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A DUAL-LEVEL APPROACH TO ENROLLMENT MANAGEMENT

by

Jason Stoddard Trainer Bachelor of Science, Minot State University, 2007 Master of Science, Minot State University, 2008

A Dissertation

Submitted to the Graduate Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

Grand Forks, North Dakota December 2016

This dissertation, submitted by Jason Stoddard Trainer in partial fulfillment of the requirements for the Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

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Jason Stoddard Trainer November 29, 2016

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You are the reason behind this accomplishment!

ABSTRACT

Increasing institutional dependency on tuition revenue paired with rising political pressures towards student success outcomes has many institutions turning to enrollment management (EM) to improve their institution's enrollment outcomes. EM is a comprehensive and inclusive process focused on achieving the optimum recruitment, retention, and graduation institutional outcomes. The academic community remains at the epicenter of this EM process. Chief enrollment officers failing to create an institutional partnership with the academic community will unlikely attain desired enrollment outcomes.

This study seeks to assist institutions by assessing how a "shared sense of responsibility" for enrollment outcomes is developed through the eyes of both chief enrollment officers (CEnO) and key academic partners (KAP). In order to identify high-performing institutions practicing enrollment management, the SEM Health Assessment survey is sent to 385 public four-year institutions across the United States comprising the 22 regional affiliate associations of National Association of College Admission Counselors (NACAC). Once high-performing institutions are identified, the researcher interviewed 20 participants from 12 institutions including 12 CEnOs and eight KAPs. This study is designed with a constructivist grounded theory approach to data collection and analysis.

The findings of this study suggest, institutions that are successfully drawing the academic community into their EM process do so by engaging EM at two levels of the institution, the central and local. This dual-level approach to EM creates the optimum environment for

developing a "shared sense of responsibility" for enrollment outcomes with the academic units. In order for each level to effectively work together, two institutional conditions must be established: credibility and transparency. Credibility is composed of executive support, datainformed decisions, and academic positioning. Transparency is composed of clear purposes and goals, open communication, and adequate opportunities for input and feedback. Each element should be addressed; however, the degree of importance of each element is tied to internal and external environmental influencers.

CHAPTER I

INTRODUCTION

There are major challenges facing higher education in the United States that have administrators reexamining how students move to, through, and away from their institutions. First, state appropriations for higher education institutions have decreased on average \$2,086 per student from 2002 to 2014 (Education Advisory Board, 2015b). This public disinvestment in higher education has many institutions becoming increasingly reliant on tuition revenue. Second, the total U.S. student loan debt has climbed over \$1.2 trillion in 2015, leaving the average 2014 graduate with over \$33,000 in student loan repayments (Education Advisory Board, 2015b).

Growing public concern towards the increasing financial burden on today's college students is having many people question the value of today's higher education. Colleges and universities are challenged with attempting to maintain affordability while positioning higher education as a worthy lifetime investment. The changing public perception is specifically shining a spotlight on institutional student success outcomes, such as retention and graduation rates. The rising heat from this spotlight is creating political pressure for institutions to improve student success outcomes, and for many states this is meaning shifts towards performance-based funding models (Education Advisory Board, 2015a).

In response, many four-year public higher education institutions are turning to enrollment management (Coomes, 2000). A primary goal of enrollment management (EM) is to comprehensively and holistically improve institutional quality (Bontrager, Ingersoll, & Ingersoll,

2012). Bontrager, Ingersoll, and Ingersoll (2012) identify this institutional quality as improvement in three key areas: admissions profile, retention and graduation of students, and financial stabilization. Unfortunately, many institutions implementing enrollment management efforts are reducing and limiting the EM function to a set of administrative processes focused on increasing tuition revenue or decreasing operating expenses (Lee, 2010).

A popular definition of strategic enrollment management (SEM), which is used in this study, also supports a comprehensive and holistic EM approach by positioning the academic community at the heart of enrollment management process:

Strategic enrollment management (SEM) is a comprehensive process designed to help an institution achieve and maintain the optimum recruitment, retention, and graduation rates of students, where 'optimum' is defined within the academic context of the institution. (Dolence, 1993, p. 8)

In this academic context, enrollment management expands beyond department silos of administrative processes focused on attracting, retaining, and graduating students. This context positions the academic community at the core of any enrollment management efforts. The researcher explores this connection between the academic community and function of enrollment management through the eyes of both chief enrollment officers (CEnO) and key academic partners (KAP) at high-performing EM institutions.

This is a national research study in which the SEM Health Assessment survey (Black, 2003) is administered to identify high-performing four-year public institutions practicing enrollment management across the United States. Once high-performing institutions are identified, the researcher interviews two participants from each institution, the CEnO and a KAP. During the interviews with chief enrollment officers, the CEnO is asked to identify a key

academic partner in their institution's enrollment management efforts. This KAP is then extended an invitation to engage in an interview with the researcher. This study is designed with a constructivist grounded theory approach to data collection and analysis where new theory is constructed related to an institution's "shared sense of responsibility" for enrollment outcomes.

Statement of the Problem

In the U.S., a disinvestment in higher education along with public outcry for institutional accountability surrounding student success has many colleges and universities turning to enrollment management to improve their institution's enrollment outcomes (SHEEO, 2014). In order to meet this challenge, enrollment management efforts are expanding and transforming within our higher education institutions (Education Advisory Board, 2015c). Enrollment management is being pushed to transcend marketing strategies, recruitment tactics, and organizational structure. Rather, enrollment management must serve as a comprehensive and holistic effort to improve institutional quality (Bontrager, Ingersoll, and Ingersoll, 2012), in which the academic community remains the epicenter (Dolence, 1997). The term academic community refers to the administration, staff, and faculty who directly work with institutional efforts surrounding curriculum, instruction, and research (Dolence, 1993), and is commonly interchanged with Academic Affairs.

Chief enrollment officers (CEnO) are often those individuals challenged with orchestrating broad and complex conversations surrounding how students move towards, through, and away from our institutions. A primary challenge for CEnOs is to create meaningful engagement with the academic community where a "shared sense of responsibility" for institutional enrollment outcomes is realized and accepted. An institution's enrollment management efforts should reflect both the academic mission along with the broader institutional culture. An institution cannot make fundamental changes to its recruitment, retention, or graduation metrics if all influencing constituents are not involved (Educational Policy Institute, 2007). This requires the breaking down of silos and the holding of all campus members responsible for the health of an institution's enrollment (Bontrager, Ingersoll, & Ingersoll, 2012).

Although today's enrollment management literature is littered with references supporting the vitality of a major academic role in an institution's EM efforts, there is a noticeable gap in the research identifying how to effectively garner a belief in shared institutional responsibility (Wallace-Hulecki, 2007). Institutions with enrollment management efforts failing to create an institutional partnership, specifically with the academic community will unlikely influence enrollment outcomes (Hossler & Kalsbeek, 2013). Hossler and Kalsbeek (2013) refer to a consultative collaboration, which must exist between enrollment management professionals and the academic units. Institutions failing to engage the academic community risk isolation of the enrollment management process from the innermost and essential component driving institutional mission and culture.

Purpose of the Study

The purpose of this study is to examine how public institutions develop a "shared sense of responsibility" for enrollment outcomes.

Research Questions

The primary research question in this study is:

What role does the academic community play in institutional enrollment efforts?
 The secondary research questions in this study are:

2. How do chief enrollment officers engage the academic community to establish a "collaborative partnership" and "shared sense of responsibility" with faculty?

3. How does the institution provide a unified approach towards how students move to, through, and away from the institution?

Significance of the Study

As enrollment outcomes continue to influence financial stability, political tensions, and institutional rankings, higher education institutions will continually strive to improve institutional enrollment outcomes (Education Advisory Board, 2015a). As a growing number of four-year public institutions in the U.S. are becoming increasingly reliant on tuition revenue, the importance of practicing effective enrollment management becomes both increasingly vital and visible.

Institutions must strive to unify and improve these institutional efforts by addressing academic buy-in and participation. This study seeks to assist institutions and chief enrollment officers by assessing how a "shared sense of responsibility" for enrollment outcomes is developed while generating new theory to aid the profession. Developing a theory that outlines ways to cultivate partnerships with the academic community likely influences administrator and CEnO approaches towards practicing enrollment management at their institution. In the end, this will result in EM efforts increasing the likelihood of achieving the institution's desired enrollment outcomes.

Conceptual Framework: An Open Systems Approach

The complex make-up of our higher education institutions can be visualized using systems theory. This theoretical approach defines a system as "elements in mutual interaction" (Bertalanffy, 1968, p. 45). Additionally, a boundary exists that serves as a filter influencing the rate of flow for inputs, the transformation process, and eventually outputs (Bess & Dee, 2012). In system theories, a system is either closed or open. In a closed system, the transformational

process functions within itself and maintains its own energy, resources, and dynamic interactions (Bess & Dee, 2012). In an open system, such higher education institutions, the system boundary is permeable and the inputs, transformational process, and outputs interact with the environment (Figure 1).

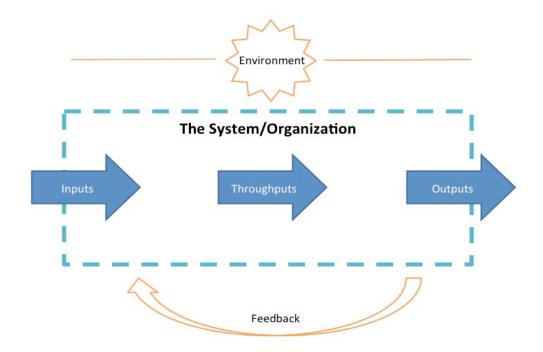


Figure 1. An open systems approach aligns with enrollment management.

In higher education institutions, the system is composed of elements interacting. These elements include: offices, departments, divisions, academic colleges, faculty, staff, and students. Additionally, a system operates within permeable boundaries, in which the external environment influences the system (Kast & Rosenzweig, 1972). The external environment in higher education includes: prospective students, legislatures, federal and state agencies, accrediting bodies, employers, and alumni (Bess & Dee, 2012). Characteristics of a system (Kast, Rosenzweig, 1972) found within our higher education institutions include:

- Composed of inputs, throughputs, and outputs (recruitment, retention, and graduation of students);
- Permeable boundaries where friction exists (reliance on stakeholders such as legislators and donors);
- Synergy creates outputs that are greater than sum of inputs (organizational culture effect on student outcomes);
- Hierarchal and overall health of the system depends on the functioning of the subunits (Removal of departments such as financial aid or advising would have disproportionate negative consequences on the institutional outcomes);
- Moves towards a state of equilibrium or non-change unless survival threatened (historical budget models and faculty tenure);
- Goal setting and feedback occurs (institutional strategic plans).

An open systems approach is ideal for this research study because the phases of enrollment management accurately align with the theory phases: inputs/recruitment, throughputs/retention, and outputs/graduation. The first research question of this study examines the role of the academic community in institutional enrollment efforts. The interaction of the "academic community" element in each phase is examined. The second research question asks how CEnOs engage the academic community, which examines these two "elements in mutual interaction" within the system (Bertalanffy, 1968, p. 45). The third and final research question seeks to identify a unified approach towards students moving to, through, and away from the institution. Again this question aligns with the systematic approach towards examining inputs, throughputs, and outputs identified by the theory.

Research Design

This research study aims to better understand the academic role at higher education institutions participating in best practices associated with the function of enrollment management. First, the SEM Health Assessment survey is administered to four-year public members of NACAC in order to identify high-performing institutions. Once institutions are identified, two participants from each institution are invited to interview.

The study is conducted in accordance with Kathy Charmaz's constructivist perspective of grounded theory (Charmaz, 2006). Grounded theory is a systematic methodology that constructs new theory through analysis of the data (Charmaz, 2006). The researcher's constructivist perspective acknowledges that the findings offer a single construction or interpretation of the data and not an absolute reality (Charmaz, 2006). The researcher's subjectivity and biases influences the construction and interpretation of this data, and these are acknowledged and recorded through reflexive journaling.

Furthermore, the methodology of grounded theory is ideal because it directly aligns with a key fundamental practice found within the enrollment management literature. This best practice recommends that the development of enrollment management strategies be informed by the data (Wilkinson & Peterson, 2001). Additionally, a grounded theory design uses data to systematically generate a theory "that explains, at a broad conceptual level, a process, an action, or interaction about a substantive topic" (Creswell, 2012, 422). In this case, the grounded theory

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design examines the development of a "shared sense of responsibility" for enrollment outcomes at the institution.

Lastly, three primary perspectives are found within the grounded theory literature: Glaser, Strauss and Corbin, and Charmaz (Birks & Mills, 2011). Glaser and Strauss originally developed grounded theory in 1967, to provide an alternative to inductive qualitative inquiry within the field of sociology (Charmaz, 2006). Although differences with collection and analysis procedures are found among the three grounded theory perspectives, a consistent point of emphasis with the trio is a back-and-forth interaction between data collection and analysis conducted by the researcher (Hall, Griffiths, & McKenna, 2013).

Assumptions of the Study

This research study is built upon three basic assumptions. The first assumption is public institutions are experiencing increased dependency on tuition revenue. State appropriations for higher education institutions have decreased on average \$2,086 per student from 2002 to 2014 (Education Advisory Board, 2015b). This public disinvestment in higher education has many institutions becoming increasingly reliant on tuition revenue for financial stability. The increase in dependency on tuition revenue is creating pressure, risking the institution's likelihood to approach EM comprehensively.

Second, institutions are feeling political pressure to improve student success outcomes. This pressure is primarily due to increasing financial burden on students. This pressure also draws attention to student success outcomes and return on student's educational investment. Colleges and universities are straining to both contain costs and insure value for their students. This attention is causing many institutions to experience shifts in funding models from historicalbased to performance-based (Education Advisory Board, 2015a).

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Third and lastly, the chief enrollment officer plays an influential role in the institution's enrollment management efforts. Institutions must create institutional partnerships in order to influence enrollment outcomes (Hossler & Kalsbeek, 2013). This study seeks to explore this connection at high-performing enrollment management institutions. Interviews with chief enrollment officers (CEnO) and key academic partners (KAP) offer unique institutional perspectives on the institution's enrollment management efforts.

Delimitations of the Study

This research study's delimitations are structured based off the researcher's personal interests and professional aspirations. The study has limited the sample group to four-year public institutions, which eliminates two-year public and all private institutions. Two-year public institutions are eliminated because of the differences found in enrollment management between the institutional types. These differences include: institutional mission, student selectivity, faculty perceptions, culture, and organizational structure. Additionally, enrollment management (EM) has not been consistently adopted across two-year public institutions versus their four-year public counterparts. Private institutions are also eliminated due to common differences found within enrollment management philosophies and practices. Although these private institutions often boast highly efficient EM efforts, they are heavily reliant on aid and tuition discounting. Many of these strategies and tactics are not viable options at public institutions.

The National Association of College Admission Counselors (NACAC) listserv has been selected as the professional organization to administer the survey and identify the highperforming sample group. Geographical diversity in this study is sought by the researcher in order to maintain alignment with constructivist grounded theory design. This research design requires broad data collection and analysis across the population. In order to ensure this geographical diversity, the study utilizes the 22 regional affiliate associations (Appendix A) comprising the National Association for College Admissions Counseling (NACAC).

Lastly, it is difficult to identify institutions successfully practicing enrollment management due to the broad goals and strategies unique to individual institutions. For example, institutions experiencing enrollment decline, stability, or growth may not be doing so in accordance to intentional enrollment management efforts. In order to identify these institutions intentionally engaging in enrollment management best practices, the SEM Health Assessment survey (Appendix B) is administered to the chief enrollment officer at each participating fouryear public institution. High-performing EM institutions are defined and identified by the parameters of the survey tool. The instrument identifies institutions engaging in EM best practices, but the instrument does not necessarily link practices to the academic community.

Definition of Terms

Enrollment management is a professional field that is continually adapting and transforming to meet the needs of the institution (Education Advisory Board, 2015c). The variety of terms and definitions found in the profession mirror this constant pattern of evolution. A prime example is the popular term of strategic enrollment management, which has grown in popularity from its original term of enrollment management. In this study, the foundational definition of enrollment management is primarily used.

 Academic Community: Administration, staff, and faculty who directly work with institutional efforts surrounding curriculum, instruction, and research (Dolence, 1993), terminology commonly interchanged with Academic Affairs.

- CAO, Chief Academic Officer: Senior academic administrator who provides leadership to institutional efforts surrounding curriculum, instruction, and research (Dolence, 1993).
- 3. *CEnO, Chief Enrollment Officer*: Senior professional who provides vision and leadership to institutional efforts surrounding identifying, selecting, registering, encouraging, retaining, and graduating students (Black, 2001).
- *EM, Enrollment Management*: Institutional set of activities designed to influence student enrollment outcomes (Hossler & Bean, 1990), terminology commonly interchanged with strategic enrollment management (SEM).
- 5. *Graduation*: Students completing their educational program within 150 percent of the normal time of degree completion (SHEEO, 2014).
- 6. *Grounded Theory*: A systematic approach to data analysis to generate a theory "that explains, at a broad conceptual level, a process, an action, or interaction about a substantive topic" (Creswell, 2012, 422).
- 7. *KAP, Key Academic Partner*: An individual identified by the CEnO who played a key role in their institution's enrollment management success.
- 8. NACAC: National Association of College Admission Counselors
- *Recruitment*: the processes, practices, and strategies intended to influence prospective students' decision to apply and enroll at a higher education institution (Bontrager, Ingersoll, & Ingersoll, 2012).
- 10. *Retention*: The percentage of first-time, full-time students enrolled freshman that return the following fall for their sophomore year (SHEEO, 2014).

- 11. *SEM, Strategic Enrollment Management*: "A comprehensive process designed to help an institution achieve and maintain the optimum recruitment, retention, and graduation rates of students, where 'optimum' is defined within the academic context of the institution" (Dolence, 1993, p.16), terminology commonly interchanged with enrollment management (EM).
- 12. *SEP, Strategic Enrollment Planning*: A complex and organized effort to connect institutional mission, priorities and goals, market position, and fiscal health into a written plan of action (Hundrieser, 2012).

Summary

In summary, increasing institutional dependency on tuition revenue paired with rising political pressures towards student success outcomes has many institutions turning to enrollment management to improve their institution's enrollment outcomes. Enrollment management (EM) is a comprehensive and inclusive process focused on achieving the optimum recruitment, retention, and graduation institutional outcomes (Dolence, 1993). The academic community is at the epicenter of the EM process when identifying and achieving desired enrollment outcomes. The research study defines academic community as the administration, staff, and faculty whom directly work with institutional efforts surrounding curriculum, instruction, and research (Dolence, 1993), and is commonly referred to as Academic Affairs.

In order for the enrollment management to meet the challenge, chief enrollment officers must establish a consultative relationship with the academic units (Wallace-Hulecki, 2007). Specifically, chief enrollment officers failing to create an institutional partnership with the academic community will unlikely attain desired enrollment outcomes (Hossler & Kalsbeek, 2013). This study seeks to assist institutions and chief enrollment officers by assessing how a "shared sense of responsibility" for enrollment outcomes is developed.

In summary, the researcher seeks to explore the connection between the academic community and EM process through the eyes of both chief enrollment officers (CEnO) and key academic partners (KAP) at high-performing enrollment management institutions. This is a national study where the SEM Health Assessment survey (Black, 2003) is administered to identify high-performing four-year public institutions practicing enrollment management across the United States. Once high-performing institutions are identified, the researcher attempts to interview two participants from each institution, the CEnO and a KAP. During the interviews with chief enrollment officers, the CEnO is asked to identify a key academic partner in their institution's EM efforts. This KAP is then extended an invitation to engage in an interview with the researcher. The study is designed with a constructivist grounded theory approach to data collection and analysis where new theory related to an institution's "shared sense of responsibility" for enrollment outcomes is constructed.

CHAPTER II

LITERATURE REVIEW

Increasing institutional dependency on tuition revenue paired with rising political pressures towards student success outcomes has many institutions turning to enrollment management to improve their institution's enrollment outcomes. Enrollment management (EM) is a comprehensive and inclusive process focused on achieving the optimum recruitment, retention, and graduation institutional outcomes (Dolence, 1993). The academic community remains at the epicenter of this EM process. An institution's chief enrollment officer (CEnO) is often the position charged with developing and overseeing this meaningful connection with the academic community.

In order to assist institutions, this research study examines the connection with the academic community at high-performing EM institutions through the eyes of chief enrollment officers and key academic partners. The researcher conducts a literature review examining both enrollment management practices and recommended processes. After the review of the existing scholarly EM literature, the researcher organizes the literature into five segments. These five segments of literature related to enrollment management include: the background of enrollment management, enrollment management planning, enrollment management organizational structures, enrollment management components and practices, and faculty involvement in enrollment management.

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Background of Enrollment Management

The concept of enrollment management arose in the early 1970's in response to an anticipated enrollment crisis at Boston College. As the baby boom generation began to bust, competition for new incoming freshmen intensifies. This intensity is extremely noticeable at private institutions, because they boast higher tuition rates and they are highly dependent on tuition revenues to cover operating expenses (Henderson, 2001). Boston College's approach towards solving their enrollment crisis has a profound impact on the profession and ultimately higher education in general.

After failing to meet enrollment goals, Boston College (BC) responds by steeply raising tuition prices eventually leading to a student strike. As this crisis lingered, John Maquire, a physics professor, is hired to serve as BC's new Dean of Admissions. Shortly following Maquire's announcement, Frank Campanella is appointed as a new Executive Vice President. Campanella, who has earned a doctorate from Harvard University Business School, believes enrollment must be viewed from a broader perspective rather than simply just one of admissions. Campanella understands that enrollment is associated with faculty course loads, tuition generation, market demands, and academic planning (Henderson, 2001).

