the status for a specific period of time, after which validating periodic reviews are required (HLC, 2010).

A college or university seeking accreditation must go through a number of steps stipulated by a regional accrediting organization. These steps involve a combination of several tasks: (a) preparation of evidence of accomplishment by the institution or program; (b) scrutiny of these materials; (c) a site visit by faculty and administrative peers; (d) and action to determine accreditation status by the accrediting organizations (Eaton, 2003; CHEA, 2007). Judith Eaton, President of the Council for Higher Education Accreditation (CHEA) identifies the five key features of a generic accreditation process (Eaton, 2003):

- *Self-study:* Institutions and programs prepare a written summary of performance based on accrediting organizations' standards.
- *Peer review*: Accreditation review is conducted primarily by faculty and administrative peers in the profession. These colleagues review the self-study and serve on visiting teams that review institutions and programs after the self-study is completed. Peers comprise the majority of members of the accrediting commissions or boards that make judgments about accrediting status.
- *Site visit:* Accrediting organizations normally send a visiting team to review an institution or program. The self-study provides the foundation for the team visit. Teams, in addition to the peers described above, may also include public members (non-academics who have an interest in higher education). All team members are volunteers and are generally not compensated.
- Action (judgment) by accrediting organization: Accrediting organizations have decision-making bodies (commissions) made up of administrators and faculty from institutions and programs as well as public members. These commissions may affirm accreditation for new institutions and programs, reaffirm accreditation for ongoing institutions and programs, and deny accreditation to institutions and programs.

• *Ongoing external review*: Institutions and programs continue to be reviewed over time on cycles that range from every few years to ten years. They normally prepare a self-study and undergo a site visit each time

As all six regional accrediting agencies share these basic tenets, all bear the responsibility for assuring students, teachers and community members that their school of choice not only meets, but also surpasses regional and national expectations for higher learning. As this study is focused on the exploration of continuous improvement efforts of AQIP community colleges in the Midwest, overview of the literature regarding AQIP and the regional agency responsible for oversight of this specific geographic region, the North Central Association of Colleges and Schools, is necessary.

North Central Association/Higher Learning Commission

The North Central Association of Colleges and Schools (NCA) was founded for the purpose of establishing close relations between the colleges and secondary schools of the region. Two independent associations hold membership in the Association: The Commission on Accreditation and School Improvement (CASI) which accredits kindergarten through twelfth grade levels; and the Higher Learning Commission (HLC) which accredits degree-granting organizations of higher education (HLC, 2010).

The North Central Association currently maintains a membership of over 1,000 higher education institutions, 30% of which are community colleges (HLC, 2010). The Higher Learning Commission (HLC) is an independent corporation and one of two commission members of the North Central Association of Colleges and Schools. It is the purview of the Higher Learning Commission to accredit degree-granting post-secondary educational institutions in the 19 states located in the North Central region. The number

of higher education institutions accredited by HLC makes it the largest accrediting body for both four-year and two-year institutions (HLC, 2010).

The Higher Learning Commission provides two programs for maintaining accreditation status: the Program to Evaluate and Advance Quality (PEAQ) and the Academic Quality Improvement Program (AQIP). PEAQ is the venerable accreditation program institutions undertake as they apply for membership to the HLC. AQIP is a quality improvement program for higher education institutions and serves as an alternative evaluation process for accredited institutions. Both programs utilize accountability tools to foster the accreditation process and improve upon the quality of services connected to each college's mission.

While programmatic differences exist between PEAQ and AQIP, the Higher Learning Commission (HLC) mandates certain requirements from its member institutions.

This includes satisfying the five HLC Criteria for Accreditation, and therefore, complying with the Federal Compliance Program (http://www.ncahlc.org/). These five criteria for accreditation are as follows:

Criterion One: <u>Mission and Integrity</u>. The organization operates with integrity to ensure the fulfillment of its mission through structures and processes that involve the board, administration, faculty, staff, and students.

Criterion Two: <u>Preparing for the Future</u>. The organization's allocation of resources and its processes for evaluation and planning demonstrate its capacity to fulfill its mission.

improve the quality of its education, and respond to future challenges and opportunities.

Criterion Three: <u>Student Learning and Effective Teaching</u>. The organization provides evidence of student learning and teaching effectiveness that demonstrates it is fulfilling its educational mission.

Criterion Four: <u>Acquisition, Discovery, and Application of Knowledge</u>. The organization promotes a life of learning for its faculty, administration, staff, and students by fostering and supporting inquiry, creativity, practice, and social responsibility in ways consistent with its mission.

Criterion Five: Engagement and Service. As called for by its mission, the organization identifies its constituencies and serves them in ways both value. (http://www.ncahlc.org/download/Overview07.pdf, p. 5-6).

The HLC relies on constant and continuous contact with accredited institutions to ensure quality higher learning. Accredited institutions, whether they are utilizing PEAQ or AQIP, are required to pay dues, submit progress reports, monitoring reports, annual reports and participate in focus visits. However, the methods to accomplish these requirements differ. PEAQ is the pathway through which all applying institutions that complete the eligibility process pursue an affiliated status with the Higher Learning Commission. Conversely, to participate in AQIP, an institution must already be accredited through the HLC and be in pursuit of an added level of accountability and continuous quality improvement. Table 2 compares the two accreditation processes in greater detail.

Table 2 Comparison of PEAQ and AQIP

7 year cycle with continuous improvement	
activities – Systems Portfolio submitted during 4 th year	
Open only to accredited institutions not on probation or sanction	
Focus on institution improving performance over time	
Nine Accreditation Criteria Choices: (a) Helping Students Learn, (b) Accomplishing other Distinctive Objectives, (c) Understanding Student and other Stakeholder's Needs, (d) Valuing People, (e) Leading and Communicating, (f) Supporting Institutional Operations, (g) Measuring Effectiveness, (h) Planning Continuous Improvement, (i) Building	
Collaborative Relationships. Institutional Self-Assessment (Examiner Survey); Emphasis on evidence of progress on institutionally-determined areas needing improvement	
Participation in Strategy Forum (1^{st} year and every 4 years thereafter)	
Creation of Systems Portfolio (years 1-3)	
AQIP team provides feedback/Institution responds with changes for improvement and updates Systems Portfolio	
Systems Portfolio updated annually	
Action Projects and Systems Portfolios are shared with the public	
Institution not improving performance returned to standard process	
Source <u>http://www.ncahlc.org/aqip-home/</u>	
S	

Academic Quality Improvement Program (AQIP)

In 1999, with the assistance of a grant from the Pew Charitable Trusts, the Academic Quality Improvement Program (AQIP) was initiated by the Higher Learning Commission (HLC). The AQIP process attempts to infuse the principles of continuous improvement into the culture of higher education institutions by providing an alternative process by which accredited institutions can maintain their accreditation. By utilizing AQIP, an institution demonstrates the meeting of accreditation standards and expectations through activities tailored to improve their performance in a more sustainable manner (HLC, 2010).

AQIP is based on the Malcolm Baldrige Criteria for Educational Excellence, which itself is founded upon the principles of Total Quality Management (TQM). The creation of the AQIP process is the result of increasing demands from the public and from local, state, and federal governments for more accountability in higher education (AQIP, 2007). The Higher Learning Commission concluded that the more in-depth, continuous quality improvement process of AQIP would satisfy stakeholder demands for increased transparency and accountability.

The AQIP program examines the context, processes, results, and improvements of a higher education institution. The following nine criteria guide the AQIP process which compels organizations to embed quality principles into the institution's culture: (1) helping students learn; (2) accomplishing other distinctive objectives; (3) understanding students' and other stakeholders' needs; (4) valuing people; (5) leading and communicating; (6) supporting institutional operations; (7) measuring effectiveness; (8) planning continuous improvement; and (9) building collaborative relationships (AQIP, 2007).

Institutions interested in participating in AQIP are required to develop a minimum of three action projects of six months to three years duration (NCA, 2010). The intent of the action project is to identify opportunities for improvement where efforts would be focused and measurement and continuous improvement would be reported. After three years of AQIP membership, each institution submits a systems portfolio that describes the results and improvement for each of the nine criteria. These portfolios are then reviewed by a panel of independent peer reviewers who assign a score to each criterion and develop a follow-up report identifying strengths and opportunities for improvement for each of the criteria. After a seven year cycle, a reaffirmation visit conducted by two HLC evaluators is scheduled. A report is then generated verifying the institution's compliance with the HLC's Criteria for Accreditation.

Critical to the success of any higher education institution are its efforts to continually improve in all aspects of the organization with a concerted focus on student learning achievement (Alfred et al, 2007). Undoubtedly, the rapidly and dramatically changing higher education landscape requires more agility and accountability. The purpose of accreditation should serve the common good through assuring and advancing the quality of post-secondary education. Accreditation appropriately encourages introspection, reflection, analysis, and action. The intended focus of accreditation is three-fold:

- 1. To assess the quality of an institution and its effectiveness;
- 2. To assist the institution in making improvements in its operations and effectiveness:
- 3. To provide mission-driven accreditation.

With AQIP, the goal is that quality principles and processes become institutionalized throughout the entire infrastructure and culture of the organization. As the purpose of this study is how and in what ways community college leaders craft institutional effectiveness strategies for continuous quality improvement, information and insights provided by leaders that have successfully been identified as high performing institutions by the Higher Learning Commission will assist other institutions.

INSTITUTIONAL EFFECTIVENESS

Community colleges are increasingly called upon to document their effectiveness to a variety of stakeholders. Concerned with the quality of higher education, external stakeholders demand accountability, high performance, and continuous improvement. Expressing concern for autonomy and academic freedom, internal stakeholders question the authority of external bodies to dictate activities for measuring accountability. External and internal community college stakeholders are shown in *Figure 5*.

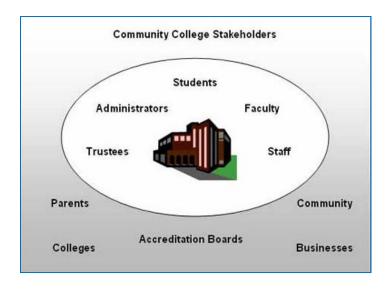


Figure 5. Internal and External Community College Stakeholders. Source: Http://www.league.org/publication/whitepapers/0804.html)

While different viewpoints abound among various constituent groups, general agreement exists as to the need for accountability and the establishment of policies and procedures to ensure the maintenance and enhancement of effectiveness (Schray, 2006).

As demands for accountability increase, higher education institutions are being asked to justify the vast amounts of time, effort, and money invested by students, faculty and staff, taxpayers, local communities, and society in general. In many ways, accountability to students, employers, accrediting agencies, government bodies that control the funding sources, serve as the catalyst for institutional effectiveness (IE) initiatives. IE has become so significant to colleges and universities that the lexicon ingrained in the concept has become embedded in their accreditation and strategic efforts. In addition, transference of this concept into action results in institutional cultures being transformed as human, fiscal, and technical resources are aligned to support and promote effectiveness (Schray, 2006; Mishra, 2007).

To facilitate numerous strategic endeavors undertaken by each institution, senior leadership positions are being created or revised to include a focus on institutional effectiveness. However, as these efforts become more prominent, many higher education institutions, community colleges in particular, are left with a major question: "What exactly is institutional effectiveness in education, and how does the institution fully leverage effectiveness efforts to increase its capacity and ability to serve students and their learning needs?"

Unfortunately, many colleges are plagued with the challenge of how to answer this question but have limited experience in developing and implementing the processes required for IE to be successful (Alfred et al, 2007). Traditional methods of self-defined

and poorly monitored improvement efforts are no longer sufficient to adequately address the expanded effectiveness criteria required by accrediting agencies. These criteria demand evidence of student learning, appropriate student services, and quality cultures supportive of continuous improvement endeavors. However, the lack of financial and infrastructure resources, absence of a standard definition of quality and effectiveness, and institutional cultures that have been traditionally slower to align human, fiscal, and technical resources to support and promote effectiveness, are among the chief hindrances to fulfilling these demands (Schray, 2006; Mishra, 2007).

In order to understand the meaning of the concept IE for higher education, several key foundational components must be considered. These components include: (a) a definition of institutional effectiveness in higher education; (b) the implementation process for institutional effectiveness initiatives; (c) the impact of an organization's culture and need for change; and (d) the leadership of the institution.

Certainly, what has contributed most to the limited success of institutional effectiveness efforts in post-secondary education is the fact that there is no universal definition or model for effectiveness (Skolits & Graybeal, 2007). Instead, what has existed is a nebulous organizational climate where effectiveness is something that we know when we see it—but we are often unable to concretely describe it to either internal or external constituents, nor explain the processes or blueprint utilized to achieve it. Ultimately, the blueprint for success for any given educational organization starts internally with defining and understanding IE. Once this has been accomplished then the institution's employees, culture and leadership need to be aligned to support ongoing institutional effectiveness efforts to enhance student learning. These concerted efforts not only confirm and

demonstrate what IE means to the organization as a whole and how it benefits student learning, but also provides opportunities to communicate these endeavors to internal and external stakeholders.

Institutional Effectiveness Defined

While public community colleges must meet external expectations for effectiveness, primarily those of their governing boards and accrediting associations, the policies and processes used to address these expectations are largely defined and determined by each institution. According to Skolits and Graybeal (2007), colleges tend to have significant latitude in determining their particular institutional effectiveness policies and practices, as well as in defining the accompanying roles expected of faculty and staff. As such, the processes employed to improve the quality and effectiveness of these institutions varies greatly.

As there are a myriad of terms for institutional effectiveness, it is important that this study ground its research in a specific definition. For purposes of this study, the definition for institutional effectiveness is defined as the extent to which an institution achieves its mission and goals (Alfred et al. 1999). Conversely, institutional effectiveness process is defined as the commitment to the continuous quality improvement of all aspects associated with fulfilling the institutional mission. This commitment is ongoing, broad-based, and embedded within the culture of the college (SACS, 2005).

While these definitions may seem simplistic, in actuality, administrators, faculty, and staff engaged in institution-wide assessment recognize the complexity involved in such an endeavor as they continue to struggle with the integration of institutional effectiveness activities into the schemata of routine practice. The complexity of these endeavors has

been compounded by the fact that while two year colleges differ in many ways from their four-year counterparts, most of the research regarding IE has focused only on the four-year institutions (Smart, Kuh, & Tierney, 1997). As community college missions differ so significantly from four-year colleges, a one-size fits all IE plan is problematic (Smart & Hamm, 1993).

Kim Cameron of Cornell University addressed these issues in her 1978 study which tested the ability of nine constructs to express institutional effectiveness in higher education institutions. Cameron (1978) concluded,

No institution operates effectively on all effectiveness dimensions, but that certain effectiveness profiles are developed in which particular dimensions are emphasized. No single profile is necessarily better than any other, since strategic constituencies, environmental domain, contextual factors, etc., help determine what combination is most appropriate for the institution (p. 625).

A later study of two-year colleges by Smart and Hamm (1993) concluded that Cameron's nine dimensions represented key management and institutional performance issues. Their study also showed that organizational effectiveness of two-year colleges was, at least in part, a function of the mission priorities. However, according to Smart, Kuh, and Tierney (1997), while Cameron's nine dimensions encompassed a range of organizational effectiveness factors, none of the measures capture the institutional culture, the nature of decision-making and its ramification on institutional effectiveness.

The issue of institutional culture is of particular importance because it provides insight into the decision making process as well as the participation and influence of various stakeholders. Further, conclusions from Cameron's (1978) study revealed the difficulty in studying organizational effectiveness in loosely coupled systems such as higher education institutions where many silos exist hindering the transfer of knowledge and

quality improvement efforts. Unlike "tightly coupled" systems of the business/corporate sector (Weick, 1982), higher education institutions tend to lack a core "group of effectiveness criteria that are relevant to organizational members, applicable across subunits, and comparable across institutions" (Cameron, 1978, p. 611). Research authored by Alfred, Shults, and Seybert (2007), entitled, *Core Indicators of Effectiveness for Community Colleges*, sought to fill this gap through the provision of a set of institutional components or core indicators that community colleges should include for improved, integrated assessment activities, based on their different mission(s). Similar to the findings of Smart and Hamm (1993), Alfred et al. (2007) cite that the effectiveness of two-year colleges is a function of the mission priorities of the institution.

While many colleges look upon effectiveness initiatives as a single project or task, Alfred et al. (2007) suggest long-lasting change can only be manifested by supportive, knowledgeable leaders dedicated to the concept that IE is a continuously evolving process. Further, the authors suggest that IE should be situated in an organizational culture of quality reflective of the internal stakeholders' attitudes and decisions which are informed by data and assessment results. This quality culture must embed evaluative tools to include a continuous feed-back loop as part of a comprehensive IE process that begins with strategic planning and ends with specific follow-up.

This comprehensive process is detailed in the following model (*Figure 6*) which depicts a cyclic process for improved institutional effectiveness. The rationale for the process model is that "measurable and accountable IE is accomplished through performance-based strategic planning and activities-based budgeting" (Billings, 2005, p. 609). According to Billings (2005), it is by the integral relationship of institutional mission,

financial resources, assessment, and continuous evaluation and improvement, that organizational performance is enhanced.

The Institutional Effectiveness Model

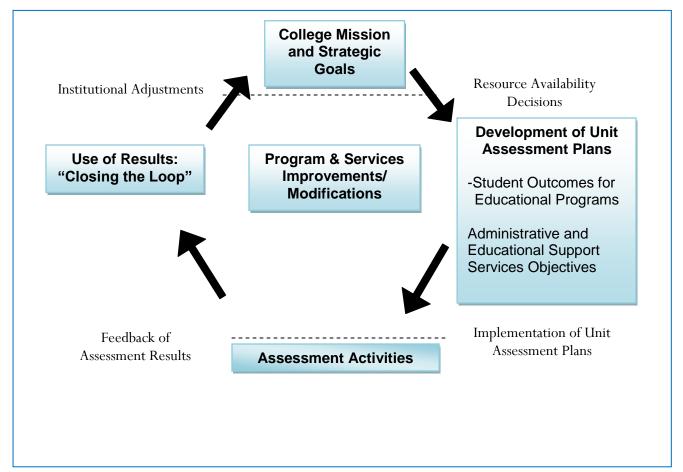


Figure 6. The Institutional Effectiveness Model.

Note: Adapted from Nichols, J. (1995). A Practitioner's Handbook for Institutional Effectiveness and Student Outcomes Assessment Implementation. Agathon Press, New York.

Also important to note, is the close, almost symbiotic relationship between the concept of institutional effectiveness and the process of strategic planning. In many instances, strategic planning and institutional effectiveness are used interchangeably as if they refer to the same process. It is crucial to distinguish between the two and to understand their correlation, as they are inextricably linked. Institutional effectiveness is a

continuous process of measuring, monitoring and assessing performance in order to enhance and improve college operations to achieve its mission. Strategic planning is the process of setting short and long-term goals within the context of current and predicted conditions of the internal and external environment to formulate a strategy, implement the strategy, evaluate progress and make adjustments as needed (Nichols, 1995). While institutional effectiveness is viewed as a comprehensive, more encompassing monitoring and improvement process, strategic planning is seen as detailed roadmap to attaining and sustaining the organization's goals. Ideally, an IE plan should be in place before substantive strategic planning can begin as goal setting requires an awareness and understanding of the current conditions and context in which the organization is entrenched.

Figure 7 depicts the relationship between strategic planning and institutional effectiveness. According to this figure, IE (macro-analysis) is an ends/outcome oriented approach which tends to look at the broader scope of organizational improvement in the context of college mission achievement. Conversely, strategic planning (micro-analysis) is a more specific, means/process oriented approach.

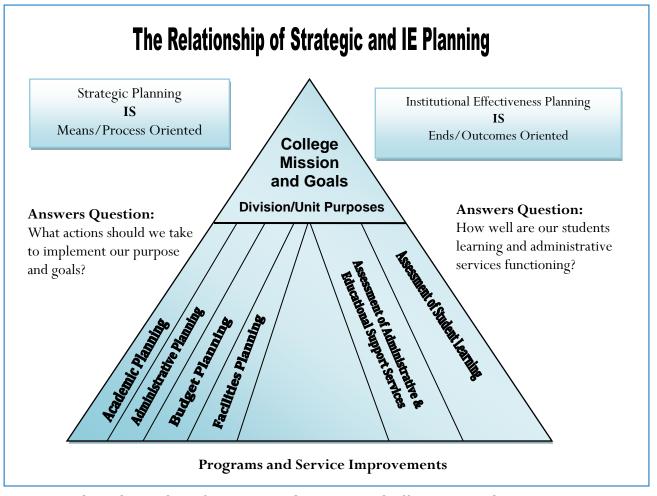


Figure 7. The Relationship of Strategic and Institutional Effectiveness Planning. Note: Adapted from Nichols, J. (1995). A Practitioner's Handbook for Institutional Effectiveness and Student Outcomes Assessment Implementation. Agathon Press, New York.

As higher education institutions continue to struggle with the concepts associated with institutional effectiveness, as well as how to address accountability demands from stakeholders, current questions will linger and new ones will arise. While additional concerns plague community college leaders such as who should be involved in the planning process and what funds can be allocated to support IE initiative(s), the organizational management literature suggests that many questions are largely attributable to problems with implementation and sustainability of IE processes. While a few institutional

effectiveness implementation models do exist, what are missing are details regarding the process of how they are successfully integrated in the organization (Smart & Hamm, 1993). This study explores the process strategies used by two-year colleges with a reputation for successfully infusing innovative IE strategies while creating cultures of evidence to support these endeavors.

Implementation Model for Institutional Effectiveness

According to Klein & Sorra (1996), "implementation is the critical gateway between the decision to adopt the innovation and the routine use of the innovation within an organization" (p. 1057). While organizational innovations for improved effectiveness are plentiful, there is still no magic which can guarantee successful implementation of institutional effectiveness practices in community colleges. Institutional effectiveness scholars have long acknowledged the paucity of research on innovation implementation (Alfred et al, 2007; Smart & Hamm, 1993). While models or frameworks for innovation adoption are abundant, research on the *process* of implementation and its *impact* on the organization are rare (Datnow, et al, 2007).

Authors Sheldon, Golub, Langevin, Ours, & Swartlander, (2008) conclude that there is growing evidence that attention to the contextual variables of organizational culture and innovation strategy fit are critical to the effective processes relevant to IE. Therefore, it is in the recognition of these contextual variables that the value of an implementation effectiveness model becomes apparent for administrators, faculty, and staff as they grapple with efforts to implement and sustain IE activities.

To further complicate matters, embedded in the IE implementation process is the notion of change management. Change and change management entails thoughtful

planning, sensitive implementation, and above all, involvement of those affected by the changes. Little research has been done on this triple threat of change management, innovation adoption, and the implementation process relevant to institutional effectiveness for higher education institutions.

While research on change management and innovation implementation related to business was limited in the 1980's, the 1990's saw an increase in literature related to these concepts. One of the first authors to explore these topics was Harvard Business School professor and organizational change management author John Kotter. In 1995, Kotter developed the model, Eight Steps to Successful Change. In this model, each stage acknowledges a key principle relating to how members of the organization respond to and approach the change process. Kotter's Change Model (1995) is relevant as this study explores how community colleges with a reputation for continuous quality improvement were able to initiate change strategies at their respective colleges. Kotter's Model for successful organizational change is summarized in Table 3.

Table 3 Kotter's 8 Steps to Successful Organizational Change Model

8 Steps	Summary	
1. Establish a Sense of Urgency	Examine the market; Identify weaknesses, opportunities for improvement and change.	
2. Form a Powerful Guiding Coalition	Assemble a group with enough power to lead the change effort; encourage team work.	
3. Create a Vision	Create a vision to help direct the change effort; develop strategies for achieving that vision.	
4. Communicate the Vision	Use every vehicle possible to communicate the new vision and strategies; teach new behaviors by the example of the guiding coalition.	
5. Empower Others to Act on the Vision	Get rid of obstacles to change; change systems or structures that seriously undermine the vision; encourage risk-taking and nontraditional ideas, activities, and actions.	
6. Plan for and Create Short Term Wins	Plan for visible performance improvements; create those improvements; recognize and reward employees involved in the improvements.	
7. Consolidate Improvements and Continue Change Initiatives	Use increased credibility to change systems, structures, and policies that don't fit the vision; hire, promote, and develop employees who can implement the vision; reinvigorate the process with new projects, themes, and change agents.	
8. Institutionalize New Approaches	Articulate the connections between the new behaviors and organizational success; develop the means to ensure leadership development and succession (p. 27-33).	

The 1990's also brought forth research by Klein and Sorra (1996) which explored the concept of "organizational fit" first depicted in Kotter's research. While Kotter (1995) provided a platform to explore the steps or processes necessary to create change within an organization, Klein and Sorra's (1996) research focused on "the aftermath of innovation adoption: implementation" (p. 1070). Their research is relevant for purposes of determining whether or not an organization could sustain the innovation such as the organization's change to a culture of institutional effectiveness. Klein and Sorra's (1996) research concluded that innovation implementation may result in one of three outcomes:

- (a) Implementation is effective, and use of the innovation enhances the organization's performance;
- (b) Implementation is effective, but use of the innovation does not enhance the organization's performance; and
- (c) Implementation fails (p. 1070).

Each of these three outcomes may influence an organization's culture and organizational performance. Therefore, since the resultant influence is so far reaching within the organization, it is crucial the leaders see beyond the silos in order to understand the interrelated components of the overall institution in order to strategically guide the process of IE implementation.

If an innovation succeeds and enhances organizational performance, Klein and Sorra (1996) contend that serendipitously the organization's implementation culture is strengthened. The stakeholders of the organization gain confidence in the new values which are congruent with the use of the innovation while the perceived efficacy of innovation adoption and implementation tends to increase as well. These organizations

tend to become trend setters as they champion a continuous quality improvement culture and other innovations.

If an implementation strategy succeeds but does not enhance overall institutional effectiveness the organization's climate for implementation is weakened. In general, the perceived value of innovation adoption and implementation may be questioned as an already weakened organizational climate leads to increased pessimism regarding the organization's implementation of future innovations. These types of organizations are more likely to initiate strategic innovations but have difficulty sustaining the innovations due to the culture of the organization.