In 1974, Maquire and Campanella coins the term "enrollment management" as a function of directing admissions resources, minimizing student attrition, predicting market demands, and developing financial aid strategies (Henderson, 2001). Maquire became the first professional to have publicly define enrollment management, which appears in an article to BC alumni: "Enrollment management is a process that brings together often disparate functions having to do with recruiting, funding, tracking, retaining, and replacing students as they move toward, within, or away from the university (Bontrager, Ingersoll, Ingersoll, 2012, p. 7)." In a follow-up article to BC alumni in 1976, Maquire identifies five goals of the enrollment management function:

- Admissions should use marketing strategies: Due to a declining national pool of high school seniors, the marketing program in enrollment management would improve communication with prospective students.
- 2. Research and data are important: Improving institutional research increases understanding of student's paths as they move through the institution.
- 3. Understanding the market is vital: The institution must have the ability to forecast future demands and pair them with appropriate institutional resources and allocations.
- 4. Financial aid can be a recruitment tool: The use of strategic financial aid is an institutional tool to attract and meet the goals of the desired socioeconomic diversity found within the student population.
- 5. Retention can be an enrollment tool: The institution can create systems to understand which areas the institution are succeeding and failing in student attrition, which influences policy development ensuring seamless transitions for students traveling to, through, and from the institution.

For Maquire and Campanella, marketing played a distinct and vital role in their practice of enrollment management. During the same timeframe, Tom Huddleston, Dean of Admissions and Financial Aid at Bradley University, has grander beliefs as to the importance of marketing to institutional and student success:

Simply stated, there needs to exist an administrative component that formally examines the needs of internal and external student publics and considers the most appropriate organizational structures to further define and support their needs. This group of units should become the foundation for institutional marketing (1980, p. 22)

Huddleston (1980) rejects the term "enrollment management" and believes a department of institutional marketing should be formed to oversee the functions of admissions, financial aid, orientation, academic advisement, retention, cooperative education, and career development. Additionally, Huddleston feels senior admissions professionals are the ideal candidates "to lead an institution's marketing efforts because of their experience, the benefits of which will assist in the development and retention of enrollment" (p. 20).

In 1982, the American Association of State Colleges and Universities publishes the first book dedicated to enrollment management. The authors Frank Kemerer, Victor Baldridge, and Kenneth Green (1982) view enrollment management as a structured set of procedures and activities. They focus on practical ways to implement enrollment management initiatives to improve institutional vitality. The authors' identify eight "interdependent" activities composing enrollment management: "clarification of institutional mission, program development, marketing, recruiting, admissions, financial aid, orientation, and retention" (Kemerer, Baldridge, & Green, 1982, p. 5).

By the late 1980s, the practice of enrollment management shifts into the classroom. Don Hossler, professor of educational leadership and policy studies at Indiana University, is largely recognized for his academic contributions to enrollment management. One of his most recognizable contributions is to begin pulling the field of enrollment management towards a research base. Additionally, Hossler challenges future SEM professionals to recognize a higher level of professionalism based on sound judgment and grounded in data, research, and strategic planning (1986). Enrollment management (EM) should expand beyond simple administrative processes focusing on attracting, retaining, and graduating students (Dolence, 1993). This context positions the academic community at the epicenter of an institution's enrollment management efforts. Additionally, Dolence's definition shifts EM from a student-centered approach to a learnercentered focus (Henderson, 2001).

Dolence's EM framework is built upon a set of nine institutional goals: stabilize enrollments, link academic programs and EM, stabilize finances, optimize resources, improve services, improve quality, improve access to information, reduce vulnerability to environmental forces, and evaluate strategies and tactics (as cited in Bontrager, Ingersoll, & Ingersoll, 2012, p. 11). Dolence adds to his EM framework by developing a set of critical success factors that assisted institutions in the evaluation of EM planning and practices. These critical success factors include: leadership, strategic planning, comprehensiveness, key performance indicators, research, academic foundations, information technology, and evaluation (Bontrager, Ingersoll, & Ingersoll, 2012).

In the early 1990s, strategic enrollment management (SEM) is becoming a best practice across all sizes and types of higher education institutions. In 1991, AACRAO holds the first strategic enrollment management conference in Atlanta, Georgia. The inaugural SEM conference attracts nearly 200 participants and continues to this day, often attracting over 1,000 participants (Bontrager, Ingersoll, & Ingersoll, 2012). As participation increases so does the complexity of content. AACRAO SEM conferences are now more comprehensive, collaborative, and strategic (Lauren, 2008).

By the early 2000s, enrollment management is being harshly criticized for selling out the academic community and diverting resources away from the institutional mission of access

(Henderson, 2001). Negative perceptions are found among many faculty and staff within higher education organizations. The Chronicle of Higher Education is able to capture this negative perception by publishing an article titled "Enrollment managers are ruining higher education" (Quirk, 2005).

The President of the Education Trust, Kati Haycock (2006), publicly summarizes how enrollment management is adversely affecting the nation's higher education institutions:

Through a set of practices known as enrollment management, leaders in both public and private four-year colleges increasingly are choosing to use their resources to compete with each for high-end, high scoring students instead of providing a chance for collegequalified students from low-income families who cannot attend college without adequate financial support. In institution after institution, leaders are choosing to use their resources to boost their 'selectivity' ratings and guidebook rankings rather than to extend college opportunities to a broader swath of American young people (p. 19).

By the mid-2000s, enrollment management is being urged to refocus their efforts within an academic context. Enrollment management, still in their youthful and overzealous years is losing sight of EM's academic soul, becoming "stuck on structure" (Henderson, 2001). Henderson urges enrollment managers to develop their activities based on the mission and principles of the institution. EM professionals need to return their focus to the synergies proposed by early enrollment managers. Institutions, whose enrollment management efforts reflect the academic mission and culture, break down silos and are capable of holding all campus members responsible for the health of the institution's enrollment (Bontrager, Ingersoll, & Ingersoll, 2012).

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As enrollment management refocuses on the founding academic context in which it was developed, David Kalsbeek of DePaul University proposes a new EM model that was focused on market position. Kalsbeek (2009) suggests that the success of enrollment initiatives is more influenced by the institution's market position rather than its mission statement. In 2006, Kalsbeek identifies four orientations within which institutions structure their EM efforts: the administrative orientation, the student-focused orientation, the academic orientation, and the market-centered orientation. Kalsbeek believes institutions most likely deploy efforts among many of the orientations, however institutions are likely to favor and invest more resources into one specific orientation.

Enrollment Management Planning

As previously discussed, higher education leadership is facing an increasing dependency on tuition revenue paired with rising political pressures towards student success outcomes (SHEEO, 2014). Institutions seeking to overcome these challenges should engage in comprehensive strategic planning where current and desired institutional positions are identified. In higher education, strategic planning is defined as:

an open systems approach to steering an enterprise over time through uncertain environmental waters. It is a proactive problem-solving behavior directed externally at conditions in the environment and a means to find a favorable competitive position in the continual competition for resources. Its primary purpose is to achieve success with mission while linking the institution's future to anticipated changes in the environment in such a way that the acquisition of resources (money, personnel, staff, students, good will) is faster than the depletion of resources. (Cope, 1981, p. 9) In enrollment management, a common outcome is the development of a plan that identified goals, strategies, performance indicators, and responsible individuals. This process is often referred to as strategic enrollment planning (SEP). It is important to note that the function of enrollment management encompasses the SEP process, and SEP is often an initial and visible step taken by an institution seeking to influence enrollment outcomes. The SEP process is a complex and organized effort to connect institutional mission with academic, enrollment, student affairs, research, facilities, fiscal, technology, and fundraising plans (Hundrieser, 2012). Additionally, it is common for institutions to form Strategic Enrollment Management (SEM) committee to develop and oversee SEP process.

Although the SEP process is unique to each individual institution, there are several consistent themes found among the enrollment planning literature. These common themes include: senior administrator support, broad committee formation, data-informed processes, established goals, targeted strategies, devoted institutional resources, and aligned departmental plans. The first step is to gain institutional support for the SEP process through the leadership of the president (Educational Policy Institute, 2007). The president and senior leadership team must visibly support and commit to the vitality of the SEP process for the institution (Penn, 1999; Ward, 2005). It is not recommended that an institution begin the SEP process without support for the senior leadership team (Educational Policy Institute, 2007).

A second vital theme is the creation of broad SEM committee composed of individuals "from all segments" of the institution (Educational Policy Institute, 2007, p. 25). It is recommended that representatives from faculty, staff, student body, and external stakeholders be selected to compose the SEM committee. Additionally, the Educational Policy Institute (2007) recommends appointing a senior faculty to chair or co-chair the committee. Special attention in the literature draws attention to avoiding the selection of individuals who are not fully supportive of the SEP process (Hundrieser, 2012).

Once the SEM committee is identified, the institution should outline the process and communicate it transparently to the campus community for feedback (Cherrey & Clark, 2010). There are numerous design models for the SEP process, and it is recommended to conduct two or three open forums to shape the direction of the EM process unique for each institution (Education Policy Institute, 2007). Rufallo Noel-Levitz, a well-known enrollment management consultant, identifies and recommends four purposeful phases of the SEP process. These four phases include: preparation and data analysis, strategy development, enrollment goal setting and plan finalization, and plan implementation and modification (Hundrieser, 2012). Each phase is composed of specific steps, which are customized based on institutional needs. It is also vital each phase of the SEP process be data-informed.

After an intensive review of internal and external data, goals, strategies, and resources are conducted. There is variance found within the literature as to when goal setting should occur. There remains however a consistent tone towards a data-driven approach towards goal setting. This is due to a common mistake found when conducting enrollment planning, which is the setting of arbitrary goals that are not aligned with institution's current position (Sevier, 2000). Goal setting should accompany specific strategies and dedicated resources. Strategy identification and development is an exciting stage of the SEP process because it transitions the institution from its current to its desired state (Hundrieser, 2012). Strategies are then prioritized and supported by dedicated institutional resources. Communication and transparency, specifically with the academic community, are vital when establishing goals, strategies, and resources (DeBiaso, 2012). These institutional enrollment goals may focus on a specific

distribution of majors, in- versus out-of-state student ratio, and/or increases to retention and graduation rates (Dixon, 1995).

The final theme within enrollment planning literature is the link to departmental or divisional plans. This is often the most challenging phase with the academic departments, if they have not been active participants in the previously highlighted phases. One reason is the increasing number of faculties positioning themselves as "prestigious scholars" in a professional field rather than as a representative or member of a specific university (Gonzales, 2012). The SEP process should encourage departments and divisions to focus on the needs of those students and communities the institution served over the academy (Gonzales, 2012). Academic and non-academic departments should align their plans, goals, and resources to meet those identified by the SEP process (Hundreiser, 2012; Ward, 2005).

Enrollment Management Structures

As student enrollments play a larger role in public universities' financial stability, chief enrollment officers often find themselves in a greater position to create institutional change (Penn, 1999). This change occurs in one of four enrollment management organizational models: the enrollment management committee, the enrollment management coordinator, the enrollment management matrix, or the enrollment management division (Kemerer, Baldridge, & Green, 1982). Each of the four models has its advantages and disadvantages with success often resting with the chief enrollment officer's (CEnO) "ability to influence, communicate, persuade, lobby, and bargain with others" (Penn, 1999, p. 7). Kemerer, Baldridge, and Green (1982) argue each model that adds increased structure is more likely to force the desired institutional change.

The Enrollment Management Committee

The first EM model is the enrollment management committee. The committee is the most convenient structure, as it requires the least amount of organizational change. This structure is often the first response of an institution to an enrollment-based problem (Penn, 1999). The committee is composed of representation across the campus, typically including faculty, middle-management administrators, and an occasional senior-level administrator (Huddleston, 1980). The committee encourages discussion; however, it lacks authority and has little chance to make significant impact (Penn, 1999). The enrollment management committee has regular turnover, and the committee is likely to develop a handful of eclectic recommendations to which limited resources are made available (Hossler & Bean, 1990).

The Enrollment Management Coordinator

The next EM model is the enrollment management coordinator. The coordinator requires minimal structural change. Hossler and Kemerer (1986) find this model offers increased structure and support over the committee model while remaining relatively inexpensive. The EM coordinator is often a mid-level administrator overseeing a key enrollment department such as admissions or financial aid (Lee, 2010). The EM coordinator is highly visible and often the face of the institution's enrollment management efforts (Huddleston, 1980). The coordinator has little influence on policy and procedures and must rely on networking to stimulate change, since no clear line of authority exists (Penn, 1999). A primary weakness of this model is the missing link between enrollment-based problems and senior-level administrator's decision-making and planning (Hossler & Bean, 1990).

The Enrollment Management Matrix

The third EM model is the enrollment management matrix. The matrix transitions leadership to the senior-administrator level within the institution. In this model, an existing senior-level administrator is tasked with leading enrollment management efforts (Lee, 2010). This model has a greater chance to influence policy and procedures however it risks being overshadowed by the other responsibilities of the assigned senior-level administrator (Hossler & Bean, 1990). The enrollment management matrix is also still dependent on the administrator's ability to influence and collaborate across the institution (Penn, 1999). The matrix structure does not require significant organizational change or realignment of offices, as vital departments are just added to the matrix (Lee, 2010). The primary disadvantage to this model is the likelihood of various disparate departments to regularly follow directives of a non-supervising figure (Hossler & Kemerer, 1986).

The Enrollment Management Division

The fourth and final EM model is the enrollment management division. The enrollment management division requires the highest degree of organizational change (Huddleston, 1980). The division is the most responsive of the models because it provides the most centralized systems approach. All major offices within the institution report to a "single senior-level administrator, usually with a direct link to the provost or president" (Penn, 1999, p. 18). The division may include the following offices or functions: admissions, financial aid, the registrar, orientation, retention/student success, career services, advising, and any other related area (Henderson, 2005). The primary strength of the enrollment management division rests with the senior-level administrator's institutional authority to garner resources and direct coordination between offices (Hossler & Kemerer, 1986). The disadvantages of the division are often the

extensive reorganization of offices, and the possibility of political controversy developing internally (Lee, 2010).

There is not a single enrollment management model that works for every institution (Hossler & Bean, 1990; Kalsbeek, 2006; Lee, 2010). Rather enrollment management models in higher education institutions typically gradually evolve and are more sophisticated based organizational need, culture, and administrative skill (Hossler & Bean, 1990; DeBiaso, 2012). Lastly, the configurations of the offices composing these four enrollment management models are "as individual as the institution itself (Penn, 1999, p. 24)."

Enrollment Management Components and Practices

Enrollment management best practices are based-off five essential components working together: the utilization of data to identify unique student characteristics and potential new markets, the strategic use of resources to create need-based financial aid programs; the implementation of retention programs such as early alert, orientation, and other timely professional services; engaging in long-term enrollment planning focused on mission, academic offerings, and enrollment projections; and the establishment of an organizational structure that supports coordinated enrollment management efforts (Kemerer, Baldridge, & Green, 1982; Huddleston & Rumbough, 1997). Enrollment management planning and structures has previously been discussed. The remaining three components are reviewed below.

Utilization of Student and Market Data

Chief enrollment officers (CEnO) develop practices from two distinct areas of expertise: business resources and professional consultants (Schulz & Lucido, 2011). Both bodies of knowledge are guiding the first component, the utilization of data to identify unique student characteristics and potential new markets. A common practice in this component is to analyze and segment data commonly found in the application process to strategically identify and target prospective students more efficiently (Hayes, 2007). Examples of these data characteristics include: GPA, standardized test scores, intended areas of study, location, financial need, level of interest, and/or admit status. For example, DesJardins (2002) found this information allows chief enrollment officers (CEnO) the flexibility to decide which students to target, at what time, and with what message. Additionally, professional consultants are developing services that utilize this data to provide for higher education institutions including: search and name buying, telecounseling, predictive modeling, campus visit solutions, customer relationship management systems (CRM), and social networking assistance (Schulz & Lucido, 2011).

Strategic Use of Financial Aid Programs

The second component is the strategic use of resources to create need-based financial aid programs. This component builds off the practice of analyzing data to identify and understand student's price responsiveness to tuition. Simplified, the institution attempts to identify the necessary amount of financial aid to offer each student to influence his or her decision to enroll at the institution. This challenge is controversial because higher financial-need students are often less price sensitive than their counterparts towards tuition prices and student loan debt (Singell, 2002).

Additionally, institutions may see financial aid needs that is unique to their student population. For example, The University of California – Berkeley saw signs of declining enrollment from middle-income families due to lack of access to their existing financial assistance programs (Education Advisory Board, 2015a). In response, an institutional financial aid-discounting matrix is becoming an increasingly popular service offered by professional higher education consultants (Schulz & Lucido, 2011).

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Implementation of Retention Programs

The third and final component is the implementation of retention programs to the institution. There are multiple existing frameworks for student success that assist in the development of retention practices and programming. A popular framework developed by Vincent Tinto (2012) highlights four conditions promoting student retention and graduation: setting clear expectations, providing institutional support, assessing and offering frequent feedback, and involving or engaging the student with faculty, staff, and peers.

Tinto's Four Conditions of Student Success. The first condition finds that institutions that set high academic expectations for their students, are more likely to generate students that are academically successful (Reason, Terenzini, & Domingo, 2006). For example, a common practice is to set clear institutional expectations during student orientation and/or initial advising sessions (Tinto, 2012). Additionally, it is recommended first-year students establish academic plans giving direction in pursuit of earning a degree at their institution (Nelson, Johnson, & Boes, 2012).

The second condition for student success revolves around institutional offerings of academic, student, and financial support services. Institutions that respond in these areas, especially during the first semester where early intervention is vital, greatly increases the likelihood of future success (Zajacova, Lynch, & Epenshade, 2005). Additionally, financial support is becoming a hot topic among enrollment management professionals for improving student success metrics. One strategy is to reward behaviors of student success and progression by creating incentive programs such as: on-pace academic grants, year-round enrollment rewards, and continuing student merit awards (Education Advisory Board, 2015a).

The third condition is assessing and providing frequent feedback. Students are much more likely to adjust their behaviors to be successful when feedback is provided (Mansson, 2013). Often this adjustment occurs when a student discovers the difference between their actual performance and their self-evaluated performance, which is internally developed (Carroll, 1988). Often early assessment and feedback is also a prerequisite for early intervention and support services previously mentioned (Tinto, 2012).

The last condition is student involvement or what is commonly referred to as student engagement. Students who develop greater formal and informal connections with their faculty, staff, and peers are more likely to be retained and progress (Fischer, 2007). For this reason, institutions should develop programs to promote meaningful engagement both in academic and social settings of the institution. This condition also provides another opportunity for meaningful connection with faculty members.

Faculty Involvement in Enrollment Management

As previously mentioned, institutions with enrollment management efforts failing to create an institutional partnership with the academic community are unlikely influence enrollment outcomes (Hossler & Kalsbeek, 2013). Hossler and Kalsbeek (2013) refer to a consultative collaboration, which must exist between enrollment management professionals and the academic units. Enrollment management policies and procedures related to student success, program development and review, and curriculum are inherently linked to academic matters (Academic Senate for California Community Colleges, 1999). Institutions failing to engage the academic community risk isolation of the enrollment management process from the innermost and essential component driving institutional mission and culture.

Wallace-Huecki (2007) found several underlying conditions for successful participation of the academic community with the EM process. These conditions include: collaborative leadership between the chief academic officer and the chief enrollment officer; financial incentives linked to accountability and outcomes; the SEM committee is composed of senior academic leadership; the CEnO communicates data transparently both horizontally and vertically; the CEnO is in a position of influence within the institution; communication with the faculty-at-large is filtered through governance bodies.

Additionally, there are voices from within the academic community who urge involvement of faculty to participate and lead institutional enrollment management activities. The Academic Senate for California Colleges (1999) urge faculty participation in enrollment management processes as they are deeply linked to academic matters. Kemerer (1985) published an article proclaiming a primary role of deans, chairs, and faculty is to participate in the enrollment management process. Kemerer states the faculties are the individuals who develop programs, establish articulation agreements, publicize departmental programs, and directly teach and advise students. Subsequently, those faculties taking active roles in enrollment management are demonstrating success at the program level.

For example, Information Systems (IS) faculty across five universities that suffered declining enrollments collaborated and engaged in enrollment management practices resulting in increased recruitment, retention, and graduation metrics (Koch & Kayworth, 2009). The IS faculty members attracted new students by developing awareness campaigns, hosting prebusiness student events, engaging in early interaction strategies at the high schools, and redesigning curriculum offering flexibility and value added opportunities (Koch & Kayworth, 2009). For improving student success metrics, the IS faculty members developed program

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orientations, sponsored student organizations, added field trips to create exceptional experiences in the field, and established industry ties and mentorship opportunities (Koch & Kayworth, 2009).

Summary

The researcher conducts a literature review on the function and process of enrollment management. After the review of the existing scholarly EM literature, the researcher organizes the literature into five segments. These five segments of literature related to enrollment management include: the background of enrollment management, enrollment management planning, enrollment management organizational structures, enrollment management components and practices, and faculty involvement in enrollment management.

A few central themes arise consistently across these bodies of literature: transparent and widespread communication and involvement across the institution, data-driven and goal specific strategies and practices, and the vitality of involving and gaining support from the academic community and leadership. Additionally, although today's EM literature is littered with references supporting the vitality of a major academic role in an institution's EM efforts, there is a noticeable gap in the research identifying how to effectively garner a belief in shared institutional responsibility for enrollment outcomes (Wallace-Hulecki, 2007).

CHAPTER III

METHODOLOGY

In the U.S., a disinvestment in higher education along with public outcry for institutional accountability surrounding student success has many colleges and universities turning to enrollment management to improve their institution's enrollment outcomes (SHEEO, 2014). Chief enrollment officers (CEnO) are often those individuals challenged to create meaningful engagement with the academic community where a "shared sense of responsibility" for institutional enrollment outcomes is realized and accepted. Institutions with EM efforts failing to create this institutional partnership with the academic community will be unlikely to influence enrollment outcomes (Hossler & Kalsbeek, 2013).

This study seeks to explore the academic connection at high-performing enrollment management institutions through the eyes of both chief enrollment officers (CEnO) and key academic partners (KAP). This is a national study where the SEM Health Assessment survey (Black, 2003) is administered to identify high-performing four-year public institutions practicing enrollment management across the United States.

Once high-performing institutions are identified, the researcher attempts to interview two participants from each institution, the CEnO and a KAP. During the interviews with chief enrollment officers, the CEnO is asked to identify a key academic partner in their institution's enrollment management efforts. This key academic partner is then extended an invitation to engage in an interview with the researcher. This study is designed with a constructivist grounded theory approach to data collection and analysis where new theory related to an institution's "shared sense of responsibility" for enrollment outcomes is constructed.

Purpose of the Study

The purpose of this study is to examine how public institutions develop a "shared sense of responsibility" for enrollment outcomes.

Research Questions

The primary research question in this study is:

- What role does the academic community play in institutional enrollment efforts?
 The secondary research questions in this study are:
 - 2. How do chief enrollment officers engage the academic community to establish a "collaborative partnership" and "shared sense of responsibility" with faculty?
 - 3. How does the institution provide a unified approach towards how students move to, through, and away from the institution?

Step One: Identification of High Performing Institutions

Participant Selection

Participant selection for this research study is completed in two steps. In the first step, the researcher identifies a geographically diverse sample group of high-performing, four-year public enrollment management institutions. Geographical diversity is sought by the researcher in order to maintain alignment with constructivist grounded theory design. This research design requires broad data collection and analysis across the population. In order to ensure this geographical diversity, the study utilizes the 22 regional affiliate associations (Appendix A) composing the National Association for College Admissions Counseling (NACAC). Also due to the extreme variance in practice and financial support found among institutional types, participants are

limited to four-year public member institutions of NACAC. There are 439 four-year public member institutions spread across the 22 discreet regional affiliate associations.

In an attempt to identify chief enrollment officers at each of the 439 member institutions, a request is made to the National Association for College Admissions Counseling headquarters seeking contact and directory information for the highest-ranking institutional member. The contact list NACAC provided includes a mixture of CEnOs along with a combination of lower enrollment management positions. Approximately 50 percent of the NACAC supplied list includes position titles commonly given to the institution's chief enrollment officer. Any position with the title of director or lower is flagged as not likely the institution's CEnO. The researcher reviews over 200 institutional websites and directories to identify and update the NACAC provided list with positions above the director level. If a clear CEnO is unable to be determined, the highest-level position identified is included on the updated list.

In order to determine the highest-performing enrollment management institutions at each of the 22 regional affiliate associations, the SEM Health Assessment Survey (Appendix B) is administered. Due to the researcher's concern regarding the CEnO's ability to accurately identify their regional affiliate association membership, 22 copies of the SEM Health Assessment Survey are electronically created in Qualtrics. An e-mail invitation is sent to the updated list of CEnOs representing the 439 four-year public member institutions (Appendix C). The study's invitations are then e-mailed out in batches based on the 22 regional affiliate association members. This e-mail includes a unique link to the SEM Health Assessment Survey exclusively created for his or her region affiliate association.

Institutions with invalid CEnO e-mail addresses are contacted directly and updated if possible. If the institution's CEnO position is in a state of vacancy or transition, the institution is

removed from the study. If the individual originally invited to participate in the study is not the CEnO, the individual is asked to respond with the current CEnO's contact information. These responses are updated on the CEnO list, and the newly identified contact is resent the institutional invitation to participate in the research study. This practice also serves as a final opportunity to identify vacant or transitioning CEnO positions. At the end of the study, 54 institutions are removed from the study due to vacant or transitioning CEnO positions.

Once the SEM Health Assessment survey is e-mailed out, the instrument remains open for fourteen days, with reminder e-mails sent out by the researcher on the seventh and thirteenth days of the study. Out of the remaining 385 four-year public institutions, 91 institutions complete the electronic Qualtrics instrument within the fourteen days. The researcher's response rate for the SEM Health Assessment survey is at 24%. As shown in Table 1, survey submissions are received from 18 of 22 regional affiliate associations of NACAC.

Once the instrument is closed on the fourteenth day, scores for each of the 91 instrument responders are calculated. Each of the instrument's 33 questions are scored using the five-point Likert scale. Subscale scores are calculated by averaging the scores from the responses in each of the five core areas. A cumulative instrument score is calculated by averaging the five subscale scores. Any responses selected as not applicable are not included in the scale or subscales averages. Institutions across the 22 regional affiliate associations with the highest cumulative scale average are identified. In the case of a tie score, the participant is randomly selected using the RAND function in Excel. In order for the institution to qualify and advance to the second step of the research study, the institution must meet the following two criteria:

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	Member	Institutions	ealth Assessment Survey	
Regional Affiliate	Institutions	with CEnO	Responders	
Region 1	9	8	6	
Region 2	14	13	2	
Region 3	3	3	1	
Region 4	13	13	1	
Region 5	12	12	3	
Region 6	3	3	0	
Region 7	7	6	1	
Region 8	15	15	5	
Region 9	11	9	0	
Region10	13	11	2	
Region 11	18	15	0	
Region 12	11	9	0	
Region 13	32	29	7	
Region 14	13	11	4	
Region 15	26	23	9	
Region 16	19	15	3	
Region 17	33	27	5	
Region 18	25	20	4	
Region 19	99	87	14	
Region 20	23	21	8	
Region 21	28	25	9	
Region 22	12	10	7	
TOTAL	439	385	91	
		Response Rate	24	

Table 1. Regional Member Institutions and Survey Participants.

1. The cumulative score on the SEM Health Assessment must be 3.0 or higher.

2. The institution must score 3.0 or higher on three of the five survey subscale scores.

After calculating an instrument cumulative score and review of the two qualifying criteria mentioned above, institutions representing 15 of the 22 regional affiliate associations meet the selection criteria. These institutions across fifteen regional affiliate associations meet the study's

requirements and definitions as top-performing enrollment management institutions. Three additional regional affiliate associations are removed from the study due to their instrument scale score not meeting the instrument's cumulative score requirement of 3.0 or higher. Overall, 60 percent of participants, or 55 of the 91 institutions completing the survey, meet the minimum standards for participation in the second step of the research study.

SEM Health Assessment Survey

The SEM Health Assessment survey is developed by Dr. Black for his dissertation to analyze and evaluate institutional enrollment management efforts (Black, 2003). Dr. Black is currently a leading enrollment management consultant, and the President and CEnO of SEMWorks. Dr. Black's instrument is composed of 33 questions (Appendix B), which probes five core institutional areas. These five subscales include: comprehensiveness of EM efforts, recruitment, marketing, financial aid, student retention, and student services. It is important to note, the survey is designed to evaluate those institutional efforts related to enrollment management best practices. The instrument is not designed to specifically examine the role of the academic community in the institution's enrollment management efforts.

For this study, 22 electronic versions of the instrument are created using Qualtrics. The 22 versions of the instrument align with the 22 regional affiliate associations composing NACAC. Due to the extreme variance in practice and financial support found among institutional types, participants are limited to four-year public member institutions of NACAC. Chief enrollment officers at each NACAC listserv member institutions are invited to participate in the research study via e-mail (Appendix C). The SEM Health Assessment survey remains open for fourteen days, with reminder e-mails sent out to chief enrollment officers on the seventh and thirteenth days of the study.

Each of the instrument's 33 questions are answered using a five-point Likert scale with five being the highest and one being the lowest. The opportunity for participants to select not applicable is also available for each question. Subscale scores are calculated by averaging the responses from the Likert scale in each of the five core areas. A cumulative score is calculated by averaging the five subscale scores together. Any responses selected as not applicable are not included in the scale or subscales averages. Institutions across the 22 regional affiliate associations with the highest cumulative instrument average are identified. In order for the highest scoring institution from each region to qualify and advance to the second step of the study, those identified institutions must meet the following two criteria:

1. The cumulative score on the SEM Health Assessment must be 3.0 or higher.

2. The institution must score 3.0 or higher on three of the five survey subscale scores.

Data Collection

Data collection of responses from the SEM Health Assessment survey are electronically stored in Qualtrics. Data collected includes: CEnO's name, position title, member institution, phone number, e-mail address, and individual responses to the 33 questions instrument. Collected information regarding the participant ensures CEnO position status, accurate collection based on regional affiliate association, and contact information for those identified to participate in the interview step of the research study. Each of the instrument's 33 questions are scored and collected using the five-point Likert scale. Additionally, the electronic instrument provides the participant the opportunity to select not applicable for each of the 33 questions.

As previously discussed, 22 versions of the SEM Health Assessment survey are created mirroring the 22 regional affiliate associations composing NACAC. The study invitations are e-mailed to CEnO's containing unique survey links, which allow for separate data collection based

on regional affiliate association. At the closing of the survey on the fourteenth day, data are collected for 18 of the 22 regional affiliate associations. There are no responders from the remaining four regional affiliate associations.

Data collected from each of the 22 versions of the instrument in Qualtrics are then exported into a single Excel spreadsheet. These data exports include biographical information highlighted above as well as individual scores associated with each of the 33 questions in the SEM Health Assessment survey. The spreadsheet is prepared for data analysis, which includes cumulative instrument and subscale scores. Member institutions are coded and sorted based on their regional affiliate association. The data collected remains in the Excel spreadsheet for the duration of the study.

Data Analysis & Reflexivity

Once the data from the 22 versions of the SEM Health Assessment survey are exported into a single Xcel spreadsheet, five columns are added to calculate subscale averages for each of the five core areas. The researcher calculates subscale scores by taking the five-point Likert responses and averaging their scores in each core area within Dr. Black's instrument. Any responses selected as not applicable are not included in the subscales averages. Once each of the subscale scores are calculated for all of the 91 institutions, a cumulative instrument or scale score is calculated by averaging the five subscale scores together.

The institutions are sorted from highest to lowest using the cumulative score. Those institutions meeting the minimum cumulative instrument score requirement of 3.0 or higher are highlighted. Overall, 55 of the 91 institutions that complete the survey meet this minimum standard. The researcher then reviews each of the subscale scores to ensure three of the five

averages are also above 3.0. No additional institutions are removed based on this second study criterion.

At this point, the researcher goes row-by-row coding each institution based on the regional affiliate association. Each region is given a numerical value between 1 and 22 and institutions are coded concordantly. Once all 91 institutions are coded, the researcher highlights the top-scoring institution per regional affiliate association. Among the remaining 55 qualifying institutions, three regional affiliate associations are eliminated from the study because their cumulative score is below a 3.0. Fifteen out of the 22 regional affiliate associations remain eligible to participate in the interview step of the research study.

Reliability & Validity of SEM Health Assessment Survey

Black establishes reliability and validity of the SEM Health Assessment survey using qualitative methods as outlined by Yin (2003). Yin (2003) identifies four tests commonly used to established quality of empirical social research: construct validity, internal validity, external validity, and reliability. Yin (2003) identifies a handful of tactics, which can be used to satisfy each of these four tests. Reliability and validity for Black's instrument is addressed following Yin's order of establishing reliability and validity (2003).

Construct validity. In order to ensure construct validity, two data collection procedures are followed: (1) multiple sources of evidence and (2) a chain of evidence (Yin, 2003). The first procedure is similar to triangulation, and Black completed this step by identifying points of convergence from evaluator ratings, observer field notes, and evaluator responses to debriefing questions (Black, 2003). In order to satisfy the procedure of providing a chain of evidence, Black (2003) forms links between the instrument questions, responses among evaluators, and conclusions generated. For example, evaluator rates each question from the instrument, which is

then used to evaluate inter-rater reliability, and finally those evaluations are used to draw conclusions across each of the six core areas (Black, 2003).

Internal validity. Black (2003) uses two approaches to ensure internal validity: (1) pattern matching and (2) addressing rival explanations. Field notes, evaluator ratings, and evaluator responses to debriefing questions are analyzed for pattern matching (Black, 2003). Pattern matching reduces the likelihood of misinterpreting and reporting inaccurate data as a study finding (Black, 2003). The second approach, addressing rival explanations, also is intended to catch inaccurate data analysis and findings (Yin, 2003). Black's (2003) study addresses rival explanations by using external evaluators and by administering the instrument on-site, which reduces the possibility of maturation or sample mortality.

External validity. Yin (2003) refers to external validity as the study's findings to be generalizable beyond the immediate case study. Black (2003) field-tests and refines the instrument with the feedback from 20-seven full-time and part-time consultants from Noel-Levitz. Then Black (2003) uses a single-case study approach, by having four experienced consultants from Noel-Levitz use the instrument to evaluate the University of North Carolina at Greensboro.

Reliability. Reliability refers to the ability of the study's process to be replicated and generate consistent findings and conclusions (Yin, 2003). Reliability is established by reviewing variance among the four experienced consultants that evaluate the University of North Carolina at Greensboro. Variance among evaluators is measured using Kendall's Coefficient of Concordance (Black, 2003). A Kendall's Coefficient of 0.735 is calculated and then converted to a Spearman's Correlation Coefficients of 0.647. Using the Landis and Koch scale, the Spearman

Coefficient is interpreted as reliable by having substantial agreement among the users (Black, 2003).

Since the publication of Black's SEM Health Assessment survey, additional scholarly research is conducted using the instrument. Lee (2010) finds the survey to have high correlation, supporting the reliability of the instrument, by calculating a Pearson R score of .848 between the results of each of the four evaluators. Additionally, the researcher of this study calculates a Cronbach's Alpha (Table 2) using the five subscale scores of the 91 survey participants. The marketing core area is the only subscale with a Cronbach's Alpha below the acceptable minimum of .70. The researcher removes the marketing core area and instrument composite scores are recalculated and sorted for further review. The researcher finds no significant changes to the top-scoring institutions per regional affiliate association; however, five additional institutions qualify for meeting the minimum scale requirement of 3.0 or higher.

Table 2. Cronbach's Alpha SEM Health Assessment Survey's Core Area.

	Core Area 1:	Core Area 2:	Core Area 3:	Core Area 4:	Core Area 5:
	Comprehensive	Marketing	Recruitment	Retention	Student Services
Cronbach's Alpha	.783	.618	.907	.817	.858

Step Two: Institutional Interviews

Research Method

Following the identification of high performing institutions, the researcher transitions to the interview step of the research study. Step two of the research study attempts to interview two participants from each institution, the chief enrollment officer (CEnO) and a key academic partner (KAP), in their enrollment management success. Each interview is conducted via telephone and lasts approximately 30-minutes. This step of the study is also conducted in accordance to Charmaz's constructivist perspective of grounded theory (Charmaz, 2006).

Initially, the CEnO from each of the top-scoring institutions across the regional affiliate associations are invited via phone calls and e-mails to further participate in the study (Appendix D). Once the CEnO agrees to participate and approval to conduct institutional interviews is received from the participant's Institutional Research Board (IRB), a 30-minute interview is conducted via telephone. All interview questions are open-ended allowing the CEnO to identify practices, strategies, and individuals that are of highest importance to their institution's enrollment management success (Appendix E). At the end of this CEnO interview, the researcher requests the CEnO to identify a key academic partner within their institution. The researcher stresses the identification of an individual that plays a key role in their enrollment management success an invitation of the CEnO interview, the identified individual receives an invitation from the researcher to participate in a second institutional interview.

The key academic partner (KAP) interview is important to the researcher because it offers an alternative viewpoint and further insight into the institution's enrollment management efforts. Specifically, the KAP interview offers data from the perspective of the academic community, whose role the researcher is attempting to examine. If the identified KAP agrees to participate in the study, a second 30-minute institutional interview is conducted via telephone with the researcher. The KAP is asked the same open-ended questions as the CEnO. The KAP is also encouraged to identify practices, strategies, and individuals of highest importance to their institution's enrollment management success. The various organizational positions of the KAPs offer unique insights into the view and interaction of the academic community with the enrollment management based on their institutional perspective.

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During both of these institutional interviews the researcher engages in a process of constant comparative analysis and reflexivity recommended by Charmaz (2006). The researcher's process of joint data collection and analysis assists in the direction of theoretical sampling. This theoretical sampling allows the researcher to narrow the study around an emerging central phenomenon, which is identified later in the chapter. This research study evolves beyond its conceptual framework towards one established by the data collected in the interviews. As the theory emerges, it influences and alters the data required to advance and define the theory (Charmaz, 2006). Depth and saturation are added to the data by adjusting the interview questions to probe the newly constructed framework (Appendix F).

Participants

After 15 high-performing institutions are identified using the results of the SEM Health Assessment survey, each Institutional Research Board (IRB) is e-mailed details regarding the study. As permissions from IRBs roll in, institutions are separated into three batches, each composed of five institutions. The creation of batches encourages the researcher to complete sets of institutional data collection and analysis before moving onto the next batch of institutions. This process most notably influences the data sought to further explore emerging theoretical constructs.

Chief enrollment officers (CEnO) from Batch 1 are first invited to participate in the interview step of the study. Contact with CEnOs is attempted three times for participation confirmation. The first two attempts are made through phone calls and the final attempt is attempted via e-mail. The CEnO's contact information is provided directly to the researcher from the completed SEM Health Assessment survey. Those CEnOs declining participation or failing to respond are dropped from the study.

At the end of each CEnO interview, the researcher requests the CEnO identify a key academic partner (KAP), which plays a key role in their institution's enrollment management success. Following the completion of the CEnO interview, the identified KAP receives an invitation from the researcher to participate in a second institutional interview. Contacts with the KAPs are also attempted three times for participation confirmation. The first two attempts are made through phone calls and the final attempt is attempted via e-mail. Those KAPs declining participation or failing to respond are also dropped from the study. All KAP interviews within the batch are completed or removed prior to moving to the next batch of institutions.

Representation from the regional affiliate association are not filled unless another qualifying institution exists, and it is deemed necessary by the minimum requirements previously approved for this grounded theory study. If needed, the second highest scoring institution in the region is selected. This study identifies the following minimum interview parameters for the interview step of the study: (1) ten regional affiliations represented and (2) 20 institutional interviews completed.

In Batch 1 of the study, four out of five CEnOs participate in an interview. Also in Batch 1, three KAPs participate in interviews across the remaining four institutions. In Batch 2, three out of five CEnOs participate in interviews with two KAPs also completing their interviews. In the final batch, Batch 3, CEnOs from five institutions engage in interviews. Due to the minimum interview parameters already outlined, a third qualifying institution representing one regional affiliate association is included. Lastly, three KAP interviews are also completed for Batch 3. At the conclusion of the interview step of the study (Table 3), 12 institutions participated in interviews are conducted from either CEnOs or KAPs.

Table 3. Institutional Interview Batches.

Institutional Interview Batches: Yes- Completed Interview No- Failed to Respond Bold- Completed KAP Interview							
Batch 1	R19- Yes	R13-Yes	R8-No	R16-Yes	R14-Yes		
Batch 2	R1- Yes	R10-No	R17-Yes	R15-Yes	R8-No		
Batch 3	R20-Yes (3 rd Qualifier)	R5-Yes	R21-Yes	R2-Yes	R18-Yes		

An important note regarding participation from the key academic partner (KAP) was the various positions they held within their institutions. The KAPs ranged from provosts and chief academic officers, to department chairs, to individual program faculty. The institutional vantage point was evident during interviews and data analysis. The impact on data analysis and theory generation from the KAPs various vantage points will be further discussed in the findings of the study.

Data Collection

Data collections for step two of the research study begins with the recordings of interviews conducted with chief enrollment officers (CEnO) and key academic partners (KAP). Twenty interviews are recorded on the researcher's cell phone using the application Call Recorder-ACR. Once the interview is completed, the recording was e-mailed to the researcher and deleted from the cell phone. The audio file is coded based on numerical values representing their regional affiliate association. Additionally, the numerical code is capped with an alphabetical reference distinguishing between CEnOs and KAPs.

The researcher saves the original audio file, and a copy is submitted to Rev.com for professional transcription. Once the transcribed interviews are received back from Rev.com, the

researcher reviews transcripts for any errors in transcription. Transcripts are then saved alongside the original audio files on a password-protected server. Interview participants are also e-mailed a copy of the transcript for their record as well as to ensure accuracy of the transcription. Participants are asked to provide any feedback or edits to the transcript to the researcher within seven days, in which the researcher receives no feedback. After the seven days, the researcher uploads the transcript to Nvivo, a qualitative software program, for coding and analysis.

In addition to the recorded interviews, the researcher collects data in the form of field notes and reflexive journaling. The researcher uses a notebook to capture field notes during interviews with CEnOs and KAPs. These field notes identify the participant reactions, attitude and tones, points of emphasis, and general thoughts during the interviews. The researcher then uses a separate notebook as reflexive journal to create memos, which includes: general thoughts throughout the study, research procedures, draft theory relationships and structures, and data analysis. Field notes and memos from the reflexive journal are added to Nvivo for coding and data analysis. In summary, all files containing data are saved on a secure password-protected server and will be destroyed four years from the successful defense of this dissertation.

Data Analysis and Reflexivity

Although the researcher engages in a constant state of reflexivity by journaling throughout the study, data analysis truly begins when transcripts, field notes, and memos are uploaded to Nvivo. The researcher closely follows data coding and analysis processes recommended by Charmaz (2006). The researcher engages in four rounds of coding: (1) initial codes, (2) focused codes, (3) focused codes to initial theoretical framework, and finally (4) theoretical codes. Data are collected and analyzed in a ziz-zag pattern throughout all four rounds of coding. Lastly, a coding key (Table 4) is created to protect confidentiality while providing information related to institutional type and individual position type within the organization.