Due to their rigid organizational cultures which are often characterized by an inability to adapt and change, the majority of the change initiatives fail at these institutions. Inevitably, administrators, faculty, and staff decrease their support of the innovation and any future innovations are met with pessimism, decreased buy-in, and overall lack of sustainability. Therefore, Klein and Sorra (1996) believe these organizational cultures are often ripe with silos, lack of visionary leadership, and innovation strategies not aligned to the overall college mission. Table 4 provides a summary of these innovation outcomes.

Table 4 Implementation Climate and Innovation Values Fit: Employee Response and Innovation Use

INNOVATION VALUES FIT					
	Poor	Neutral	Good		
Strong Implementation Climate	Employee opposition and resistance Compliant innovation use at best	Employee Indifference Adequate innovation use	Employee enthusiasm Committed, consistent and creative use		
Weak Implementation Climate	Employee relief Essentially no innovation use	Employee disregard Essentially no innovation use	Employee frustration and disappointment Sporadic and inadequate innovation use		

Note. Adapted from Klein and Sorra (1996) p.1066.

Research by Klein and Sorra (1996) suggests that, "implementation effectiveness is an organizational-level construct in which effectiveness is dependent on the coordinated and collective use of the innovation by institutional members" (p. 1056). The authors go on to state that many innovative processes fail to realize their potential, not because the concepts are flawed, but because too little attention is directed at the implementation phase. The model seeks to demonstrate that implementation effectiveness is primarily a function of two variables: organizational culture and the relevance of the innovation (innovation values fit) to the overall mission of the institution.

As this study explores the processes for the successful implementation of institutional effectiveness initiatives in community colleges, the model of implementation effectiveness (*Figure 8*) described by Klein and Sorra (1996) is particularly relevant. In this model, the authors distinguish between an organization's decision to adopt an innovation, in this case an institutional effectiveness initiative, and its subsequent implementation

process whereby leadership champions the initiative, builds the infrastructure to support it, and trains staff to embed it into the culture of the college.

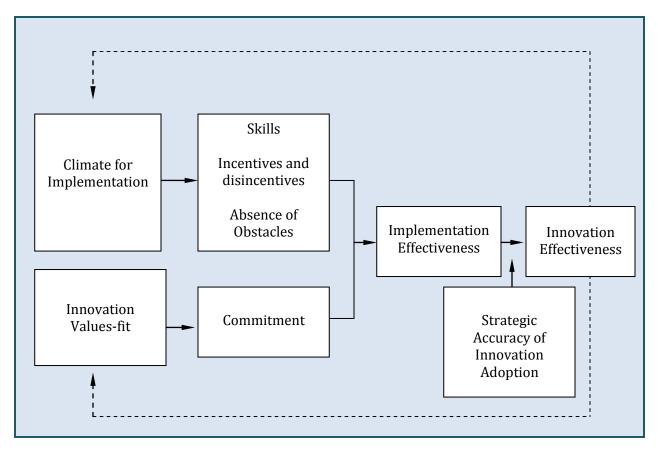


Figure 8. Organizational Climate and Implementation Effectiveness Model. Copyright 1996 by Klein and Sorra p. 1056.

While the organizational culture variable refers to the organizational values, beliefs, policies, procedures, and practices related to the use of the innovation, innovation values fit refers to the processes or strategies implemented and examines how well the organizational culture can adapt to sustain the innovation. Table 5 predicts that integration of institutional effectiveness activities into routine practice will be maximized when institutional culture is strong and willing to accept change as stakeholders come to the realization that the innovation has improved organizational performance. Klein &

Sorra (1996) conclude that an organization must have a supportive, quality driven culture as well as an innovation that fits within the mission (values) of the organization. Any incongruence between these variables will adversely affect the success of IE strategies.

Table 5 Implementation Climate and Innovation-Values Fit

IMPLEMENTATION CULTURE	INNOVATION VALUES FIT
Timely and accessible training	Impetus for innovation implementation (less effective if externally motivated)
Additional assistance following initial training	Integration within institutional operations
Adequate time to learn and practice	Institutional quality is well defined and a common definition utilized by stakeholders
Responsiveness to user complaints and concerns	Involvement of all stakeholders
Readily accessible resources related to the assessment	
Praise and recognition from supervisors	

Conversely, when institutional culture and values fit are weak, the innovation, such as IE implementation, is likely to fail. In fact, some estimates indicate that two-thirds of organizations' efforts to implement change fail (Damschroder et al 2009). Birnbaum (2000) concurs with this analysis noting that a primary cause of managerial strategy failure is lack of support from users. As community college leaders look to implement strategies for improved institutional effectiveness initiatives, it is important for them to evaluate their organization's readiness for change.

Organizational Readiness for Change

Successful implementation of institutional effectiveness strategies usually requires an active change process on two fronts: the individual employee and the organization.

Community colleges that seek to engage in continuous quality improvement (CQI) or institutional effectiveness strategies should do so with a full understanding that it is not a linear, one dimensional process. Indeed mindful consideration on multiple dimensions is essential when deciding on an organizational change initiative and/or institutional effectiveness strategy.

According to Weiner (2009), organizational readiness for change can vary tremendously based upon how well organizational members "value the change and how favorably they appraise three key determinants of implementation capability: task demands, resource availability, and situational factors. When organizational readiness for change is high, organizational members are more likely to initiate change, exert greater effort, exhibit greater persistence, and display more cooperative behavior (Weiner, 2009). The result is more effective implementation. Conversely, if individual members do not embrace the change, then the implementation fails and the organization's performance is likely to suffer. It would greatly benefit an organization to determine its readiness for change prior to engaging in time-consuming and expensive initiatives that the members do not embrace. According to Aarons (2007), organizations that look to engage in a change initiative should evaluate the organizations' readiness for change based upon six components: (a) organizational level characteristics; (b) individual characteristics; (c) resources; (d) knowledge; (e) consumer; and (f) initiatives.

Ferlie and Shortell (2001) concur with Aarons regarding the importance of organizational readiness. In fact, their 2001 study refers to organizational readiness determinants citing that while a number of initiatives to improve quality have been undertaken recently, most efforts to improve quality to date have relied on relatively narrow, single-level program changes and not institution-wide changes. They believe that in order to achieve a successful transformation into an organizational culture supportive of change, leaders must focus on four levels of change:

- 1. The individual—i.e., community college leader(s).
- 2. *The team*—a small group of individuals within the organization that can muster the human, financial, and technological resources to do its work.
- 3. *The overall organization*—for example, the entire college and/or department for which the initiative was designed supportive of the process.
- 4. *The larger system or environment in which the individuals or organizations are rooted* the community or district in which the college is located.

As this study seeks to reveal the processes and strategies for successful IE implementation of change initiatives which become embedded in the organizational culture, it is important to incorporate the four levels of change cited by Ferlie and Shortell for lasting sustainability. As organizations determine their readiness for change and anticipate barriers which would hinder the process of implementing IE, it is important to also analyze or explore the relationship between the organizational culture and the ability to improve effectiveness.

Organizational Culture and Effectiveness

The concept of organizational culture has been investigated by many researchers in order to explore the possible linkage to organizational performance and effectiveness.

These studies, adding to the body of organizational studies literature, highlight the significance culture has in dictating an organization's ability to survive and succeed (Kotter, 1995; Klein & Sorra, 1996; Ferlie et al, 2002; Aarons, 2007). Examples of this experiential literature, which meant to establish a direct relationship between organizational culture and effectiveness, can be traced back to studies addressing organizational structure and change management. One such study, *The Change Masters* (1983) by renowned Harvard Business School Professor and author, Rosebeth Kanter, studied organizational change in relation to cultures that promoted innovation implementation as opposed to those that did not. Her findings demonstrated that positive organizational cultures are linked to increased staff alignment, resulting in enhanced organizational effectiveness, heightened consensus regarding strategic direction, increased employee productivity, and advanced levels of employee commitment (Kanter, 1983). While no surprise, research by Barney (1986) showed that negative organizational cultures tend to negate innovation/change initiatives.

Interestingly, Edward Schein (1990), MIT Sloan School of Management Professor, agreed with Kanter's findings as he analyzed organizational cultures according to their strength and culture type. In his research, he concluded that the strength and type of culture are critical to the organization's success and survival. According to Schein, institutional leaders should put their energies on developing a strong organizational culture that supports the following activities: (a) managing change; (b) achieving goals; (c) coordinating team work; and (d) customer orientation in the organization - activities that he believed would contribute to organizational effectiveness. According to Schein, culture is the most difficult organizational attribute to change (Schein, 1990).

Daniel Denison (1990), former Associate Professor of Organizational Behavior and Human Resource Management at the University of Michigan Business School, supported Schein's research as he noted that successful organizations, over time, are likely to possess a strong, well-defined culture. His later research (Denison & Mishra, 1995) went on to suggest that culture could be studied as an integral part of the change process and that certain cultural traits may be utilized as predictors of an organization's performance and effectiveness.

As the contextual nature of this research is interested in exploring the relationship between organizational culture, leadership, implementation, and sustainability of effectiveness initiatives, the theory by Denison and Mishra (1995) is most relevant.

According to their study, a direct correlation exists between an organization's culture and their ability to initiate and sustain effectiveness strategies. Denison and Mishra (1995) go on to suggest that organizational culture has been found to be "measureable and to be related to important organizational outcomes" (p.204). Utilizing case studies and surveys, the authors provide evidence for the existence of four organizational cultural traits: (1) involvement; (2) consistency; (3) adaptability; and (4) mission – and indicate that these characteristics are positively related to perceptions of performance. The Theoretical Model of Culture Traits developed by Denison & Mishra (1995, p. 216), in *Figure 9*, suggests that culture can be studied as an integral part of the adaptation or implementation process of organizations and that specific culture traits may be useful predictors of performance and effectiveness.

Theoretical Model of Cultural Traits

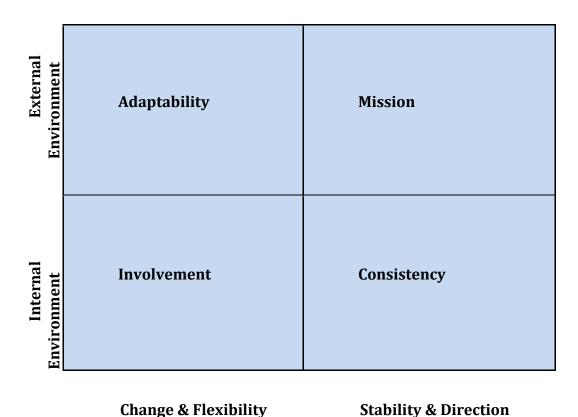


Figure 9. Theoretical Model of Culture Traits. Copyright 1996 by Klein and Sorra. The Challenge of Innovation Implementation. Academy of Management Review, 21, 1055-1080.

The relationship between Dennison & Mishra's (1995) cultural traits and organizational effectiveness is summarized as follows:

INVOLVEMENT

Research suggests that high levels of *involvement* and participation within an organization create a sense of ownership and responsibility. The sense of ownership then serves as a catalyst for greater commitment to the organization. This organizational commitment or involvement increases the quality of decisions and innovation implementation. Organizations with whom these traits have been positively identified, tend to have a positive correlation with the following *Involvement Index* items:

- 1. People in these companies have input into the decisions that affect them.
- 2. Cooperation and collaboration across functional roles is actively encouraged.

CONSISTENCY

This cultural trait refers to the organization's quality initiatives being driven by internal motivators as opposed to external demands for accountability (i.e. accreditation). The concept of *consistency* is deeply rooted in change and adaptation abilities of the organization. Organizations, with which these traits have been identified, tend to have a positive correlation with the following *Consistency Index* items:

- 1. There is a high level of agreement about the way that things are done in these companies.
- 2. The approach to doing business is very consistent and predictable.

ADAPTABILITY

The *adaptability* component of this model asserts that an effective organization "must develop norms and beliefs that support its capacity to receive and interpret signals from its environment and translate these into internal cognitive, behavioral, and structural changes" (Dennison & Mishra, 1995, p. 216). The research suggests that organizations characterized as flexible, innovative, and *adaptable*, give priority to the satisfaction of their clients and in implementation of innovation strategies for continuous quality improvement. Organizations with whom these traits have been positively identified, tend to have a positive correlation with the following *Adaptability Index* items:

- 1. Customers' comments and recommendations often lead to changes in these organizations.
- 2. These organizations tend to be very responsive and change easily.

MISSION

Emphasizes the stability of an organization's central purpose. The importance of *mission* to culture and effectiveness was also supported by the observation that the most critical crises in each organization came when the basic mission was questioned or altered. Organizations with whom these traits have been positively identified, tend to have a positive correlation with the following *Mission Index* items:

1. These companies have a long-term purpose and a sense of direction.

2. There is a shared vision of what the organization will be like in the future.

According to Dennison & Mishra (1995), this research served to provide an awareness of the multidimensional nature of effectiveness within organizations. The inclusion of the four cultural traits served to summarize characteristics of an organization's culture and the processes by which culture may have an impact on effectiveness. Always keenly aware that conceptualizing and measuring organizational effectiveness poses a host of challenges as not only is cultural meaning contextualized, but so is effectiveness, the authors state that while their traits set the stage for exploring the linkage between organizational performance and organizational culture, the complex nature of organizations themselves presents nearly endless complexities. Adding to the complexity is the impact of leaders on organizational culture and performance.

Community College Leadership

Community colleges are entering a period of renewed interest in college performance at all levels and an impetus on accountability. This interest has sparked a variety of prominent higher education commissions and researchers to call for greater focus on performance accountability though often in forms different from past practice (Blanco, Jones, Longanecker & Michelau, 2007; Callan, Ewell, Finney & Jones, 2007; National Commission on Accountability in Higher Education, 2005; Shulock & Moore, 2005, 2007). Community college leaders, faculty and administrators, must collaborate to define deliberate approaches wherein their institutions adapt to today's rapidly changing environment while maintaining quality. Some of the more prominent changes including

limited resources, rapid advances in e-technology, and an increase in enrollment of underprepared students add to the complexity of the leadership agenda (Alfred et al, 2007).

In 2001, a leadership survey conducted by the American Association of Community Colleges (AACC) revealed that the impending retirements of community college administrators posed a grave concern for the future of two-year colleges in America. According to the report, the average age of community college presidents was 56, with 79% of the respondents stating that they would retire within the next 10 years (AACC, 2001; Weisman & Vaughn, 2001). Research by O'Banion (2003) also suggests that there will be troubling times in the years ahead because presidents and senior-level administrators are retiring at a steady rate. In fact, a major challenge facing community colleges today is filling the leadership pipeline with qualified individuals who are prepared and have the skill sets for the presidency (Shults, 2001). In a replication of their earlier study, Weisman & Vaughn (2007) found that 84 percent of the respondents indicated plans to retire by 2016.

To further complicate this picture, those vice-presidents and deans in the traditional pipeline for moving upward in the organization are also retiring or have no desire to assume a presidential position. Interestingly, recent research indicates that community colleges have not anticipated the impact of additional leadership gaps in highly skilled and specialized middle level positions such as deans of enrollment, directors of financial aid, and registrars (Campbell 2006). Therefore, community college leaders are a declining commodity at a time when knowledgeable stewardship requires individuals to successfully address a great variety of challenges. Many community college leaders find themselves at a crossroads at which the wrong turn could prove devastating for their institutions and they are in need of guidance to enhance the quality of their organizations.

As community college leaders continue to face complex decisions involving the operation and quality of their colleges, many have discovered that their institutions were built for stability or linear change rather than "frame-breaking" change (Alfred, 2005). As such, the tendency for this kind of linear and static organizational behavior poses another major challenge: lack of organizational readiness versus organizational inertia. According to Alfred (2005), not only must community colleges organize for constant change, they must be ready to change frequently and quickly to keep pace with the external environment. Further, they must be ready, willing, and able to address competing demands, and to satisfy the ever-increasing needs and rising expectations of various stakeholder groups (e.g., board of trustees, faculty, parents, students, legislators, and accrediting agencies). Community colleges wanting to have an impact on their student's, their community, and the global workforce must be equipped with the tools for continued quality improvement of their institutions. To accomplish these daunting tasks, the very culture of their organizations must be inoculated with the spirit of quality, data-driven decision making, and a readiness to embrace innovative change.

Given the difficulties associated with the facilitation and implementation of various change initiatives, scholars note that numerous leaders, administrators, and managers are rushing into the multifaceted process of change without fully recognizing and understanding three critical realities: (1) the complexities associated with facilitating, implementing, and institutionalizing change; (2) the political perspective that pervades organizational life; and (3) the leadership characteristics needed to effectively guide the institution through the change process (Burnes, 1992; Kezar, 2001). As a result, many change initiatives such as those surrounding the embedding of institutional effectiveness

concepts within the organization's culture have failed despite good intentions, noble causes, and valiant efforts.

There is a shortage of research concerning leadership roles, behaviors, and selfperceptions as it relates to the implementation of quality improvement efforts at community colleges. While many leadership theories focus on identifying one's management approach or style, one method in particular stands out as being intimately connected to an awareness of and development of its employees and organizational performance for improved institutional effectiveness. This approach is the Situational Leadership Theory Method developed by Kenneth Blanchard and Paul Hersey (1977). Originally, the authors proposed that managing the relationship between a leader and a follower on a given task underlies effective leadership. An adapted model created by Blanchard, Zigarmi and Nelson (1993), entitled Situational Leadership II (SLII), still emphasized the relationship between leader and follower, but went on to cite that effective leaders are those who adapt their behavior to the commitment and competence of particular abilities of their staff. The basic premise of the SLII model is that effective leadership requires flexibility since different situations require different leadership approaches and tactics. Leadership style in this model is based upon the amount of direction and support the leader provides to their follower(s). It also enables a leader to identify a task, set goals, determine the task maturity of the individual or group, select an appropriate leadership style, and modify the style as change occurs. According to Blanchard et al. (1993), the Situational Leadership Model (SLII) essentially combines four different leadership styles into a practical and methodical order as it teaches leaders to diagnose the needs of an individual or a team, and then use the appropriate leadership

style to diagnose and guide the change or implementation efforts of the organization. The four leadership styles of the SLII are:

- 1. **Directing** style High level of direction from team leader; typically with low support behavior towards staff member.
- 2. **Coaching** style Medium to high level of direction from team leader; typically with medium to high support behavior towards staff member.
- 3. **Supporting** style Medium to Low level of direction from team leader; typically with high support behavior towards staff member.
- 4. **Delegating** style Low level of direction from team leader; typically low support behavior towards staff member.

Blanchard et al. (1993) believe leaders should be flexible and adjust their styles as followers and situations change over time. The model also implies that if the correct styles are used in lower-readiness situations, followers will mature and grow in their abilities and the organization's performance will improve. Situational Leadership II theory is appropriate for this study in that it recognizes those traits needed by leaders, the characteristics of the employees, and the ever-changing milieu of increased accountability facing community colleges.

It is not possible to achieve a thorough understanding of the efficacy of an institution without examining its leadership to determine if they foster and sustain strategies for the creation of a culture of accountability. That is, how and in what ways do leaders foster the process of IE and its establishment into the culture of the college? Leaders would foster an environment that enables wide-ranging review of progress against objectives, coupled with an ability to determine the most effectual approaches to replicating success and improving upon initiatives that are not meeting their defined goals all to improve institutional performance. While little research has been done on the links

between leadership, organizational culture and organizational effectiveness in community colleges, organizational studies for other industries have shown that leadership and organizational culture are tightly intertwined (Peters & Waterman, 1982). Additional research in business, suggests that leaders must have a deep understanding of the identity and impact of the organizational culture in order to communicate and implement new visions and inspire follower commitment to the vision (Schein, 1990). Therefore it is fair to suggest that leadership in community colleges also requires visionary leadership which can effectively communicate the adoption, process, and success of improvement initiatives for their institutions.

Highly effective leaders are cognizant of shifts in the environment and in the culture of their institutions and guide their organization to be responsive to those changes. These leaders are aware of the realities of their environment and are able to facilitate strategic planning and decision-making processes which allow the organization to even rethink their vision (Joiner, 1987; Barnes & Kriger, 1986). Leaders of change not only act as champions of the movement, they are often the needed stimulus for change as they are aware that "effective change requires skilled leadership that can integrate the soft human elements with hard business actions" (Joiner, 1987 p. 1).

Community colleges strive to provide a quality learning experience to all students while demonstrating to stakeholders that IE is successfully being accomplished. As IE is a convoluted and complex endeavor, attempts at documenting effectiveness processes are seen as tenuous at best as the rules, goals, and choices operating within these organizations are ambiguous, ever-changing, and often unrecognizable. Knowledgeable community college leaders are needed to firmly define the initiatives and guide the IE processes. The

melding of these two elements empowers institutions to gain a broader understanding of their status and progress across all functional areas, including academics, organizational resource alignment, and the overall student and faculty experience.

SUMMARY

The purpose of this study is to explore how and in what ways community college leaders craft institutional effectiveness strategies for continuous quality improvement. While there is generally little disagreement about the importance of institutional effectiveness (IE), there are ongoing concerns and debate regarding the implementation and sustainability of such initiatives within the higher education community. In this context, the significance of this research study is to describe the process of a model of implementation effectiveness applicable to community colleges and provide sustainable processes toward the achievement of this goal. The complexity of this type of research stems from the fact that while the assessment movement in higher education is now in its third decade, tremendous variation exists with respect to implementation adoption, process, and sustainability.

As evidenced by the literature review, a need for institutional effectiveness has been strongly established by community college stakeholders; however, almost no literature exists on the process of IE implementation at community colleges. Many community college leaders are unaware of the necessary steps for successful implementation. This study seeks to add to the body of knowledge by filling this gap in the literature and providing information on the process of successful institutional effectiveness implementation.

CHAPTER 3

METHODOLOGY

INTRODUCTION

This chapter provides an overview of the methodology and criteria relevant for the rigor and soundness of this study. The research purpose and driving questions serve as the impetus in the selection of the design, while the research design provides the logical systematic structure guiding the study. This research is a qualitative inquiry, using a case study methodology set within the interpretive paradigm. To increase understanding of the little known and identified process colleges employ when building a sustainable organizational culture of evidence for improved institutional effectiveness, the qualitative paradigm was selected. It is the intent of this exploratory study to understand the complexity of this process.

This chapter describes and presents rationale for the following: (a) selection of the qualitative paradigm and case study methodology; (b) site and participant selection criteria; (c) data collection strategies and protocols; (d) data analysis procedures; e) trustworthiness and validity; (f) ethical considerations; (g) limitations; and (h) the researcher as the tool.

RESEARCH DESIGN

Qualitative Paradigm

Qualitative inquiry is well suited to exploring the complexities of higher education organizations in transition. Since higher education institutions are structurally and functionally complex, a means to understand the dynamics involved in transition or change

is to explore and examine commonalities and distinctive features. This can be accomplished by soliciting information from individuals employed at community colleges undergoing transition.

As this study seeks to understand and explore the factors that effectively initiate and guide change in community colleges, a process that is both complicated and contextual, it calls for a research approach that accounts for these interrelated elements. As little is known of the phenomena of how community colleges initiate and guide their change efforts in order to create responsive institutional effectiveness strategies, the qualitative paradigm is most appropriate for this particular study.

A quantitative study is an inquiry based on testing a theory or hypotheses composed of variables, measured with numbers, and analyzed with statistical procedures. However, qualitative inquiry aims to describe, identify and explore phenomena. Qualitative researchers gather information and data from multiple data sources, such as interviews, observations, and documents to facilitate development of a holistic, complex picture of the problem, issue or concern under study. In contrast, quantitative researchers employ different methods as they undertake their studies. Table 6 adapted from Johnson and Christensen (2004), outlines the key differences between the quantitative and the qualitative research approaches.

Table 6 Quantitative and Qualitative Paradigm Differences

	Quantitative	Qualitative
Scientific Method	Deductive or "top-down" reasoning;	Inductive or "bottom up" reasoning;
	Researcher tests hypotheses and theory with data collected	Researcher generates information, new hypotheses, theory from data collected
View of Human Behavior	Behavior is regular and predictable	Behavior is fluid, dynamic, situational, social, contextual, and personal
Common Research Objectives	Description, explanation, and prediction	Description, exploration, and discovery
Focus	Narrow-angle lens, testing specific hypotheses or theories	Wide-angle and "deep-angle" lens, examining the breadth and depth of phenomena to learn more about it
Data Collection	Data collected based on precise measurement using structured and validated data collection instruments (e.g. closeended items, rating scales, behavioral responses	Researcher is the primary data collection instrument; Data collection methods include interviews, observation, document, artifacts, field notes
Data Analysis	Identify statistical or probabilistic relationships	Search for patterns, themes;
Findings	Generalizable findings	Particularistic findings; Holistic features; Findings transferable by the reader

Note: Adapted from Johnson and Christensen (2004). Educational research: Quantitative, qualitative, and mixed-methods approaches (2^{nd} ed). Boston, MA: Pearson

According to Creswell (2003), the use of qualitative methods are most appropriate when the researcher seeks to: (a) describe a phenomenon by examining its occurrence broadly in a natural setting; (b) where the data collected are based upon open-ended

observations and interviews; (c) where the information is discovered and emergent; (d) where knowledge is obtained based upon multiple individual experiences; and (e) where the data are interpreted. Merriam (2009) is in agreement indicating that there are primarily four characteristics or elements which are key to understanding the nature of qualitative research: "(a) the focus is on process, understanding, and meaning; (b) the researcher is the primary instrument of data collection and analysis; (c) the process is inductive; and (d) the product is richly descriptive" (p. 14). Elaborating on Merriam's first characteristic, Patton (1985) explains:

[Qualitative research] is an effort to understand situations in their uniqueness as part of a particular context and the interactions there. This understanding is an end in itself, so that it is not attempting to predict what may happen in the future necessarily, but to understand the nature of that setting. The analysis strives for depth of understanding. (p. 1).

Qualitative research describes and records lived experiences, perspectives, behaviors, processes and or values. Merriam (1998) indicates that knowledge gleaned from a qualitative inquiry provides insights and information related to how individuals make meaning from their experiences. Stake (1995) concurs and believes that qualitative inquiry helps to preserve the "multiple realities, the different and even contradictory views of what is happening" (p. 12). The qualitative paradigm is a naturalistic inquiry that seeks to understand phenomena in a context-specific situation or setting. Denzin and Lincoln (2005) further detail the utilization of naturalistic inquiry in qualitative research by stating that this "research is a situated activity that locates the observer in the world [as researchers] study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them" (p. 3). The utilization of the qualitative paradigm which is naturalistic in focus facilitates this study's

purpose to understand the institutional effectiveness processes employed by community college leaders to facilitate continuous quality improvement.

Merriam's (2009) second characteristic of the qualitative paradigm is the researcher is the primary instrument for data collection and analysis. Merriam (2009) elaborates on this by stating:

Since understanding is the goal of this research, the human instrument, which is able to be immediately responsive and adaptive, would seem to be the ideal means of collecting and analyzing data. Other advantages are that the researcher can expand his or her understanding through nonverbal as well as verbal communication, process information (data) immediately, clarify and summarize material, check with respondents for accuracy of interpretation, and explore unusual or unanticipated responses (p. 5).

Creswell (2009) agrees and feels the researcher is the instrument to discover participants' perspectives of their worlds. The researcher gathers participants' perceptions of their experiences, but ultimately the researcher is the interpreter of the data. It is also the role of the researcher to provide sufficient description enabling the reader to ascertain whether findings are transferable to their particular context and/or situation.

The third characteristic from Merriam's list of qualitative research characteristics is that the process is inductive. Merriam (2009) elaborates on this concept by stating:

Qualitative researchers build toward theory from observations and intuitive understandings gleaned from being in the field. Bits and pieces of information from interviews, observations, or documents are combined and ordered into larger themes as the researcher works from the particular to the general. Typically, findings inductively derived from the data in a qualitative study are in the form of themes, categories, typologies, concepts, tentative hypotheses, and even theory about a particular aspect of practice" (p. 16).

The overall process of inductive logic includes: (a) data gathering; (b) analysis of the data to identify themes or categories; (c) searching for broad generalizations and patterns in

those themes; and (d) and comparison of the themes to the researcher's past experiences and to the literature (Creswell, 2003). Where the nature of quantitative research is objectivity and finite measurement, the nature of qualitative research is subjective, personal, and socially constructed (Johnson & Christensen, 2004). Qualitative researchers build their patterns, categories, and themes from the "bottom-up," by organizing the data into increasingly more abstract units of information. This inductive process involves researchers working iteratively with the data until they establish a comprehensive set of themes.

Merriam's fourth and final characteristic describes qualitative research as richly descriptive, "rich thick data". Words rather than numbers are used to convey what the researcher has learned about a phenomenon. In addition, support of the study findings was found in a variety of sources including quotes from participant interviews, as well as information gathered from documents, field notes, and a survey. These "quotes and excerpts contribute to the descriptive nature of qualitative research" (Merriam, 2009, p. 16).

This study requires the wide-and deep-angle lens of the qualitative approach capable of discovering rich, thick data to address how community colleges initiate and guide their change efforts in order to create responsive institutional effectiveness strategies. Denzin and Lincoln (2000) also define qualitative inquiry as being "multi-method in focus, involving an interpretive, naturalistic approach to its subject matter...attempting to make sense of or interpret phenomena in terms of the meanings people bring to them" (p.2). Thus, the study's use of the qualitative paradigm is most appropriate as it allows the

researcher to gain a more in-depth understanding of the process of how community colleges implement their plan for institutional effectiveness.

The research purpose and the driving research questions for this study guided the selection of the qualitative paradigm. The purpose of this study is to identify how and in what ways community college leaders craft institutional effectiveness processes to facilitate continuous quality improvement. As this study seeks to shed light and insights on the process employed by community college leaders when instituting continuous quality improvement strategies, it is important to provide an intensive, holistic description of the phenomenon from the perspective of those with an intimate understanding of the phenomenon. Therefore, the appropriate design for this study is a qualitative inquiry utilizing a case study method situated in the interpretive paradigm.

Case Study

Through the selection of a qualitative case study design, this study seeks to explore the meaning of a phenomenon from the participant's perceptions. Case study method has gained in popularity and use since the 1930s particularly in the fields of sociology and education. Over the last 25 – 30 years, a number of classifications regarding the case study method have emerged. For example, Yin's (1993) identification of the "exploratory" and "explanatory" case study and Stake's (1994) "intrinsic' and "instrumental" case study. The case study designation of explanatory and intrinsic is applicable when one wants to better understand the particular case. "How" and "Why" questions guide this type of exploratory research as there is a need to yield deep and meaningful insights into the perceptions, assumptions and meanings which underpin the findings.

Case studies are "intensive descriptions and analyses of a single unit or bounded system such as an individual, event, group, intervention, or community" (Merriam 1998, p. 19). Case studies focus on process, context, and discovery rather than outcomes, a specific variable, or confirmation of a theory. A case study method is appropriate for this particular research as it allows for an exploration of how and in what ways community college leaders create and implement processes and strategies for improvement.

According to Stake (2000) case studies are employed in qualitative research for three primary purposes:

- 1. to better understand a particular case;
- 2. to illustrate an issue or phenomenon;
- 3. or to extend understandings of a phenomenon and possibly develop theory. Yin (2003) adds to the definition by stating "a case study investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between the phenomenon and context are not clearly evident" (p. 13).

Creswell (2007) defines case study research as an exploration within a bounded system (case) through detailed, in-depth data collection involving multiple sources of information. Creswell's definition compliments the choice of the qualitative case study methodology used to frame this study as it (a) facilitates the exploration of understanding as to how community college leaders create strategies which lead to improved efficacy for their institutions; (b) allows for a complex and in-depth understanding of the attitudes, perceptions and strategies employed by leaders at AQIP community colleges; and (c)

provides an essential understanding of institutional context within the bounded case selected for this study. This study is a case study bounded by the purpose, AQIP community colleges, the geographic region of Midwest, and the leadership involved in leading the strategies for improving institutional effectiveness at selected institutions.

A research design foretells approaches and procedures for collecting, analyzing, and reporting research. Case studies allow the researcher to gain a holistic view of a phenomenon or a series of events and can provide round pictures since a variety of data sources are used. The utilization of the qualitative case study method also aids the researcher in the interpretation of the perspectives and viewpoints of the study participants. This ensures a means of exploration and discovery into the organizational change process employed by community college leaders whom have implemented institutional effectiveness strategies at their respective colleges.

Case studies also enable the researcher to capture the emergent and fluid properties of organizational activity and culture. Yin (1994) noted the trend toward appreciating the complexity of organizational phenomena and determined that case study may be the most appropriate research method for examining those phenomena. Yin also asserts that an important application of case study was to explain the causal links in real-life interventions that are too complex for the survey or experimental strategies. This assists the researcher to link the implementation of a change process or program with its influences. Merriam (1998) came to a similar conclusion that the case study is a particularly suitable design if the researcher is interested in process. Merriam (1998) goes on to state that the case study was appropriate for the educational setting because of its strength in examining and bringing about understanding and improving practice in applied fields of study. This has

proven particularly useful for studying educational innovations and organizational change processes. As the study of organizational transition cannot be studied apart from its natural complex social context, a community college, the case study method is most appropriate. This case study is not intended as a study of the entire organization but rather it is intended to focus on a particular issue, the processes and strategies employed by community college leaders to improve institutional effectiveness.

Interpretive Paradigm

This study utilizes a qualitative research design with a case study methodology situated in the interpretive paradigm. According to Denzin and Lincoln (2005) "all research is interpretive; it is guided by the researcher's set of beliefs and feelings about the world and how it should be understood and studied" (p. 22). Merriam (2002) elaborates on this concept and states, "learning how individuals experience and interact with their social world, the meaning it has for them, is considered an interpretive qualitative approach". As this research is interpretive in nature, it seeks to understand and capture richly descriptive data through the collection of information from interviews, field notes, and demographic questionnaires.

Merriam (2002) identified a key element of interpretive qualitative designs as a product where data is gathered from participants' lenses and interpreted through the lens of the researcher. Willis (2007) supports this view of the interpretive paradigm and suggests that case studies are "about real people and real situations...rely on inductive reasoning [and] illuminate the readers understanding of the phenomenon under study" (2007, p. 239). Used within an interpretive framework, "researchers do not seek to find

universals in their case studies. They seek instead a full, rich understanding (*verstehen*) of the context they are studying" (Willis, 2007, p. 240).

A qualitative, interpretive approach allows acknowledgement of conflict, ongoing struggle, as well as the situated and co-produced nature of subjective and complex accounts related to organization change. When looking to explore the complexity of community colleges in transition, it is essential to determine not only what worked well, but also what did not; what were the conflicts; and how were they resolved to sustain continuous improvement efforts.

The task of qualitative researchers is to describe, report, and represent the realities of their research participants. This type of research is best described as the pursuit of knowledge through questioning and is achieved by using rich, descriptive data from a variety of data sources. The questions addressed by qualitative case study are key tools in framing, focusing, critiquing, and ultimately resolving research goals. These questions and the type of research that ensues is seen as a philosophical process of developing deeper understanding of the human phenomenon being investigated using the world view and lens of the researcher. Ultimately, the case study approach was particularly relevant and best suited for this study due to the complex and overlapping perspectives, concepts, and experiences inherent when crafting a process for improved institutional effectiveness and sustained change.

Case Selection

The intent of the study is to achieve an in-depth understanding of selected individuals and high achieving community colleges noted for their excellence in continuous quality improvement processes. Of utmost importance in formulating a research strategy

is deciding on a sample for the study. According to Merriam (1998), the number of participants in a sample depends on the questions being asked, data being gathered, the analysis in progress, and the resources available to support the study. While there are no closely defined rules for sample size (Baum 2002), sampling in qualitative research usually relies on small numbers with the aim of studying in-depth and detail (Miles & Huberman 1994). Patton (2002) articulates that, "qualitative inquiry typically focuses on relatively small samples...selected purposefully to permit inquiry into an understanding of a phenomenon in depth" (p.46). Therefore, the purpose of the study guided the decision regarding both site and participant selection. Purposeful sampling is oriented towards cases that are likely to be information-rich and involves intentionally selecting individuals and sites to understand the central phenomenon. Merriam (2009) elaborates by stating, "purposeful sampling is based upon the assumption that that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned" (p 77).

For this study, participant colleges were selected using purposeful sampling based on reputation for implementation of continuous quality improvement strategies at Academic Quality Improvement Plan (AQIP) community colleges across five states in the Midwest. With the borders of the NCA/HLC region spanning west from Arizona to east with West Virginia as shown in *Figure 10*, the study geographic area was narrowed to the Midwestern states of the NCA region. The further reduction of the geographic sample was essential in order to conduct face-to-face interviews. While the process of purposeful sampling based on reputation for implementation of continuous quality improvement strategies at AQIP community colleges was employed in the selection of sites for this study,

the convenience sampling technique allowed further specificity in the selection of only Midwestern states.

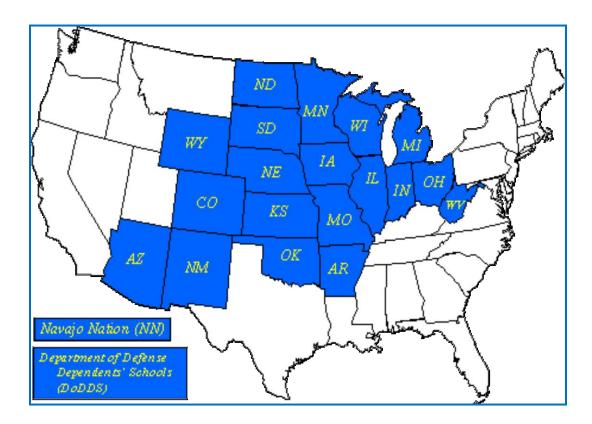


Figure 10. The Higher Learning Commission 19 State Region.

The North Central Association of Colleges and Schools (NCA) accredits the largest number of higher education institutions among the six regional accrediting agencies (1,005), with 342 described as community colleges. It was therefore selected as the geographic boundary in which to situate this study. Of the 1,173 public community colleges in the U.S., 342 are located in the region and accredited by the NCA/HLC (Higher Learning Commission, 2010). Of all the regional accrediting organizations, the NCA Higher Learning Commission (HLC) accredits the largest percentage (29%) of the community

colleges. *Figure 11* shows the number of community colleges accredited by six regional accrediting organizations.

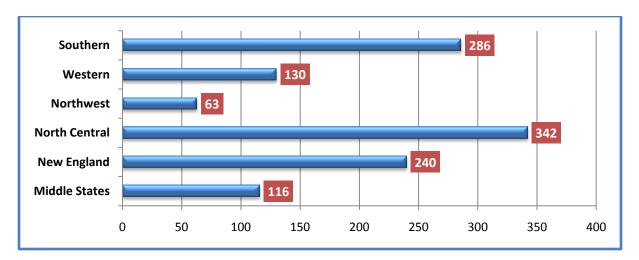


Figure 11. Community Colleges Accredited by Regional Accrediting Organizations Source: (NCA, 2010; SACS, 2010; MSCHE, 2010; CIHE, 2010; WASC, 2010).

The selection of the North Central Region Midwestern states further situates the study in an area of great community college diversity representing rural, suburban and urban-centered colleges of various sizes (annual student FTE) to create maximum variation of the sample pool. As this study seeks to understand the phenomenon of how and in what ways community college leaders craft institutional effectiveness strategies for continuous quality improvement for a wide variety of community colleges, it is important to create a sample with a maximum variation as possible to garner wide-ranging insights. This strategy facilitates capturing and describing the central themes or principal outcomes shedding light on the phenomena that span both participant and or program distinctions. "The evaluator using a maximum variation sampling strategy would not be attempting to generalize findings to all people or all groups but would be looking for information that elucidates programmatic variation and significant common patterns within that variation"

(Patton, 1990, p.172). For small purposeful samples, a great deal of homogeneity can be a problem because individual cases are so similar. However, by adding the sampling technique of maximum variation, the sampling pool is strengthened. According to Patton (1990), any common patterns that emerge from great variation are of particular interest and value in capturing the core experiences and central, shared aspects or impacts of a phenomenon.

When selecting a small purposeful sample of great diversity, such as community colleges with varying attributes ranging from degree of urbanization, geographic region, and annual FTE enrollment, data collection and analysis will yield two kinds of findings: (1) high-quality, detailed descriptions of each case, which are useful for documenting uniqueness; and (2) important shared patterns that cut across cases and derive their significance from having emerged out of heterogeneity. It is also important to note that maximum variation sampling emphasizes divergent perspectives and increases the transferability and usefulness of the findings (Creswell, 2007; Lincoln & Guba, 1985; Patton, 1990). Creswell (2007) elaborates on this concept by stating:

[Maximum variation sampling] consists of determining in advance some criteria that differentiate the sites or participants, and then selecting sites or participants that are quite different in the criteria. This approach is often selected because when a researcher maximizes differences at the beginning of the study, it increases the likelihood that the findings will reflect differences or different perspectives-an ideal in qualitative research (p.126).

The inclusion of purposeful convenience sampling as well as maximum variation will ensure a more in-depth, information-rich collection and analysis of the research data.

Site Selection

The Higher Learning Commission (HLC) of the North Central Association of Colleges

and Schools assisted with the selection of those AQIP community colleges that have distinguished themselves from the norm. Seven exemplary community colleges were recommended by the Higher Learning Commission based on their reputation for innovation and excellence in planning improvement strategies. All of those recommended were contacted and invited to participate in the study. Of the seven colleges, six agreed to participate in this research study. The site selection process and criteria employed are listed sequentially in Table 7.

Table 7 Selection Criteria Utilized in the Purposeful Sampling Process

Sequential Order	Criteria	Process	Sampling Strategy
I	Reputation for innovation and excellence	Accredited and recommended by HLC	Purposeful sampling criterion
II	Geographical location	Midwest	Purposeful convenience sampling criterion
III	Participation in AQIP	Completed AQIP Action Project (different categories)	Maximum variation sampling criterion
IV	Community colleges of different sizes and degree of urbanization	Carnegie Classification	Maximum variation sampling criterion

The first selection criteria - reputation for innovation and excellence in the implementation of continuous quality improvement strategies, was achieved through a recommendation by the Higher Learning Commission. The second selection criteria - geographical distribution, was met by community colleges located in a Midwestern state of the North Central region. The third selection criteria was attained by affirmation of those community colleges whom participated in the HLC- AQIP process between 2006 – 2010, as

detailed in participant's Action Projects detailed on the AQIP website (AQIP, 2010). The fourth selection criteria - degree of urbanization, has been frequently utilized in maximum variation selection criterion as suburban, rural, and urban institutions can vary tremendously in terms of their curriculum and services provided. This was facilitated by the Carnegie Classification system for public associates degree granting institutions (public community colleges). The six community colleges in the study had great diversity in regard to both annual enrollment as well as the degree of urbanization. Table 8 illustrates the selection criteria data of those community colleges in the study.

Table 8 Selection Criteria Data of those Community Colleges in the Study

College	Annual FTE enrollment 2009	Degree of urbanization	Action Project Date	AQIP Category
CC-1	3,519	Small-Suburban	2007	Valuing People
CC-2	4,003	Medium-Rural	2009	Leading and Communicating
CC-3	27,083	Very Large- Suburban	2009	Helping Students Learn
CC-4	7,729	Medium-Rural	2008	Planning Continuous Improvement
CC-5	10,532	Medium- Suburban	2007	Measuring Effectiveness
CC-6	5,573	Medium-Rural	2008	Understanding Students' and other Stakeholders' Needs

Source: AQIP Action Project Directory, 2010. http://www.aqip.org/?option=com actionsearch

Participant Selection

Six vice presidents of academic affairs (or the President's designee) of the selected community colleges participated in the study. It was confirmed that these study participants were assigned the responsibility of leading or coordinating accreditation, program evaluation and accountability endeavors. As this study is interested in strategies for improved effectiveness planning, it seems most feasible to study this phenomenon from the leadership position responsible for overseeing this activity within the college. According to Yin (1994), research focused on insight and understanding from the perspectives of those being studied offers the greatest promise of making significant contributions to the practice of education.

The participant selection criteria were as follows: (a) responsible for AQIP or institutional effectiveness processes for their college; and (b) two or more years of service in their role as the AQIP or institutional effectiveness contact at their college. Table 9 provides information relevant to the study participants, including their respective job title and number of years in that position.

Table 9 Study Participant Title and Number of Years in Position

College	Job Title	Years in Position
CC-1	Dean of Institutional Planning & Effectiveness	Nine Years
CC-2	Vice President Academic Affairs	Two Years
CC-3	Vice President Academic Affairs	Two Years
CC-4	President	Nine Years
CC-5	Vice President of Quality & Strategic	Four Years
	Development	
CC-6	Academic Quality Improvement Specialist	Four Years

Since organizational culture is complex, a comprehensive and powerful way to understand the dynamics involved is to look at individual institutions and seek to identify common threads and distinctive features via a qualitative approach. As qualitative research explores phenomena via field notes, observations, and interviews, it is important to establish a contact protocol for consistency of data gathering and analysis. For this study, all potential participant college presidents received a letter of introduction from the Vice President of the Higher Learning Commission and Director of AQIP, Dr. Stephen Spangehl. The presidents received a follow-up letter from the researcher (Appendix B) describing the study in detail and inviting their institution to participate in the study. All the presidents contacted, having been apprised of the research study, agreed to the inclusion of their institution and assigned the vice president or a designee as the college representative, with the exception of one college.

Data Collection

As the purpose of the study was to understand and to identify how and in what ways community college leaders craft institutional effectiveness processes to facilitate continuous quality improvement, multiple data sources including interviews, field notes, and reference to documents and statistical material were employed that allowed the researcher to focus on meaning, perspectives, and word-centered data collection (Creswell, 2008; Leedy & Ormrod, 2005; Lincoln & Guba, 1985). This variety of data sources served to describe and record the lived experiences, perspectives, and behaviors of the study participants. For this study, data was collected from five sources. Table 10 lists each data source, categorizes the method or methods employed, and data-collection technique.

Table 10 The Five Data Sources Employed for the Study

Data source	Method	Data collection technique
AQIP/ Institutional Effectiveness planning professional	Pre-interview Demographic Questionnaire	An Online survey using SurveyMonkey.com yielding demographic and planning process data
AQIP/Institutional Effectiveness planning professional	In-person Interview	In-person interview approximately 45-60minutes in length yielding digital recording of interview; interview transcript; field notes
AQIP Action Project	Document	Retrieved from institution's web site or AQIP web site
AQIP Systems Portfolio	Document	Retrieved from institution's web site or AQIP web site
College mission statement	Document	Retrieved from college catalog; marketing materials; institution's web site

Qualitative researchers gather information and data from multiple data sources, such as interviews, observations, and documents to facilitate development of a holistic, complex picture of the problem, issue or concern under study.

Interviews

Patton (1990) elaborates on interviewing techniques by stating that there are three types of qualitative interviewing: (1) informal, conversational interviews; (2) semi-structured interviews; and (3) standardized, open-ended interviews. For purposes of this study, semi-structured interviews were conducted. This data collection method allowed a conversation-like interview to take place using semi-structured questions designed to solicit information specifically addressing the purpose of the study. During the interview, the researcher also utilized probing questions in order to uncover new clues, open up new

dimensions of a problem, and secure vivid, accurate and detailed accounts of the phenomena based on the personal experience of the participants.

The objective of qualitative interviews is to obtain detailed information, in the form of narratives or stories of people's experiences, local histories, and shared knowledge to get verbal pictures of systematic behaviors. Data derived from qualitative interviews were descriptive explanations that gave meaning to how and in what ways community colleges implement their plan for institutional effectiveness. Semi-structured interviews are useful for exploratory investigations of new topics and ideas, or when the topic under study is not well known or understood such as the case in this study which seeks to explore continuous improvement strategies at AQIP community colleges. The idea is to allow informants to express themselves freely, in order to gain the most information possible.

The utilization of an interview guide provided a systematic approach for all the interview sessions. An interview guide or "schedule" consisted of the list of questions the researcher asked during each interview. With the use of semi-structured interviews, the researcher was free to probe and explore within predetermined inquiry areas. Employing an interview schedule ensures good use of limited interview time, maintains a similar systematic approach to each interview, and assists to keep the interview session focused. The interviews in this study lasted 45-65 minutes, were audio tape-recorded and transcribed. The interviews were face-to face interviews conducted with each research participant in their respective office locations. The driving questions mapped to the interview schedule are found in Appendix C.

Documents

Complex phenomena such as organizational procedures, change processes over time, and social interactions underlying specific outcomes may be difficult to measure quantitatively. Qualitative methods can be helpful in identifying and characterizing multifaceted organizational dynamics that can influence outcomes, including organizational culture. Documents collected and reviewed for this study included AQIP Systems Portfolios, AQIP Action Projects, organizational hierarchies, and those related to institutional effectiveness strategies and presentations. According to Stake (1995), "documents substitute for records of activities the researcher could not observe directly" (p. 68). An analysis of institutional documents allows the researcher to generate inferences through objective and systematic identification of core elements of written communication. Content analysis of the documents provides for the categorization and classification of data found within said documents in order to make inferences about the antecedents of a communication, describe and make inferences about characteristics of a communication, and make inferences about the effects of a communication within the organization.

Field Notes

The fundamental aspect of qualitative field research is to position the researcher as close as possible to the subjects so as to gain access to them and describe personal experiences. These are then interpreted in the context of the social setting. Qualitative researchers maintain a field record in which details of events, personal reactions to the events, and changes in the researcher's views over time are entered. This becomes the basis of developing tentative hypotheses or theories which then get further refined as the research progresses. Field notes played an important part during participant interviews of

this study (Creswell, 2007; Merriam, 2009). Field notes are a written account of the observation and/or interview by the researcher, which provide a description of the setting, the themes and substance of the dialogue, and reflective perceptions captured during or after the event (Merriam, 2009). Moreover, Merriam charges researchers with being "highly descriptive" (p. 130) in their field note accounts. She believes "that enough detail should be given that readers feel as if they are there" (p. 130).

In a similar manner, Creswell (2008) describes field notes as consisting of two parts: observations and reflections. The observations are descriptive accounts of what was perceived through the five senses: sight, hearing, smell, taste, and touch. Parallel to the observations, the researcher captures reflections that loosely correspond to the observations. Such a process helps the researcher understand how thoughts and reflections can impact perceptions. Field notes are traditionally viewed as an observational tool in capturing visual cues not necessarily transmitted to audio tape or the subsequent transcript. The utilization of reflective field notes also assisted in attempts to reduce research bias.

Data Analysis

According to Bogdan and Biklen (1992), data analysis is "the process of systematically searching and arranging the interview transcripts and other materials that you accumulate to increase your own understanding of them and to enable you to present what you have discovered to others" (p. 153). Creswell (2007) described this same process as a spiral image creating structure and meaning as data and information is collected. The procedural stages of this process were categorized as: (a) data managing; (b) reading and

memoing; (c) describing, classifying, and interpreting; and (d) representing and visualizing.

The data analysis phase of this study followed Creswell's spiral.

Data Managing Stage

The process begins with data managing, the first loop in the spiral. This organizational stage is created at the inception of the data collection process. For this study, folders and storage units were utilized to contain all documents collected. These documents were then sorted by type of data, participant's name, and community college affiliation. An excel file was also created to organize the data and saved onto digital flash drives which were kept in a secure location. This process was the beginning of the study's audit trail.

Reading and Memoing Stage

According to Johnson and Christensen (2004) memoing is a tool for recording ideas which are generated throughout the data analysis process. They go on to note that "memos are reflective notes that researchers write to themselves about what they are learning from their data" (p. 501). These memos can be in the form of short phrases or key concepts to aid the researcher in the recollection of their observations, and enhance the accuracy and reliability of the research conducted.

The researcher transcribed the face-to-face interview tapes and then reviewed them against the tapes for accuracy. The transcriptions were then sent to each participant for member checks. After verification and agreement, the transcripts were continually reviewed to enable data segmentation for coding to begin the identification of themes and patterns. Memoing and notations were made after reviewing the transcripts and then

combined with those prepared from the documents and the researcher's field notes. The creation of memoing and reflective notes was a continual process thereby increasing the accuracy, reliability, and transparency of the data analysis process.