Table 4. Interview Coding Keys.

Initial codes. The first round of coding is conducted throughout the first 10 interviews.

This data analysis occurs by first fracturing the data line-by-line into initial codes targeting

action and processes (Charmaz, 2006). This first round of coding by the researcher results in 356

initial codes, which highlight areas of interest and further exploration.

The following are examples of initial codes fractured line-by-line.

• Accreditation requirements shape incoming class

- Faculty took high-ability recruits into their labs
- Orientation transitioned to last yield event
- Resources provided supported enrollment management goals

Focused codes. The researcher then engages in a second round of coding by reviewing, analyzing, and grouping initial codes around emerging themes. Thirty-one focused codes are created from the 356 initial codes. Focused coding serves as a significant step in the study because decisions with the data start to be made and excess data are trimmed away (Charmaz, 2006). It is through this round of analysis that the key concept of central and local levels of enrollment management begins to emerge from the data. This second round of coding also identifies additional emerging themes including: CEnO background, organizational structure, data-driven decisions, faculty perceptions, open communication, executive support, practices and strategies, previous EM outcomes, and clear purpose and goals. Mid-way through Batch 2 of the interviews, the researcher continues to bounce between initial and focused coding.

The following are examples of focused codes created by the researcher from several initial codes following data analysis.

- CEnO experiences and backgrounds
- Enrollment management challenges or failures
- Faculty participation in enrollment management
- Open communication with academic affairs
- Resources provided to enrollment management

Focused codes to initial theoretical framework. As themes emerged from the 31 focused codes, a theoretical framework is constructed from the data. The researcher engages in a third round of coding where focused codes are then matched to a preliminary or initial

framework. This step is not necessary according to Charmaz (2006), but the researcher finds it helpful in identifying gaps in the existing data. At this point 10 interviews have been conducted, transcribed, and coded. During this round, coding identifies six major theoretical constructs: Central EM, Local EM, CEnO Background, Credibility, Transparency, and External Environment. Additionally, fourteen categories within the theoretical constructs are identified. The researcher transitions to focus the remaining interviews on adding depth and saturation to the data, constructs, and themes.

The following is an example of a set of focused codes matched to a theme of Purpose and Goals composing the construct of Transparency in the theoretical framework.

- Transparency
 - Communication
 - Input and Feedback
 - Purpose and Goals
 - Communicating enrollment management purpose
 - Creating environment for enrollment management
 - Enrollment management goals
 - Faculty goals
 - Reasons for implementing enrollment management

Theoretical codes. The fourth and final round of coding is conducted using the

transcripts, field notes, and memos from the remaining 10 interviews of CEnOs and KAPS. These interviews are coded in accordance to Charmaz's (2006) emergent approach of theoretical coding. It is important to note, this approach differs from Strauss and Corbin's axial coding, which again focuses primarily on a formal procedure (Birks & Mills, 2011). Instead, the researcher engages in theoretical sampling by adjusting interview questions (Appendix F) to probe the phenomenon and saturate the themes with data.

This theoretical sampling leads the researcher into an advanced state of analysis. The joint data collection and analysis pushes the study to evolve from the initial framework previously identified, towards one established by the data (Charmaz, 2006). After completion of this round of coding, the theoretical constructs and themes are refined. In the updated theoretical framework, constructs are reduced from six to four and themes are reduced from fourteen to 12. An example of the refinement includes the initial theoretical construct of CEnO Background transitioning to a sub-theme under the Credibility construct.

In summary, this study is grounded in constant comparative data analysis through coding, theoretical sampling, memoing, and theory generation. The researcher closely follows data coding and analysis processes recommended by Charmaz (2006). The researcher engages in four rounds of coding: (1) initial codes, (2) focused codes, (3) focused codes to initial theoretical framework, and finally (4) theoretical codes. Lastly, data are collected and analyzed in a zig-zag pattern throughout all four rounds of coding.

Reliability & Validity

It is important to note the different connotations of establishing reliability and validity for qualitative research. According to Creswell (2012), qualitative validity ensures the researcher follows certain procedures to ensure accurate findings, whereas qualitative reliability ensures the researcher's approach is consistent throughout the study. In order to ensure qualitative validity, the researcher engages in (1) member checking and (2) identification of the researcher's bias to bring into the study. In order to ensure qualitative reliability, the researcher (1) reviewed

transcripts for accuracy and (2) created a codebook (Appendix G) to ensure definitions did not drift throughout the study (Creswell, 2012).

Member checking. During the interview step of the study, three CEnOs and two KAPs are identified and agreed to participate in member checking. Member checking occurs by e-mailing the initial theoretical framework, constructs, and themes to participants for feedback. Feedback is received from all five CEnOs and KAPs. Their feedback is recorded in the researcher's reflexive journal and eventually entered as memos into Nvivo for coding and analysis.

Researcher's bias. The researcher's biases towards this study are based on the experiences and viewpoints related to the profession of enrollment management. The researcher has a background in the practice of enrollment management across two-year public, four-year regional, and four-year research institutions. The researcher maintains thorough knowledge of conceptual and academic theories related to enrollment management. The researcher's biases that are being brought into the study include:

- Institutions with increased reliance on enrollment/tuition revenue will be more likely to be practicing enrollment management effectively. This is because enrollment management seems to gain support and urgency when the institution becomes more heavily reliant on tuition revenue.
- The academic communities are more likely to understand and participate in enrollment management efforts occurring when academic funding mirrors enrollment patterns. If funding does not reward enrollment outcomes, there is little motivation to actively participate. For example, historical-based funding models likely reward those departments experiencing decreases in enrollment outcomes.

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• The initial and majority of an institution's enrollment management efforts typically focus heavily on the input (marketing/recruitment) of new students over the retention and graduation of current students. This is primarily due to the reactive nature of higher education along with an elementary understanding of enrollment management across the institution.

In order to account for these biases throughout the study, the researcher engages in two practices recommended by Creswell (2012). The first practice is reflexive journaling. The researcher creates memos throughout the data collection and analysis process regarding these influences on interpretations of the findings. The second practice is member checking. As the initial theoretical framework, constructs, and themes are constructed, the researcher engages in member checking with research participants.

Review of transcripts. The reviews of transcripts are completed following transcription of the CEnO and KAP interviews. The CEnOs and KAPs are e-mailed a copy of the transcript to ensure accuracy of the transcription. Participants are asked to provide any feedback or edits of the transcript to the researcher within seven days. The researcher receives no feedback or edits. After the seven days, the researcher uploads the transcript to Nvivo for coding and analysis.

Creation of codebook. The researcher creates an electronic codebook using an Xcel spreadsheet in conjunction with the first step of coding, the creation of initial codes. The multiple rounds of zig-zag coding encourage the researcher to maintain consistent definitions and meanings. The research design keeps the researcher in a constant state of comparative analysis. Lastly, the researcher engages the codes in reflexive journaling and memo creation through the various rounds of analysis (Appendix G). Again, the research design of grounded theory

encourages consistent and accurate data analysis through coding, theoretical sampling, memoing, and theory generation.

Role of the Researcher

This study is aligned with a constructivist's philosophy on grounded theory, which focused on identifying "how" a phenomenon occurs (Charmaz, 2006). The theory is interpreted and constructed by the researcher (Hall, Griffiths, & McKenna, 2013). The researcher's history and viewpoints influences the interpretation and construction, and these biases are accounted for within the research process (Birks & Mills, 2011). In this study the researcher attempts to account for one's self, which is composed of multiple perspectives and vantage points (Birks & Mills, 2011).

Charmaz (1991) identifies and defines the researcher's self as the "organized set of internalized attachments, commitments, attributes, images and identifications, with which a person creates a concept of self" (p. 72). The researcher and the participant mutually constructs the data interpretation and constructed the theory. The research and theory offers one interpretation of the phenomenon (Hall, Griffiths, & McKenna, 2013). In this study, the researcher is a subjective active participant in data generation with the participants (Birks & Mills, 2013).

Lastly, the researcher is responsible for creating an audit trail of reflective writing in the form of memos. According to Birks and Mills (2013), memoing serves the purpose of reflexivity, in which a researcher systematically develops insights into their work and guides their future actions. Charmaz (2006) recognized reflexivity as an important process, and the researcher created a reflexive journal to ensure validity and reliability.

Emerging Themes and Constructs in the Data

As step two of the study is completed and the researcher's initial framework is refined, four theoretical constructs emerge from the data. Engagement with the academic community at both the central and local levels of the institution is established as the core phenomenon. The researcher refers to this as a dual-level approach to enrollment management. The dual-level construct is probed, and the merger of sub-themes found within the data creates new constructs: credibility, transparency, and environmental influencers.

For example, three sub-themes found within the data are merged to form the construct of credibility. The researcher refers to these sub-themes as the three conditions necessary to establish institutional credibility: executive supported, data-informed, and academic-positioned. Additionally, three themes or conditions are found by the researcher to establish institutional transparency: clearly defined purpose and goals, maintained open communication, and adequate opportunities for input and feedback. The fourth and final construct of the framework accounts for environmental influencers, which are both internal and external forces on the institution's enrollment management.

Dual-Level Enrollment Management

As previously stated, the central construct and core phenomenon that emerges from the data highlighted the different levels in which enrollment management is performed, referred to as dual-level enrollment management. Successful enrollment management is engaged at both the central and local level within the institution. Enrollment management at the central level focuses on broad institutional initiatives. These initiatives are often aligned with the institutional strategic plan, and include areas of performance related to enrollment, retention, diversity, and academic quality across the entire institution. Faculty participation at the central level include: SEM

committees, shared governance, and other forums and surveys, which provide opportunities to collect feedback.

At the local level, enrollment management focuses on individual units within the institution. These academic units that practice enrollment management include: colleges, departments, and/or individual programs. Local level enrollment management often focuses on the same initiatives as their central counterpart such as enrollment, retention, diversity, and academic quality. The primary differences between the two levels are (1) the institutional level in which the activity occurs and (2) the individual's institutional position that participate. Due to these differences, faculty participation at the local level is more likely to garner stronger understanding, participation, and commitment.

Credibility

The second construct that emerges from the data is one of the two conditions necessary for establishing collaboration with the academic community. Credibility is established when enrollment management has executive support, is data-informed, and is academically positioned. Institutions not addressing these three elements are likely to struggle developing support and collaboration for enrollment management with the academic community.

Transparency

The third emergent theoretical construct focuses on the final condition encouraged collaboration across the institution. This condition is the need for the institution to establish a state of transparency for enrollment management. Transparency is about creating an environment where enrollment management is clearly visible and understood. Transparency is achieved by: defining purposes and goals, maintaining open communication, and providing adequate opportunities for input and feedback.

Environmental Influencers

The fourth and final emergent theoretical construct addresses the environments, which influences institutional enrollment management efforts. The construct environmental influencers are broken down into those pressures found internally and those existing externally. The varying combinations of environmental influencers found among institutions are unique, making no two institutions identical. The degree and importance in addressing each of the elements composing credibility and transparency vary based on the institution's unique internal and external environmental influencers.

Summary

In summary, this study seeks to explore the academic connection at high-performing enrollment management institutions through the eyes of both chief enrollment officers (CEnO) and key academic partners (KAP). This is a national study where the SEM Health Assessment survey (Black, 2003) is administered to identify high-performing four-year public institutions practicing enrollment management across the United States. Once high-performing institutions are identified, the researcher interviews 20 participants from 12 institutions including 12 CEnOs and eight KAPs. This study is designed with a constructivist grounded theory approach to data collection and analysis, where new theory related to an institution's "shared sense of responsibility" for enrollment outcomes is constructed.

Transcripts, field notes, and memos underwent analysis as the researcher fractures data into initial, focused, and theoretical codes. As themes emerge, the researcher transitions to theoretical sampling to further probe the initial framework. Interview questions are adjusted to add depth and saturation to the data. Four theoretical constructs emerge from the data for institutions successfully engaging the academic community: dual-level enrollment management, credibility, transparency, and environmental influencers. The constructs of credibility and transparency are both composed of three elements developed from sub-themes found within the data.

CHAPTER IV

RESULTS

This study seeks to explore the connection between enrollment management professionals and the academic community at high-performing enrollment management institutions through the eyes of both chief enrollment officers (CEnO) and key academic partners (KAP). In order to identify high-performing institutions practicing enrollment management, the SEM Health Assessment survey (Black, 2003) is sent to 385 public four-year institutions across the United States. Once high-performing institutions are identified, the researcher interviews 20 participants from 12 institutions including 12 CEnOs and eight KAPs. This study is designed with a constructivist grounded theory approach to data collection and analysis, where new theory related to an institution's "shared sense of responsibility" for enrollment outcomes is constructed.

The researcher fractures and conducts data analysis through interview transcripts, field notes, and memos. The study's zig zag pattern of data collection and data analysis allows the researcher to engage in theoretical sampling. This sampling allows the researcher to probe the initial framework by adjusting interview questions, which adds depth and saturation to the data. In the end, four theoretical constructs are constructed from the data: dual-level enrollment management, credibility, transparency, and environmental influencers. The constructs of credibility and transparency are both composed of three elements developed from sub-themes found within the data.

Emergent Theoretical Constructs

As data are collected and analyzed, four theoretical constructs emerge. The core phenomenon and construct emerging from those institutions successfully developing "a shared sense or responsibility" for enrollment outcomes, did so by engaging EM at two levels of the institution. This dual-level approach to enrollment management engages the academic community at both central and local levels of the institution. The dual-level construct is identified as the core phenomenon by the researcher in the initial theoretical framework. As this construct is moved to the center, existing themes of data are viewed through the lens of the central construct. The result of two rounds of data collection and on-going data analysis is a refined framework, which identifies three additional theoretical constructs for the study: credibility, transparency, and environmental influencers.

Construct I: Dual-Level Enrollment Management

As previously mentioned, the central theoretical construct identified by the researcher is the two levels in which enrollment management is practiced within higher education institutions. Although chief enrollment officers (CEnO) and key academic partners (KAP) did not specifically identify their enrollment management efforts as being intentionally focused on two levels of the institution, multiple examples are provided of enrollment management practices and outcomes during interviews. The collection and analysis of these data assists in the development of the researcher's initial theoretical framework, which identifies the dual-levels of enrollment management.

As the researcher engages in a state of constant comparative analysis, this phenomenon of an "institutional approach" versus a "departmental or college approach" is constructed from the data. This theme is increasingly distinctive and evident among the KAPs whom had a lower institutional responsibility or vantage point. For example, one KAP who serves as a department chair and faculty member states, "I haven't been involved at the institutional level. I've been involved at the program level, so that's how I view the management of enrollment at this point" (1B-BF, 2016). This faculty member's local vantage point makes it difficult to develop meaningful collaboration with a top-down approach to EM.

Enrollment management at the central level. Enrollment management at the central level focuses on broad institutional initiatives. These initiatives are often aligned with institutional strategic plans, and include areas of improvement related to enrollment, retention, diversity, and academic quality across the entire institution. A current CEnO describes their institution's process of drafting a strategic enrollment plan as, "we're just getting into more detail with this strategic enrollment plan that is going to mimic our university's strategic plan" (5R-A, 2016). Another CEnO also links their institution's strategic plan with their current enrollment planning process; "it's strategically driven by the overall strategic plan, which includes master planning, and it relates back to the budget" (4M-A, 2016). This example serves as a top-down approach to enrollment management.

Central level practices & outcomes. Institutional enrollment plans often identify strategic priorities that drive practices at the central level. Central level practices likely target the entire student body rather than individual segments. For an example, one institution implements a predictive model to evaluate all of their prospective students. "We worked with a company that helps us develop predictive models that help us understand the likelihood for students to, ultimately, come to our campus" (1M-A, 2016). A second example includes a KAP and senior vice chancellor highlighting how their enrollment management committee develops an iPad initiative to support their institutional priority of maintaining access and affordability. "We

launched an open access textbook initiative to mitigate, reduce, maybe even eliminate textbook costs in some key areas" (5M-BA, 2016). Lastly, a third institution evaluates and rates their entire incoming class based on known risk factors:

We made a list of those students with more than three or four risk factors. We reached out discreetly. In some cases, we facilitated meetings with Financial Aid. We reached out to try to get them involved in clubs and activities (5M-A, 2016).

These three examples draw attention to enrollment initiatives focused across the central level of the institution.

The central level advantage. The primary advantage of central level enrollment management is the ability to approach EM as a single entity. It is common for central level EM to target increases in enrollment or retention by a specific number or percentage. These central level enrollment goals typically do not focus on individual academic areas of the institution. For example, a CEnO states their institution's enrollment goal "went from 2,900 in the freshman class to the next year of 3,800" (1R-A, 2016). Another CEnO highlights their institution's new retention goal, "our retention goal is to increase by five percent a year" (1B-A, 2016). A third CEnO draws attention to a recently developed institutional strategy implemented to meet their increased graduation goals; "Try to get students maximizing their load and taking a very deliberate set of courses while they're here will help our 4- and 6-year graduation goals" (2R-A, 2016). All of these institution's developed initiatives that are attempting to influence a central or institutional metric surrounding enrollment outcomes.

Academic involvement at the central level. A major challenge with central level EM is garnering meaningful involvement from the academic community. This study finds faculty participation at the central level includes: serving on committees, participating in shared

governance, or other methods, such as surveys, for faculty to provide feedback and input regarding institutional priorities. A CEnO stresses the intentional effort their institution made to involve the academic community throughout their SEM committee, "We have an enrollment management committee. There's strong representation from academic affairs on that committee" (1B-A, 2016). A strong academic presence or involvement with the SEM committee reinforces the importance of the academic role towards enrollment outcomes.

Key academic partners (KAP) also play an important role in developing collaboration with the academic community at their institutions. A senior vice chancellor identifies their institution's routine of bringing enrollment management issues regularly to faculty senate,

We engage faculty senate in a very effective share governance policy. When I make a suggestion regarding our Hispanic enrollment that increased by 10 percent. We talk about what that means. It becomes a point of discussion rather than a decree (5M-BA, 2016). Another KAP and department chair describes their faculty member's reaction to systematic collection of feedback surrounding enrollment priorities, "being able to collaborate and give suggestions to them has been really important to our faculty" (1R-BA, 2016). Faculty are inherently interested in strategic initiatives at the central level, which includes enrollment management.

Enrollment management at the local level. As the researcher transitions to examining enrollment management at the local level, the focus moves towards individual academic units found within the institution. These academic units include colleges, departments, and programs. Local level EM is found to focus on the same initiatives as those at the central level such as enrollment, retention, diversity, and academic quality. The primary difference between the duallevels of enrollment management rests with the various environmental factors influencing and driving the enrollment priorities. These environmental influencers are discussed in greater detail later in the chapter; however, an example includes a key academic partner (KAP), whom identifies the need for higher admissions criteria for competitive programs over the institution's general admissions criteria:

The college says you can transfer with a 2.5 GPA, but we knew that people coming in with a 2.5 GPA would never get into the program. It's unethical. We put a plan into place that required a 3.0 GPA or better (1M-BF).

This example draws attention to the different enrollment goals found at central and local levels of the same institution.

Due to the variety of structures, perceptions, and program conditions found among various colleges, departments, and academic programs at an institution, EM at the local level is often more challenging and complex to orchestrate. The researcher found this challenge often encourages chief enrollment officers to ignore the local level and focus their efforts from the central level downward. As a CEnO states, "From a top-down place, those are probably the three biggest elements of enrollment management. Organization, technology and infrastructure, and connectedness to learning" (3M-A, 2016). Furthermore this top-down approach also threatens the desire for administrators to garner input and feedback from the academic units surrounding enrollment priorities and initiatives. For example a second CEnO declares, "Enrollment, you just have to plan, get it approved by the upper administration, and then execute that plan. There really is no time to seek input from the student body or from other folks related to what the class should look like and so forth" (5R-A, 2016). This CEnO reinforces a common top-down approach to EM.

Local level practices & outcomes. Local level EM practices and outcomes range from recruitment activities to advising to critical course remediation. A common theme found within the local level data are segmenting students based on characteristics. These characteristics include: academic ability, diversity, and/or academic interest. For example, an academic dean discusses how their faculty developed and hosted a day targeting transfer students. "For the first time we are having collegiate day, which is for the community colleges. It's for all of the community colleges that have newspapers, magazines, media arts programs, with students who are interested in transferring" (3R-BA, 2016). This example identifies a unique local level desire to increase transfer students.

Another institution asks their faculty to review and create remediation courses, which are identified to be critical towards student progression. "They were asked to develop a variety of plans to re-mediate these barrier courses. That has helped us along with analyzing those critical courses in every program that are predictors of student success. It forced us to develop strategies" (5M-A, 2016). A CEnO explains the institution's enrollment management efforts consists of working with every academic department to predict majors across the institution, "We model down to the seat. We're predicting space at the university by the class, by level, and by major. We know exactly what our university has to produce to achieve our goals, which is to graduate students" (4M-A, 2016). These examples identify the impact and benefit of pushing enrollment management from the local level upward to the central level.

The local level advantage. The advantage of local level EM is the ability to garner stronger understanding, involvement, and commitment from the academic community. Local level EM operates within the passions and expertise of the faculty. Due to this, faculty members lacking extensive knowledge of formal enrollment management best practices are often still

attuned to the circumstances affecting their students and profession. According to a dean, faculty members at their institution understand they need to recruit high-ability students more intentionally when they visit campus, "Say I have a great physicist coming through, high school senior with a 36 ACT, wants to major in physics. Those physicists just open up their lab to this kid. They took him everywhere, they spent the entire afternoon with him" (1R-BA, 2016). This example draws attention to the benefit of academic involvement at the local level of enrollment management efforts.

A second example occurs with a nursing program is struggling to attract top quality prospects to enroll at their institution. The academic unit adjusts their program admissions policy based on their faculty's knowledge of common practices found across competing nursing programs. The result is faculty establishing a direct entry program guaranteeing admission to their top tier prospects:

A couple years ago I worked with the CEnO. I would love to have a direct entry. All freshmen are admitted directly into Nursing. They have to maintain a certain GPA. They have to get C's at least in all their "pre-reqs", but the competition is so bad, and the anxiety is so bad that I really would love to have an all direct entry. Many of the schools around the nation have direct entry (1M-BF, 2016).

Ultimately, the new direct entry program increases the attractiveness of the institution for prospective students looking to major in nursing.

A third example includes a biology program that struggles to meet institutional standards for retention and graduation rates. The academic department institutes a course review process that requires the examination of completion rates for all biology courses. Faculty members then develop improvement strategies for courses identified as barriers towards academic progression: We introduced a separate advising platform that was much more focused on student success and early warning systems and things like that. More faculty members are using that in tandem with our regular degree audit system. For instance, we completed a study two years ago on courses with high rates of D's, W's, or S's versus their course completion records. That was an eye opener for many departments. It forced the departments to develop strategies for overcoming some of those courses that were barriers and obstacles to students graduating on time or graduating ever (5M-A, 2016). An outcome from this local level EM process is the department requirement for all biology majors to meet with a biology advisor prior to registering for courses each semester.

Construct II: Credibility

The second emergent theoretical construct highlights the first of two conditions, which ensures interaction between the two levels of enrollment management. The first condition for successful dual-level EM is the need for EM to establish a sense of credibility at the institution. Credibility is earned by rooting enrollment management efforts that are executive supported, data-informed, and academically positioned within the institution. Institutions not addressing these three elements are likely to struggle developing support and collaboration for enrollment management with the academic community.

Executive support. Executive support is often viewed as the starting point and tone setter for collaborative enrollment management with the academic community. A consistent finding within the data is the president or chancellor serving as the vocal and visible champion of enrollment management. For example, a CEnO reminisces about the previous president's commitment to a healthy enrollment. "Our past president, who retired and left, reminded everyone that enrollment is life. He pushed that not just to me and others, but he pushed it to

faculty and deans. To do all they could to help enrollment" (5R-A, 2016). The president identifies the benefits of EM at the institution, and the necessity to fully embrace EM both collaboratively and as a collective responsibility of everyone at the institution (2M-BA, 2016).

The president is often the initial administrator identified, but executive support is not limited to any one position at the institution. For example, another CEnO identifies the need to have multiple champions across the institution:

You need some champions. That's been really important. The provost is a champion, we've got some of the deans, they need to be champions, some of the vice presidents need to be champions. If you don't have champions you're not going to get a lot of stuff done. You need to pick some partners (2R-A, 2016).

Enrollment management champions across the executive team validate the importance of enrollment management at both the central and local levels of the institution.

Additionally, the provost and deans are also found to be vital when supporting enrollment management because they often align priorities and resources across the colleges. As a CEnO states, "The deans play a crucial role in enrollment management activities. They are given a budget and expected to work at delivering the outcome" (4M-A, 2016). Furthermore, attaching resources to enrollment management initiatives sends a very powerful message to colleges, departments, and individual programs (3R-A, 2016). At another institution, priorities set by executive leadership direct their Foundation to pursue large gifts, which according to a KAP is used to start new scholarship programs that attract high-ability in-state students to attend the flagship:

We had a large gift, and it was stipulated that the honors college existed mostly to keep these high ability talented students in-state for their undergraduate education. Now we send them off to top graduate schools, but we really want them to be here for their undergraduate as the flagship (1R-BA, 2016).

Identifying resources to align with enrollment initiatives are paramount when demonstrating support for EM.

Here are a few additional examples of executive support of EM efforts that are found within the data. A CEnO relays their chancellor's financial support on multiple enrollment management priorities, "We were all on the same team and the Chancellor was very supportive of our work and gave us additional money, gave us additional scholarship dollars, paid to renovate our building" (1R-A, 2016). A second CEnO recites their provost's student-centered mantra:

Have I received push back and difficulty? Absolutely. But bringing in a provost whose mantra is: students don't care how much faculty know, until they know how much faculty care, which is a very student-centered philosophy and mantra, has helped immensely. He and I are on the same page (2M-A, 2016).

A third CEnO describes how their provost led the enrollment charge of increasing low enrollment programs; "Provost meets with the Deans about the need to develop programs to recruit in under-subscribed, or under-enrolled areas" (1M-A, 2016). These examples showcase EM penetrating the local level of the institution.

Data-informed. The second element influencing credibility of enrollment management is being data-informed. The importance of using data to gain support is brought up in all 20 interviews. Data are utilized in both conditions and levels of enrollment management. At the central level, institutions often engage in data mining across the entire institution. For example, an institution uses this type of data to identify gateway courses that serves as real predictors of

student retention (2R-A, 2016). Another example is an institution that identifies the importance of admission decision times greatly influencing yield rates:

We also know that the number one thing for us that improves our ability to yield students, is how quickly we get a decision to the student. We've gone from two months to under two weeks in sending out notifications to students regardless of the season (1R-A, 2016). Data mining is crucial when developing central enrollment management initiatives.

At the local level, the use of data to increase faculty support and buy-in of enrollment management initiatives is also a necessity (3R-BA, 2016). A CEnO describes how National Clearing House data is used at their institution to engage the academic community:

For our students who were admitted to our campus and chose not to enroll, we then pull a file from the National Data Clearing House. That helps us to explain to faculty departments why they're up, why they're down, what occurred, where did they go, what did they major in, what did their financial aid look like. Data is key in this role because you just can't argue with data (5R-A, 2016).

Another institution is able to reduce their spring melt by nearly 11 percent by sharing enrollment funnel data and research related to best practices with their faculty. The data are then used by Faculty Senate to develop a faculty-advising program. The impact from the newly created program adds \$700,000 worth of credit hours back into the institution and academic departments (3M-A, 2016). "We did that with incentivizing them, and it's had a meaningful impact on credit hours and revenue" (3M-A, 2016). Furthermore, incentivizing enrollment outcomes for the local level reinforces executive support of EM through alignment of resources based on institutional priorities.

Additional examples of data-informed EM practices and recommendations include a CEnO that data-mines student progression data across the majors at the institution and approach the deans about negative trends. "Enrollment management means that I had to go in with our academic dean and say, 'Hey, do you realize this is what's going on in your school?' These are the students that are going to transfer somewhere else or drop out because they lose their major" (3M-A, 2016). Another CEnO makes specific reference to the importance of using data to gain support from their faculty:

Data is the key, especially when you're working with the academic side because you can't lie with data. What I learned early is that if you're going to give a report or make a change, you have to back it up with data to show faculty that this in fact is why we're making the change based on this data (5R-A, 2016).

A final CEnO stresses the need to push past general institutional student data into data within the academic programs:

I guess I'd say really get to know through deep dives, specifics about what's going on with the student body. You can't do anything in general terms. You've really got to dig into programs, because that's where you'll be able to make change (2R-A, 2016).

These examples draw attention to the regular use of data when approaching the academic community at the local level of the institution to engage in discussions surrounding enrollment management.

Academic positioning. The third and final element influencing credibility is to academically position enrollment management within the institution. Academically positioning the function of enrollment management is necessary when attempting to collaborate with the academic units. Academic positioning EM is established through organizational structure and the CEnO's academic relationships and credentials. Organizational structure in enrollment management often pairs offices related to student recruitment and retention under the same leadership umbrella (2M-BA, 2016). As a CEnO puts it, "enrollment management without adequate infrastructure support is destined to fail" (3M-A, 2016). A CEnO's academic relationships and credentials are a key sub-theme of data, which focuses on developing validity among the academic community.

Positioned through organizational structure. Although this research study does not explore the benefit of any specific organizational scheme, an emerging theme in the data supports EM literature related to structures. This theme reinforces organizational structure as one of the institution's initial responses towards enrollment management. Out of the 12 institutions interviewed, eight institutions have new enrollment management structures created in the past five years. Another common theme related to organizational structure is the creation or movement of the EM division from student affairs to academic affairs or directly under the president. This study's emphasis on the academic role in enrollment management efforts draws special attention to a few advantages in the data from those institutions positioning the EM function closer to the academic units.

For example, enrollment management structures transitioning to academic affairs or the president increases the CEnOs access to the executive leadership and financial resources. A CEnO states, "Coming over to the provost office, I had a direct relationship with the provost who was the second in command here at the university" (5R-A, 2016). Additionally, the same CEnO identifies their new structure as reinforcing enrollment management as an institutional priority grounded in the academic mission of the institution (5R-A, 2016). A provost also agrees with the importance of the positioning the EM division closely to the academic units, "They would be

able to see the importance of enrollment management in academics. It is there as a reminder to everybody on campus that enrollment management is among our highest priorities" (1B-BA, 2016). It is important to restate that this study is not recommending a specific organizational structure for EM. Rather due to this study's emphasis on the academic role in enrollment management efforts, advantages from those institutions repositioning the EM function closer to the academic units are explored.

Positioned through academic relationships and credentials. A second way to establish academic positioning for enrollment management at the institution is through the CEnO's academic relationships and credentials. Academic relationships and credentials attempts to position CEnOs as colleagues of faculty members. Chief enrollment officers that develop meaningful relationships with faculty, or those with faculty credentials are found to be at a distinct advantage:

It's really about developing working relationships, and collaborating together, and developing trust, and building that trust that's going to allow them to see you with more credibility. But also, to be able to readily feel comfortable with engaging with you as well. (1M-A, 2016)

Ten out of the 12 CEnO's that are interviewed have earned a doctorate, and all of them cited their terminal degree as a noticeable status equalizer among faculty.

A CEnO with over 21 years of experience at the same institution has already developed strong relationships with the academic departments over her tenure. The CEnO notices immediately a difference in perception and treatment from her faculty members after earning her doctorate:

It's kind of odd, but it was almost instantly, when you have those extra letters behind your name what a difference it makes in the eyes of the academic side of the house. I was kind of shocked by it because I had been at the institution for such a long time and I do have strong relationships with our academic colleges. (4R-A, 2016)

A dean comments on the importance of their CEnO's doctorate when working with their faculty: It's a very, very good thing that he has a Doctorate. I think that gives him more equal footing with faculty and administration. Being as well prepared in both experience and credentials as possible in order to navigate the hierarchies and the very status conscious environment of academia. (3R-BA, 2016)

The doctorate is a key credential in earning credibility from the academic community.

Additionally, institutions can also look within their faculty ranks when considering a CEnO. In this study, four out of 12 CEnOs have faculty backgrounds with a couple CEnOs serving in dual roles within the institution. For example, a senior vice chancellor of academic affairs identifies the extended academic experience of their CEnO as a faculty member at the institution:

He began here in the faculty ranks, worked his way through assistant, associate, full professor, was dean for 10 years. By the time he had taken this position he was far better known as a sound academic than he was as an enrollment management officer. (5M-BA, 2016)

Another CEnO is able to negotiate a tenured track faculty position as part of the CEnO hiring process:

I also said, I want a tenure track position in higher education. I do publish stuff and I receive national competitive awards and things like that. So they allowed me to do that, and I come up for tenure this year, actually. (1R-A, 2016)

Experience serving as an academic strengthens the CEnO's ability to resonate and collaborate with faculty members.

Construct III: Transparency

The third emergent theoretical construct highlights the second of two conditions, which ensures interaction between the two levels of enrollment management. This second condition is the need for the institution to establish a state of transparency for enrollment management. Transparency is all about creating an environment where enrollment management is clearly visible and understood. Transparency is achieved by implementing an enrollment management process that defines purpose and goals, maintains open communication, and provides adequate opportunities for input and feedback.

Clear purposes & goals. The researcher found that it is important to clearly identify the purposes driving enrollment management across the institution. For example, a common purpose driving EM at a handful of institutions in the study is financial stability. These institutions are experiencing declining state funding, and they are becoming increasingly dependent on tuition revenue (1B-BA, 2016; 3R-BA, 2016). As a CEnO explains, "We are in a state that I think ranks forty-ninth in state appropriation to higher education. That cost has gradually shifted from the state to the students and families who come here. That's a significant challenge" (3R-A, 2016). Financial stability is a primary driver, increasing the importance of enrollment management within institutions.

Another common purpose driving EM among a second group of institutions is the need to improve retention and graduation rates. For example, one senior vice chancellor speaks about their institution's retention, "We do have it as a goal to increase our retention rate of rising sophomores. We're currently pretty good at about 80%. We'd like to see that push 84 or 85%" (5M-BA, 2016). Although the institution is not currently funded based on performance metrics, this KAP acknowledges discussions surrounding funding changes in their future.

Regardless of the environmental influencers creating pressure and driving the institution's enrollment management, there has been "clarity of purpose" and "clarity of goals" (3M-BA, 2016). These clarities provide a clear direction and assists in the development of support from faculty. Furthermore, clearly identifying purposes and goals shape the conversation that is necessary for meaningful dialect with academic community (2M-A, 2016). As a provost explains:

Making sure that everybody on campus understands the big picture of what we're trying to do as an institution, not as the enrollment management division, but as an institution. What we're trying to do enrollment management-wise, so that we are all working in concert towards that common goal. (1B-BA, 2016)

A key point the provost makes is enrollment management pushing beyond just a divisional goal towards as an institutional responsibility.

Additional examples of purposes and goals driving enrollment management at higher education institutions includes a CEnO identifying their institutional goal as improving academic quality of their incoming class, "My number one goal is to help raise our average ACT scores for our students in coming. Another one is to raise the student's cumulative GPA" (1B-A, 2016). A second CEnO explains how their institution's goal is to shape their enrollment, "For the most part we try to maintain a level enrollment. Focusing on a high academic quality of student, and a very diverse student body represented by socio-economic status, first generation representation, as well as race and ethnicity" (2R-A, 2016). A third CEnO, states their institution is attempting to have students graduate in 4-years in order to decrease student debt, "Get those students graduated as quickly as possible, so they focus on getting them out in four years. Trying to minimize the student debt and expense related to pursuing their studies" (1B-A, 2016). Although the purposes and goals are driving each institution differently, the CEnOs are able to easily identify their EM drivers.

Open communication. The second element aiding in the establishment of transparency is open communication. Open communication is identified as a key element in achieving successful enrollment management throughout all 20 interviews. When one KAP and provost is asked to give a single piece of advice surrounding their successful enrollment management, the response is simply, "communicate, communicate, communicate" (1B-BA, 2016). The provost goes on to explain that enrollment management needs to focus on communication at every stage of the process and at every level of the institution (1B-BA, 2016).

Communication is either mentioned as a strength or weakness of their enrollment management implementation process across all 12 institutions. A CEnO stresses the importance of communication in the collaborative process, "It's been a pretty collaborative spirit. I think it's promoted largely due to open lines of communication. I can give you one example, we monitor our enrollment numbers and we look at them every other week, we produce enrollment reports that we share broadly across campus" (1B-A, 2016). Another CEnO identifies an institutional criticism regarding lack of communication: It was maybe, the communication piece of it. When I was doing my initial plans earlier it was just what we planned on doing. Here's the numbers that we're hoping to get. And that wasn't always shared with everybody on campus (1B-A, 2016).

A third CEnO draws attention to the impact of communication on the individual academic units: The Chancellor and Provost have been very good to get the messages out. They've held breakfast for faculty, they've done everything they can to explain here's where we went financially, here's where we are financially, here's what we're able to provide students now that we might not have been able to provide before. Here are things we're able to provide you as faculty members that we were not able to provide before. (1R-A, 2016)

In summary, communication is essential when seeking to collaborate with the academic community with enrollment management efforts.

Input & feedback. The third and final element in the establishment of transparency is providing adequate opportunities for input and feedback. Creating opportunities for faculty to provide input and feedback is an important step in building a shared sense of responsibility for enrollment outcomes. A CEnO details their faculty's initial reaction to participating in enrollment management:

At first we were hearing, "Wait a minute, we're doing some work that other people have been hired to do." But when we got them to see that it was actually a part of shared governance and they were having a say in who was sitting in front of them when they

were lecturing and in the classroom, that also bought us some credibility. (2M-A, 2016) Input and feedback of EM initiatives is collected at the institutional level by conducting open forums, participation on institutional committees, or presenting to faculty governing bodies. A dean that is seeking to increase their institution's Hispanic enrollment by 15 percent brought their EM goal to their faculty senate for discussion and feedback:

I think we have really an excellent communication system across administrative ranks with the academic units. At faculty senate we engage in a very effective shared governance policy. I make a suggestion about our Hispanic enrollment, it becomes a point of discussion. (5M-BA, 2016)

Active participation from shared governance reinforces both EM as an institutional priority and shared responsibility with the academic community. Another common method is collecting input and feedback at the departmental level and pushing it upward (5R-A, 2016; 2M-A, 2016; 3R-BA, 2016):

For example, we added civil engineering. The question was: are we going to hurt physics? The folks in physics were saying it's actually going to help us. We may see a little bit of a dip in students who are majoring in physics, but physics are core courses that we're required to teach for civil engineering. We have the capacity, let's do that. (2M-A, 2016)

In this case, feedback from the local level assists in guiding central level enrollment policy.

Providing an opportunity to receive input and feedback is not about reaching consensus or necessarily changing strategy based on an individual response. It is rather an authentic opportunity to add value and avoid unforeseen consequences of the institution's enrollment management efforts. Collecting input and feedback from the academic units is essential in adding value through accurate and meaningful enrollment management initiatives. For example, a dean explains the benefit of academic input and feedback to their EM efforts: The voice that I'm aware of our having as a dean is in working directly with enrollment management to help them understand what we're about, what the school is about, and the kinds of things we're doing, and the kinds of students we're looking for, and what our students go on to do when they graduate. (3R-BA, 2016)

In summary, input and feedback is an extension of the element open communication, which was previously highlighted.

Construct IV: Environmental Influencers

The fourth and final emergent theoretical construct addresses the environments, which influences institutional enrollment management efforts. Those found internally and those adding pressure externally comprises the construct, environmental influencers. The varying combination of environmental influencers found among institutions is unique, making no two single institutions identical. As a CEnO states, "I think sometimes administrators at the vice president level forget that every institution is different and you have to make sure that what you're adopting for your institution fits the culture and the needs of your institution" (2M-A, 2016). In order to account for the variance of environmental influencers at every institution, the degree in which each element within the conditions of credibility and transparency varies.

Internal environmental influencers. Environmental influencers of enrollment management found internally are largely based on institutional culture. Is enrollment management a newly developed concept at the institution? Does faculty see themselves as active participants in recruitment and retention initiatives? One dean explains their college's new expectation for faculty participation in recruitment and retention efforts:

We assigned individual faculty members roles in recruiting. It's not simply a generic suggestion to aid in helping in student recruitment and retention. There were specific

tasks that were identified and assigned to faculty. In fact, we appreciated that because they understood it to be the culture of our place. (5M-BA, 2016)

Many institutions identify a change in culture in recent years surrounding a growing collective ownership of enrollment management initiatives across the institution (5M-A, 2016; 2M-BA, 2016; 3M-A, 2016).

In order for enrollment management to be successful, there needs to be a sense of buy-in for the importance of EM across the organization. A CEnO states, "The reason why we're so successful here is because we have buy-in from both sides. Even when I was in student affairs, academic affairs knew the importance of enrollment management" (5R-A, 2016). Enrollment management is viewed as a responsibility at both the central and local levels of the institution.

A second internal environmental influencer is the institution's funding model. A CEnO recalls a conversation with a faculty member regarding the relationship between enrollment outcomes, furloughs, and pay increases:

We were coming right out of a terrible recession, so we looked to grow. Growth, even though sometimes problematic for faculty members, ensured they were getting raises all those years. They are not being furloughed, and they are receiving raises when most of their peers at other institutions are not. (1R-A, 2016)

When you tie academic funding to recruitment, retention, and graduation numbers, faculty respond (4M-A, 2016).

Institutions where their funding models are based on historical resources struggle in developing a culture of buy-in from faculty. As a CEnO provides details regarding their institution's funding model:

We're in an RCM budget format, revenue center management. Which essentially takes the tuition dollars and assigns them back out to the schools and colleges that teach the courses, retain the students, and graduate the students. When you have that kind of environment set up, that drives much of the buy-in or issue because there's a direct financial correlation. (3R-A, 2016)

If the institution's funding model disperses dollars based on student enrollment, there is a direct financial correlation to enrollment management.

External environmental influencers. External environmental influencers range from accrediting agencies to changes in state and region demographics. Many external environmental influencers affect the institution at the central level. For example, declining state support of higher education paired with stagnant numbers of high school graduates turns six institutions towards enrollment management (5M-BA, 2016; 1M-A, 2016; 3R-A, 2016; 1B-BA, 2016; 2R-A, 2016; 1R-A, 2016). A KAP and dean articulate their demographic challenges:

With declining high school graduates. The majority of those are in two cities on the East side of the state. The pool of the students that we all compete for dwindles so that competition increases. That's a challenge no question. That causes to look at different out-state population growth areas for students. (5M-BA, 2016)

Additionally, it is important that both central and local levels are aware of external environmental influencers such as changing demographics.

One institution highlights their state rank as one of the lowest in the nation for state appropriations to higher education; meaning cost of higher education has gradually shifted to students and has become a larger factor to their families (3R-A, 2016). A second state institution is feeling pressure to equally represent the diverse population of the state among their entering class. A CEnO asks, "How do you represent the population of a state when there's such unequal playing fields afforded to certain segments of the population, or not afforded to" (4M-A, 2016)? And yet a third CEnO cites concerns about the state moving towards performance-based funding models focused on course completion rates as a driving factor:

Many states are moving to performance-based funding for their institutions. You don't get paid necessarily just because a student signed up for a class. It's based on course completion rates and success of the students. Although it hasn't come yet, we can certainly see that in the future, it's likely to. It's in everyone's best interest to do a little better job than we had in the past. (5M-A, 2016)

These examples describe environmental influencers that must be approached at both the central and local levels of the institution.