Describing, Classifying, and Interpreting Stage

In order to divide the data into meaningful analytical units, the researcher began to establish themes and patterns utilizing categorical aggregation (Creswell, 2007). These categories, or codes, helped to expose insights, relationships or connections emerging from the raw data. According to Creswell (2007), researchers should begin with a short list of potential codes that "match text segments" (p. 152). Coding for this study was developed through the use of a priori themes garnered from the study's theoretical lenses. However, great care was taken to capture all emergent themes so that no data was lost.

Representing and Visualizing Stage

The final loop of Creswell's (2007) spiral depicts how the data is represented or depicted as in a figure, tabular form, or text. Johnson and Christensen (2004) concur that diagrams can be helpful in making sense of the data. Following the categorization and coding of the data, emerging themes and patterns were identified. This allowed the researcher to create a typology classification system that organized the qualitative data into tables, figures, and text which further concentrated the data and themes. The findings from the data analysis provided useful insights into the emerging trends of how community college leaders create strategies for improved institutional effectiveness which was the purpose of the study.

Trustworthiness and Validity

Patton (2002) states that validity and reliability are two factors with which any qualitative researcher should be concerned while designing a study, analyzing results, and judging the quality of the study. In their seminal 1985 publication, Lincoln and Guba substitute the concepts of reliability and validity used in quantitative research with the parallel term of trustworthiness and clarifies its meaning and relevance to qualitative research. According to Lincoln and Guba (1985), there are specific means for establishing credibility, transferability, dependability, and confirmability supporting the trustworthiness of qualitative research.

CREDIBILITY - Refers to the credibility of the study findings arrived at from the researcher's interpretation of the information and data gleaned from the participants.

TRANSFERABILITY - Refers to the degree to which the research findings can be transferred to other contexts or situations. From a qualitative perspective, transferability is primarily the responsibility of the one doing the generalizing or transferring.

DEPENDABILITY - Refers to the reliance and dependence on a consistent quality of the study design, data collection and analysis.

CONFIRMABILITY - *R*efers to the neutrality of how well the findings are shaped and supported by the data and information collected.

Patton (2002), Lincoln & Guba (1985) are not the only theorists to have written extensively regarding the concepts of qualitative research validity and trustworthiness. Yin (2003) speaks of four tests for judging the quality of research designs: (a) construct validity, (b) internal validity, (c) external validity, and (d) reliability. Yin (2003) states that while construct validity relies on the tactics of multiple sources, chains of evidence, and member checking of preliminary results, internal validity relies on pattern matching,

explanation-building, addressing rival explanations, and using logic models. He goes on to state that external validity is created using a theoretical framework and replication logic. Finally, the concept of reliability is said to be achieved through case study protocols and a development of a case study database.

Similar to those of Yin (2003), Stake (1995) suggests a list of strategies to establish trustworthiness. Stake's strategies tend to focus more directly to the specialized work of the case study researcher than those of Lincoln and Guba (1985), which are more general. Stake (1995) references two trustworthiness issues: validation and transferability. He believes validation is achieved primarily through triangulation of data sources and member checks where as transferability or "naturalistic generalizations" are achieved by applying a variety of strategies and techniques. Table 11 compares the trustworthiness concepts within the qualitative paradigm as discussed through the works of Lincoln & Guba, Stake, and Yin. By comparing the aforementioned concepts, it is clear that many commonalities exist as the authors review their frameworks for validity and trustworthiness.

Table 11 Comparison of Trustworthiness Frameworks within the Qualitative Paradigm

Trustworthiness concept	Lincoln & Guba (1985)	Yin (1995)	Stake (2003)
Internal validity	Credibility: prolonged engagement, persistent observation, triangulation, peer debriefing, negative case analysis, referential adequacy, member checks	Internal validity: pattern-matching, explanation building, addressing rival explanations, logic models	Validation: triangulation, member checks
External validity	Transferability: rich, thick description	External validity: theoretical framework, replication logic	Naturalistic generalizations: adequate raw data, detailed methodology, define validity, peer review
Reliability	Dependability: audit trail	Reliability: case study protocol, case study database	Naturalistic generalizations: detailed methodology
Objectivity	Confirmability: audit trail	Construct validity: multiple sources, chain of evidence, member checks of preliminary findings	Naturalistic generalizations: Researcher bio, detailed methodology

Validity, in "a broad sense, pertains to the relationship between an account and something outside of that account, whether it is construed as objective reality, the constructions of actors, or a variety of other possible interpretations" (Huberman & Miles, 2002, p. 41). The trustworthiness of this study was maintained by the use of contact protocols to ensure the consistency with regards to the interactions with the participants,

triangulation of multiple data sources, document review and field notes. This research employed numerous strategies to enhance the dependability and trustworthiness of the findings. These strategies are highlighted in Table 12.

Table 12 Strategies Used to Promote Qualitative Research Trustworthiness

Concept	Strategy	Description
Credibility	Fieldwork	Face-to-face interviews with participants to gather data.
	Triangulation	Multiple data sources employed providing cross- checking of information and corroboration of the data. Triangulation of the data from interviews, field notes, and documents.
	Theory triangulation	Multiple theories and perspectives to help interpret and explain the data.
Transferability	Data triangulation	Multiple data sources to help understand a phenomenon for the reader.
Confirmability	Audit Trail	Documentation and detailing of the data, interpretation of the data, and the findings.
Dependability	Member Checks	Participants verification of transcripts for accuracy
	Critical Reflection	Self-awareness and "critical self-reflection" by the researcher on potential biases and predisposition; limitations of the study also acknowledged.

Ethics

A professional code of ethics is "beneficial as a guideline to alert researchers to ethical dimensions of their work, particularly prior to entry" (Denzin & Lincoln, 1998, p. 171). For purposes of this study, the researcher adhered to the National-Louis University

Internal Research Review Board policies, and ensured that all participants signed an informed consent form (Appendix A). Participants signed two copies, keeping one for their personal files and returning the other to the researcher at the time of the interview.

Regarding the importance of the informed consent, Neuman (2003) wrote,

Allowing participants to sign an informed consent decreases any risks or discomfort associated with participation, provides the purpose and procedure of the research, guarantees anonymity and confidentiality of records, that participation is completely voluntary and can be terminated at any time, and offer to provide a summary of findings, (p. 92).

No transcriptionist confidentiality form was necessary, as the researcher transcribed all participant interview tapes.

The research design included a plan to safeguard the identity of the research participants as evidence of responsible research practice (Cooper & Schindler, 2003). The use of numeric identifiers helped to code the responses and data. Upon conclusion of the interview session, data were transcribed by the researcher and placed on a hard drive and secured in a locked cabinet not accessible to anyone other than the researcher. After seven years, all data will be destroyed.

Limitations

Every study has a set of limitations (Leedy & Ormrod, 2005), or "potential weaknesses or problems with the study identified by the researcher" (Creswell, 2008, p. 207). A limitation can be defined as an uncontrollable threat to the validity and trustworthiness of a study. As limitations will directly affect the transferability of the findings, it is important to acknowledge them. Creswell (2008) also believes that limitations "…often relate to inadequate measure of variables, loss or lack of participants,

small sample sizes, errors in measurement, and other factors typically related to data collection and analysis" (p. 207). Two limitations of this research were identified: (1) the completeness and accuracy of the information obtained from participants; and (2) the familiarity of the participants with institutional effectiveness endeavors in the college.

As this study sought to explore strategies undertaken by community college leaders for improved institutional effectiveness, one must consider the participant's memory and/or recall and honest reflection of complex phenomena. The researcher, aware of the difficulty in recalling events and in describing the culture of an organization, requested institutional documents which would assist in detailing many of these concepts and assist participants to recall events, strategies, and their outcomes. For instance, AQIP Action Projects, Strategic Planning documents, organizational hierarchy charts, and marketing materials utilized for communicating institutional effectiveness projects to internal/external constituents were requested. In addition, the interview questions were sent to the participants two weeks prior to the interview so that they could prepare if they so desired.

With regard to the second limitation, the participants of the study were designated by the college president as those engaged in the college's institutional effectiveness processes. However, some individuals might have been in another capacity at the time and therefore, were not responsible for leading the institutional effectiveness projects for their respective colleges. Although this was unavoidable, each designee was asked to describe their title, length of time in current position, and responsibilities as it related to this study's analysis of continuous improvement strategies for increased effectiveness of the organization. This was initially achieved through the demographic questionnaire that each

participant completed. It was followed by a brief introductory telephone conversation in which the in-person interview was scheduled once it was confirmed that the designee was responsible for the AQIP project at the institution. This verified person's position and responsibilities assisting with contextualizing the insights and information each shared.

Researcher as the Tool

Merriam (2009) cites that the researcher is the primary instrument for data collection and analysis in qualitative research. Creswell (2009) agrees and feels the researcher is the instrument to discover participants' perspectives of their worlds. The researcher gathers participants' perceptions of their experiences, but ultimately the researcher is the interpreter of the data. Since the researcher is the instrument or the tool through which the data is collected, it is important for the reader to have an understanding of the researcher's prior experience.

As the researcher has always believed herself to be a change agent who wanted to make a difference in the community, she began obtained her bachelor's degree in criminal justice from Eastern Michigan University in 1997 and became a law enforcement officer and Criminal Justice Instructor at a local community college. Having decided that she may be able to make a bigger impact on other people's lives as an educator, she became an Assistant Registrar at a small, private four-year university in 2002 and obtained her master's degree from Michigan State University in 2003 in Higher Education Administration and Teaching. While an Assistant Registrar, it was edificatory that the institution was particularly strong at collaboration, cyclical planning, and organizational effectiveness and the researcher was able to acquire many skills such as program planning, marketing, and supervision of staff while in this role. The researcher went on to acquire a

position as a community college faculty member in 2005 at Remington College where she taught primarily criminal justice classes such as Forensic Science, Constitutional Law, and Introduction to Criminal Justice. This role allowed the researcher the opportunity to participate in curriculum development and assessment activities at a 2-year higher education institution.

In 2007, the researcher assumed the position as Associate Dean of Student Services at Richard J. Daley College, one of the seven City Colleges of Chicago in Illinois. Her primary responsibilities in this role centered on the supervision of enrollment management, marketing, financial aid, career resources, testing & assessment, veteran affairs, and new student orientation. This position allowed the researcher to work on various planning initiatives such as strategic planning, commencement, accreditation, and the Survey of Entering Student Engagement (SENSE). It was in this role that the researcher determined that there was a need for community colleges to promote and initiate a stronger culture of evidence whereby continuous improvement strategies for institutional effectiveness could be fostered throughout the organizational culture. While involved in these experiences, the researcher became more familiar with leadership behaviors, faculty involvement, stakeholder's personal agendas, and organizational culture. Having served over ten years in higher education, her passion continues to be community colleges, and the very special students they serve.

Summary

As little is known of the phenomena of how community colleges initiate and guide their change efforts in order to create responsive institutional effectiveness strategies, a qualitative case study, situated within an interpretive paradigm, is most appropriate for

this particular study. Of utmost importance in formulating a research strategy is deciding on a sample for the study. For this study, participant colleges were selected through a process of purposeful sampling based on reputation for implementation of continuous quality improvement strategies at Academic Quality Improvement Plan (AQIP) community colleges. In addition, enhancing transferability of the findings, maximum variation criteria was employed with the selection of the North Central Region Midwestern states to further situate the study in an area of great community college diversity representing rural, suburban and urban-centered colleges of various sizes (annual student FTE).

The principle instruments for data collection included face-to-face semi-structured interviews, documents, and field notes. Data analysis techniques such as categorizing, coding and theming of information gathered from multiple data sources followed Creswell's (2007) data analysis spiral, consisting of data managing; reading and memoing; describing, classifying, and interpreting; and representing and visualization. All data was tracked utilizing the functions within Microsoft Access providing easy access and retrieval of data and an adult trail.

In order to address the issues of research soundness, rigor, and trustworthiness, methods and strategies were integrated into the design to meet and address the qualitative criteria purported by Lincoln and Guba (1985) credibility, transferability, dependability, and confirmability. The limitations of the study were two: (1) the completeness of the information obtained from participants; and (2) the familiarity of the participants with institutional effectiveness in the college. Researcher bias was also addressed by maintaining an audit trail documenting the processes of methodology development, implementation, and data analysis. Finally, the trustworthiness of this study was

maintained by the use of contact protocols to ensure the consistency with regards to the interactions with the participants, triangulation of multiple data, document review and field notes. The utilization of reflective field notes also assisted in attempts to reduce research bias. An overall systematic consistency within the study design, data collection and analysis processes were maintained throughout the research process enhancing the transparency, trustworthiness and rigor of the study.

CHAPTER 4

DATA COLLECTION

As this study seeks to shed light and insights on the process employed by community college leaders when instituting continuous quality improvement strategies, it is important to provide an intensive description of the phenomenon from the perspective of those with an intimate understanding of the case under study. Data for the study was acquired through the collection of AQIP documents and demographic survey, as well as face-to-face, semi-structured interviews. This chapter will describe the phases of the data collection techniques, site and participant basic demographic data and the inventory of the documents procured to assist with situating the study findings. It will also highlight and describe the retrieval of documents pertinent to understanding the strategies employed by participants instituting continuous quality initiatives.

Research Process

Phase One- Participants Contacted and Acquired

As qualitative research explores phenomena via field notes, observations, documents, artifacts, and interviews, it is important to establish a contact protocol for consistency of data gathering and analysis. *Phase One* centered on the initial identification and contact of participants. Wanting to include an in-depth analysis of quality strategies at AQIP community colleges, the Higher Learning Commission, Division of AQIP was contacted to acquire a list of colleges deemed exemplary in the implementation of AQIP continuous improvement endeavors that could be considered for the study. All seven potential participant college presidents received a letter of introduction describing the

purpose of the research study from Dr. Stephen Spangehl, Vice President of the Higher Learning Commission and AQIP Director. The college presidents received a follow-up email from the researcher describing the study in greater detail and inviting their institution to participate in the study. Of the seven institutions originally recommended by the HLC and contacted by Dr. Spangehl and the researcher, six agreed to participate. The President of each institution then assigned the individual responsible for institutional effectiveness activities, commonly the Vice President, as the college representative for the study.

Phase Two-Distribute Demographic Survey

The second phase of the study entailed the distribution of the on-line survey instrument (Appendix D) for the purpose of gaining contextual insight into the characteristics of both the study participants and their respective institutions. The utilization of an online-survey instrument allowed data collection which was "unbound from the restrictions of proximity or geography. Rather than relying on traditional, geographically based means of encapsulating the culture under study" (Markham, 2004, p.101). Close-ended survey questions allow for increased ease of coding and analysis.

Utilizing an online Survey-Monkey instrument, all participants were asked to identify certain demographic characteristics relevant to them individually as well as specific information pertinent to their affiliated community college institutions. Therefore, the survey provided participant descriptive statistics (questions 1-7) and contextual information related to organizational culture and leadership (questions 8-11).

Phase Three-Participant Interviews and Coding Processes

In keeping with the protocols for interviewing, appointments were made to interview each participant. Each participant signed a consent form and granted permission for the interview to be audio recorded. The interview schedule contained nine questions.

The interviews were conducted in April and May 2010. Interviews lasted 45 to 65 minutes, most slightly longer than 50 minutes. Common interview techniques of probing, follow-up, reiteration, and silence were used to gain thick rich data from participants. Each interview was digitally recorded, and field notes captured shortly after the interviews took place provided relevant observational elements and reflections. Each interview began with introductions, establishment of rapport and gathering background information, and then proceeded to the interview questions. The goal of these questions was to elicit information concerning the participant's perspectives and knowledge of how their institution initiated, championed, and sustained a culture of quality, as well as the realities of its adoption and implementation of AQIP. For this study, the contact protocol and overall research process was characterized by three distinct phases as outlined in Table 13.

Table 13 Contact Protocol for the Research Process Three Phases

	Phase One: Participant Selection	Phase Two: Distribution of Demographic Survey	Phase Three: Interviewing & Coding
Timeline	January-March, 2010	March, 2010	April-May, 2010
Sampling	Purposeful	Purposeful	Multiple Variation
Participants	Seven colleges recommend by HLC	Six of the seven colleges agreed to participate	Designee interviewed
Data Collection	Letters sent by HLC; Researcher follow up	Online-survey; follow up email	Semi-structured interviews; field notes
Data Analysis		Descriptive Statistics	Coding: a <i>priori</i> themes and data

Site Description

Participant colleges were selected upon recommendation by the HLC and based on their reputation for excellent implementation of continuous quality improvement strategies at Academic Quality Improvement Plan (AQIP) community colleges in the Midwest. The study sought out schools based on the following criteria: (a) reputation for implementation of institutional effectiveness strategies for continuous quality improvement; and (b) geographical location with the Midwest Region of AQIP. The application of maximum variation sampling criteria was not applied until these first two criteria had been satisfied.

In keeping with the study's ethical considerations, anonymity and confidentially was maintained for the participants and institutions participating in the study. Therefore, names of the institutions were not used, but disginations were assigned. The lack of representation of a large community college was not significant and an unintentional consequence. The college designation and attributes are diplayed in Table 14.

Table 14 College Designation and Attributes

College	Degree of Size Classification Urbanization		Annual FTE Enrollment
CC-1	Suburb: Large	S2 (small)	3,519
CC-2	Town: Distant	M2 (medium)	4,003
CC-3	Suburb: Large	VL2 (very large)	27,083
CC-4	Rural: Fringe	M2 (medium)	7,729
CC-5	Rural: Fringe	M2 (medium)	10,532
CC-6	City: Small	M2 (medium)	5,573

Note: The size classification is based upon the Carnegie size classification system: VS2: Very small 2-year --fall enrollment data show FTE* enrollment of fewer than 500 students at these associate degree granting institutions; S2: Small 2-year -- fall enrollment data show FTE* enrollment of 500 – 1,999 students at these associate degree granting institutions; M2: Medium 2-year -- fall enrollment data show FTE* enrollment of 2,000 – 4,999 students at these associate degree granting institutions; L2: Large 2- year -- fall enrollment data show FTE* enrollment of 5,000 - 9,999 students at these associate degree granting institutions; VL2: Very large 2 –year -- fall enrollment data show FTE* enrollment of at least 10,000 students at these associate degree granting institutions. FTE enrollment figures from IPEDS (2009) - http://nces.ed.gov/collegenavigator/.

Table 15 displays the year each participant institution joined AQIP. Interestingly, three of the six institutions recommended for this study by the Higher Learning Commission for Excellence in Innovation and Continuous Quality Improvement, were

among the original fourteen institutions to join AQIP. The other three participant institutions joined within two years after the original cohort.

Table 15 Number of Years Institution in AQIP

College	Year Joined AQIP	Years in AQIP
CC-1	2001	9
CC-2	2002	8
CC-3	2001	9
CC-4	2002	8
CC-5	2003	7
CC-6	2000	10

Participants

The participants were six individuals in administrative areas each college designated as responsible for AQIP and quality initiatives. According to each college president, participants were purposely chosen for their knowledge of AQIP, understanding of their respective organizational system or culture, and professional roles as stewards of institutional effectiveness projects for their community college. For this study, participant gender and ethnicity were not of significance.

One president was interviewed for the study. He had designated the individual responsible for AQIP (Executive Director of Institutional Effectiveness & Legal Affairs) to participate on behalf of the college. However, shortly before the scheduled interview, a family emergency had arisen and she would not be on campus for the interview. After

discussion with the researcher, to honor the commitment made regarding the college's involvement in the study, the president participated as the college's representative and completed the online demographic questionnaire and interview. The president had been greatly involved throughout the college's implementation of AQIP and he felt his knowledge of this time was unsurpassed next to the Executive Director's.

Four participants had served in their positions for four or more years. Most of the participants noted being at their respective institutions for five years or more and being promoted into their current positions. Interestingly, all participants had previously served as faculty members in a higher education setting.

The age range of the majority of participants is indicative of the research presented in the literature review regarding community college leaders who are a declining commodity at a time when knowledgeable stewardship requires individuals to successfully address a great variety of challenges. As five of six participants are either retirement age or near retirement age, many acknowledged the importance of professional development opportunities to recruit and train personnel to fill the leadership gaps (such as their position) that are occurring as a result of baby boomer retirements. Each participant was assigned a participant designation for confidentially purposes. Table 16 displays the participant general demographic data.

Table 16 Demographic Data Describing Participants

College	Participant	Age Range	Title	No. Years in position
CC-1	A	56-60	Dean, Institutional Planning & Effectiveness	9
CC-2	В	46-50	Vice President, Academic Affairs	2
CC-3	С	46-50	Vice President, Academic Affairs	2
CC-4	D	Over 60	President	9
CC-5	Е	51-55	Vice President, Quality & Strategic Development	4
CC-6	F	36-40	Academic Quality Improvement Specialist	4

Demographic data shows even though all the colleges have been in AQIP over 7 years, the majority of those individuals regarded as leaders in institutional effectiveness and responsible for AQIP are fairly new to their positions. Figure 12 highlights the length of time each participant college has participated in AQIP as well as the length of time each individual has spent in their positions which are responsible for oversight of the AQIP process at their respective institutions.

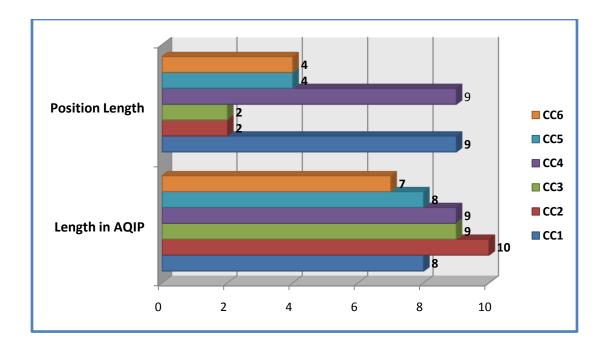


Figure 12. Years in Current Position and Years in charge of AQIP

Documents Collected and Reviewed

As part of this study's triangulation of data, documents were reviewed in addition to interviews, the survey and field notes. The documents gathered were those related to the AQIP Action Projects and Systems Portfolios for each participant institution. These items were collected from the institutions and reviewed to identify the strategies each institution developed for the implementation of continuous quality improvement endeavors.

Additional documents reviewed were found on the AQIP website under each institution.

Some documents were gathered during the course of the interview, while others were retrieved from the colleges' web sites. Table 17 highlights the type of documents(s) retrieved from each participant institution. As many of the received documents were similar, (i.e., strategic planning documents, AQIP Action Projects, etc.), relevant themes or excerpts were coded and categorized as they aid in deciphering the journey undertaken to

propel the institutions toward their reputation of excellence as they implemented continuous quality improvement AQIP Action Plans.

Table 17 Institutional Effectiveness Documents Reviewed for the Study

Document type	CC-1	CC-2	CC-3	CC-4	CC-5	CC- 6
AQIP Action Projects	X	X	X	X	X	Х
AQIP Systems Portfolio	X	X	X	X	X	Х
Balanced scorecard		X		Х		Х
Quality teams	X	X	X	X	X	X
Mission statement	X	X	X	X	X	Х
Planning process				X		
Strategic plan					X	
Accountability Measures		X		X		
Strategic Plan Surveys		X				
Institutional Priorities			X			

Source: (X) received

SUMMARY

The focus of this chapter was the phases of the data collection techniques, site and participant basic demographic data and the inventory of the documents procured. The trustworthiness of this study was maintained by the use of contact protocols to ensure the consistency with regards to the interactions with the participants, triangulation of multiple data sources, document review and field notes.

CHAPTER 5

DATA PRESENTATION AND ANALYSIS

Multiple data sources served to describe and record the lived experiences, perspectives, behaviors, and processes of the study participants. Data derived from qualitative interviews were rich, in-depth descriptions that explained and gave meaning to how and in what ways community colleges implement their plan for institutional effectiveness using the Academic Quality Improvement Program (AQIP). This exploratory qualitative case study was designed to capture the emergent and fluid properties of organizational activity and culture linking the implementation of a change process or program with its most influential components.

The purpose of this study was to identify how and in what ways community college leaders craft institutional effectiveness processes to facilitate continuous quality improvement. As this study seeks to shed light and insights on the process employed by community college leaders when instituting continuous quality improvement strategies, it is important to provide an intensive, holistic description of the phenomenon from the perspective of those intimately involved.

The driving questions arising from the research were the following:

- 1. What factors prompt community colleges to engage in a planned process to improve institutional effectiveness?
- 2. Are specific organizational culture characteristics or dynamics evident as community colleges engage in a planned process to improve institutional effectiveness?

- 3. What are the preliminary steps taken by community colleges to establish a plan of institutional effectiveness for systematic continuous improvement?
- 4. How and in what ways did community college leaders facilitate and support the implementation of an institutional effectiveness process for systematic continuous improvement?

DATA ANALYSIS TECHNIQUES

The transcribed data were analyzed through open and axial coding (Gall et al, 1996). That is, the data were separated into units and these units were placed in respective categories (open coding). Throughout multiple data analysis iterations, connections were made within the data to further analyze the categories (axial coding). The study purpose, driving questions, and a rich literature review resulted in the identification of four key *a priori* themes for the data analysis: (1) reasons for engaging in institutional effectiveness; (2) culture; (3) implementation processes; and (4) leadership. Data gathered was sorted, filtered and coded according to these themes (Appendix E). Care was also taken to capture additional themes emerging from the data.

Survey

This study attempts to explore and understand participant's perceptions of factors which enable organizations to create and sustain cultures of evidence for improved institutional effectiveness. A questionnaire gathered demographic data relevant to the participants and the college (questions 1 – 8). Utilizing a five point Likert scale, the same questionnaire gathered (questions 9 - 13) pertinent data regarding the following three factors: (a) organizational culture; (b) leadership support; and (c) resources.

Factors Contributing to Institutional Effectiveness

Participants ranked in order of importance four factors which they believed to positively impact an organization's ability to create and sustain a culture of evidence for improved effectiveness. Participants overwhelmingly expressed the importance of the factor *leadership support and facilitation* in creating cultures of evidence which is needed to improve institutional effectiveness. Five out of six participants agreed that it was very important with a rank of five out of five on the Likert scale. This finding from these participants corroborated the forewarning from AQIP which revealed that "support of leadership was essential" for an institution wishing to join AQIP (AQIP, 2007).