External environmental influencers are also found specifically at the local level of the institution. For example, a department chair cites new accreditation standards in teacher education directed academic quality and diversity of admitted students into the program:

We're a teacher education program, and we have very specific accreditation requirements. They have to meet admission requirements of 2.75 GPA, and they also have to take an entrance exam called a Praxis exam. Those have to be passed before you can even enter a teacher education program. Those are different requirements and criteria that must be met prior to entrance into the program. This is different than any other program on campus with the exception of nursing. (1B-BF, 2016)

Accrediting agencies and changes in academic disciplines influences also enrollment management.

Environmental influencers are found at every level of the institution, and they need to be taken into account when practicing enrollment management. For example, one provost points out the extreme competition existing within their state:

In our state there are upwards of ninety institutions of higher learning. That's not counting the community colleges. That's just four-year colleges. So we have ninety of our neighbors competing for the very same students, and there are fewer and fewer of those students. That's one of the challenges we have. It is creating a presence in a very crowded market. (1B-BA, 2016)

Another CEnO highlights the enrollment goals set by their Board of Regents, "Through the Board of Regents and our strategic plan we have goals that are set out for 2025. The overall growth totals of the institution are to grow to 64,000 students and we're at 43,000 now" (4R-A, 2016). A third CEnO discusses how their institution needs to expand their view of enrollment management beyond just recruitment and retention; "We're really connecting all the dots in a student's cycle of life on campus. I think that's probably the most limiting or myopic perspective to have, is that enrollment management is simply recruitment or retention" (3M-A, 2016). This comprehensive view of enrollment management pushes beyond traditional boundaries and considers external and internal environmental influencers.

Summary

This study seeks to explore this connection at high-performing enrollment management institutions through the eyes of both chief enrollment officers (CEnO) and key academic partners (KAP). In order to identify high-performing institutions practicing enrollment management, the SEM Health Assessment survey (Black, 2003) is sent to 385 public four-year institutions across the United States. Once high-performing institutions are identified, the researcher attempts to interview two participants from each institution, the CEnO and a KAP.

This study is designed with a constructivist grounded theory approach to data collection and analysis where new theory related to an institution's "shared sense of responsibility" for enrollment outcomes is constructed. The researcher fractures and conducts data analysis through interview transcripts, field notes, and memos. The study's zig zag pattern of data collection and data analysis allows the researcher to engage in theoretical sampling. This sampling allows the researcher to probe the initial framework by adjusting interview questions, which adds depth and saturation to the data.

In the end, four theoretical constructs are constructed from the data: dual-level enrollment management, credibility, transparency, and environmental influencers. Central and local levels compose the dual-levels of EM. The constructs or conditions of credibility and transparency ensure collaboration between the two levels of enrollment management. The condition of credibility is achieved through three elements that are executive supported, was data-informed, and academically positioned. The condition of transparency is achieved also through three elements: defining purposes and goals, maintaining open communication, and providing adequate opportunities for input and feedback. Lastly, external and internal influencers break down the construct of environmental influencers.

CHAPTER V

DISCUSSION

This research study seeks to assist institutions and chief enrollment officers (CEnO) by assessing how a "shared sense of responsibility" for enrollment outcomes is developed at highperforming enrollment management institutions. The researcher finds institutions that have successfully developed a "shared sense of responsibility" for enrollment outcomes with the academic community do so by engaging enrollment management (EM) at two levels of the institution, the central and local. This dual-level approach to EM creates the optimum environment for collaboration to be developed with the academic units. Specifically, the institutions establishing the conditions of credibility and transparency for the two levels to effectively inform and influence each other.

Four theoretical constructs are constructed from the data: dual-level enrollment management (EM), credibility, transparency, and environmental influencers. Central and local levels compose the dual-levels of EM. The constructs or conditions of credibility and transparency ensure interaction between the two levels of enrollment management. The condition of credibility is achieved through three elements: executive supported, data-informed, and academically positioned. The condition of transparency is also achieved through three elements: defined purposes and goals, maintained open communication, and adequate opportunities for input and feedback. Lastly, external and internal influencers break down the fourth construct of environmental influencers.

In this chapter the Dual-Level Enrollment Management (EM) Model is presented in detail with suggestions on how the institution can use the model to audit past and current institutional EM efforts as well as direct future EM process. Assumptions and limitations of the research study are reviewed, and literature supporting and conflicting the findings are identified. Lastly, the researcher identifies recommendations and opportunities for further enrollment management research.

Supporting Literature

The literature directly supports three out of the four theoretical constructs identified in the study. The only construct not directly referenced within the literature is the dual-level enrollment management construct; however, there are examples addressing both levels of the institution cited in the enrollment management planning literature. Additionally, supporting literature is found for each of the sub-themes composing the constructs of credibility, transparency, and environmental influencers with the exception of one element of academic positioned, which is academic relationships and credentials.

Construct I: Dual-Level Enrollment Management

As previously stated, the construct of dual-level enrollment management (EM) is not directly referenced in the enrollment management literature. There are however examples of central and local level actions found within the enrollment management planning literature. At the central level, supporting literature recommends faculty members to view themselves as members of the larger institution over a specific academic area or unit (Gonzales, 2012). At the local level, supporting literature recommends academic and non-academic departments to align their unit plans, goals, and resources to those identified at the institutional or central level (Hundreiser, 2012; Ward, 2005).

Construct II: Credibility

The theoretical construct credibility is supported by literature related to being executive supported, making data-informed decisions, and effective organizational structure. For example, the Education Policy Institute (2007) identifies presidential support as the first step in the enrollment management process and warns institutions against proceeding without support from their senior leadership team. Secondly, Hundrieser (2012) urges each phase of enrollment management planning process to be data-informed and not data-driven. Lastly, Penn (1999) identifies the creation of an enrollment management division as the most responsive approach to organizational structure and encourages a direct link to the provost or president.

Construct III: Transparency

The theoretical construct transparency is also supported by literature related to defined purposes and goals, maintained open communication, and adequate opportunities for input and feedback. For example, Sevier (2000) highlights the need for institutions to set clear goals aligned with their current market position. Secondly, DeBiaso (2012) found that transparent communication is vital, specifically with the academic community, when establishing goals, strategies, and resources. Thirdly, Cherrey and Clark (2010) found there is need for the institution to outline and communicate the proposed enrollment management process across the institution to collect feedback and input. The Educational Policy Institute (2007) recommends that two or three open forums be conducted to help shape the unique enrollment management process at each institution.

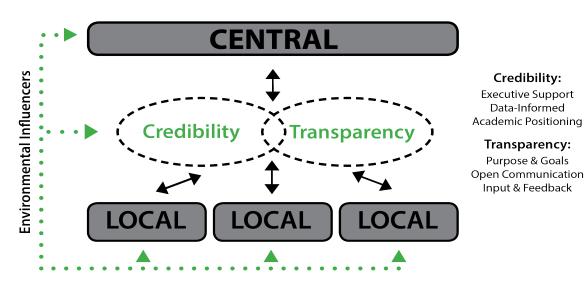
Construct IV: Environmental Influencers

The theoretical construct of environmental influencers is supported by open systems literature. The literature defines open systems as "elements in mutual interaction" (Bertalanffy, 1968, p. 45). In regard to internal influencers, it has been found that the hierarchal and overall health of the system depends on the functioning of the internal sub-units (Kast, Rosenzweig, 1972). These internal units and influencers include: offices, departments, divisions, academic colleges, faculty, staff, and current students. In regard to external influencers, Kast and Rosenzweig (1972) found, an open system to operate within boundaries, in which the external environment influences the system. The external environment influencers include: prospective students, legislatures, federal and state agencies, accrediting bodies, employers, and alumni (Bess & Dee, 2012). Open systems engage and interact with both internal units along with external influencers (Black, 2001).

Dual-Level Enrollment Management Model

Institutions and CEnOs that are able to successfully develop a "shared sense of responsibility" for enrollment outcomes with the academic community, do so by engaging enrollment management (EM) at two-levels of the institution. This dual-level approach to EM draws individual attention to both the central and local levels of the institution. In order for the central and local levels to properly inform and influence each other, the conditions of credibility and transparency must be established. Each of these two conditions is comprised of three elements, which are defined further below. Additionally, environmental influencers that can be found both internally and externally impact priorities at each level of the institution as well as the individual elements impacting the conditions of credibility and transparency. The Dual-Level Enrollment Management Model (Figure 2) identifies the institutional levels, necessary conditions, and environmental influencers.

Dual-Level Enrollment Management Model



A Central & Local Approach

Figure 2. Dual-Level Enrollment Management Model

Establishing Central Level EM

Establishing enrollment management (EM) at the central level focuses on the creation of broad institutional initiatives. These initiatives are often aligned with institutional strategic plans and typically will address areas of sought improvement such as: enrollment, retention, diversity, and academic quality across the institution.

The advantage of establishing central level EM is the ability to approach these institutional initiatives as a single entity. A major challenge with central level EM however is the difficulty to garner meaningful involvement and participation from the academic community. Faculty participation at the central level should include: committees, shared governance, and other methods for faculty to provide feedback and input regarding institutional priorities. Additionally, faculty whom develop a deeper understanding of enrollment management at one institutional level would likely serve as stronger partners and collaborators at the other institutional level.

Establishing Local Level EM

Establishing enrollment management (EM) at the local level transitions initiatives into the academic units comprising the larger institution. These academic units include: colleges, departments, and academic programs. Local level EM also focuses on the same initiatives found at the central level such as: enrollment, retention, diversity, and academic quality. The advantage of establishing local level EM is the increased ability to garner stronger understanding, involvement, and commitment from the academic community. This local level EM advantage is because the activities operate within the passions and expertise of the faculty. A major challenge with local level EM is the complexity and timeliness of orchestrating multiple priorities and initiatives across the various academic units found within the institution.

Interaction Between the Dual-levels of EM

In order for the central and local levels to successfully inform and influence each other, the conditions of credibility and transparency should be established. Each condition is comprised of three elements, and the degree of importance for each element is tied to internal and external environmental influencers. Credibility is earned by rooting enrollment management efforts, which are executive supported, are data-informed, and are academically positioned within the institution. Academic positioning is established through organizational structure, academic relationships, and credentials.

Transparency focuses on creating an environment where enrollment management is clearly visible and understood throughout the organization. Transparency is achieved by implementing an enrollment management process that defines purpose and goals, maintains open communication, and adequate opportunities for input and feedback

Accounting for Environmental Influencers

It is important that environmental influencers impacting both the central and local levels be identified and accounted for within the enrollment management process. These environmental influencers have been found both internally and externally. They impact both central and local levels as well as the elements comprising the conditions of credibility and transparency. In order for the institution to develop an effective enrollment management process, it needs to account for the unique blend of influencers creating pressure on the institution.

For example, the central level may be faced with external pressure to increase enrollment by state entities or decreasing financial state support. At the same time local levels of the institution might also be faced with external pressure from accrediting bodies to be more selective and improve student outcomes. Accounting for these unique pressures encourages and fosters collaboration across the institution towards achieving desired enrollment outcomes. Additionally, accounting for internal influencers assists in determining the importance of each element comprising credibility and transparency. For example, if the institution has a culture of mistrust among faculty towards administration, strategies targeting the elements of transparency become of utmost importance to the enrollment management process.

Making Decisions

The Dual-level Enrollment Management (EM) Model can be used to review and direct institutional enrollment management efforts. One example of using the Dual-level EM Model is to conduct an audit of past and/or present enrollment management efforts. Another example is to use the Dual-level EM Model to influence the EM process created by the strategic enrollment management (SEM) committee. Further details about both of these examples are below.

Conducting an EM Audit

The Dual-level Enrollment Management (EM) Model is ideal for auditing an institution's past and current enrollment management efforts. The model is especially useful for institutions struggling to develop a "shared sense of responsibility" for enrollment outcomes with the academic community. The model assists the institution by identifying areas for further development and improvement by auditing the enrollment management process. The model encourages the institution to examine the actions of their past or current enrollment management processes. The conclusions of an EM audit can be used in the SEP process, which is a visible and essential component of the EM function.

Auditing the dual-levels. When conducting an EM audit using the Dual-Level EM Model, questions should probe both levels of the institution. For example, does the institution take into account both the central and local levels? Has the institution's enrollment management efforts been strictly pushed downward from the central level? Can enrollment management initiatives at both levels of the institution be identified? Did the two levels successfully inform and influence the other level? How can faculty participation and buy-in at each level of the institution be described?

When conducting this enrollment management audit, it is also important to recognize the conditions, credibility and transparency, are in no particular order. The audit is not intended to identify a proper sequence; rather it should highlight areas that need to be addressed. Additionally, the degree of importance surrounding each of the elements is determined by accurately identifying key environmental influencers. If an institution has an internal culture where faculty members do not participate in enrollment management activities, buy-in may be difficult to initially establish. In this case, the elements of executive support, clear purpose and goals, and open communication will be very important in developing a culture that supports faculty acceptance and participation towards enrollment management.

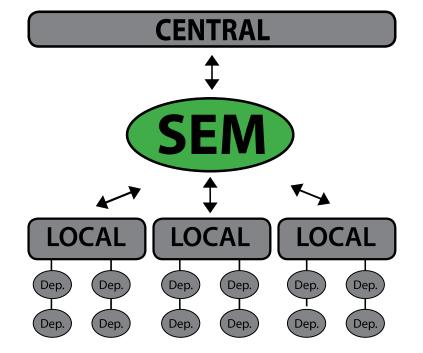
Auditing credibility. When reviewing the condition of credibility, the institution should evaluate the areas of executive support, data-informed decisions, and academic positioning. For example, has the president and senior level administration served as champions for enrollment management? Was every aspect of the enrollment management process informed by data? How was enrollment management academically positioned within the institution? Does the EM division link directly to the institution's president or provost? Does the chief enrollment officer have a terminal degree or strong ties to the faculty?

Auditing transparency. When reviewing the condition of transparency, the institution should evaluate purposes and goals, open communications, and opportunities for input and feedback. For example, does the institution's enrollment management efforts have clearly defined purposes and goals? Have these purposes and goals been communicated openly and consistently across the institution? Have there been adequate opportunities for the academic community to provide input and feedback regarding enrollment management process and initiatives?

Influencing Strategic Enrollment Management (SEM) Committee

The Dual-level Enrollment Management (EM) Model is also ideal for influencing the institution's Strategic Enrollment Management (SEM) committee. The Dual-level EM Model can be used to create and guide the EM process (Figure 3), which is often overseen by a SEM committee. For example, committee selection should ensure participation from key areas encouraging alignment and integration of central and local level goals and initiatives. Additionally, the model can be used to guide specific enrollment management processes. For

example, task groups could be created at each EM level, with recommendations being brought back to the SEM committee for prioritization, selection, and oversight. Below are some additional examples of the Dual-level EM model being used to influence the SEM process at both the central and local levels of the institution.



Dual-level Approach to SEM Committee

Figure 3: Dual-Level approach to SEM Committee.

Institutional/central level. SEM at the institutional or central level will focus on broad institutional initiatives such as data-mining and market analysis. These works will likely lead to the formation of task groups, which research, develop, and present recommendations to the SEM committee. Examples of institutional SEM task groups may include: scholarships, marketing and communication plans, academic advising, transfer-friendliness, or early alert.

College/local level. SEM at the college or local level will focus on auditing, prioritizing, and recommending priorities within each college. A team will likely be developed to assist

colleges and departments in auditing and the development of recommendations regarding their student's progressions. This collaboration at the departmental level will generate goals, strategies, and anticipated resources surrounding the program's recruitment and retention ideas. The results from these departmental level audits will be collected for the dean to prioritize. Selected initiatives from the deans would move upward to the SEM committee for consideration.

The SEM Committee dual-level process.

- 1. Select broad SEM Committee membership
- 2. Develop Institutional EM activities- Data-mining and Market Analysis
 - a. Form task groups based on findings
 - b. Develop and propose recommendations to SEM committee
- 3. Develop college/departmental audit activities
 - a. Design audit worksheets for distribution
 - b. Create EM audit team to assist colleges and departments
 - c. Identify college priorities and push recommendations to SEM committee
- 4. Select SEM priorities from institutional and college level recommendations
 - a. Establish performance and outcome goals
 - b. Develop strategies to meet established goals
 - c. Implement developed strategies- follow-up, measurements, and adjustment

Contradictions in the Literature

The Dual-level Enrollment Management (EM) Model incorporates many areas that have already been researched within the field of enrollment management. The majority of these previous findings do not contradict the Dual-level EM Model. This is primarily due to the absence of a recommended sequence of activities within the enrollment management process. There is however one theme found within the existing literature that contradicts the Dual-level EM Model by undervaluing the relationship between the central and local levels of the institution.

Existing strategic enrollment planning (SEP) literature recommends academic and nonacademic departments to align their unit plans, goals, and resources to those identified by the SEP process (Hundreiser, 2012; Ward, 2005). This approach to SEP emphasizes a top-down approach where initiatives are being pushing down from the central to the local level. The findings from this study highlight the value and importance of local level EM also informing and influencing initiatives at the central level. In summary, the findings from this study identify the dual-level approach to EM creates the optimum environment for a shared sense of enrollment outcomes to be developed with the academic units.

Discussion of the Findings

Primary Research Question

The primary research question in this study is to identify the role of the academic community in institutional enrollment efforts. The findings from this study suggest the academic community plays a critical role at the central and local levels of the institution. At the central level, involvement from the academic community should assist in the development of broad institutional initiatives related to enrollment, retention, diversity, and academic quality across the institution. Specifically, faculty participation at the central level could include: committees, shared governance, or other methods for faculty to provide input and feedback on institutional enrollment priorities.

The distinguishing finding from this study draws attention to the important role of the academic community at the local level of the institution. At the local level, initiatives related to enrollment, retention, diversity, and academic quality are developed within the academic units of

the institution. The advantage of local level EM is the ability to garner stronger understanding, involvement, and commitment from all levels of the academic community. Additionally, developing a culture of enrollment management at the local level also benefits those serving and representing the academic community at the central level.

Secondary Research Questions

The first of two secondary research questions ask how chief enrollment officers (CEnO) engage the academic community to establish a "collaborative partnership" and a "shared sense of responsibility" with faculty. The findings from this study suggest CEnOs need to intentionally engage faculty at both the central and local levels of the institution. Additionally, CEnOs need to establish the conditions of credibility and transparency to ensure successful interaction between the two levels. Each of the six elements comprising the conditions of credibility and transparency should be addressed through evaluation of the institution's unique environmental influencers. These environmental influencers should assist the CEnO in identifying elements of greatest importance in their institution's enrollment management process.

Additionally, the elements comprising the conditions of credibility and transparency support theory found in leadership. For example, Kotter (1990) found leadership to be about seeking adaptive and constructive change rather than order. Kotter's (1990) identified activities for establishing direction, aligning people, and motivating & inspiring connect with the elements of credibility and transparency of the Dual-level EM Model (Figure 4).

Kotter's Leadership ProducesDual-level EM Model:Change & MovementElements of Credibility & Transparency

Establishing Direction	
Create Vision	Defined Purposes & Goals
Clarify Big Picture	Defined Purposes & Goals
Set Strategies	Data-Informed
Aligning People	
Communicate Goals	Open Communication
Seek Commitment	Executive Supported
Built Teams & Coalitions	Academically Positioned
Motivating & Inspiring	
Inspire & Energize	Executive Supported
Empower Subordinates	Opportunities for Input & Feedback
Satisfy Unmet Needs	Data-Informed

Figure 4: Kotter's Leadership Change & Movement Aligned With Dual-level EM Model.

The second and final secondary question of the study explored how institutions have a unified approach towards students moving to, through, and away from the institution. This process also starts by separating the central and local levels of the institution. Each level of the organization should inform, influence, and direct the institution's enrollment management efforts. In other words, the enrollment efforts at both the central and local levels should effectively interact and work together towards the same desired institutional outcomes. In order to ensure the successful interaction between the two levels, the conditions of credibility and transparency need to be established. Although the degree of importance for each element comprising the two conditions varies by institution, it is important that enrollment management efforts are executively supported, data-informed, and academically positioned within the institution. Additionally, enrollment management should operate in an environment with defined purposes and goals, maintained open communications, and adequate opportunities for input and feedback.

Assumptions of the Study

At the beginning of this study, three assumptions were made by the researcher. The first assumption is that institutions are experiencing increased dependency on tuition revenue. State appropriations for higher education institutions decreased on average \$2,086 per student from 2002 to 2014 (Education Advisory Board, 2015b). This public disinvestment in higher education has forced many institutions to become increasingly reliant on tuition revenue to establish financial stability for the institution. This assumption identified by the study was found to be true with 11 of 12 institutions citing financial stability as a primary driver to their institution's enrollment management process.

The second assumption made by the researcher is that institutions were feeling political pressure to improve student success outcomes. This public pressure has been increasing due to the rising financial burden of loan debt on students. Additionally, this public pressure has caused many institutions experiencing shifts in their funding models, which often transitions historical-based models to those based on performance (Education Advisory Board, 2015a). This assumption is also found to be accurate with all 12 institutions in the study referencing student success outcomes as a primary driver to their institution's enrollment management process.

The third and final assumption made by the researcher is that the chief enrollment officer (CEnO) is playing an influential role in the institution's enrollment management efforts. Institutions must create institutional partnerships in order to influence enrollment outcomes (Hossler & Kalsbeek, 2013). This study seeks to examine those partnerships with the assistance of the CEnO. The CEnOs across all 12 institutions identified as playing an influential role in their institution's enrollment management efforts. The SEM Health Assessment survey is administered to CEnOs in order to identify high-performing institutions. It is likely any CEnO not playing an influential role would have scored poorly on the survey, which would have excluded their institution from the study.

Limitations of the Study

There are four major limitations identified at the onset of this research study. The first limitation identified in the study is the willingness of the chief enrollment officer (CEnO) to participate at both the survey and interview phases of the study. Out of the 385 four-year public member institutions of NACAC, 91 CEnOs complete the electronic SEM Health Assessment survey. Interviews are then completed for 12 CEnOs with five CEnOs failing to respond or declining to participate.

The second limitation identified in the study is the accuracy of the chief enrollment officer's (CEnO) responses in accurately representing the holistic institutional enrollment management efforts. This limitation primarily exists at the first step of the study however key academic partners (KAP) are then invited to participate at the interview step. Out of the 12 institutions that participate in step two of the study, eight key academic partners participate and offer academic viewpoints of their institution's enrollment management efforts. The second institutional interview for KAPs is an attempt by the researcher to reduce this limitation.

The third limitation in study relates to the transparency of information provided by the chief enrollment officer (CEnO) and key academic partner (KAP). All survey results and interview transcripts are collected and analyzed without institutional identifiers. Each participant is notified about the anonymous and confidential nature of the research study. The researcher does not receive any communication or feedback from participants concerning confidentiality or proprietary information.

The fourth and final limitation identified in the study is the differing roles and structures impacting chief enrollment officers (CEnO). Simply stated, no two CEnO positions or organizations are identical. The researcher finds this limitation also to be accurate, as both organizational structures and CEnO's academic relationships and credentials are identified as a key element in establishing the condition of credibility at the institution. Specifically, both organizational structure and academic relationships/credentials are used to academically position the enrollment management process at the institution.

Recommendations

It is recommended that academic leaders utilize the findings of this study to inform and influence their institutional enrollment management process. The Dual-level Enrollment Management (EM) Model can be used for auditing the institution's past and current EM efforts as well as influencing future process, such as SEP. The Dual-level EM Model can be especially useful for institutions struggling to develop a "shared sense of responsibility" for enrollment outcomes with the academic community. The findings of this study led the researcher to make four recommendations: EM is both central and local, environmental influencers need to be taken into account, credibility needs to be established with the academic community, and transparency is vital for collaboration across the institution.

Recommendation 1: EM is Both Central and Local

The primary finding of this study relate to the importance and value with engaging the academic community at both the central and local levels of the institution. This dual-level approach to EM creates an optimum environment for achieving a "shared sense of responsibility" for enrollment outcomes with the academic units. Special attention and considerations at both EM levels should exist within the enrollment management efforts. Each level adds a distinct

value and should inform and influence the overarching strategic direction of the institution's EM process.

A top-down approach to EM risks isolating the EM process from the academic units. Additionally, a strictly downward approach discourages a "shared sense of responsibility" for enrollment outcomes across the institution. Each of the two levels adds value to the EM process. For example, the central level focuses on broad institutional initiatives such as data-mining and market analysis. The local level focuses on college or department initiatives such identifying and recruitment and retention priorities. Environmental influencers that may impact each level differently will be discussed further below.

Recommendation 2: Take Into Account Environmental Influencers

Environmental influencers should be taken into account when developing and implementing enrollment management initiatives. Environmental influencers provide pressure internally and externally at both the central and local levels. By accounting for the various environmental influencers in play, the institution's enrollment management efforts will be better positioned to achieve desired outcomes.

For example, an institution may be facing external pressure at the central level to increase enrollment to establish financial stability. At the same time an academic department at the local level could be receiving external pressure from accrediting agencies to increase their admissions criteria to increase student success outcomes. This same institution may also have an internal culture of mistrust between administration and faculty. All of these influencers should be taken into account in order to develop the institution's ideal enrollment management process.

Recommendation 3: Establish Credibility With The Academic Community

It is important that a sense of credibility be established with the academic community surrounding enrollment management (EM) at the institution. Credibility is established at the institution by being executively supported, data-informed, and academically positioned. The institution can academically position the EM process through organizational structure or CEnO relationships and credentials.

Credibility is all about positioning the EM process as a priority of the institution. Executive support should include both visible EM champions as well as providing adequate financial resources. It is recommended that financial resources be tied to enrollment initiatives and desired outcomes. The use of data throughout EM process also adds credibility and is key when developing support from the academic community. Lastly, the EM process needs to be positioned to effectively collaborate with the academic units. Organizational structure is a common approach, where the EM function is positioned directly under the president or provost. The EM process can also be academically positioned by having a chief enrollment officer (CEnO) that has strong faculty relationships or academic credentials. For example, a CEnO that previously served as a faculty member or who has completed a doctoral degree is more likely to receive support from faculty members.

Recommendation 4: Transparency is Vital for Collaboration

Transparency is vital for collaborating with the academic community. Faculty members require a translucent approach to enrollment management. Faculty members want to easily understand and have a voice in the institution's enrollment management efforts. A transparent enrollment management process should clearly identify purpose and goals, maintain open communication, and provide adequate opportunities for input and feedback. Additionally,

transparency is important because it encourages information to flow freely between central and local levels.

Everyone at the institution should understand what is driving the enrollment management process. For example, the institution wants to improve its retention and graduation rates to these numbers for these reasons. All aspects of the EM process need to be communicated at every stage and level of the institution, or as one KAP and Provost simply stated, "communicate, communicate (R16-B, 2016)." Lastly, it is important that opportunities be created for faculty to provide input and feedback such as open forums, participation on institutional committees, and/or presentations to faculty governing bodies. By developing active participation with governing bodies, such as shared governance, enrollment outcomes are reinforced as an institutional priority and shared responsibility with the academic community.

Opportunities for Future Research

The findings from this study may provide direction for future research. The following research opportunities are recognized:

- 1. This study was conducted on four-year public institutions of NACAC. Further research should be conducted on two-year public and private institutions.
- The conditions and elements of credibility and transparency should be further investigated to identify recommended practices, participants, and particular sequences.
- The Dual-level EM Model could be used to audit institutions with different enrollment priorities to compare and contrast participation from faculty. Studies could also be conducted based on Carnegie Classification.

- 4. This study identifies conditions and elements surrounding a dual-level approach to enrollment management. It is recommended research be conducted that examines the model through the lens of strategic enrollment planning.
- 5. Further research should also be completed to examine the impact of local level enrollment management on faculty perceptions surrounding a "shared sense of responsibility" for enrollment outcomes.
- This study recommends financial resources be tied to EM initiatives and outcomes.
 Further research should be conducted on academic enrollment outcomes in relation to faculty promotion and tenure.

Summary

In summary, institutions that are successfully drawing the academic community into their enrollment management efforts do so by engaging enrollment management (EM) at two-levels of the institution, the central and local. This dual-level approach to EM creates the optimum environment for developing a "shared sense of responsibility" for enrollment outcomes with the academic units. In order for each level to effectively work together, two institutional conditions must be established: credibility and transparency. Credibility is composed of executive support, data-informed decisions, and academic positioning. Transparency is composed of clear purpose and goals, open communication, and opportunities for input and feedback. Each element should be addressed; however, the degree of importance of each element is tied to internal and external environmental influencers.

The Dual-level Enrollment Management Model is great for auditing and reviewing institution's current EM efforts. The model is especially useful for institutions struggling to develop a "shared sense of responsibility" for enrollment outcomes with the academic community, by identifying areas for further development and improvement. Additionally, the findings have led the researcher to make four recommendations: EM is both central and local, environmental influencers need to be taken into account, credibility needs to be established with the academic community, and transparency is vital for collaboration.

Lastly, the assumptions and limitations identified for the study were affirmed. The Duallevel Enrollment Management Model is supported by the literature with an interpreted contradiction regarding the role of local level EM within SEP. There are numerous opportunities for further research with five areas being identified including: studying private and 2-year institutions, exploring the conditions credibility and transparency, using the Dual-level EM Model to audit institutions, examining SEP in relation to the Dual-level EM Model, and further investigating into the impact of local level EM on faculty perceptions. APPENDICES

Appendix A NACAC Regional Affiliate Associations (R1-R22)

1. Dakota	13. Ohio
2. Great Plains	14. Pacific Northwest
3. Illinois	15. Pennsylvania
4. Indiana	16. Potomac & Chesapeake
5. Iowa	17. Rocky Mountain
6. Kentucky	18. Southern
7. Michigan	19. Texas
8. Minnesota	20. Western
9. Missouri	21. Wisconsin
10. New England	22. Hawaii
11. New Jersey	
12. New York	

Appendix B SEM Health Assessment Survey

The following self-assessment instrument is intended to be a tool for reflecting on your institution's relative evolutionary stage in strategic enrollment management (SEM).

Please answer the questions in this survey using a scale from 1 to 5 by circling the appropriate response: 1= poor or nonexistent

2= functional but needs significant improvement

3= average in relation to national practices in Strategic Enrollment Management (SEM) 4= above average and meets current institutional needs

5= a national model or best practice in the profession

n/a = not applicable - unable to answer

The following questions assess strategic enrollment management (SEM) as a comprehensive system at your university. At your university is there:

1. A commonly shared vision or strategic direction for SEM?

1 2 3 4 5 n/a

2. A core set of values that everyone involved with SEM embraces?

1 2 3 4 5 n/a

3. A core set of goals that are designed to move the institution towards the realization of a SEM vision?

1 2 3 4 5 n/a

- 4. A written implementation plan for all facets of the SEM enterprise?
 - 1 2 3 4 5 n/a
- 5. Accountability measures and sufficient quality control to ensure successful implementation of SEM?

1 2 3 4 5 n/a

6. Effectiveness measures or key performance indicators that are used to gauge the success of SEM initiatives?

1 2 3 4 5 n/a

7. A systematic method of continuously improving SEM activities?

1 2 3 4 5 n/a

1 = poor or nonexistent, 2 = functional but needs significant improvement, 3 = average in relation to national practices in SEM, 4 = above average and meets current institutional needs, 5 = a national model or best practice in the profession, n/a = not applicable - unable to answer

At your university is there:

8. A formal structure that facilitates effective communication, planning, decision-making, workflow, student services, use of technology, and utilization of resources?

1 2 3 4 5 n/a

9. A student information (computer) system that provides quality service to student, timely information to those who are serving students, a streamlined workflow for users, and strategic information to decision-makers?

1 2 3 4 5 n/a

- 10. Support of SEM efforts by key decision-makers on campus?
 - 1 2 3 4 5 n/a
- 11. Adequate resources for the implementation of SEM initiatives at a high level of quality?

1 2 3 4 5 n/a

The following questions assess marketing at your university. (scale at top of page)

12. Decisions to add, revamp, or eliminate academic programs are driven by market demand along with other factors such as costs and existing faculty expertise.

1 2 3 4 5 n/a

13. The institution has the capacity as well as the ability to meet student demand for courses (e.g., number of sections, physical space, adequate number of faculty, faculty with related expertise, faculty available to teach, course is in keeping with the academic mission and accreditation standards).

1 2 3 4 5 n/a

14. Courses are offered at times and places that are convenient to students.

1 2 3 4 5 n/a

15. There is a consistent and distinctive marketing message and look.

1 2 3 4 5 n/a

 $\frac{1 = poor or nonexistent, 2 = functional but needs significant improvement, 3 = average in relation to}{national practices in SEM, 4 = above average and meets current institutional needs, 5 = a national model or best practice in the profession, n/a = not applicable – unable to answer$

- 16. There is frequent and systematic communication of marketing messages to prospective students.
 - 1 2 3 4 5 n/a

The following questions assess recruitment at your university. (scale at top of page)

17. The search for potential prospects is based on historical data, identifying those who are most likely to enroll.

1 2 3 4 5 n/a

18. Information to prospective students shifts from general to specific as their interest level increases.

1 2 3 4 5 n/a

19. Contacts with prospective students consist of a targeted message, communicated at the right time in the college decision-making process, through an effective medium, from the most influential person.

1 2 3 4 5 n/a

20. Relationships are built between prospective students and others at the university.

1 2 3 4 5 n/a

21. Contacts, like those in the recruitment process, are designed to bond the student to the institution.

1 2 3 4 5 n/a

22. Professional and volunteer recruiters are trained to communicate institutional marketing messages, answer frequently asked questions, and respond to objections.

1 2 3 4 5 n/a

23. The campus visit experience is choreographed to ensure quality.

1 2 3 4 5 n/a

24. The campus tour route conveys the best possible image of the institution.

1 2 3 4 5 n/a

 $\frac{1 = poor \ or \ nonexistent, \ 2 = functional \ but \ needs \ significant \ improvement, \ 3 = average \ in \ relation \ to}{national \ practices \ in \ SEM, \ 4 = above \ average \ and \ meets \ current \ institutional \ needs, \ 5 = a \ national \ model}{or \ best \ practice \ in \ the \ profession, \ n/a = not \ applicable - unable \ to \ answer}}$

The following questions assess **retention** at your university. (scale at top of page)

25. The orientation process prepares students for the transition into college and helps them to make friends.

1 2 3 4 5 n/a

26. Proactive efforts are made to integrate students socially and academically.

1 2 3 4 5 n/a

27. Early intervention support services are available to assist students experiencing academic or social difficulties.

1 2 3 4 5 n/a

- 28. The university provides accurate advising along with meaningful mentoring.
 - 1 2 3 4 5 n/a
- 29. University policies and procedures are student-centered.

1 2 3 4 5 n/a

The following questions assess student service at your university. (scale at top of page)

- 30. The institution has service standards that permeate the culture.
 - 1 2 3 4 5 n/a
- 31. Exceptional student service is recognized and rewarded.
 - 1 2 3 4 5 n/a
- 32. Employees are required to treat all students with dignity and respect.
 - 1 2 3 4 5 n/a
- 33. Employees consider students to be the purpose of their work.
 - 1 2 3 4 5 n/a

Appendix C Informed Consent Letter for Survey

Greetings,

I am a doctoral student at the University of North Dakota conducting a national research study on the relationship of the academic community in enrollment management efforts. As the chief enrollment officer at a public four-year member institution of NACAC, I am seeking your participation in a short survey. If you are not the chief enrollment officer for your institution, please reply with the appropriate name, title, and e-mail.

The SEM Health Assessment survey will take approximately 5-15 minutes to complete. All participant information along with survey responses will remain confidential. Top-performing institutions will be invited to participate further in the study.

If you have any questions please let me know.

Sincerely,

Jason Trainer jason.trainer@und.edu 701-777-3791

Appendix D Informed Consent Letter for Interview

Greetings,

I am a doctoral student at the University of North Dakota conducting a research study on the relationship of the academic community in enrollment management efforts. Your institution has been identified as one of the highest performing enrollment management institutions in the U.S. You specifically, have been identified as a key individual in your institution's enrollment management efforts.

I am requesting your participation in a single interview regarding enrollment management at your institution. The interview will last approximately 30 minutes via telephone or Skype. Attached is the Consent to Participate document, which further details the study. After reviewing, if you are willing to participate in this study please respond to this e-mail.

If you have any questions please let me know.

Sincerely,

Jason Trainer jason.trainer@und.edu 701-777-3791

Appendix E Initial Interview Questions

- 1. Describe why enrollment management was implemented at your institution?
 - a. What were the goals or reasons for EM implementation?
 - b. Where does EM report in the organizational structure?
- 2. Has implementation of enrollment management been a collaborative process? If so, who have been key partners in your institution's success?
 - a. Describe the involvement of academic affairs in the EM process.
 - b. Describe any steps or actions you or your department has taken to encourage collaboration throughout EM process.
- 3. What have been the greatest successes of enrollment management at your institution?
- 4. What have been the greatest challenges or criticisms of enrollment management at your institution?

Appendix F Revised Interview Questions

- 1. Describe the function of enrollment management at your institution?
 - a. What does enrollment management look like at the institutional level?
 - b. What does enrollment management look like at the divisional or departmental level?
 - c. Could you provide examples of enrollment management activities at each level?
- 2. How would you describe the transparency of enrollment management at your institution?
 - a. To what extent was input and feedback collected in your enrollment management process?
- 3. How would you describe the credibility of enrollment management at your institution?
- 4. What would be your advice to someone wanting to replicate similar enrollment management success at his or her institution?

Appendix G Code Book

Initial Codes

A person who understands their programs is huge a terminal degree for CENO builds credibility AA approached EM about accreditation and diversity needs ability to quickly get decision to student improves yield Academic advising successful because of relationship with students Academic background helped CENO Academic program more competitive then institution requirements academic success center under CENO academics recruits with admissions Access effectiveness of EM efforts accreditation requirements create EM needs accreditation requires program admission data to be reported accreditation requires students meet academic criteria accreditation standards shape incoming class Admissions has one contact for departments admissions orchestrates recruitment of high-ability with AA Admitting students quickly has been a challenge Adopted data driven approach to EM Advisors in EM division and academic schools African American students graduation rate above white students All academic divisions involved in EM process attaching yourself to the academic mission really strongly attract students who will succeed being more data driven was important Board of Regents set enrollment growth goal both recruitment and retention key to EM bump in honor students didn't grow overall enrollment Campus unaware of FA leveraging on campus CENO and AA piloted direct entry program CENO at institution for 15 years CENO background influences structure CENO charged with increasing new student enrollment CENO communicates competitive landscape and demographics CENO data right at her fingertips CENO developing trust with faculty creates credibility CENO embraces technology and speaks nationally CENO enlists many partners across campus

CENO enlists many partners across campus (2)

CENO experience with data analytics

CENO has doctorate and longevity at institution

CENO has terminal degree and teaching background

CENO has worked with AA through graduate programs

CENO helped faculty understand needs of incoming class

CENO holds a Dean and VP title

CENO in field 21 years

CENO includes admissions, FA, registrar, academic advising

CENO informs and work through deans

CENO is a great politician

CENO is an AVP in SA

CENO is transparent

CENO job to facilitate collaboration

CENO leads SEM with help of partners

CENO meet regularly with Deans, Provost, and cabinet

CENO meets with Deans

CENO meets with Deans and Ass. Deans

CENO meets with President and Provost

CENO new position, new EM structure centralized offices

CENO oversees both recruitment and retention

CENO political ties across campus

CENO position also included tenure faculty position

CENO pressure graduate programs for missing goals

CENO previously grew Honors College

CENO reached out to faculty

CENO received more respect after doctorate

CENO reports to the president.