While institutional effectiveness is measured by how well an organization meets its mission and stated goals, this study is supported by years of research which reveals that without the guidance and support of the leaders, the organization will not be successful in its endeavors for improvement. Leadership, therefore, sits at the heart of an organization's institutional effectiveness (IE) efforts. This is particularly relevant when it comes to making the decision to join AQIP and the subsequent continuous active support and facilitation of improvement efforts that blossomed from the college's accreditation process. Table 18 displays the participants' answers for question number 9 using the Likert five point ranking scale.

Survey Question 9 - In your opinion, how important are the following factors as the institution engages in a dedicated process to enhance institutional effectiveness and establish an environment conducive to building and sustaining a data-driven culture of evidence?

Table 18 Factors Which Contribute to Institutional Effectiveness

	1	2	3	4	5	Rating Average
Leadership Support Facilitation				1	5	4.83
Mission & Goals			1	3	2	4.17
Culture Supportive of Data- driven analysis & Metrics				3	3	4.50
Appropriate financial Technological allocation			2	4		3.67

Importance on a scale of 1 to 5 where: 1 = Not Important; 5= Very Important

Leadership

As community colleges review their accreditation process and decide whether to continue with PEAQ or switch to AQIP, it was important to confirm who made this decision on behalf of the college. The majority of the participants indicated it was the president, with the remainder stating it was the inclusive group of college senior leaders.

Participants overwhelmingly agreed that unless the community college president drove this decision, the college would remain with the PEAQ program. However, findings showed that while the president made the decision to join AQIP, selection of the college's participation in specific AQIP categories was made more collaboratively. The AQIP Action Projects were decided by both senior leadership and college stakeholders, including in some instances, board members and students. Table 19 displays the participant's answers for question number 10.

Survey Question 10 - Who made the decision at your institution to participate in AQIP? To participate in specific AQIP categories?

Table 19 Decision to Participate in AQIP and AQIP Action Projects

College	Participate in AQIP	Participate in Specific AQIP Categories
CC-1	"A team of senior leaders."	"The categories and the specific Action Projects within those categories are selected through a two-stage, all campus survey process."
CC-2	"Senior Leaders."	"This decision was made by our AQIP Steering Committee"
CC-3	"Original decision to join AQIP as driven by past president."	"Quality Team and senior leaders."
CC-4	"The President."	"The President and executive leadership team."
CC-5	"The President."	"The process for making the decision was collaborative engaging key college stakeholders, including faculty, staff, administrators, students, and the Board of Trustees."
CC-6	"The President."	"Senior leadership and AQIP committee."

Once the colleges make the decision to join AQIP, leadership support and stakeholder involvement becomes paramount. Community colleges soon discover that the

AQIP process provides a means to respond to opportunities for improvement as a direct result of strategic issues identified by stakeholders. It also propels colleges to utilize performance measures and other data to formulate and guide the decision-making processes for the organization. As no surprise, many participants noted that while performance indicators, strategic plans and AQIP Action Projects aide in this process, communication remains a constant challenge within their institutions. Communicating the college's challenges as well as its opportunities for improvement across institutional silos proves difficult as there may be competing missions and perceptions of the direction the college should proceed on action projects and initiatives.

Resources

As colleges embark on the selection of specific AQIP Action categories on which to focus, setting benchmarks for successful effectiveness endeavors, timely and accurate college data must be available. The utilization of technology to promote and inform stakeholders of the AQIP process, continuous improvement initiatives, and evaluative techniques is crucial. Indeed, 4 of the 6 participants indicated that there are generic systems in place at their colleges to create, gather and distribute (communicate) data. The pie chart in Figure 13, displays the participants answers for question number 11.

Survey Question 11 - Is a system in place to gather and distribute timely, useful, and user-friendly information about institutional effectiveness at your community college?

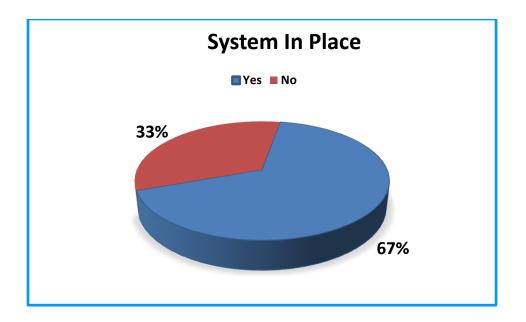


Figure 13. Systems in Place for Information Dissemination

Having data systems in place does not necessarily equate into individual's receiving the correct data needed nor the availability of a useful data dissemination stream. To make good decisions, the data must be the right data, manageable in size, user-friendly with regards to retrieval, understandability, and timeliness. Although participants acknowledge that their college had some sort of data systems, these system's usabilty was not as efficient as many would like. The participants perceptions were that while their colleges had performance metrics and other data at their disposal, there was not necessarily a formal set of administrative policies to govern the information management processes. For an institution's planning and decision-making processes to be informed by data, the right data must be consistently available to constituent groups across the campus for a true culture of evidence to exist (McClenney & McClenney, 2003). All participant colleges communicate AQIP information on the public domain of the college website, while the strategic plan and key performance indicators are typically highlighted on an internal portal for community

college employee review only or disseminated to senior staff. Table 20 displays the participant's answers for question number 12.

Survey Question 12 - Please rate how well each of the following statements describes your community college.

Table 20 College Data Systems Factors

	1	2	3	4	5	Rating Average
My college uses data & metrics			1	1	4	3.50
Employees who need access to data for decisions have technology and processes available to get information in a timely manner		2	1	2	1	3.33
My college has a formal set of administrative policies to govern our information management processes	1	1	2	1	1	3.00
Data and information regarding the college is transparent and shared across the college		2	1	2	1	3.33

Importance on a scale of 1 to 5 where: 1 = Not Important; 5= Very Important

Although the use of data to inform decisions has been continuously afffirmed in the literature of practice for higher education institutions, the process for the integration and systematic collection and subsequent use of such data to create cultures of evidence has been rarely studied. With this limited research on cultures of evidence, models are needed to guide community colleges leaders on how to initiate the integration of data into an

institution's cultural norms (McClenney et al, 2007). It seems resonable to assume that a college with little or no culture of evidence, supporting and being successful with AQIP endeavors would be a exercise in futility. Findings strongly indicate that participants felt potential outcomes for their college's development of a culture of evidence related to decision-making and problem solving, could provide key insights into student and institutional success. The highest potential outcome was the creation of a framework for proactive, evidence based decision-making closely followed by improving the quality of programs and services at the institution and solving complex problems. Table 21 displays the participant's answers for question 13.

Survey Question 13 - The following is a list of potential outcomes of a culture of evidence. Please rate each in terms of the benefit you believe it provides to your college.

Table 21 Potential Outcomes for Colleges with a Culture of Evidence

	1	2	3	4	5	Rating Average
Improve regulatory compliance			2	3	1	3.83
Drive sustainable growth through innovation			1	4	1	4.00
Improve the quality of programs and services			1	1	4	4.50
Anticipate and manage change		1		4	1	3.83
Establish a framework for proactive, evidence based decision-making				2	4	4.67
Increase enrollment		1	3	2		3.17
Solve complex problems				3	3	4.50

Importance on a scale of 1 to 5 where: 1 = Not Important; 5= Very Important

Interview Questions

The interview questions explored the phenomenon of institutional effectiveness at community colleges with a reputation for excellence in the Higher Learning Commission (HLC) Midwest Region. This section of the chapter highlights participant's reflections and responses gathered. This data collection method allowed a conversation-like interview to take place using semi-structured questions designed to solicit information specifically

addressing the purpose of the study. The interview questions were developed to explore and understand the specific practices of community college leaders responsible for crafting institutional effectiveness strategies for continuous quality improvement. The interview questions explored these practices on four thematic dimensions: (a) reasons for engaging in institutional effectiveness practices (interview question 1); (b) organizational culture (interview questions 2 - 6); (c) implementation process (interview questions 7 - 8); and (d) leadership (interview question 9).

Dimension 1: Reasons for engaging in institutional effectiveness practice

Not only did this question verify who decided the college's move to a focus on institutional effectiveness and thus a transformation to a "culture of evidence", but also the reasons given. All participants noted the catalyst for change emerged from senior leadership with most citing the college president. All similarly expressed that the individual in this position must be a visionary change agent, and highly motivated to engage in quality improvement activities. They felt the president leading this change or institutional paradigm shift needs to either be knowledgeable in quality improvement benchmarks and practices, or have the foresight to hire a dedicated person to coordinate these activities to improve effectiveness practices at their institutions.

Many participants noted that their president was an active member of the Continuous Quality Improvement Network (CQIN). The purpose of this network, begun in 1991, is to have an open sharing of information among community college presidents who are committed to Total Quality Management (TQM) principles as a way to continuously improve their institutions. A parallel group composed of senior TQM practitioners from

each member institution also meets separately on a regular basis. These meetings allow those individuals responsible for implementation strategies to develop their skills and knowledge of quality and continuous improvement practices.

Not surprisingly, many participants cited accreditation mandates as the primary reason for engaging in institutional effectiveness practices. However, those indicating their president made the decision to move to the AQIP accreditation process viewed this as an extension of their president's focus on organizational quality. These presidents seemed to have had a long-standing focus on continuous quality improvement pre-dating the switch from PEAQ to the AQIP process. Therefore, the decision to move to AQIP was neither unexpected nor upsetting for college employees. Table 22 highlights some of the participant comments illustrating the factors which propelled the institution to become engaged in institutional effectiveness practices.

Interview Questions 1 - 9

Interview Question 1: What were the factors at your college that prompted the decision to engage in a planned process to improve institutional effectiveness?

Table 22 Interview Question 1

College	Participant	Salient Points
CC-1	A	"Our president was keyhe is very much a visionary, very much on the cutting edge of change and improvement. He spent a good deal of time investigating ideas, theories, and concepts as far as organizational improvement was concerned. He decided that AQIP was something that he wanted to do."
CC-2	В	"Prior to the AQIP initiative we were using TQM and it was really just a natural progression for us that we switched to this."
CC-3	С	"It was a collegiate decision driven by the President of the College at the time. He was a champion for shared governance and institutional effectiveness and believed the AQIP process could be used as a framework for these attributes."
CC-4	D	"We wanted to enhance our ability to improve measures of effectiveness. This was all driven by the President. We obtained faculty buy-inthe faculty recommended the AQIP process and we eventually did join AQIP [about 8 ½ years ago in 2001 or 2002].
		We realized that we needed to gain efficiency by first realizing financial efficiency, etc. We worked on the alignment of institutional priorities and processes. Have to ensure that time spent is on things that contribute to our mission, vision, and values."
CC-5	Е	"We are just positioned for change and growththe Board [of Trustees] was very supportive in ensuring we were able to do AQIP effectively. You need to have people that are voices and are champions and try to communicate the vision."
CC-6	F	I think that our culture has for a long time been influenced by CQI and we have a senior leadership team that has been very active in learning about thatso when the opportunity came about to explore using CQI model for accreditation they were very receptive to that.

Dimension 2: Organizational culture

There is overwhelming evidence that both leadership engagement and a supportive organizational culture are essential to sustaining cultures of evidence needed for continuous institutional effectiveness. The questions which fell under the theme of "Organizational Culture" sought to delve deeper into the concept to determine specific characteristics which are present in the cultures of community colleges with a reputation for exemplary institutional effectiveness.

The higher education literature has made inference that there are two links between culture and change: (a) that the culture encourages change; and (b) the culture is transformed by change (Curry, 1992; Kezar & Eckel, 2002). As many planned change initiatives in community colleges failed due to underestimating the impact of change itself on the behavior of employees, ignoring the college's particular inherent organizational culture puts the implementation processes for any and all continuous quality efforts in jeopardy. It is imperative that leaders of these institutions be aware of the cultural elements present as they begin to plan change initiatives. In this study, organizational culture was defined as the underlying beliefs, values and assumptions held by members of an institution (Schein, 1990). Further, it is noted that the culture embodies both the history of the organization and is grounded in the shared assumptions of individuals participating in the organization. As such, an institution's culture is reflected in what is done (reasons for engaging in IE), how it is done (implementation processes), and who is involved in doing it (leadership).

Pertinent to this study is the notion that higher education cultures are intrinsically composed of complex processes and practices entrenched in long-standing traditions

which are often difficult to undo or change. As such, having an understanding of an organization's unique cultural paradigm enables focused change management efforts. The interview question found in Table 23 sought to explore participant perceptions of the organizational cultural characteristics or dynamics that assisted in moving their college forward to engage in a planned focus on institutional effectiveness (IE). Common themes which emerged were that successful and sustained IE initiatives must take place within a supportive organizational culture described as collaborative, supportive, data-driven, and innovative. Further, this IE culture must be embedded within an organization driven by a knowledgeable, passionate, quality-driven leader that supports institutional effectiveness initiatives. Table 23 highlights participant comments illustrating what were the organizational cultural characteristics assisting to move the college forward in a planned focus on institutional effectiveness.

Interview Question 2: What were the organizational cultural characteristics or dynamics that assisted in moving the college forward to engage in a planned focus on institutional effectiveness?

Table 23 Interview Question 2

College	Participant	Salient Points
CC-1	A	"I think having new blood on staffwho are present and aren't confined to the way we've always done things is very positive. It allows them to come up with ideas and feel comfortable offering them. The administrative staff are supportive and non-punitive."
CC-2	В	"Very openopen communications. We really try to have line level decisions made and from the bottom – up leadership style and it works. Everybody buys into it. We really had gone to a model where we are more informed by data. In the past we had tons of data and we really didn't do a good job at looking at it carefully. Now we have that in place."
CC-3	С	"Willingness to be leading edge in the field of higher education. [We] have a sense of wanting to be trend setters and consistently take on an entrepreneurial approach. Strong sense of collaboration and a family-like atmosphere. Good employees that have a strong work ethic. The college has a good reputation which attracts highly qualified staff. The college culture supports collaboration, team work, innovation and communication."
CC-4	D	"Committed Board of Trustees and Administration. Stay abreast of budgetary and state/federal accountability issues. We are under siege financially so we need to stick to policies and procedures that enable staff/faculty to engage in good, quality work. Additionally, community colleges are increasingly being called to higher levels of accountability in regard to accreditation, finances, etc. The culture has to be supportive of the organization staying on top of these issues.
CC-5	Е	The use of data helps us to make good decisions. We also need people willing to make decisions and be supportive of quality initiatives. Need a supportive President, which we have." "Our whole way that we communicate and make decisions through our cross functional teams."
CC-6	F	"As an organization, we believe in measuring what we do and the AQIP framework provides a way for us to do that and to make it visible to everyone in the college. [Also] when we look at our culture, is the commitment to learning. Our President believes in investing in peopleso part of our culture is that continuous learning."

This study also explores processes by which community college leaders implement innovative strategies and organizational change from a cultural perspective so as to understand how institutional effectiveness may be improved and sustained over time. Within this framework, it is important that the techniques and strategies used in change initiatives fit the specific organizational culture. These strategies must also hold value for stakeholders, those involved with this organizational cultural change. Participants all indicated there was some type of stakeholder involvement across their college with the implementation of IE plans and initiatives. Other participants go on to note that collaboration and team building is essential for effective quality planning and implementation. Table 24 highlights participant beliefs on the role of stakeholder involvement to assist in moving the college forward in a planned focus on institutional effectiveness.

Interview Question 3: What role have stakeholders had in assisting to move the college forward to engage in a planned focus on institutional effectiveness?

Table 24 Interview Question 3

College	Participant	Salient Points
CC-1	A	"We have an extensive infrastructure for quality initiatives [through] a steering committee that is cross-functional and changes depending on what types of initiatives we are engaged in at the time. The steering committee has on it the dean of institutional planning and effectiveness and that is my position as the chair person of that. There is a chair person from each academic department as appropriate. We are also a member of CQIN and CQIN is a team based function for us and we have some kind of a college-wide project each year."
CC-2	В	"Once they [stakeholders] are comfortable with understanding we value their input, they do it [get involved]."
CC-3	C	"Sustained institutional effectiveness would not be possible without stakeholder involvement. In 2005, [we] created the Institutional Effectiveness Council (IEC) which later combined with Cabinet level administration. The IEC had 4-administrators, 4-faculty, and 4-classified personnel. This group drives the Institutional Effectiveness process and makes recommendations for various implementation strategies for continuous quality improvement. Also formed a Quality Improvement Council which was embedded throughout the organization. Every constituency group had two representatives to ensure that every group had a "seat at the table." [We] believe every constituent group should have the opportunity to provide feedback/buy in."
CC-4	D	"We have the involvement of the Board, senior level administrators, faculty, etc. To be successful, you also need community involvement.
CC-5	Е	"[We] update annually through collaborative process, our goals and objectives [Board of Trustees included and they approve it-Strategic Planning Framework]. It includes our vision, mission, values, and strategic goals and objectives."
CC-6	F	"As an organization we believe in measuring what we do and the AQIP framework provides a way for us to do that and to make it visible to everyone in the college."

While stakeholder involvement warrants careful consideration and the attention of community college leaders, consistency of not only their commitment and involvement, but also a regular reaffirmation of the college's overall culture of quality improvement must be continually communicated to stakeholders. Table 25 highlights participant comments regarding consistency in concerted efforts to improve organizational performance. One of the more salient was rendered by participant C who stated that the cornerstone of success for their institution was directly correlated to the consistency of organizational practices and the continued employment of committed key personnel.

In essence, an organization cannot expect to be successful with their IE initiatives if institutional policies and practices are in flux and college leadership positions experience excessively frequent turnover. Having *consistent* processes, teams, and role specific positions in place which strategically address IE issues for the organization are essential if institutions want to have successful and sustainable IE initiatives.

Interview Question 4: What role or function do you feel organizational consistency (the systems and processes in place to efficiently do what s needed over and over) had in assisting to move the college forward to engage in a planned focus on institutional effectiveness?

Table 25 Interview Question 4

College	Participant	Salient Points
CC-1	A	"I think people throughout the college know that if there is an issue or suggestion that they want to make, they can either enter that into an online surveyor they can come to me or send me an email and say I would like to have somebody to look at this issue because it is still a problemand I would like to have it fixed or and they know that it goes from me to the CQI Steering Committee. I think knowing that there is a process and we will follow the process makes people more inclined to participate because it won't just come to me or somebody else and just be dropped after they have spent time talking about it"
CC-3	С	"Consistency of organizational practices and employees enabled [CC-3] to thrive and have continued success with AQIP and institutional effectiveness the first 8 years after joining AQIP (2001). In fact, it was considered the cornerstone of success at [CC-3]."
CC-4	D	"Need positions which focus on these processes and you need to make increasing investments in this [personnel]. The priority has to be on staff and resources. When we started this process years ago, a faculty member comprised the research department. We now have 2 full-time researchers, a secretary and a Director. Additionally, we have a Director of Institutional Quality [which will start in the Fall of 2010]."
CC-6	F	"I think what helps is that we have a strategic planning process that is very cyclicalevery year we start at the same timeand then we use these types of mechanisms to feed into that."

The new millennium has ushered in an array of challenges for higher education spurred by political turmoil, economic chaos, unparalleled shifts in student demographics, and technological advances. As such, community college leaders are under a constant barrage of new and extremely complex issues and circumstances to which they must find solutions. Higher education institutions do not readily or easily embrace change management strategies. Table 26 provides participant comments regarding the function

their organization's ability to change had in assisting to move the college forward in a planned focus on institutional effectiveness. The responses by three participants (B, D, and F), corroborates the belief that the degree of flexibility found in an organization's culture provides a foundation that is open to planned change. As participant B stated, "Either you adapt or die." Albeit simplistic, the participant was asserting that engagement in change is not a choice but is inevitable for the institution's continued success.

Interview Question 5: What role or function do you feel the organization's adaptability or the ability to change had in assisting to move the college forward to engage in a planned focus on institutional effectiveness?

Table 26 Interview Question 5

College	Participant	Salient Points
CC-2	В	"Well, you adapt or die, that's essentially it. And we are so used to change and it's just a culture that we make changes and move on."
CC-4	D	"Our spirit is willing, but the budget is pretty weak. As such, we are not able to implement as many initiatives that we would like to aide in our adapting to a changing environment. We also have a Union environment [2 unions; one for faculty and one for support staff]. This creates an impediment sometimes as we have to look at contractual obligations versus adaptability or effectiveness processes."
CC-6	F	"I think the change in leadership actually made our flexibility and adaptability improve. We had some personalities come in that made our perspectives/innovation/effectiveness improve."

As the AQIP accreditation process requires that institutions engage in activities that maintain the central tenets of their college mission, interview question 6 attempts to ascertain the importance each study participant places on being 'mission-oriented' when initiating IE activities. Mission statements are declarations of a college's rationale and

purpose; its responsibilities toward students and the community; and its vision of student, faculty, and institutional excellence, (Meacham, 2008). They should guide the institution strategic plan and subsequent decisions. College mission statements can be utilized as an effective tool for addressing organizational problems, moving conversations among faculty and administrators forward, and crafting long-term, sustainable solutions.

While participants overwhelmingly agreed that the mission has been an effective tool for institutional planning efforts, codifying just how and in what ways remained nebulous. It seems that being "mission-driven" is implicitly deemed as fundamental to IE efforts, but specific examples of how these statements facilitate continuous quality improvement initiatives are not that obvious. Table 27 highlights participant comments on what role the organization's mission played in assisting to move the college forward in a planned focus on institutional effectiveness.

Interview Question 6: What role or function do you feel the organization's clear sense of mission had in assisting to move the college forward to engage in a planned focus on institutional effectiveness?

Table 27 Interview Question 6

College	Participant	Salient Points
CC-3	С	"Many organizational decisions are made while taking the Mission Statement into account. We at [CC-3] feel that it is important to keep the Mission at the center of all institutional decision making processes."
CC-6	F	"Our Vision and Values are being tweaked. Our Mission is not really going to change. Being part of a state technical college system, we won't be changing what our core function is. Having a solid Mission is important. Our Mission has not changed since I've been here."

Dimension 3: Implementation Process

While many recognized and gave voice to the need to be mission-driven at the onset of their IE journey, these participants found it was a minor player in the organizations' change to a culture of institutional effectiveness. While insights into the mission of each college were enlightening, the element of mission did not appear to be of concern to participants in the initiation of IE implementation processes. Perhaps this was due to college leaders having ingrained the concept of being mission-centered into the fabric of organizational planning, policies, and procedures. Indeed upon reflection, the leaders discovered that there were four elements required for an organization to begin the implementation of a culture of institutional effectiveness: (a) leadership support; (b) cultural fit; (c) stakeholder consideration and buy-in; and (d) the creation of a position(s) responsible for oversight of the IE efforts. Table 28 provides participant comments on the preliminary steps taken to establish the plan for institutional effectiveness.

Interview Question 7: Describe the preliminary steps taken to establish the plan for institutional effectiveness at your college?

Table 28 Interview Question 7

College	Participant	Salient Points
CC-1	A	"We brought in a consultant for 2 days. One day he spent his time with upper leadership and talked to them about systems thinking, quality improvement, about things to anticipate both positively and negatively from our employees to nonemployee stakeholders. Then a second day he spent with all of our staff talking with them about quality improvement, giving surveys [organizational climate, etc] so that we could kind of understand where we were. How we were thinking and feeling. The consultant was from the Center for Excellence from Datatel. Created the CQI Teams, joined AQIP after that."
CC-3	C	"The initial feedback that we received from AQIPwas that we needed to be more organized. We worked with faculty and staff to conduct research on other higher education institutions to determine best practices, benchmarks, scorecards, etc. One of the outcomes of this research was the creation of a single body (IEC) that was responsible for institutional effectiveness. It is a 12 person committee that meets bi-weekly. This committee was selected based on constituency grouping and experience in quality improvement. The team has (a) 2-3 year staggered terms; (b) Started with faculty receiving overload, then a stipend, now based on volunteerism."
CC-5	E	"Having been a long-term employee of this institutionwas clearly an advantage that I understand the culture from many perspectives because I have had lots of different roles. The worst thing that you can do is try to enforce a change that doesn't line up to the culture. It is about getting buy-in and having conversations, and trying to develop a culture. We created a Quality Team that works on IE projects/initiatives."
CC-6	F	"I really think that having someone responsible for the AQIP piece and to be responsible for the Strategic Planning piece is important. [In my position] I do anything related to the quality and measurement of academics. The other piece is being able to articulate how institutional effectiveness is felt at every level of the college. For faculty in the classroom, they want to know what impact I have at the college. How do I fit in the Strategic Plan?

The gap between a preferred future and an institution's current practices, challenges the capacity of the entire institution to move forward in proactive and innovative ways. The analysis of the preliminary steps taken to establish the plan for institutional effectiveness at participant colleges provided a glimpse into practices that aided these exemplary community colleges to move forward. Ascertaining the "lessons learned," by these participants, their shared insights can be of benefit to other community college leaders contemplating moving their institutions to an IE focus. Some participants cited the involvement and support of stakeholders as key components to the success of implementing IE efforts. Many participants mentioned that this process takes time and stressed the necessity of having the appropriate infrastructure in place to propel the institution forward in its quality plans. A review of the "lessons learned" has been highlighted in Table 29.

Interview Question 8: On reflection, what are the "lessons learned" from this undertaking (implementing the institutional effectiveness process)?

Table 29 Interview Question 8

College	Participant	Salient Points
CC-1	A	"We did a lot of things well, we really did, but we didn't get the buy-in from some of our senior leaders. Now in our job ads and in our employee interviews, we talk a great deal about CQI and we try to ask questions to determine how comfortable people are with this. We try to determine if they will be comfortable with this process or be resistant. Also, on reflection, we should have celebrated more."
CC-2	В	"It takes time. And what your goal would be is slow but steady. Focus on process change and you will improve. Question everything. Be very open-minded about everything. What I love about AQIP is that all of these folks that work here have phenomenal ideas and I wish we could do all of them, but a lot of times you hear something or we talk about something and we say, wow, that is really good. How can we make it happen? I think developing benchmarks would be critically important. (Based on national and internal benchmarking standards). When participating in AQIP, the one thing you need to be prepared for is change. One project may be in one specific area, but what I've found is that it changes multiple things. And we have a culture that works with change and it works. I think the one key thing is all the employees need to be ready to do this because it is a lot different than the retrospective process of a college in the traditional accreditation process."
CC-3	С	"Most important components to sustain continuous quality improvement efforts: (a) commit to shared governance; (b) have viable support from the President, Cabinet, and Board of Trustees; (c) create a solid, systematic structure (people come and go but structure/processes remain intact); (d) IEC created a handbook/guidebook (approximately 10 pages in length) which defined what is an AQIP Project, What is the IEC and who makes up the committee, including the role of each position, the terms of each position, how members are selected, etc."
CC-4	D	"Involve lots of people (internal/external stakeholders); Go in with a long-term view. Be prepared for a marathon; Create manageable workloads. Pick 1-2 areas or priorities and manage those well. Be successful in a few tasks initially so you can be successful in many over time."
CC-5	E	"Time frame for IE – It's a long term process and it never ends. If you really want to make systemic change I think most of the research shows you need at least three years but I think you will need at least

five years. Five years to really, really make the change. And it is a work in progress because every time you move one thing, it will impact something else. Hopefully people will react positively, but not always because it is a very complex organism so people don't always understand the change or they get threatened by the change or there are some people that are really into it and they go too fast so that's as dangerous as not going fast enough, so I mean, its, you have to really look at the bigger picture if you are really going to engage in this. Because you will receive rewards over time but you will never be done. I think we're at the beginning to be honest with you.

You need to celebrate successes. When you're an institution like us, it's moving so fast, you have to force yourself to stop and say hey, we did well. We did a good job here. Both big and small wins. There is a book that I often loan out to people about being a change agent and that it can often be a thankless job. It's hard for people to understand the greater vision. People buy-in when they are able to internalize it themselves, but you're constantly asking people to be outside of their comfort zones."

CC-6 F

"More resources. I would just say more resources to do the work. The other thing is to have the processes mapped and systems in place to make the work easier. We spent a lot of time trying to build spreadsheets for budgeting, etc. We spent a lot of time re-working things whereas if we had this mapped out it would have made the process easier. Don't try to reinvent wheel. There are so many college out there that you can learn from. Even the other [local] colleges when we get together as a group we see that they are doing this and we should be sharing the knowledge.

- ii. Attend the HLC annual meetings which are invaluable.
- iii. Join CQIN.

Having a network of people to bounce ideas off of. To be able to send a note out to peer groups and ask how they did something in their [AQIP] report. Every college has or most have Systems Portfolios...these are excellent resources and are linked on the AQIP website so if you are struggling with how to do something go and look at another portfolio."

Dimension 4: Leadership

Table 30 highlights participant perceptions on the role of community college leaders in the IE implementation process. All participants noted the importance of not only the President's role in the continuous quality impovement (CQI) journey, but interestingly they also indicated the Board of Trustees. Participants B ,E, and F recite how without the leadership, support, guidance and allocation of resources by the President, AQIP and other institutional effectiveness endeavors will not succeed.

Interview Question 9: How and in what ways do you feel your college's leaders facilitated and supported the implementation of an institutional effectiveness process for systematic continuous improvement?

Table 30 Interview Question 9

College	Participant	Salient Points
CC-2	В	"I think that it is key that the president of a college must be open to change and process change. If some school is considering going to the AQIP model if they don't have their president or the top administrators behind it, it's not going to be successful. You have to have that buy-in, and not just the nodding your head yeahthey have to live it."
CC-5	Е	"The VP, President, also the Board [of Trustees] are key. But it's also the leadership development piece. Making sure that administrators are communicated with. They understand what the vision is and understand how they fit in and what the expectations are. The other thing that I would say that top leadership does is make sure that we use the same language, same rules for everyone, which sometimes can feel terribly unfair. But if you make an exception for one person, then you start to create all sorts of problems, so while the individual incident may be difficult, overall, I've learned that if you
CC-6	F	consistently apply a policy, it works better." President involved in everything we do. He is committed to it. He provides the funds to do various projects. Receptive to when we're trying to determine a team. He doesn't decide on his own. Receptive to feedback."

SUMMARY

In this chapter, the results of the data analysis are presented. Two fundamental goals drove the collection of the data and the subsequent data analysis. The first goal is to identify how and in what ways community college leaders crafted institutional effectiveness processes to facilitate continuous quality improvement. Based on the study findings, the second goal is to subsequently create an institutional effectiveness implementation model to assist leaders in the continuous quality improvement strategies at their respective community colleges.

CHAPTER 6

RESEARCH FINDINGS AND IMPLICATIONS

INTRODUCTION

The 21st century has ushered in an array of challenges for community colleges including but not limited to financial pressures, technological advances, increased public scrutiny and changing demographics. Leaders of these institutions must respond to these challenging issues with strategic and thoughtful plans. The implementation of these plans cannot be simplified with ill-conceived change initiatives with no staying power. Indeed, implementation strategies that have the capacity to guide institutions and facilitate permanent, major, institution-wide change are necessary.

This study seeks to increase understanding of the little known process colleges employ when building a sustainable organizational culture of evidence for improved institutional effectiveness. The significance of the research study was to provide insights that could be beneficial to current and future leaders of community colleges seeking implementation of processes for sustained organizational continuous quality improvement efforts.

The views and perspectives of six community college leaders having an intimate understanding of the phenomenon regarding the implementation of institutional effectiveness strategies were explored. This final chapter includes the following: (a) a brief summary of chapters 1 through 5, which establishes a context for the research findings; (b) summary of the findings followed by implications for practice, organized by research question; (d) the conclusion, (e) presentation of an implementation model for institutional effectiveness; and (f) recommendations for further research.

BRIEF SUMMARY OF CHAPTERS 1 - 5

Chapter 1 provided an introduction of the background of the issue under study and its significance to the community college field. The research purpose and driving questions were presented which guided the study. A brief literature review highlighted the pertinent theories and concepts used to situate this research. An overview of the study design was also described establishing for the reader a contextual framework for the research.

Definitions of relevant terms were included to provide greater understanding of the research and subsequent implications of research.

In Chapter 2, a review of the relevant literature was presented and served as the lens or framework with which to view this study and its findings. This review included an overview of: (a) American community colleges; (b) regional accreditation processes; (c) the primary theoretical concept espoused by Dennison and Mishra (1995); and Situational Leadership theory by Blanchard (1993). Finally, as this research sought to provide insights into how exemplary colleges inoculate the organizational culture to promote institutional effectiveness practices, research related to organizational implementation processes was reviewed.

Chapter 3 provided the explanation and rationale for the research design identifying it as a qualitative case study, situated within an interpretive paradigm. The methodology was described in detail and included the case selection criteria, data collection methods, analysis techniques, ethical considerations, and information regarding the researcher as the research instrument. Seven exemplary community colleges were recommended by the Higher Learning Commission based on their reputation for innovation and excellence in planning improvement strategies. Six agreed to participate across five Midwestern states.

A discussion on purposeful and maximum variation sampling was included as well as explanation regarding the community college selection criteria of site diversity representing rural, suburban and urban-centered colleges of various sizes (annual student FTE).

The primary data collection method was face-to-face semi-structured interviews. An on-line survey instrument was utilized for the purpose of gaining insight into the characteristics of both the study participants and their respective institutions. The survey provided participant descriptive statistics and contextual information related to organizational culture and leadership.

Two limitations of this research were identified: (1) the completeness of the information obtained from participants; and (2) the familiarity of the participants with institutional effectiveness endeavors in the college. Those steps used to minimize each were explained. To enhance transparency of the findings, a thorough description of the methods and techniques employed to ensure trustworthiness and validity of the study were provided. An overall organized consistency within the study design, data collection and analysis processes were maintained throughout the research enhancing the trustworthiness, rigor, and transferability of the study.

In Chapter 4, a rich description of the case colleges and the participants were presented, thereby affording a context for understanding the study findings. The data gathered was cleaned, sorted, coded and summarized in a series of tables and charts which indicated the a priori themes derived from the literature review. The following four major *a priori* themes were presented in greater detail and served as an analytical lens in which

the data was coded and subsequently analyzed: (1) reasons for engaging in institutional effectiveness; (2) implementation processes; (3) organizational culture; and (4) leadership-

Chapter 5 provided the presentation and analysis of the data obtained. The rich, thick data gathered from the multiple data sources were subsequently analyzed. The analysis of the shared perspectives and information provided by the study participants was the basis of the research findings, conclusions, and implications for community college leaders. It is not the intent of this study to detail the reasons different organizations may feel compelled to enact institutional effectiveness (IE) efforts, but identify and share how exemplary colleges implemented their IE plan and CQI efforts.

FINDINGS AND IMPLICATIONS

Purpose of the Study

The purpose of this study is to identify how and in what ways community college leaders craft institutional effectiveness processes to facilitate continuous quality improvement.

Research Driving Question 1:

What factors prompt community colleges to engage in a planned process to improve institutional effectiveness?

It was apparent from these participants that the move towards continuous quality improvement (CQI) and thus institutional effectiveness (IE) was initiated by the president of the college. Descriptive comments were similar among both large and small institutions.

Many noted that the president's role was one characterized by a visionary leader, a change agent vested in CQI practices. These stewards, serving as the "champion" of the improvement effort, were the catalyst for the organization's change and transformation to a culture of evidence. Participants also agreed that while their colleges were motivated by accreditation mandates, it was the deeper desire of the president and senior leaders to improve the organization's ability to use data to drive decision-making, measure performance, and weave the concepts of sustainable quality improvement into the fabric of the organization, which led them to participate in the Academic Quality Improvement Program (AQIP). They also indicated that a true organizational change to a culture of evidence could only be accomplished with long-term commitment to the process and involvement of all stakeholders. Aware that change takes time, and that it is not a swift and linear process, AQIP provides for evolutionary change which facilitates the organizational cultures of higher education institutions transformation into "cultures of evidence" and to embrace institutional effectiveness (IE) endeavors. This results in the kinds of organizational transformation necessary to respond to the ever changing and challenging environment of 21st Century American Community Colleges.

Implications of Findings for Community Colleges

While a senior leader may be responsible for the decision to engage the organization in IE activities, this single decision is only the commitment of one individual. To move this decision forward, support of all the stakeholders including the board of trustees, faculty, staff and administrators is required. To make this endeavor successful, it is immensely helpful to communicate how this change can improve the organization to those groups and individuals that will be directly involved with the activities and thus doing the work.

Therefore, to garner stakeholder buy-in and support prior to implementation of institutional effectiveness (IE) endeavors, scheduled question and answer meetings hosted by the president should be held to discuss and explain the decision to the internal stakeholder groups. Efforts need to be made to convey the following: (a) the reasons for the decision and how it will benefit the college; (b) what types of IE efforts are currently underway and how these efforts may be enlarged or improved; (c) what types of data are needed for improved decision-making and how this information should be disseminated to stakeholders; (d) who will be involved and how will they be involved; and (e) what this will cost in terms a variety of organizational resources. This initial introduction by the president is crucial and is the foundation of a successful move for the college to a "culture of evidence" which sustains institutional effectiveness initiatives.

Research Driving Question 2:

Are specific organizational culture characteristics or dynamics evident as community colleges engage in a planned process to improve institutional effectiveness?

Human factors and the organizational culture present the greatest challenge to initiating planned processes for continuous quality improvement. While some members of the organization will embrace and facilitate change, others may be threatened by new roles and responsibilities and actively hinder or thwart the processes being created throughout the institution. As community college leaders begin to initiate this change, a proactive yet organizational culturally appropriate implementation plan must be in place to address these and other obstacles.

Participant comments regarding organizational cultural characteristics which nourish and sustain IE efforts focused on three primary components. One was the requirement of a supportive leadership consisting of the president and the senior leadership team. The second was adaptability within an innovative and data-driven organizational infrastructure. Lastly, they believed in the celebration of wins and successes for continued momentum of the quest for continuous quality improvement. The participants also shared cultural characteristics which inhibit effectiveness. Participants acknowledged that community college leaders may need to re-align staff in order to successfully fulfill the change effort to move the institution to embrace a culture of evidence. Participant A described an experience common to other participants related to the human factor of organizational culture:

"We didn't get the buy-in from some of our senior leaders. Through the years, they really were subversive in their manner of dealing with people and so it had a negative impact. Eventually, over a period of time, the president had to encourage them to find employment elsewhere."

Highly effective leaders are cognizant of shifts in the organizational cultures and are able to facilitate strategic planning and decision-making processes which allow the organization to reassess their vision. Leaders of change for institutional effectiveness (IE) not only act as champions of the movement, they are the needed stimulus for the change effort.

Implication of Findings for Community Colleges

Leaders must be aware that the college's organizational culture is ubiquitous and influences the mission, strategic planning, communication, policies, processes, and even how and in what ways leadership can be effective. The most successful organizations at

sustaining change are those able to promote and adapt improvement initiatives over time and create new improvements while still working on current practices. Specific ways to enhance movement of the organization's culture to embrace a culture of evidence include a variety of strategies as each college is unique.

Suggestions for colleges include the following:

- Schedule professional development activities to improve understanding of IE components, including its benefits and challenges. This should include the AQIP Strategy Forum which brings together employees across the college to generate improvement strategies in a creative, supportive environment;
- Set aside resources for the inclusion of new positions whose primary focus is Research and Institutional Effectiveness. Some of the titles for these positions are: Dean of Institutional Planning & Effectiveness, Academic Quality Improvement Specialist, Executive Director Institutional Effectiveness; Director of Institutional Research, Vice President of Research and Technology, Executive Director of Institutional Effectiveness & Legal Affairs and Vice President of Academic Affairs.
- Utilize consultants such as those associated with the Continuous Quality Improvement Network (CQIN) and AQIP to offer advice and/or assistance for community colleges with their CQI endeavors.
- Disseminate organizational climate surveys and organizational analysis worksheets to interpret the culture and assess the level of stakeholder knowledge and buy-in concerning CQI efforts. A worksheet example adapted from the Baldridge Performance Excellence Program for Education, is included in Appendix F.
- Provide avenues for individual(s) to leave the organization who continue to inhibit the implementation and sustainability of IE.

Research Driving Question 3

What are the preliminary steps taken by community colleges to establish a plan of institutional effectiveness for systemic continuous improvement?

As community college leaders wrestle with the practical issues that need to be considered when undertaking the planning and subsequent implementation of quality improvement strategies, insights regarding participants' experiences with these processes were enlightening. Interestingly, almost all participants noted that during the initial implementation stage of their institution's continuous quality improvement initiative, many complex questions arose regarding the implementation process. They shared these questions similarly raised at their college's which inflicted a rather paralyzing inertia, resulting in a delay in getting started. Some of these questions surrounded such issues as: (a) how to instill a sense of ownership among the faculty and staff in this initiative; (b) what steps can be taken to motivate stakeholders to undertake this CQI organizational culture shift; (c) what resources and training are needed to assist in making this endeavor successful and self-sustaining; (d) how can data sharing, monitoring and evaluation become part of all processes, systems of the college to promote a culture of evidence; and (e) what are the preliminary steps that should be taken to successfully integrate a plan of institutional effectiveness in their institution?

Their recommendations to actively address these initial questions and others included starting a shared governance system for the institution. They also recommended the formation of steering committees or quality teams which are cross-functional and include members from various departments to bridge the institutional silos. Participants also noted that the investment of time and the amount of resources required to begin implementation of the IE plan evolves and changes over this initial time period requiring diligence and attention by the leaders and champions of the IE process. The majority of participants indicated the single most valuable tangible resource needed to successfully

implement the IE initiative involved technology. Not only should this involve the allocation of an infrastructure to support data mining to carry out dedicated IE initiatives but also technology process and procedures to effectively communicate progress to all stakeholders. Finally, while each institution set about the establishment of IE activities differently, all participants voiced the need for supportive leadership behind the IE effort and the creation of position(s) to focus entirely on IE.

Implications of Findings for Community Colleges

Based on the findings from this driving question, the implications for community colleges regarding the successful establishment of initial implementation of IE can be summarized in 3 steps.

Preliminary Step #1: *Right Leader for the job.*

As participant colleges were recommended by the HLC based upon their exemplary implementation of CQI, it can legitimately be assumed that at these colleges, innovation abounds and institutional pride is evident and justified. It can also be assumed that this sense of innovation and stakeholder pride was facilitated by the leadership of these institutions. Therefore, in order for a community college to maximize its efforts towards CQI, the institution must have appointed the right leader for the job. As such, it is imperative to have a strong, committed leader at the helm of the institution that is committed to the investment of time, money, human resources, and organizational restructuring to see the institution's quality efforts come to fruition.

Preliminary Step #2: *Prepare for the marathon.*

The journey towards sustained institutional effectiveness is long, the tasks are multiple, and the challenges are conceptually and politically complex. Research into quality practices and trends for higher education institutions seeking improved effectiveness must be done at the beginning to prevent costly mistakes on the back end. Community college leaders must realize this is no small undertaking. It is not nimble. Instead, this process takes real time, commitment, and resources to successfully achieve and sustain institutional effectiveness. Additionally, if the culture needs to change to be more adept or receptive of CQI initiatives, then this too takes time, effort and constant active and proactive encouragement.

Preliminary Step #3: *Stakeholder awareness and buy in.*

Community college leaders should encourage and empower stakeholder project participation to reinforce college efforts in change to cultures of evidence and establishment of IE practices. Frequent professional development opportunities must be available so individuals instrumental in the IE effort will become proficient in continuous learning strategies and are familiar with current trends and best practices. Vital to the process is the formation of a Steering Committee to guide the initiative and to assist with creation of the needed infrastructure, data tools, and communication processes. As part of the Steering Committee or Quality Team, key leaders must be designated and provided with appropriate training to direct initiatives such as an AQIP project. These individuals should consider being trained as HLC Consultant Evaluators for Accreditation in order to become immersed in quality initiatives and stay abreast of best practices within the field.

These team-based efforts with those responsible for implementing the changes, set in a collaborative and supportive environment which increases the chance for success and sustainability.

Driving Question 4

How and in what ways did community college leaders facilitate and support the implementation of an institutional effectiveness processes for systemic continuous improvement?

Highly effective leaders are cognizant of shifts in the higher education environment and in the culture of their institutions and guide their organization to be responsive to those changes. These leaders are aware of the realities of their organizational cultures and are able to facilitate strategic planning and decision-making processes which allow the organization to rethink their vision, collaborate on implementation of institutional effectiveness initiatives, and build the necessary infrastructures to support the endeavors. Leaders of change at exemplary colleges not only act as champions of the movement, they are often the needed stimulus for the change effort. Participants also noted the importance of collaboration among community college leaders, faculty and administrators to define deliberate approaches wherein their institutions adapt to today's rapidly changing global environment while maintaining quality.

Participants overwhelmingly agreed that community college executive leaders (Board of Trustees, President, and Vice Presidents) need to facilitate and support the implementation of an institutional effectiveness process for systemic continuous improvement. Participants shared how their institutions creatively supported

establishment and maintenance of IE processes. The common themes from the findings were: (a) create a college-wide commitment to institutional effectiveness, continuous quality improvement, and the AQIP accreditation process; (b) offer leadership development to middle managers and other administrators who oversee the change initiative; (c) make available to those individuals directly involved with the operations of CQI infrastructure creation professional development opportunities to gain needed knowledge; (d) provide adequate resources and an infrastructure which propels and supports the organization; and (f) research exemplary organizations and best practices in the field of higher education to stay current regarding trends and innovations in the delivery of quality higher education initiatives.

As community college leaders attempt to establish lasting institutional effectiveness processes, learning lessons from others who have successfully accomplished these tasks is beneficial. Insights into the initial steps enhancing the movement of the institution to a culture of evidence, including factors which propel institutions forward and those that inhibit or hinder progress, provide a very helpful template for others contemplating or starting this difficult endeavor.

Implications of Findings for Community Colleges

Community colleges wanting to have an impact on their student's, their community, and the global workforce must be equipped with the tools for continued quality improvement of their institutions. To accomplish these daunting tasks, the very culture of their organizations must be inoculated with the spirit of quality, data-driven decision making, and a readiness to embrace innovative change. Community college leaders are the *key* to this implementation process. Only with the prominent commitment of the president,

will this happen. An active visionary leader can encourage the quality initiative and its subsequent institutionalization within the organization's culture. If the proper leadership and support is not in place, it is a waste of time, resources, and energy for all involved.

For the community college, the process of change to a culture of evidence must also take into account the cultivation of college resources. These resources include human, fiduciary, and technological capabilities. Community college leaders need to effectively and prudently manage current resources while identifying new sources of funding and revenue to support innovative strategies for continuous quality improvement. A strategic staff position or an office responsible for grant research and proposals will further this quality objective. Further, strategic planning activities need to not only address quality initiatives, benchmarks and goals, but also establish timelines and resources necessary to fulfill said goals. The establishment of staff positions to oversee this process is imperative as it aligns the organizational structure providing the means for accountability and oversight.

Leaders must understand that to effectively lead change, they must recognize the phenomenon of change is more than the single activity or change effort. Instead, it involves leveraging resources, people, funding, training and development, and a transformation to a culture of evidence for sustainability to occur. A model or template to assist community college leaders in this endeavor can be extremely beneficial as they begin this journey.

MCKINNEY MODEL FOR IMPLEMENTATION OF INSTITUTIONAL EFFECTIVENESS

The research findings offer an insight into a myriad of ideas, suggestions, and exemplary practices surrounding the complex endeavors of instilling institutional effectiveness processes in community colleges. One way to bring clarity to the

recommendations arising from the findings and succinctly give guidance to this endeavor is the creation of a model. The McKinney Model for Implementation of Institutional Effectiveness can assist community college leaders to craft a successful institutional effectiveness implementation process to facilitate continuous quality improvement.

The McKinney Model is based on the need for institution leaders to recognize, and implement strategies which lead to the successful initiation of institutional effectiveness (IE). The failure of many change initiatives is directly attributed to the lack of recognition and understanding of the three components required to undertake this journey. In order to achieve sustainable change within a community college institution, there must be a clear vision and a plan that involves community college *leaders*, organizational *culture*, and a supportive *infrastructure* for the change.

First and the primary foundational component, is the leadership. Community college leaders must recognize and embrace their role as the visionary, the champion, and the supporter of the institutionalization of IE. The culture of an organization is the second component of the Model. It is the modifying element in the IE journey; the hurdle that must be conquered to move forward. The third and final element of the McKinney Model, infrastructure, consists of all of the formal structures, processes, systems, roles and relationships (Walton & Nadler, 1994) within an organizational change initiative. Where leadership is the key to start the change process, and culture is the engine that runs the IE endeavor, the third component, infrastructure, can aptly be described as the fuel needed to maintain the momentum of the IE process.

Figure 14 illustrates the three components of leadership, culture, and infrastructure of the McKinney Model for Implementation of Institutional Effectiveness.

The McKinney Model

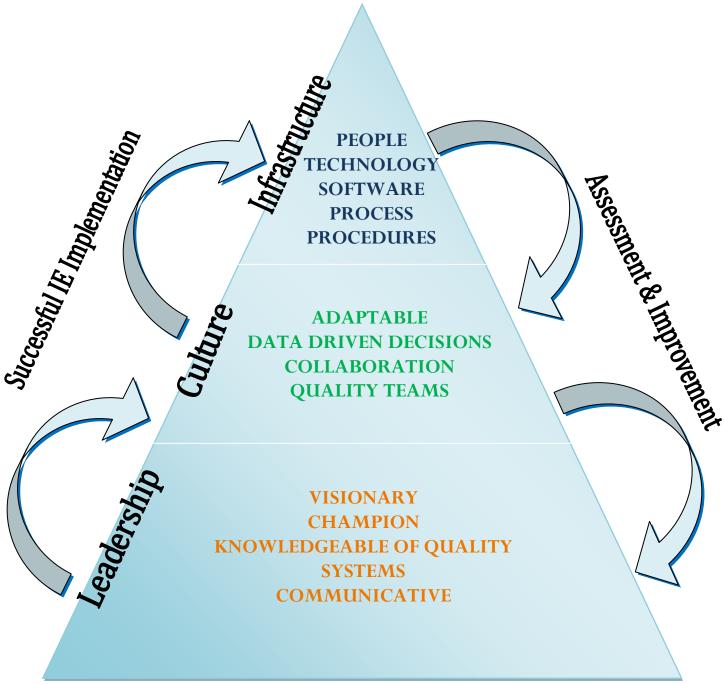


Figure 14. McKinney Model for Implementation of Institutional Effectiveness

McKinney Model Element 1: Committed Leadership

Leadership serves as the key to start the organization's movement towards this endeavor. It is only with committed and knowledgeable leadership guiding and supporting the IE effort that the quest for sustained change to a culture of evidence will succeed. The President is catalyst in the implementation of institutional effectiveness for continuous quality improvement. Once they decide on this change, to initiate institutional effectiveness at their college, they must become the champion of the endeavor leveraging the vision and necessary support and resources for the effort. This includes not only seeking and obtaining the Board of Trustees endorsement but that of key leaders and stakeholders of the institution as well. The findings for this study show that the President has to communicate to employees this need to change and incorporate institutional effectiveness (IE) into the college's daily routine. The President has to support the work of employees directly involved in this endeavor through encouragement, resources, and the assignment of the "Right people in the Right positions". The President must continually be aware of the "big picture" of the implementation of IE in the organization, but not involved in the daily operations.

As the nomenclature, *continuous quality improvement* implies, IE is a continuous process and the leadership must be continuously supportive and aware of the problems, issues, and concerns surrounding continuous quality improvement.

Therefore, to begin on this journey of change at their community colleges, the president's attention should focus on the following 5 steps:

1. Establish the President's *vision* for the college – what do you want the institution to be known for in the community?

- 2. *Communicate* this vision explain the rationale for your vision.
- 3. Create a *sense of urgency* for implementation of the vision highlight its benefits for the students and the organization stressing that improved institutional effectiveness is needed to attain this vision.
- 4. Be a *champion* of the vision facilitate the strategies for continuous quality improvement initiatives and provide the necessary resources to support the endeavor.
- 5. Communicate an emphasis on *data-driven decision making* research best practices related to Total Quality Management, Institutional Effectiveness, and continuous quality initiatives-

In following these steps, leaders can create learning organizations capable of initiating, implementing, and sustaining IE. Peter Senge (1990) defines a learning organization as

"Organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to learn together" (p. 236).

However, additional resources for the creation of IE strategies and methods for creating a learning organization are useful. A selection of websites, organizations, articles, and books pertinent to how community college leaders can learn Total Quality Management and Continuous Quality Improvement strategies are found in Appendix G.