CENO reports to VPSA

CENO serves on President's council

CENO should be highly connected with your peers

CENO sits on strategic planning and budget committees

CENO strength strategically developing EM models

CENO updates at monthly provost meeting

CENO was previously a professor, chair, and dean

CENO was supportive of increased program faculty

CENO well-known, trustworthy, hard worker, and high standards

CENO works closely with AA and SA

CENO works with AA for direct entry

CENO's academic background helps position arguments and data

chancellor has a diverse group advising him

Chancellor reached out to every department

people have a right to know and understand the plan and goals chancellor tried to keep everybody informed on the direction and reasoning chancellor wants enrollment growth Collaborating building goals with Board of Regents Collaboration begins with Board of Regents Goals collaborative process between EM and AA collaborative with open communication collaborative with open communication (2) College accepted more than program capacity College entrance standards not a fit for program College worth with CENO to assure available sections communicate consistently with faculty Communicate efficiently with faculty Communicate, communicate, communicate. communicating and articulating with faculty about their program needs Communicating and understanding faculty is vital Communicating today's students are astute job seekers communicating what is EM and why buy-in and campus-wide involvement is important communicating what is EM and why buy-in and campus-wide involvement is important (2) communication and providing access has been a change communication for campus to understand big picture communication important when growing connecting AA, marketing, and recruitment systematically connecting AA, marketing, and recruitment systematically (2) Connecting faculty through EM means more success cooperation between EM and department counter athletic image with academic message create beautiful environment for campus visits created an environment of buy-in created an environment of buy-in (2) created environment where we can be successful created environment where we can be successful (2) current student information transitioned to welcome week Data and yield rates analyzed Data drives decision making data informs EM actions data informs EM actions (2) data provided to academic units data-mining identifies impeder classes Declining funding forced new tuition model declining HS graduates Demographic has influenced faculty and deans to get on board with EM

Department couldn't take all admitted students departments may have higher expectations for admits departments rely on EM to report data and train different admissions goals from institutional to colleges Dig into programs to understand the student body Direct entry not favorable for institutional enrollment goals Direct entry pilot has been a success Direct entry targeted top tier students Directors work very transparently and collaboratively Distance students is fasting growing population Diversity and retention has grown diversity requirements is part of national accreditation Doctorate instantly made a difference for CENO Early alert and intervention improved retention Early alert seminar for new students EM assisted the department in shaping admitted class EM began meeting with registrar and FA EM data were provided to accreditation agencies EM division also includes online EM division collaborates with AA and SA EM division creates systematic outreaches EM Division includes 23 units EM division very young EM driven by budget and data analytics EM driven by campus understanding of demographics EM efforts increased graduation rates and new revenues EM feedback we are moving to fast EM focused on due to declining demographics EM gets input across campus but not open presentations EM goal quality, EM goal diversity, EM student success EM has done a great job with diversity goals EM has expanded presence EM has increases in quantity and quality EM in Nursing because influx of students EM increasing market share EM involved in curriculum development EM is not just recruiting EM priorities communicated to cabinet EM recruiters meeting with department every year is important EM relies on expertise from the program faculty EM structure includes recruiting, retention, and graduation offices EM structured in AA signals importance

EM under SA EM work with AA to identify and recruit scholars EM work with department to set transfer GPA standards Engage with faculty quickly they are allies engineer faculty work with honor students enrollment goals transparent in public document Enrollment has grown. Enrollment on impact on funding is transparent establish roles and collaborate with faculty everybody is responsibility for matriculation Everyone needs to help and be transparent executive leadership recognized need for CENO Expand diversity of FY FA offerings finely target students faculty believe retention efforts dumb down curriculum faculty directly interacting with students is key Faculty don't like transfers but need them Faculty embrace EM efforts Faculty embraced additional students Faculty engaged on developing classes and student success faculty feel recruiters are well trained faculty feel too many students faculty interview honors students for admission faculty involved in co-curricular student orgs faculty involved in EM at the program level faculty only have time to visit students on campus Faculty positive of EM efforts faculty provide constant input to Chancellor and Provost faculty responsible for advising and academic progress faculty took high-ability recruits into their labs faculty trained for advising semester Faculty view EM as a business not educational approach faculty want a voice and to be informed faculty want to interact with high-ability recruits Faculty would like a smaller class financial pressure to grow enrollment first CENO created 4 years ago focus efforts convert students with a 50-60% chance of converting focus on advising and student success programming focus on shape and makeup of class focused on 3 programs with retention issues Focused on classes which affected high amount of students

focused recruitment of certain demands follow-through and clear communication Funnel by major shared with Chairs Funnel stage broken down into convert rates getting the faculty and dean to call students getting the faculty and dean to call students (2) Goal to minimize extra classes and maximize course load graduation goal of 4 years High attrition rates due to low capacity Higher admission criteria set for program Holistic approach to EM holistic approach to enrollment management. honors relies on admissions honors very much on board with recruiting Idea to grow was set important to remember communication in-state competition is crowded increase freshman class Increase of FY credits towards degree increase of non-tenure track faculty Increase quality of incoming class Increase quality of students supported by faculty Increase retention by 5% increasingly tuition dependent Institution EM not concerned about student's major Institution good at bringing in students holistically not by major institutional need changing so does EM model Investing in facilities attracts quality faculty Involve as many people as possible jobs weren't viewed in context of larger goals Know and share your data large gift supports targeting high-ability larger department size has influence on EM leadership highlights how enrollment impacts faculty logistical problems with office space Long standing faculty may be difficult to change looed at data across US and internationally look at retention rates by major not institutionally lots of collaboration to determine number low likelihood students sent scaled down pieces Make better decisions using data manage course scheduling

marketing materials focused on academic engagement, study abroad, research. Meeting goals and expectations is biggest challenge for CENO Mini EM plan for each particular school modernizing admissions to use data More admitted students than program capacity national requirements influences institutional EM New CENO position and structure due to enrollment declines new CENO position provided centralized structure new CENO position with executive support new VP wants more feedback from faculty and staff Offices were moved over if coordination efforts failed offices weren't talking to each other Older faculty may resist enrollment changes on-going collaborative process with academic side open communication and transparent Open houses have shift from tables to activities opportunity to research used in recruitment Orientation transitioned to EM Orientation transitioned to last yield event Orientation used to be information heavy Outside vendor develops predictive model Partnered with departments to meet recruitment and accreditation goals Placement under CENO People are responding. People are moving quickly. Poor FA customer service existed priorly position reported to the provost. predictive model identifies at risk students President and consultants led to EM structure President communicates with Provost about undergrad and grad admissions President initiated CENO position and structure President initiated CENO position and structure (2) President, Provost, and VP supported EM implementation President, Provost, and VP supported EM implementation (2) Presidents Office down is supportive of EM Previous EM wasn't systematic or comprehensive Previous EM wasn't systematic or comprehensive (2) proactively meeting with chair to manage enrollment and open sections Program changes vetted of potential admission impacts promotes research, study abroad, faculty promoted national scholarships winners prospective student scores integrated into CRM prospective students scored throughout funnel

Provost championed EM efforts to Deans Provost lead EM charge Provost understand academic units over SA Provosts meets with Deans to encourage recruitment programs Quantitative metrics used collaboratively with internal and external constituents quick enrollment growth to faculty may not feel like management to reach out to graduate faculty recruiting has changed based on needs recruiting not in job description or professional requirements Recruitment efforts were not strategic or personal report department enrollment goals to outside agencies Resources provided support EM goals Retention hurt by no direct entry Review of departmental policies and offerings not student progressional friendly Scholarships and endowments assisted in recruiting quality SEM committee focuses on matriculation and academic success SEM goal is to communicate better SEM uses a set format for plans SEP has enrollment goals, success indicators, and responsible parties SEP mimics university strategic plan SEPs for divisions or departments set specific enrollment goals shared office location not under same umbrella show faculty how EM helps them small institution not approached at program level stagnant high school enrollment growth strong AA representation on SEM committee Strong academic representation on SEM committee struggling to get buy-in from minority struggling to get buy-in from minority (2) student come for academic opportunities not social student success center work on retention students and families don't know about us Students pay for every credit consumed students scored and segmented by likelihood to enroll Students taking more credits than needed successful EM is built through key partnerships Successful in getting faculty participation Support from President and Provost for faculty buy-in Technology has increased competition the CENO having a strong statistical background the Provost understands our situation better than VPSA

There has to be administrative support tie athletic and academic messages track retention rates across degrees Transfer student challenges transition to controlling enrollment numbers TRIO success replicated for larger campus body try to minimize student debt and expenses Undergraduate admissions has increased despite a declining demographic. Undergraduate work with course scheduling Understand why students visit your campus units meet with EM and specific plans are created units should collaborate and challenge each other university couldn't increase the numbers VP for EM new position; CENO is associate provost VPSA looking at numbers to survive VPSA not recognizing program admission requests we are all here to recruit and for student success We changed all of our communications plans. Make better decisions with data team We're now in this restructuring phase when CENO reports data everyone writes it down worked with groups to determine online offerings working collaboratively for early alert systems Working with Deans to identify high-performing faculty You need champions to be successful

Focused Codes

Accrediation requirements CENO's experiences and background CENO's practices and activities Collaboration with EM Communicating data Communication the purpose of EM Conducting EM training and outreach Connecting EM with academic affairs Create ideal enviroment for EM Creating new EM structures Data-informed decision making Developing faculty buy in EM challenges or failures EM exists at the local level EM has goals and priorities EM includes retention and student success EM includes strategic marketing EM is transparent EM successes and achievements EM translates to practices and activities EM weaknesses or deficiencies Executive support for EM External enviroment influencers Faculty concerns or challenges faculty participations in central EM Identify faculty goals or priorities Involve faculty at the local level Maintaining open communication with academic affairs provide resources for EM reasons for implementing EM Understand faculty perceptions

Theoretical Codes

Environmental Influencers		
	External	
	Internal	
Central-Level EM		
	Activities and Practices Outcomes and Obstacles	
Credibility		
-	Executive Support	
	Data-Informed	
	Academic Positioning	
		Organizational Structure Relationships and Partnerships
Transparency		1
	Purpose and Goals Open Communication Input and Feedback	
Local-Level EM		
	Activities and Practices Outcomes and Obstacles	

REFERENCES

- Academic Senate for California Community Colleges, S. (1999). The role of academic senates in enrollment management. Retrieved from http://www.asccc.org/sites/default/files/ publications/Enrollment_0.pdf
- Bauer, R. P., Dougherty, K. M., Goodno, A. D., Hatch, S. C., Nailos, J. N., & Vakilian, C.
 (2013). Examining the Representation of Mission Statements within Admissions
 Marketing Materials: An Indiana University- Bloomington Study. *The Journal of the Indiana University Student Personnel Association, 2013*, 15-34.

Bertalanffy, V. L. (1968). General systems theory. New York: Braziller.

- Bess J. D., & Dee, J. R. (2012). Understanding college and university organization: Theories for *effective policy and practice*. Sterling, VA: Stylus Publishing Company, LLC.
- Black, J. (2001). *Strategic enrollment management: Revolution*. Washington, DC: American Association of Collegiate Registrars and Admissions Officers
- Black, J. (2003). The enrollment management framework. *Digital Dissertations*, *64*(11), 3113329.
- Bontrager, B., Ingersoll, D., & Ingersoll, R. (2012). Strategic enrollment management: Transforming higher education. Washington, DC: American Association of Collegiate Registrars and Admissions Officers
- Birks, M., & Mills, J. (2011). Grounded theory: A practical guide. Thousand Oaks, CA: SAGE Publications Ltd.

- Britner, P. A. (2012). Bringing public engagement into an academic plan and its assessment metrics. *Journal of Higher Education and Engagement, 16*(4), 61-77.
- Bucher, K. H. (2010). Critical Components of Community College Enrollment Management Planning. *ProQuest LLC*.
- Carroll, J. (1988). Freshman Retention and Attrition Factors at a Predominantly Black Urban Community College. *Journal Of College Student Development, 29*(1), 52-60.
- Charmaz, K. (1991). Turning points and fictional identitites. In D. Maines (Ed.), Social organization and social process: Essays in honor of Anselm Strauss (pp. 71-86).
 NewYork, NY: Aldine Publishing Company.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis.* Thousand Oaks, CA: SAGE Publications Ltd.
- Cherrey, C., & Clark, E. C. (2010). Strategic Planning: Renewal and Redesign during Turbulent Times. *New Directions for Student Services*, *132*, 75-85.
- Coomes, M. D. (2000). The Historical Roots of Enrollment Management. *New Directions for Student Services, 89*, 5-18.
- Cope, R. G. (1981). *Environmental assessments for strategic planning*. In N. L. Poulton (Ed.), Evaluation of management and planning systems (pp. 5–15). San Francisco, CA: Jossey-Bass.
- Corbin, J. M., & Strauss, A. L. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Los Angeles, CA: SAGE Publications Ltd.

Creswell, J. W. (2012). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Thousand Oaks, CA: SAGE Publications Ltd. *Students and debt* (2015). Retrieved from https://www.debt.org/students

- DeBiaso, N. (2012). Enrollment management in academic units. (Order No. 3505875, Arizona State University). ProQuest Dissertations and Theses, 166. Retrieved from http://ezproxy.library.und.edu/login?url=http://search.proquest.com/docview/1013843784 ?accountid=2826
- DesJardins, S. L. (2002). An Analytic Strategy to Assist Institutional Recruitment and Marketing Efforts. *Research in Higher Education*, *43*(5), 531-553.
- Dixon, R. (1995, Fall). What is enrollment management? *New Directions for Student Services*, *71*, 5-10.
- Dolence, M. G. (1993). Strategic enrollment management: A primer for campus administrators.Washington, D.C.: American Association of Collegiate Registrars and AdmissionsOfficers.
- Education Advisory Board (2015a). Leveraging the EM core for success: Promoting persistence across the student lifecycle (EAB Report 30515C). Washington D.C.: Godow, D., Nguyen, T., Jin, N., & Talbot, P.
- Education Advisory Board (2015b). The EM state-of-the-union: Identifying the trends shaping enrollment management's competitive landscape (EAP Report 30515A). Washington D.C.: Dwyer, C., Bloom, A., Nguyen, T., Talbot, P., & Attis, D.
- Education Advisory Board (2015). *The evolving EM organization: The expansion of EM roles and responsibilities* (EAB Report 30515D). Washington D.C.: Talbot, P., Perez, G., Godow, D., & Jin, N.

- Educational Policy Institute. (2007). *A practical guide to strategic enrollment management planning*. Virginia Beach, VA: Wilkinson, R. B., Taylor, J. S., Peterson, A., & Machado-Taylor, M. L.
- Filip, A. (2012). Marketing theory applicability in higher education. *Social and Behavioral Sciences, 46*, 912-916.
- Fischbach, R. (2006). Assessing the Impact of University Open House Activities. *College Student Journal*, 40(1), 227-232.
- Fischer, M. J. (2007). Settling into Campus Life: Differences by Race/Ethnicity in College Involvement and Outcomes. *Journal of Higher Education*, 78(2), 125-161.
- Fremont, E. K., & Rosenzweig, J. E. (1972). General systems theory: Applications for Organization and Management. *Academy of Management*, *15*, 447-465.
- Gallicano, T. D. (2013). *THE PR post: An example of how to perform open coding, axial coding, and selective coding.* Accessed from http://prpost.wordpress.com/2013/07/22/an-example-of-how-to-perform-open-coding-axial-coding-and-selective-coding/
- Gibbs, G. R. (2007). Analyzing qualitative data. In U. Flick (Ed.), *The Sage qualitative research kit*. Thousand Oaks, CA: Sage.
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine Publishing Company
- Gonzales, L. D. (2012). Responding to Mission Creep: Faculty Members as Cosmopolitan Agents. *Higher Education: The International Journal of Higher Education And Educational Planning*, 64(3), 337-353.
- Hall, H., Griffiths, D., & McKenna L. (2013). From Darwin to constructivism: The evolution of grounded theory. *Nurse Researcher*. 20, 3, 17-21.

- Haycock, K. (2006). *Promise abandoned: How policy choices and institutional practices restrict college opportunities.* Washington, D.C.: The Education Trust.
- Hayes, T. (2007). Delphi study of the future of marketing higher education. *Journal of Business Research*, 60, 927-931.
- Heath, H., & Cowley, S. (2004). Developing a grounded theory approach: A comparison of Glaser and Strauss. *International Journal of Nursing Studies*, *41*(2004), 141-150.
- Henderson, S. E. (2001). On the Brink of a Profession: A history of enrollment management in higher education. In J. Black (Ed), *Strategic Enrollment Management Revolution*.Washington, DC: AACRAO
- Henwood, K., & Pidgeon, N. (2003). Grounded theory in psychological research. In P.M. Camic,J.E. Rhodes, & L. Yardley (Eds.), *Qualitative research in psychology*. Boston, MA:Allyn & Bacon.
- Hillman, N. W. (2012). Tuition Discounting for Revenue Management. Springer Science & Business Media, 53, 263-281.
- Hossler, D. (1986). *Creating effective enrollment management systems*. New York: College Entrance Examination Board.
- Hossler, D., & Bean, J. P. (1990). *The strategic management of college enrollments* (1st ed.). San Francisco, CA: Jossey-Bass.
- Hossler, D., & Kalsbeek, D. (2013). Enrollment management and managing enrollments:
 Revisiting the context for institutional strategy. *Strategic Enrollment Management Quarterly*. 1, 5-25.
- Hossler, D., & Kemerer, F. (1986). Enrollment management and its context. *New Directions for Higher Education*, 53(1), 5-14.

- Hossler, D., Ziskin, M., Moore, J. V. III, & Wakhungu, P. K. (2008, May). The Role of Institutional Practices in College Student Persistence: Results from a Policy-Oriented Pilot Study. Paper presented at the Association for Institutional Research, Seattle, WA.
- Hundrieser, J. (2012). Strategic enrollment planning: A dynamic collaboration. Coralville, IA: Noel-Levitz, Inc.
- Huddleston, T. (1980). In consideration of marketing and reorganization. *The National* Association of College Admissions Counselors Journal, 25(1), 18-24.
- Huddleston, T., Jr., & Rumbough, L. P. (1997). Evaluating the enrollment management organization. *College and University*, 72(4), 2–5.
- Jones, M., & Alony, I. (2011). Guiding the use of grounded theory in doctoral studies: An example from the Australian film industry. *International Journal of Doctoral Studies*, 6, 95-114.
- Kalsbeek, D. H. (2006a). Some reflections on SEM structure and strategies-part one. *College and University*, *81*(3), 3-10.
- Kalsbeek, D. H. (2006b). Some reflections on SEM structure and strategies-part two. *College and University*, *81*(4), 3-10.
- Kalsbeek, D. H. & Hossler, D. (2009). Enrollment management: A market-centered perspective. *College and University*, 84(3), 2-11.
- Kast, F. E., & Rosenzweig, J. E. (1972). General systems theory: Applications for organization and management. *Academy of Management Journal*, December, 447-465.
- Kemerer, F. R. (1985). The Role of Deans, Department Chairs, and Faculty in Enrollment Management. *College Board Review*, *134*, 4-8, 28-29.

- Kemerer, F. Baldridge, J. V., & Green, K. (1982). Strategies for Effective Enrollment Management. Washington, D.C.: American Association of State Colleges and Universities.
- Koch, H., & Kayworth, T. (2009). Partnering with the Majors: A Process Approach to Increasing IS Enrollment. *Journal of Information Systems Education*, *20*(4), 439-449.
- Kot, F. C. (2014). The Impact of Centralized Advising on First-Year Academic Performance and Second-Year Enrollment Behavior. *Research in Higher Education*, *55*(6), 527-563.
- Kotter, J. P. (1990). A Force for Change: How Leadership Differs From Management. New York, NY: Free Press.
- Kraft, P. D. (2007). Faculty Engagement in Campus-Wide Enrollment Management Activities: A Grounded Theory. (Unpublished doctoral dissertation). Montana State University, Bozeman.
- Lauren, B. (2008). *The college admissions officer's guide*. Washington, D.C.: American Association of Collegiate Registrars.
- Lee, S. (2010). The Implementation of Enrollment Management at Two Public Universities Experiencing Demographic and Funding Challenges. Indiana University of Pennsylvania Dspace, 2069-248.
- Lehmacher, A. (2012). Successful Practices and Models of Enrollment Management in Illinois
 Community Colleges: An Explanatory Mixed-Methods Research Case Study.
 (Unpublished doctoral dissertation). Benedictine University, Lisle, IL.
- Mansson, D. H. (2013). Assessing Student Learning in Intercultural Communication: Implementation of Three Classroom Assessment Techniques. *College Student Journal*, 47(2), 343-351.

- Maquire, J. (1976). To the organized go the students. *Bridge Magazine, 39*(1). Boston: Boston College, 6-10
- Martin, R. E. (2002). Tuition Discounting: Theory and Evidence. *Economics of Education Review*, 21, 125-136.
- Maxwell, J. A. (2005). *Qualitative research design: An interactive approach* (2nd ed.). Thousand Oaks, CA: SAGE Publications Ltd.
- Muston, R. A. (1985). Role ambiguity in institutional marketing and enrollment management. *Research in Higher Education, 22*, 371–379.
- Natek, S., & Zwilling, M. (2014). Student's data mining solution- knowledge management system related to higher education institutions. *Expert Systems with Applications*, 41, 6400-6407.
- Nelson, S., Johnson, L., & Boes, L. (2012). In Practice: Harvard Houses--The Value of the Tutorial System. *About Campus*, 17(2), 22-25.
- Penn, G. (1999). Enrollment management for the 21st century: Institutional goals, accountability, and fiscal responsibility. *ASHE-ERIC Higher Education Report, 26(7)*. Washington DC: The George Washington University, Graduate School of Education and Human Development.
- Quirk, M. (2005, November). The best class money can buy. *The Atlantic Monthly. 294* (4). Retrieved from http://www.theatlantic.com/magazine/archive/2005/11/the-best-classmoney-can-buy/304307/
- Reason, R. D., Terenzini, P. T., & Domingo, R. J. (2006). First Things First: Developing
 Academic Competence in the First Year of College. *Research in Higher Education*, 47(2), 149-175.

- Schulz, S. A., Lucido, J. A., & University of Southern California, C. P. (2011). EnrollmentManagement, Inc.: External Influences on Our Practice. Center for Enrollment Research,Policy, And Practice.
- Singell, L. D. (2004). Come and stay a while: does financial aid effect retention conditioned on enrollment at a large public university? *Economics of Education Review, 23*, 459-471.
- Sevier, R. (2007). *Strategic planning in higher education: Theory and practice*. Washington, DC: CASE Books.

State Higher Education Executive Officers (2014). *Moving the needle: How financial aid policies can help states meet student completion goals*. Retrieved from http://www.sheeo.org/sites/default/files/publications/Moving the Needle 041414.pdf

- The Quality Imperative: Match Ambitious Goals for College Attainment with an Ambitious Vision for Learning. (2010). *Liberal Education*, *96*(1), 30-35.
- Tinto, V. (2012). *Completing college: Rethinking institutional action*. Chicago, IL: The University of Chicago Press.
- Vander Schee, B. (2007). Organizational models for enrollment management at small colleges. *College and University Journal, 82*(3), 13–19.
- Vander Schee, B. (2009). Embracing enrollment management: A comprehensive approach to college student marketing. *Academy of Marketing Studies Journal*. Retrieved from HighBeam Research: http://www.highbeam.com/doc/1G1-219063764.html
- Ward, J. (2005). Enrollment management: key elements for building and implementing an Enrollment Plan. *College and University*, *80*(4), 7-12.

- Wallace-Hulecki, L. (2007). Creating the conditions for shared responsibility of enrollment outcomes: Reframing strategic enrollment management from the academic lens.
 Retrieved from http://www.semworks.net/white-papers-books/index.php
- Wertz, F. J., Charmaz, K., McMullen, L. M., Josselson, R., Anderson, R., & McSpadden E.
 (2011). *Five Ways of Doing Qualitative Analysis: Phenomenological Psychology, Grounded Theory, Discourse Analysis, Narrative Research, and Intuitive Inquiry.* New York, NY: The Guilford Press.
- Westdijk, K., Koliba, C., & Hamshaw, K. (2010). Collecting data to inform decision making and action: The University of Vermont's Faculty Community Engagement Tool. *Journal of Higher Education Outreach and Engagement*, 14(2), 5-33.
- Wilkinson, R. B., & Peterson, A. (2001). Information of the realm. In J. Black (Ed), Strategic Enrollment Management Revolution. Washington, DC: AACRAO.
- Yin, R. (2003). *Case study research: Design and methods*. Thousand Oaks, CA: SAGE Publications Ltd.
- Zajacova, A., Lynch, S. M., & Espenshade, T. J. (2005). Self-Efficacy, Stress, and Academic Success in College. *Research in Higher Education*, *46*(6), 677-706.