McKinney Model Element 2: Culture of Evidence

The second element in the Model pertains to the culture of the community college. In order to promote continuous quality improvement endeavors, the college must have an organizational culture built on the premise of a "culture of evidence." The study participant colleges identified their difficulties, barriers, and potential solutions in providing rich insights as to what it takes to build an institution-wide culture of evidence to support informed decisions substantiated with accurate data.

Study findings brought forth seven crucial factors, each one vital to the successful strengthening of IE within the college culture. An explanation of how these factors influence the adoption of a culture of evidence provides additional guidance and is found in Table 31. Additional details are described for each factor following the table.

Table 31 Seven Factors to Enhance Adoption of a Culture of Evidence

Factors		Definition
	Senior Administrative Support	Board of Trustees, President, and senior leadership agreement and commitment.
2.	Collaboration	Senior leaders invite collaborative participation and empower committees. Provide staff with skills, knowledge, resources to accomplish quality initiatives. Encourage consensus building.
3.	Vision Takes Time	Prepare for the marathon. Vision takes realistic timelines. Sustained change will take 3-5 years. Research trends, best practices for improved effectiveness. Be innovative. Cultivate an entrepreneurial spirit. Creative strategies advancing institution's vision must be forward thinking, fluid, adaptable.
4.	Organizational Strategy & Re-organization Structures	Identify, implement and evaluate strategies for change to an organizational culture of evidence. Provide necessary reorganization of departmental and reporting structures to support successful and sustained quality processes and initiatives.
5.	Communication	Create processes and events to communicate a shared vision within the organization and broader community. Re-organize departmental structures to enhance dissemination of timely, accurate, user-friendly data across educational silos.
6.	Professional Development	Afford training to facilitate stakeholder access to information and data. Provide educational opportunities for leadership development, and to gain knowledge regarding current CQI processes and systems thinking.
7.	Celebration of Wins	Celebrate people and successes.

Additional details described for each factor.

- 1. **Senior Administrative Support** The support and guidance of organizational leaders are essential to successful IE and CQI efforts. Their active support enhances gaining buy-in from faculty and staff in mid-management positions. Although the size and scope of the CQI project will dictate the level of support needed, the necessity for consistent and persistent leadership will encourage and foster a nurturing environment for change. Leaders of community colleges must provide a compelling case for the change, a sense of urgency, articulate the benefits to be realized, and describe the challenges, processes, and timelines for the stakeholders. Knowledgeable employees understanding the college's IE efforts are essential to moving the college forward to meet the challenges of the 21st century.
- 2. *Collaboration* While the ongoing involvement and commitment of highly influential individuals is important to the endurance of change initiatives, the stakeholder's roles and responsibilities cannot be diminished. This change for the organization must be a collaborative effort. Simply having employee buy-in is not enough. To really add to the quality of the QCI initiatives, staff and faculty must be provided with the opportunity to become knowledgeable, gain the skills and have at their finger-tips the resources to accomplish quality initiatives.
- 3. **Vision Takes Time** Community college leaders must enumerate the goals and benefits associated with this organizational vision to the stakeholders. It also needs to be made painstakingly clear, that this change process requires commitment and time. It will indeed be a continued, multi-year, ever-evolving process necessitating the will, support, collaboration, and skills of many stakeholders. It requires agility, patience, and continued support of the vision promoted by the senior leader(s).
- 4. *Organizational Strategy & Re-Organization Structures -* Each college operates with a unique organizational structure reflective of its organizational culture. However, the onset of the IE journey may dictate a re-organization of reporting and departmental structures. Not only will this focus the college's efforts and provide a knowledgeable staff, but also locate the accountability and functionality for all quality endeavors in a single unit. These strategies might include:
 - a) Establish an Institutional Research Office and/or designate an individual responsible for fulfilling the tasks associated with this role.
 - b) Create a position for Institutional Effectiveness Dean or Vice President who is responsible for all accreditation, assessment and quality initiatives.

- c) Create steering committee, quality teams or councils responsible for the management and oversight of all AQIP Action Plans and CQI initiatives.
- 5. **Communication** For IE efforts to be successful, accurate and timely data must be available. Further, the information must be user-friendly (both in retrieving and understanding) and provide measureable benchmarks as needed. To share information regarding what CQI initiatives the college is undertaking, and other efforts related to institutional effectiveness, communication needs to be consistent with established times and venues. This encourages and allows for two-way discourse throughout the organization.

For example, helpful documents could include:

- a) Accountability and Institutional Measures (AIM) document which lists the institutions benchmarks, metric systems and goals;
- b) Annual published document entitled "Institutional Priorities" which is a greeting card-like document to inform stakeholders of the strategic areas for improvement in a given fiscal year;
- c) Annual college strategic plan which details goals, strategic objectives, actions, person to be held accountable, and metrics to measure success;
- d) Creation of an "Organizational Analysis Worksheet" to assist with the planning.
- 6. **Professional Development** Development of the leaders, faculty, and staff involved in the management of the college's continuous quality improvement endeavors is key. Training and professional development activities regarding how stakeholders can access needed information and data to assist with decisions, quality processes, and systems thinking are needed.

Professional development programs and activities could include:

- a) Use of such companies as the Continuous Quality Improvement Network (CQIN), Datatel, Noel Levitz, the regional accreditation agencies such as the Higher Learning Commission.
- b) Develop a Quality Improvement Handbook to establish a systematic way to train individuals and quality teams in continuous quality improvement. This would include their responsibilities, expectations, how and what data to retrieve to assist with decisions and assessment mechanisms. This would ensure continuity for improvement initiatives despite shifts in personnel. It is a training manual of sorts which keeps all stakeholders on task and aware of their role within the larger system for continued improvement of effectiveness for the organization.

7. *Celebration of Wins* – To continue the momentum brought about by the implementation of IE strategies, institutions must celebrate wins and successes. The celebrations can be as simple as an email or newsletter, or as elaborate as a college-wide meeting. Activities to celebrate the work of the faculty and staff are essential for the continue motivation and support for the college's culture of evidence. Their CQI efforts have taken hard work and their successes must be overtly recognized and appreciated.

Participant colleges, like many higher education institutions, were faced with a number of obstacles in this new era of accountability. Leaders of these institutions were determined to combat many of these challenges through a transformation of decision-making processes and a radical change from past operating assumptions. These changes were necessary for continued success with serving students effectively and to compete within an ever evolving academic milieu. Table 32 identifies a number of culture elements currently undergoing adaptation and evolution in many academic institutions where senior leaders are seeking to transition the organization(s) from more traditional academic cultures to create sustained cultures of evidence for improved institutional effectiveness.

Table 32 Transition from Traditional Academic Culture to a Culture of Evidence

The Traditional Academic Culture	The Continuum	The Emerging Culture of Evidence
Leaders and staff abide by time		Leaders and staff draw upon their
honored rules, policies,		knowledge and experience but
procedures and protocols		take risks, often without a pre-
		tested methodology
Formal academic programs drive		Learners' needs drive
departmental decision-making	4	departmental decision-making;
		academic programs are
		responsive to the needs of the
		individual learner
Administrative and academic		Academic support structures are
structures support the delivery of		tailored to the needs of the learne
programs and courses		
People who can work within given		People who can anticipate market
structures are most important		shifts are most important
Key message is "Don't rock the		Key message is "Seize the day"
boat"		
Communication strategies are		Communication strategies are
- Internal,		- external and internal,
- Vertical,		- horizontal,
- Formal		- informal
Strategic partnerships go		Strategic alliances and
unrecognized and untapped		partnerships are sought out and
S T T T T T T T T T T T T T T T T T T T		implemented
Segmented, specialized		Integrated, cross-functional
organizational structures are	•	organizational structures are
prevalent		reinforced
Budgets are stable and committed		Budgets are fluid and opportunity
to existing programs; deficit		seeking; deficit financing is
financing is avoided		common
New academic programs		New programs create opening for
complement existing programs		new markets
New programs must fit within		The best structure is determined
existing structures		for each program
Actions tend to be evolutionary		Actions tend to be revolutionary
Stewardship and preservation are		Vision and strategy are the critica
the critical elements of leadership		elements of leadership
Change efforts focus on improving	4. E	Change efforts focus on being firs
programs and activities deemed		to develop a new program or
valid by competitors		activity
Staff tend to work to their own	A	Staff often collaborate with each
agendas and act independently of		other and across disciplines in
their colleagues		pursuit of organizational goals
Appraisal, reward, and recognition	4	Appraisal, reward, and recognitio
are based primarily on individual		are based on individual and group
scholarly performance		scholarly and entrepreneurial
Jonoranny periorinanee		performance

Source: Adapted from Donald Hanna. Building a Leadership Vision. Eleven Strategic Challenges for Higher Education. *Educause Review. July/August 2003*.

McKinney Model Element 3: Create the New Infrastructure

The infrastructure, which includes both the hardware, software, procedures, and processes necessary to retrieve data quickly, is the final element of the Model. This complimentary element provides the capability for the organization to gather and disseminate timely and accurate information in useful formats so that decisions can be made sagaciously. The infrastructure creates the platform for all data process, control and accountability measures necessary for quality initiatives to be implemented in the college. By creating a strong infrastructure, the institutionalization of the culture of evidence is assured.

Community college leaders should consider the following infrastructure components when developing a culture of evidence for improved institutional effectiveness:

- 1. Develop a vision, clearly-defined mission, core themes, and core values which are intended to guide the institution through planning, assessment, budgeting and improvement activities;
- 2. Develop success indicators to illustrate achievement of the mission at the institutional level;
- 3. Develop guidelines and framework for assessment of programs and services;
- 4. Enhance communication through multi-media formats, software and technology to encourage the sharing of information, ideas, and solutions among committee members, staff and departments to promote innovation, continuous improvement, assessment activities and research;
- 5. Propose how general student learning outcomes are assessed and how the use of those results will be used across programs and disciplines to improve the overall student learning experience;

6. Align strategic planning, quality initiatives and resource allocation for overall institutional effectiveness and continuous improvement. Demonstration of a template for aligning an institution's planning, quality initiatives, and budget allocation can be found in Figure 15.

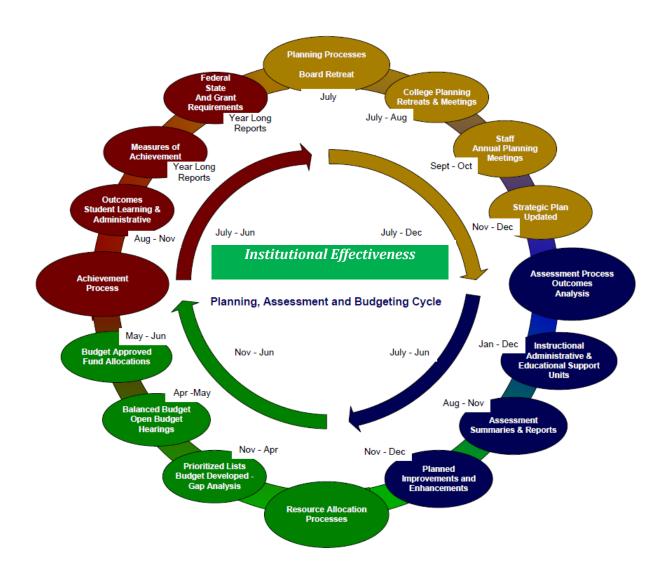


Figure 15. Planning, Assessment and Budgeting Cycle. Source: Southwestern Oregon Community College Institutional Effectiveness, Planning and Assessment Handbook. (2010). Retrieved from

http://www.socc.edu/ie/pgs/bm~doc/institutional effectiveness planning assessmen t handbook .pdf. Development of a strong infrastructure with established procedures and communication methods will allow for demonstration of institutional effectiveness.

This will contribute to an institution's ability to maintain public trust, compliance with accreditation standards, and its own definition of mission fulfillment.

IN SUMMARY

To increase understanding of the little known and identified process colleges employ when building a sustainable organizational culture of evidence for improved institutional effectiveness, selected high achieving AQIP community colleges noted for their excellence in continuous quality improvement processes were selected. As this study sought to understand the complexity of this implementation process, the McKinney Model for IE Implementation assists with this complex endeavor. The McKinney Model can be used to situate the college within the AQIP framework. *Figure 16* provides a visual depiction of the components found in the Model *(leadership, culture and infrastructure)* for improved institutional effectiveness for community colleges situated within the AQIP accreditation process.

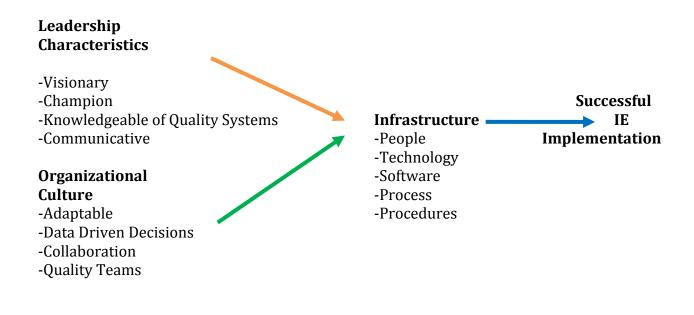


Figure 15 . Components of McKinney Model of Institutional Effectiveness Implementation

The concept of organizational change is inherently complex and demands new approaches attuned to the needs of the 21st century. To meet the challenge of change, community college leaders must be transformational stewards pursuing organizational improvement, while serving as guides for their organization and the communities to which they so valiantly and courageously serve. This undertaking is not to be approached haphazardly, or from a single perspective. Instead, the planning should be a collegial effort engaging the stakeholders and encouraging consensus building in a deliberate and strategic manner. If an institution believes that it can achieve IE in a short period of time, with minimal planning, and stakeholder engagement, the outcome will be subpar, costly and demoralizing. As the planning, implementation, and evaluation of change initiatives is

challenging, transformational stewardship requires leaders maintain a dynamic equilibrium reflecting dedication to consistency of service, strategy, agility and accountability.

While the implementation of continuous quality improvement initiatives are inconsistent among community colleges across the country, the six participant colleges all share in their experiences of successfully implementing and sustaining institutional effectiveness for improved organizational performance. Most likely this success can be characterized as their willingness to embrace a culture of evidence as a result of the college's organizational culture, leadership and the strategies employed to undertake this change. Determining what factors influence the successful implementation of institutional effectiveness initiatives offers administrators and planning teams guidance toward success at their own institutions.

The concepts of leadership and culture are the modifying elements in any change effort for improved institutional effectiveness within community colleges. Leadership sits at the heart of IE endeavors and can aptly be described as the art of getting people to move together toward a goal "they don't yet see." The leader must establish the vision for the organization, communicate it to stakeholders, and go about creating the necessary infrastructure to support those actions focused on its accomplishment. A leader's success in these efforts will depend a great deal on understanding the organizational culture. A strategic and successful leader will accomplish IE goals through their ability to create and maintain the organizational culture characteristics which reward and encourage collective effort and engage the institution in organizational change.

RECOMMENDATIONS FOR FUTURE RESEARCH

The higher education literature provides a three dimensional correlation between culture and successful organizational change in that it proposes organizations: (a) need a culture that supports and encourages change; (b) the culture or key institutional elements that shape culture will be modified as a result of the change process; and (c) leadership needs to understand the unique elements of their institution's culture and provide resources necessary for the change (Kezar & Eckel, 2002). As this study sought to answer how and in what ways community college leaders implement a plan to change to an organizational culture of evidence to sustain the institution's accountability system, insight from individuals responsible for these processes were obtained. Study participants were able to provide a holistic description of the phenomenon which concluded that in order to achieve sustainable change within a community college institution, the integration of leaders, organizational culture, and supportive infrastructure for the change, must be included. It is within this framework that consideration of further research interests has been considered.

Within the element of leadership, further research identifying how and in what ways senior leadership embed institutional effectiveness (IE) into strategic planning efforts would assist community colleges as they plan for the future. Exploration into the identification of the key community college informal and formal leaders as they undertake institutional effectiveness initiatives would assist colleges as they begin these endeavors. In addition, research regarding the characteristics of leaders facilitating continuous quality improvement activities could assist all colleges accomplish this successfully as well as provide information for aspiring leaders.

Relevant to the community college culture, further research regarding exploring commonalities and differences between rural and urban colleges and/or single campus institutions and multi-campus systems relative to their approaches to organizational change could be beneficial to a college of any size. Further research is also needed to identify community college organizational culture characteristics which specifically hinder and or propel the organization towards institutional effectiveness assisting colleges to strategize as they move forward in this direction.

The third element of institutional infrastructure is complex and could encompass both technology and processes within an organization. Research focusing on the exploration of the various processes necessary for institutional stakeholders to have access to timely, user- friendly information would be of immense benefit. Further, research identifying necessary technology and/or software and programs fostering organizational efficiency and communication could lead to improved student success. It would also be beneficial to explore how these IE programs could be integrated into the organizational culture to assure accuracy, improved skills, and communication among the stakeholders for continuous quality improvement. Also, attention and research examining systemic processes for implementing and disseminating assessment information would assist community colleges as they continue to evolve with their assessment and accountability initiatives.

REFERENCES

- Aarons, G.A., Palinkas, L.A. (2007). Implementation of evidence-based practice in child welfare: Service provider perspectives. *Administration and Policy in Mental Health & Mental Health Services Research*. 34:411–419.
- Academic Quality Improvement Program. (2010). Action Project Directory. Retrieved from http://www.aqip.org/index.php?option=com actionsearch.
- AQIP (2007). Introduction to AQIP. Retrieved from http://www.hlcommission.org/aqip-home/.
- Alexander, F. K. (2000). The changing face of accountability. *Journal of Higher Education*, 71, 411-431.
- Alfred, R., Ewell, P., Hudgins, J., and McClenney, K. (1999). Core indicators of effectiveness for community colleges. Washington, D C: Community College Press, American Association for Community Colleges.
- Alfred, R. L. (2005). Managing the big picture and college and universities: From tactics to strategy. New York: Praeger.
- Alfred, R. L., Shults, C., & Seybert, J. A. (2007). *Core indicators of effectiveness for community colleges*. Washington, DC: American Association of Community Colleges
- Allen, J. and Bresciani, M.J. (2003). Public institutions, public challenges: The transparency of assessment results. *Change Magazine*, 35 (1). American Association for Higher Education: Washington D.C.
- American Association of Community Colleges. (2001). AACC survey on leadership.
 Available from American Association of Community Colleges, One Dupont Circle,
 N.W., Ste. 410, Washington, DC 20015)
- American Association of Community Colleges (2010). Retrieved from http://www.aacc.nche.edu/AboutCC/Pages/fastfacts.aspx.
- An assessment framework for the community college. (2004). [Graph illustration Community college stakeholders November 05, 2010]. http://www.league.org/publication/whitepapers/0804.html
- Banta, T. W. (1994). Do faculty sense the tightening of the accountability noose? *Synergy*, 2(2), pp. 1-2.
- Barnes, L.B., & Kriger, M.P. (1986). The hidden side of organizational leadership. *Sloan Management Review*, 28(1), 15-25.

- Barney, J. (1986). Organizational culture. *Academy of Management Review*, 11(3), 656 -665.
- Baum, F. (2002). The new public health. Oxford: Oxford University Press.
- Bernerth, J. 2004. Expanding our understanding of the change message. Human Resource Development Review, 3(1): 36-52. Carnegie Classification Description: Size and Setting Retrieved from http://classifications.carnegiefoundation.org/descriptions/size setting.php
- Billings, M. (2005). Web-based strategic planning. *Community College Journal of Research and Practice*. 29, 609-610.
- Birnbaum, R. (1988). How colleges work: The cybernetics of academic organization and leadership. San Francisco: Jossey-Bass.
- Birnbaum, R. (2000). Management fads in higher education: Where they come from, what they do, why they fail. San Francisco: Jossey-Bass.
- Blanchard, K.H., Zigarmi, D., and Nelson, R. (1993). "Situational leadership after 25 years: A retrospective *Journal of Leadership Studies*. 1(1), 22-36.
- Blanco, C.D., Jones, D.P., Longanecker, DA., & Michelau, D.K. (2007). Thinking outside the box: Policy strategies for readiness, access, and success. Retrieved from http://inpathways.net/ThinkingOutsideTheBox.pdf.
- Bogdan, R.C. & Biklen, S.K. (1992). Qualitative research for education: An introduction to theory and methods. Boston: Allyn and Bacon.
- Brandon, K. (2009). Investing in education: The American graduation initiative. Retrieved from http://www.whitehouse.gov/blog/Investing-in-Education-The-American-Graduation-Initiative/
- Brint, S. and Karabel, J. (1989). The diverted dream: Community colleges and the promise of educational opportunity in America, 1900–1985. New York: Oxford University Press.
- Brock, T., Jenkins, D., Ellwein, T., Miller, J., Gooden, S., Martin, K., MacGregor, C. & Pih, M. (2007). Building a culture of evidence for community college success: Early progress in the achieving the dream initiative. Retrieved June 22, 2009 from http://www.mdrc.org/publications/452/full.pdf
- Brooks, R. L. (2005). Measuring university quality. *The Review of Higher Education,* 29(1), 1-21.

- Burnes, B. (1992). Managing change: A strategic approach to organisational development and renewal. Pitman Publishing. London.
- Callan, PM., Ewell, PT., Finney, J.E. & Jones, D.P (2007). Good policy, good practice. Improving outcomes and reducing costs in higher education: A guide for policymakers. Retrieved from http://www.highereducation.org/reports/Policy Practice/index.shtml.
- Cameron, K. S. (1978). Measuring organizational effectiveness in institutions of higher education. *Administrative Science Quarterly*, *23*, 604-632.
- Campbell, D. F. (2006). The new leadership gap: Shortages in administrative positions. *Community college journal, 76(4).* 10-14.
- Carey, K. (2006). Is our students learning" The measurements elite colleges don't want you to see. Washington Monthly. Retrieved March 12, 2010 from http://www.washingtonmonthly.com/features/2006/0609.carey.html.
- Center on Educational Governance Datnow, Park U.S. Department of Education. 2006.

 A Test of Leadership: Charting the Future of U.S. Higher Education. Washington, DC: U.S. Department of Education.
- Chaffee, E. and L. Sherr. (1992). Quality: Transforming postsecondary education, ASHE/ERIC Higher Education Report 3. Washington DC: School of Education and Human Development, The George Washington University.
- CHEA Institute for Research and Study of Accreditation and Quality Assurance. *The condition of accreditation: US accreditation in 2007.* Retrieved from http://www.chea.org/pdf/Condition of Accred 2007.pdf.
- Cohen, M. D., & March, J. G. (1974). Leadership and ambiguity: The American college president. New York: McGraw-Hill.
- Cohen, A. M., & Brawer, F. B. (4th ed.), (2003). The American community college. San Francisco, CA: Jossey-Bass.
- Cohen, A. M., & Brawer, F. B. (2006). *The American community college.* 4th ed. San Francisco: Jossey-Bass.
- Cole, J.J.K., Nettles, M.T. & Sharp, S. (1997). Assessment of teaching and learning for improvement and accountability: State Governing, Coordinating Board and Regional Accreditation Association Policies and Practices. University of Michigan: National Center for Postsecondary Improvement.

- Coley, R. (2000). The American community college turns 100: A look at its students, programs and prospects. New Jersey: ETS Policy Information Center.
- Cooper, D. R., & Schindler, P. S. (2003). Business research methods. New York: McGraw-Hill.
- Cornesky, R. (1990). Using Deming: Improving Quality in Colleges and Universities. Madison, WI: Magma Publications.
- Creswell, J. W. (1994). Research design: Qualitative & quantitative approaches. Thousand Oaks, CA: Sage Publications.
- Creswell, J.W. (2003). Research design: Qualitative, quantitative, and mixed methods approaches (2nd ed.). Thousand Oaks, CA: Sage Publications.
- *Creswell, J. W.* (2007). Qualitative inquiry and research design: Choosing among five approaches. Thousand Oaks, CA: Sage
- Creswell, J. W. (2008). Research Design: Qualitative, Quantitative and Mixed Method Approaches. Thousand Oaks, CA: Sage.
- Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approach (3rd ed.). Los Angles: Sage.
- Curry, B.K. (1992). Instituting enduring innovations: Achieving continuity of change in higher education. Retrieved June 20, 2009 from http://www.ericdigests.org/1993/higher.htm
- Damschroder, L.J., Aaron, D.C., Keith, R.E., Kirsh, S., Alexander, J., Lowery, J. (2009). Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. *Implementation Science.* 4 (50).
- Datnow, A., Park, V., & Wohlstetter, P. (2007). Achieving with data: How high performing elementary systems use data to improve student achievement. Los Angeles: Center on Educational Governance, University of Southern California.
- Denison, D. (1990). Corporate culture and organizational effectiveness. New York: John Wiley & Son.
- Dennison, D. & Mishra, A. (1995). Toward a theory of organizational culture and effectiveness. *Organization Science*. 6 (2): 204-223.
- Department of Education. (1965). General higher education programs: Higher Education Act. Retrieved from http://www.nrcyd.ou.edu/programs/pdfs/hea1965.pdf.

- Denzin, N., & Lincoln, Y. (Eds.). (1994). Handbook of qualitative research. Newbury Park, CA: Sage Publications.
- Denzin, N. K., & Lincoln, Y. S. (1998). *The landscape of qualitative research: Theories and issues.* Thousand Oaks, CA: Sage.
- Denzin, N.K. &Lincoln, Y. (2000). Introduction: The Discipline and practice of qualitative research. Thousand Oaks: Sage.
- Denzin, N. & Lincoln, Y. (2005). *The Sage handbook of qualitative research.* Thousand Oaks, CA: Sage.
- Dixon, N. (1999). The organizational learning cycle. How we can learn collectively. London: McGraw-Hill.
- Earl, L. and Katz, S. (2002). Leading schools in a data-rich world. *Second International Handbook of Educational Leadership and Administration*, ed. K. Leithwood and P. Hallinger. Dordrecht: Kluwer Academic Publishers.
- Eaton, J. (2003). CHEA letter from the president. *The Value of accreditation: Four pivotal roles.* Retrieved from http://www.chea.org/pdf/pres ltr value accrd 503.pdf.
- Eckel, P., Green, M., Hill, B., & Mallon, W. (1999). Taking charge of change: A primer for colleges and universities. Washington, D.C.: American Council on Education.
- Ewell, P.T. (2002). Perpetual movement: Assessment after twenty years. Boulder, CO: National Center for Higher Education Management Systems.
- Ferlie, E.B., Shortell, S.M. (2001). Improving the quality of health care in the United Kingdom and the United States: a framework for change. *Milbank Quarterly*. 79(2): 281–315.
- Ferlie, E.B., Heinold, J., Shortell, S.M. (2002). "Improving the Quality of Health Care in the United Kingdom and the United States: A Framework for Change." *Milbank Quarterly* 79, 2 (February 2002).
- Gall, M. D., Borg, W. R., & Gall, J. P. (1996). *Educational research* (6th ed.). White Plains, NY: Longman.
- Hargreaves, A., & Fink, D. (2004). The seven principles of sustainable leadership. *Educational Leadership, 61*(7), 8-13.
- Heifetz, R.A. & Linsky, M. (2004). When Leadership Spells Danger, *Educational Leadership*, 61 (1).

- Hersey, P. and Blanchard, K. H. (1977). *Management of Organizational Behavior 3rd Edition–Utilizing Human Resources*. New Jersey/Prentice Hall.
- Higher Learning Commission (2010). Program to Evaluate and Advance Quality. Retrieved from http://www.ncahlc.org/peaq-home/peaq.html.
- Higher Learning Commission (2010). Academic Quality Improvement Program Retrieved from http://www.ncahlc.org/aqip-home/.
- Huberman, A. M., & Miles, M. B. (2002). *The qualitative researcher's companion*. Thousand Oaks, CA: Sage.
- Immerwahr, J. & Johnson, J. (2007). Squeeze play: How parents and the public look at higher education today (National Center Report #07-4). San Jose, CA: The National Center for Public Policy in Higher Education.
- Johnson, B., & Christensen, L. (2004). Educational research: Quantitative, qualitative, and mixed approaches (2nd edition). Boston, MA: Pearson Education Inc.
- Joiner, C.W. (1987). Leadership for change. Cambridge, MA: Ballinger Publishing Company.
- Kanter, R.M. (1983). The change masters: Innovations for productivity in the American corporation. NY: Simon and Schuster.
- Kezar, A. (2001). Understanding and facilitating organizational change in the 21st century: Recent research and conceptualizations. ASHE-ERIC Higher Education Report. San Francisco: Jossey-Bass.
- Kezar, A. (2001). Investigating organizational fit in a participatory leadership environment. *Journal of Higher Education Policy and Management*, *23*(1), 85-102.
- Kezar, A., & Eckel, P. (2002). The effect of institutional culture on change strategies in higher education: Universal principles or culturally responsive concepts? *The Journal of Higher Education*, 73(4), 435-460.
- Klein, K.J. & Sorra, J.S. (1996). The challenge of innovation implementation. *Academy of Management Review*, 21, 1055-1080.
- Kotter, John P. (1995). Winning at Change: Leader to Leader. 10:27-33.
- Leedy, P. D., & Ormrod, J. E. (2005). *Practical research: Planning and design* (5th ed.). Upper Saddle River, NJ: Prentice Hall.
- Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Newbury Park, CA: Sage Publications.

- Markham, A. (2004). Internet Communication as a tool for qualitative research. *Qualitative Research: Theory, Method and Practice. Sage Publications. Thousand Oaks, CA.*
- McClenney, K. M., McClenney, B. N. (2003). Community College Inventory. Focus on student persistence, learning and attainment. Retrieved from www.ccsse.org/publications/Community%20College%20Inventory.pdf.
- McClenney, K. M., McClenney, B. N., & Peterson, G. F. (2007). A culture of evidence: What is it? Do we have one? Planning for Higher Education, 35(3), 26-33.McClenney
- Meacham, J. (2008). What's the Use of a Mission Statement? *Academe*, *94*(1), 21-24. Retrieved from Academic Search Complete database.
- Merriam, S. B. (1988). Case study research in education: A qualitative approach. San Francisco: Jossey-Bass.
- Merriam, S. B. (1998). Qualitative research and case study applications in education. San Francisco: Jossey-Bass Publishers.
- Merriam, S. B. and Associates (2002). *Qualitative research in practice: Examples for discussion and analysis.* San Francisco: Jossey-Bass Publishers.
- Merriam, S. (2009). *Qualitative research: A guide to design and implementation*. San Francisco: Jossey-Bass.
- Middle States Association of Colleges and Schools. (2010). Membership Directory. Retrieved from http://www.msche.org/institutions directory.asp.
- Middle States Commission on Higher Education (2009). History of Accreditation and the Middle States Commission on Higher Education. *90th Anniversary 1919-2009: Re*trieved from http://www.msche.org/publications/90thanniversaryhistory.pdf.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis*. Thousand Oaks, CA: Sage.
- Moore, C. & Shulock, N. (2007) Beyond the Open Door: Increasing Student Success in the California Community Colleges. Sacramento, CA: Institute for Higher Education Leadership & Policy.
- Neuman, W. L. (2003). *Social research methods: Qualitative and quantitative approaches* (5th ed.). Boston: Allyn & Bacon.

- New England Association of Colleges and Schools. (2010). Roster of Institutions.

 Retrieved from

 http://cihe.neasc.org/about our institutions/roster of institutions/.
- Newman, M. (1996). Agency of change: One hundred years of the north central association of colleges and schools. Tempe, AZ. The north central association of colleges and schools.
- North Central Association of Schools and Colleges (2010). Directory of Institutions
 Retrieved from
 http://www.ncahlc.org/component/option,com_directory/Itemid,192/lang.en/
- Northwest Association of Schools and Colleges. (2010). Directory of Institutions. Retrieved from http://www.msche.org/institutions_directory.asp.
- National Assessment and Accreditation Council (2007). Quality Assurance in Higher Education: An Introduction. Vancouver, Canada: Sanjaya Mishra.
- National Commission on Accountability in Higher Education (2005). Retrieved from http://www.sheeo.org/about/paulpres/ACE%20Presentation%20February%2020 <a href="https://oscartage.com/
- New York State Education Department. (2008). History of the Board and University of the State of New York. Retrieved from http://www.regents.nysed.gov/about/history-usny.html.
- Nichols, J. O. (1995). A Practitioner's Handbook for Institutional Effectiveness and Student Outcomes Assessment Implementation. Third Edition, Agathon Press, New York.
- O'Banion, T. (2003). Learning colleges and educational change: An interview with Terry O'Banion. Retrieved from http://occrl.ed.uiuc.edu/Newsletter/2003/spring/spring2003 1.asp.
- Parsons, M.D. (2010). Accreditation in the United States: Higher Education. Retrieved from http://www.answers.com/topic/accreditation-in-the-united-states-higher-education.
- *Patton*, M. Q. (1990). Qualitative evaluation and research methods (2nd ed.). Newbury Park, CA: Sage Publications.
- Patton, M. Q. (2002). Qualitative evaluation and research methods (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Patton, Eric, & Appelbaum, Steven H. (2003). The case for case studies in management research. *Management Research News*, 26(5), 60-71.

- Peters, T., & Waterman, J. (1982). In Search of Excellence. Warner Books, New York.
- Peterson, M.W., & Augustine, C.H. (2000). External and internal influences on institutional approaches to student assessment: Accountability or improvement? *Research In Higher Education*, 41 (4), 443-479.
- Pickering, J. W. & Bowers, J.C. (1990). "Assessing value-added outcomes assessment", measurement & evaluation in counseling & development, Vol. 22(4), 1990, 215-221.
- Ruben, B.D. (2007). Higher education assessment: Linking accreditation standards and the Malcolm Baldridge criteria. *New Directions for Higher Education*, 137, 59-83.
- Schein, E. H. Organizational Culture. (1988). WP 2088-88. Sloan School of Management Working Papers, Massachusetts Institute of Technology, 1988.
- Schein, E. (1990). Organizational culture and leadership. San Francisco: Jossey-Bass.
- Senge, P. (1990). The Fifth Discipline: the Art and Practice of the Learning Organization. New York: Doubleday.
- Shavelson, R.J., & Huang, L. (2003). Responding responsibly to the frenzy to assess learning in higher education. Change, 35(1), 10-19.
- Sheldon, M., Golub, A.J.; Langevin, J.; Ours, P. A.; Swartlander, B.J. (2008). Improving Institutional Effectiveness: Description and Application of an Implementation Model. *Society for College and University Planning (SCUP): Planning for Higher Education.*
- Shulock, N. B. and Moore, C. (2005). "Diminished Access to Baccalaureate for Low-Income and Minority Students in California: the impact of budget and capacity constraints on the transfer function." *Educational Policy*, 19 (2): 418-442.
- Shults, C. (2001). The critical impact of impending retirements on community college leadership. Leadership Series no. 1. Washington, DC: American Association of Community Colleges.
- Skolits, G. & Graybeal, S. (2007). Community College Institutional Effectiveness. Community College Review, 34(4), 302-323
- Smart, J.C., and Hamm, R.E. (1993). Organizational effectiveness and mission orientation of two-year colleges. *Research in Higher Education*, *34*, 489-502.
- Smart, J.C., Kuh, G.D., and Tierney, W.G. (1997). The roles of institutional cultures and decision approaches in promoting organizational effectiveness in two-year colleges. *The Journal of Higher Education*. 68(3). 256-281.

- Southern Association of Schools and Colleges. (2010). Membership Directory. Retrieved from http://www.sacscoc.org/search.asp.
- Southern Association of Colleges and Schools (2005). Principles of Accreditation: Foundations for Quality Enhancement. Retrieved from http://www.sacscoc.org/pdf/2010principlesofacreditation.pdf.
- Spillane, J., Halverson, R., and Diamond, J. (2001). "Investigating School Leadership Practice: A Distributed Perspective". *Educational Researcher*, vol. 30 no. 1, pp. 23–28.
- Stake, R. E. (1994). Case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), Handbook of qualitative research (pp. 236–247). Thousand Oaks, CA: Sage.
- Stake, R. (1995). The art of case study research. Thousand Oaks, CA: Sage.
- Stake, Robert E. (2000), "Qualitative Case Studies." In N.Denzin & Y. Lincoln eds., *The Sage Handbook of Qualitative Research*, 3rd edition, Thousand Oaks, CA, Sage Publications, 443-466.
- State Higher Education Executive Officers. (2005). Accountability for better results: A national imperative for higher education. Boulder, CO: State Higher Education Executive Officers.
- The Higher Learning Commission. (2007). Institutional Accreditation: An Overview. Retrieved from www.ncahlc.org/download/Overview07.pdf.
- The Secretary of Education's Commission on the Future of Higher Education (2006). Assuring Quality in Higher Education: Key Issues and Questions for Changing Accreditation in the United States. Washington, DC: Vickie Schray.
- U.S. Department of Education. (2006). A test of leadership: Charting the future of U.S. Higher Education. Washington, DC: U.S. Department of Education.
- United States Department of Education. (2008). *Accreditation and Quality Assurance*. Retrieved from http://www2.ed.gov/about/offices/list/ous/international/usnei/us/edlite-accreditation.html
- Walton, E. and Nadler, D. (1994), "Diagnosis for organization design", in Howard and Associates (Eds), Diagnosis for Organizational Change, The Guilford Press, New York, NY, pp. 85-105.
- Waters, T., Marzano, R. J., and McNulty, B. (2003). Balanced Leadership: What 30 Years of Research Tell Us about the Effect of Leadership on Student Achievement. McREL.

- Weick, K. (1982). The Management of Organizational Change among Loosely Coupled Elements. *The Education Digest,* pp. 28-32. Blackwell.
- Weiner, B, (2009). A theory of organizational readiness for change. *Implementation Science*. (4) 67, retrieved from http://www.implementationscience.com/content/4/1/67.
- Weisman, I.M. & Vaughan, G.B. (2001). The community college presidency. Washington, D.C.: Community College Press.
- Weisman, I.M. & Vaughan, G.B. (2007). The community college presidency. Washington, D.C.: Community College Press.
- Western Association of Schools and Colleges (2010). Member Directory. Retrieved from http://www.wascsenior.org/wasc/MI Directory.htm.
- Willis, J.W., Jost, M., Nilakanta, R. (2007), Foundations of Qualitative Research: Interpretive and Critical Approaches, Sage, Thousand Oaks, CA.
- Wolverton, M., Gmelch, W., Montez, J., & Nies, C. (1993). The Changing nature of the academic deanship: *ASHE-ERIC Higher Education Research Report*, vol 28, (1).
- Van der Post, W.Z., de Coning, T.J., & Smit, E.vd.M. (1997). An instrument to measure organizational culture. South African Journal of Business Management, 28(4), 147-168.
- Yin, R., The Case Study Crisis: Some Answers. *Administrative Science Quarterly*, Volume 26, 1981, pp. 58-65.
- Yin, R. (1984). Case study research: Design and methods (1st ed.). Beverly Hills, CA: Sage Publishing.
- Yin, R.K. (1993) Application of Case Study Research, California: Sage Publications.
- Yin, R. (1994). Case study research: Design and method (2nd ed.). Beverly Hills, CA: Sage Publications.
- Yin, R. (2003). Case study research: Design and methods (3rd ed.). Thousand Oaks, CA: Sage.

APPENDIX A

INFORMED CONSENT-PARTICIPANT

Thank you for agreeing to participate in this study that will take place from October, 2009 to January, 2011. This form outlines the purposes of the study and provides a description of your involvement and rights as a participant.

I consent to participate in a research project conducted by Teresa R. McKinney, a doctoral student at National-Louis University, located in Chicago, Illinois.

I understand the study is entitled *Institutional Effectiveness and a Culture of Evidence:* Accountability Cornerstones for the Community College in the 21st Century. The purpose of this study is to explore how and in what ways community college leaders craft institutional effectiveness strategies to create continuous quality improvement.

I understand that my participation will consist of audio recorded interviews lasting 60 to 90 minutes with a possible second, follow-up interview lasting 60 to 90 minutes. I understand that I will receive a copy of my transcribed interview at which time I may clarify information.

I understand that my participation is voluntary and can be discontinued at any time until the completion of the dissertation.

I understand that my anonymity will be maintained and the information I provide confidential.

I understand that only the researcher, Teresa R. McKinney, will have access to a secured file cabinet in which will be kept all transcripts, audio recordings, and field notes from the interview(s) in which I participated.

I understand there are no anticipated risks or benefits to me, no greater than that encountered in daily life. Further, the information gained from this study could be used to assist community colleges to be more successful in their crafting of integrated institutional effectiveness and organizational improvement strategies.

I understand that in the event I have questions or require additional information I may contact the researcher: Teresa R. McKinney, 10437 S Bell Avenue, Chicago, IL 60643. Phone: 773-238-2237 or E-mail: teresa4142@sbcglobal.net.

If you have any concerns or questions before or during participation that you feel have not been addressed by the researcher, you may contact my Primary Advisor and Dissertation Chair: Dr. Rebecca S. Lake, National-Louis University (Chicago Campus), 122 S. Michigan Avenue, Chicago, IL 60603. Phone: 312-261-3534 or E-mail: rebecca.lake@nl.edu

Participant's Signature:	Date:	
• -		
Researcher's Signature:	Date:	

Appendix B

Email Invitation from Researcher

Date:

To: []

Subject: Doctoral Research Regarding AQIP Community Colleges

The purpose of this letter is to briefly introduce myself and my doctoral research. My name is Teresa McKinney and I am a doctoral candidate who is attending National Louis University. The National Louis University Community College Leadership doctoral program is intended to engender a broad understanding of community colleges by encouraging focused scholarly inquiry grounded in the reality of leadership and administrative practices.

Your college has been nominated by the Higher Learning Commission, AQIP Division, as one of seven community colleges in the Midwest with an exemplary continuous quality improvement planning process to participate in a research study. The purpose of my dissertation study is to identify how and in what ways community college leaders craft institutional effectiveness strategies to facilitate continuous quality improvement.

I invite your college to participate by asking you to identify the executive-level person responsible for the AQIP planning and change processes. Please respond to this email agreeing to participate in my research with the appropriate contact information. It is anticipated that this research will generate relevant information and insights surrounding community college change processes and the planning initiatives involved with the creation of improved institutional effectiveness strategies. The identities of participant colleges and strategic planners will be kept strictly confidential.

I will contact you during the week of March 22 to see if you have any questions regarding the study. If you accept this invitation to participate, a sixty minute interview will be scheduled between the weeks of March 29th and May 1, 2010. My contact information is (773) 617-1766 or by email at teresa4142@sbcglobal.net

Thank you for your time and consideration.

Teresa McKinney

Appendix C

Driving Questions Mapped to the Interview Questions

Driving question	Interview question(s)
1. What factors prompt community colleges to engage in a planned process to improve institutional effectiveness?	1. What were the factors at your college that prompted the decision to engage in a planned process to improve institutional effectiveness?
2. Are specific organizational culture characteristics or dynamics evident as community colleges engage in a planned process to improve institutional effectiveness?	2. What were the organizational cultural characteristics or dynamics that assisted in moving the college forward to engage in a planned focus on institutional effectiveness?
	3. What role or function do you feel the involvement of the stakeholders had in assisting to move the college forward to engage in a planned focus on institutional effectiveness?
	4. What role or function do you feel organizational consistency (the systems and processes in place to efficiently do what is needed over and over) had in assisting to move the college forward to engage in a planned focus on institutional effectiveness?
	5. What role or function do you feel the organization's adaptability or the ability to change had in assisting to move the college forward to engage in a planned focus on institutional effectiveness?
	6. What role or function do you feel the organization's clear sense of mission had in assisting to move the college

forward to engage in a planned focus on institutional effectiveness?

- 3. What are the preliminary steps taken by community colleges to establish a plan of institutional effectiveness for systematic continuous improvement?
- 7. Describe the preliminary steps taken to establish the plan for institutional effectiveness at your college?

- 4. How and in what ways did community college leaders facilitate and support the implementation of an institutional effectiveness process for systematic continuous improvement?
- 8. On reflection, what are the "lessons learned" from this undertaking (implementing the institutional effectiveness process)?

9. How and in what ways do you feel your college's leaders facilitated and supported the implementation of an institutional effectiveness process for systematic continuous improvement?

Appendix D

Demographic Survey

This questionnaire will provide a profile of each study participant. To facilitate ease of access, the demographic survey will be uploaded to a commercially available Internet survey tool. The tool will capture, store, and summarize the results to allow for data analysis. Please take a few minutes to complete this short and confidential survey.

1.	Participant Name:	
2.	Date:	
3.	Current Position:	
	Job Title:	
	Years in Current Position:	
	Phone:	
	_	
	Institution:	
	City:	
	State:	
	Email:	
4.	Gender:	
5.	Age Group:	
	25 -30 31 -35 36 -40 41-46 51-55 56 -60 Over 60 years	
6.	Ethnicity: Asian or Pacific Islander American Indian or Alaskan Black, non-Hispanic White, non-Hispanic Other	
7.	Previous Higher Education Positions: Vice President Institutional Researcher Dean	

Faculty

Other (please specify)

- 8. When did the institution join the Academic Quality Improvement Program (AQIP) for accreditation through the Higher Learning Commission (HLC)?
- 9. In your opinion, how important are the following factors as the institution engages in a dedicated process to enhance institutional effectiveness and establish an environment conducive to building and sustaining a data-driven culture of evidence? Please rate the importance on a scale of 1 to 5 where: 1 = Not Important; 5 = Very Important
 - Leadership Support & Facilitation
 - Culture Supportive of Data-driven Analysis & Metrics
 - Appropriate Financial/Technological Allocation
- 10. Who made the decision at your institution to participate in AQIP? To participate in specific AQIP categories?
- 11. Is a system in place to gather and distribute timely, useful and user-friendly information about institutional effectiveness at your community college?

N	C
	N

- 12. Please rate how well each of the following statements describes your community college on a scale of 1 to 5. Use scale where 1= Does not describe my college at all; 5= Accurate description of my college.
 - My college utilizes data & metrics to make decisions
 - Employees who need access to data for decisions have
 - Technology and processes available to get information in a timely manner
 - My college has a formal set of administrative policies to govern our information management processes
 - Data and information are regarding the college is transparent and shared across the college
- 13. The following is a list of potential outcomes of a culture of evidence. Please rate each in terms of the benefit you believe it provides to your college on a scale of 1 to 5 where 1= No benefit; 5=Great benefit
 - Improve regulatory compliance
 - Drive sustainable growth through innovation
 - Improve the quality of programs and services
 - Anticipate and manage change
 - Establish a framework for proactive, evidence-based decision making
 - Increase enrollment
 - Solve complex problems

Appendix E

Summary of Interview a Priori Themes

Driving Questions	Participant Responses
Theme - Reasons for Engaging in IE What factors prompt community colleges to engage in a planned process to improve institutional effectiveness? Theme - Organizational Culture Are specific organizational culture characteristics or dynamics evident as community colleges engage in a planned process to improve institutional effectiveness?	 Spurred by Visionary Leadership of the President AQIP focus on quality, improvement, shared governance, and institutional effectiveness. Wanted to explore a CQI Model of Accreditation To enhance our ability to improve measures of effectiveness. To gain efficiency by first realizing financial efficiency. We worked on the alignment of institutional priorities and processes. President of the College at the time. He was a champion for shared governance and institutional effectiveness and believed the AQIP process could be used as a framework for these attributes." Culture supports collaboration, teamwork, innovation, communication, and an investment in employees. Extensive infrastructure in place which support institutional effectiveness initiatives (teams, committees, and staff positions). Consistency of organizational practices Adaptability Mission-Driven
Theme - Implementation Process What are the preliminary steps taken by community colleges to establish a plan of institutional effectiveness for systemic continuous improvement?	 Committed Executive Leadership [including the Board of Trustees]. Hire external consultant to teach key IE concepts, processes, systems thinking, quality improvement, quality tools (climate surveys, organizational analysis worksheets, etc), and ways to sustain IE efforts. Celebrate Successes Develop benchmarks, objectives, timelines, manageable workloads, systemic infrastructure, and handbook. Attend annual Higher Learning Commission Meetings Join the Center for Quality Initiatives Network (CQIN). Commit to shared governance Prepare for the marathon (3-5 year cultural transformation process).
Theme - Leadership How and in what ways did community college leaders facilitate and support the implementation of an institutional effectiveness process for systemic continuous improvement?	 Senior leaders committed to IE and CQI Offered leadership development Provided fiduciary, personnel, and technological resources Joined AQIP, CQIN, and other organizations or training seminars to learn more about TQM, CQI, and higher education best practices.

APPENDIX F

ORGANIZATIONAL-ANALYSIS WORKSHEET

This worksheet will assist organizations with selecting institutional priorities, goals, and objectives. It allows an institution to identify their organization's key strengths and opportunities for improvement (OFIs) in order to accelerate their continuous quality improvement journey. Please identify 1-2 strengths and 1-2 opportunities for improvement for each category (More could be added). For those of high importance, establish a goal and a plan of action.

		For High-Importance Areas			
Criteria Category	Importance High, Medium, Low	Stretch (Strength) or Improvement (OFI) Goal	What Action Is Planned?	By When?	Who Is Responsible
Category 1—Leadership					
Strength					
1.					
2.					
OFI					
1.					
2.					
Category 2—Strategic Planning					
Strength					
1.					
2.					
OFI					
1.					
2.					
Category 3—Customer Focus					
Strength					
1.					
2.					
OFI					
1.					
2.					

		For High-Importance Areas			
Criteria Category	Importance High, Medium, Low	Stretch (Strength) or Improvement (OFI) Goal	What Action Is Planned?	By When?	Who Is Responsible ?
Category 4—Measurement, Analy	sis, and Knowledge Manag	ement			
Strength					
1.					
2.					
OFI					
1.					
2.					
Category 5—Workforce Focus					
Strength					
1.					
2.					
OFI					
1.					
2.					
Category 6—Operations Focus					
Strength					
1.					
2.					
OFI					
1.					
2.					
Category 7—Results					
Strength					
1.					
OFI					
1.					
2.					

Source: Adapted from the Baldridge Criteria for Excellence Self-Analysis Worksheet http://www.nist.gov/baldrige/publications/education_criteria.cfm

Appendix F

Resources for Community College Leaders

Organizations	Tools	Books
Continuous Quality Improvement Network (CQIN) http://www.cqin.net/	Organizational Analysis Worksheets (Figure X and Appendix A) or use the Community College Inventory http://www.achievingthedream.org/ images/ index03/Community College Inventory.pdf by McClenney (2003).	A Practitioners Handbook for Institutional Effectiveness and Student Outcomes Assessment Implementation James O. Nichols
Datatel – Center for Excellence http://www.datatel.com/products.cfm	Establish Key Performance Indicators	A Handbook on the Community College in America: It's History, Mission, and Management George Baker, Judy Dudziak, Peggy Tyler
The Higher Learning Commission Annual Meeting http://www.ncahlc.org/	Strategic Planning http://www.scup.org/page/index	Institutional Effectiveness in Two-Year Colleges: The Southern Region of the United States in Community College Review Timothy Todd, George Baker
Achieving the Dream http://www.achievingthedream.org/default.html	Assessment Matrix http://www.cwu.edu/president/current/AnAssessmentMatrixforCWU.pdf	Changing Our Schools: Linking School Effectiveness and School Improvement Louise Stoll, Dean Fink
The Foundation for the Malcolm Baldridge National Quality Award http://www.baldrigepe.org/foundation/	Annual Institutional Priorities and Objectives Planning (RQ-3 Section)	Planning and Assessment in Higher Education: Demonstrating Institutional Effectiveness Michael Middaugh
American Association of Community Colleges http://www.aacc.nche.edu/Pages/default.aspx	AQIP Projects http://www.hlcommission.org/aqip-home/	Prioritizing Academic Programs and Services Robert Dickeson
Lean Learning Center http://www.leanlearningcenter.com/	Baldridge Criteria for Performance Excellence http://www.quality.nist.gov/PDF files/200	Assessing for Learning: Building a Sustainable Commitment Across the Institution Peggy Maki
Society for College and University Planning (SCUP) www.scup.org/page/index	8 Business Nonprofit Criteria.pdf Community College Inventory http://www.achievingthedream.org/ images/ i ndex03/Community College Inventory.pdf	Strategic Change in Colleges and Universities Daniel Rowley
National Consortium for Continuous Improvement http://www.ncci-cu.org/		Strategic Leadership: Integrating Strategy and Leadership in Colleges and Universities Richard Morrill