Pepperdine University

Graduate School of Education and Psychology

IDENTIFIED ENROLLMENT MANAGEMENT PRACTICES IN THE CALIFORNIA STATE UNIVERSITY SYSTEM

A dissertation submitted in partial satisfaction

of the requirements for the degree of

Doctor of Education in Organizational Leadership

by

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February, 2015

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DEDICATION

This dissertation is dedicated to my nieces and nephew:

Annabelle, Bryanne, Charlayne, Ciara, Colin, Lilith, and Madilyn.

I look forward to all the many accomplishments you will have in life.

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ABSTRACT

This study focused on the California State University system's enrollment management activities. For schools in California who rely on state funds, managing enrollment has to be balanced with competing campus priorities, limited resources, volatile economic times, and the primary mission of the system which is serving students whose goal is to achieve a college degree.

Hossler and Bean (1990) defined enrollment management as the activities a campus conducts and how it organizes itself in order to influence student enrollment. Enrollment management components consist of marketing, admissions and recruitment, academic advising, career planning and placement, academic assistance programs, institutional research, orientation, financial aid, retention programs, and student services and activities (Hossler, 1984).

Individuals in leadership roles ranging from the presidents to administrators in various academic and student affairs areas were invited to participate in the study. A survey that inquired about campus enrollment management activities and perceived effectiveness of those activities was distributed through the campus system with support from the Chancellor's Office. Responses were received from each of the 23 campuses with a range of 1 to 6 respondents per campus.

A total of 90 surveys revealed the most prevalent enrollment management activities included the use of current students in the recruitment process, campus visits by prospective students, and the use of recruiters making visits. Also, the utilization of professional advisors in the advisement of students was used at a majority of campuses. Almost all the campuses had academic assistance programs in reading and study skills as well as used student tutors. Orientation activities were prevalent amongst all the campuses though student dropout follow-

up, services addressing non-traditional students, and programs focused toward commuter students were found to be inconsistent amongst the campuses.

From this study, the following conclusions were determined. Certain components of enrollment management, such as recruitment and institutional research, could be standardized. Enrollment management components such as academic advisement and learning assistance must stay within the choice of campus so they can have the latitude to meet the needs of the students they serve. Enrollment Management activities focus on the goal of student retention and persistence.

Chapter One: The Problem

Introduction

In President Obama's 2009 Joint Session of Congress, he called for an increase in college graduates so that the United States will be able to compete in a global economy. Obama envisioned that by 2020, the United States will have the highest portion of graduates in the world. For students in California, this vision is difficult to achieve. California is experiencing a budget shortfall of $28 billion dollars. As a result, funding for higher education may stand to lose $1.7 billion. Given California's current state of economy, the ability to access higher education is being threatened. In particular, the California State University system could lose up to $500 million. Being the largest system of higher education in California, this cut will affect the ability to provide higher education access to students. This is contrary to the mission of the California State University system.

California students have not always seen this type of threat. For a period of time in the twentieth century, higher education was readily attainable and a variety of higher education institutions were accessible. During the 1990's, California experienced a time of economic growth. Due to the booming technology industry, state revenues exceeded projections. However in early 2002-2003, California was forced to cut spending due to the bust of the dot-com industry (Shulock & Moore, 2005).

Pursuing higher education for a high school student can benefit students socially as well as financially. According to the 2011 US Department of Education's National Center for Educational Statistics, those with a college degree earned two times more than those without a degree. Besides the earning potential, for Californians, a bachelor's degree translated to

increased availability of job opportunities. The incentives for obtaining a college degree are a driving force for students.

Statement of the Problem

Access to higher education can be difficult. The unpredictability of the market can affect funding support for higher education as it competes with other state priorities and constraints. "Because higher education is the largest discretionary item in states' budgets, state funding for higher education tends to rise when the economy and state revenues are good and to drop during recessions" (Altbach, Berdahl, & Gumport, 2005, p. 117). Colleges and universities in California are funded in part by student fees and state support. The inability to have funds to cover the cost of educating students affects the obtaining of a college degree. These costs can consist of inadequate campus infrastructure for providing classes, limited class availability, and enrollment. The pressure on this decreased funding can have a cascading effect- enrollment caps, selectivity, and targeted admissions (Albach et al., 2005).

The demand for higher education does not look to decrease. The National Center for Education Statistics projects that college enrollments between 2003 and 2013 will increase 11% nationally even though high school graduation rates will either decline or level off. For Californians, students have the opportunity to attend one of the following public postsecondary institutions- community college (CC), University of California (UC), or the California State University (CSU) System. In 2009, over 377,000 high school graduates enrolled at one of these institutions. Each segment of higher education serves a distinct set of students. This was intentionally set up by California through the implementation of the California Master Plan. Created in response to the increase in migration of people into California, the purpose of the Master Plan, developed in 1961, was to provide access to a baccalaureate education for all

qualified students (Legislative Analyst Office, 2011). This plan served as a model for all other states.

Due to California's budgetary climate, there is now question as to whether the California Master Plan still works. Colleges and universities have seen a record number of college admission applications. In 2011, the California State University system received over 338,000 applications, but was only able to enroll 36% of these students. In 2009, The University of California system received over 98,000 applications and could only accommodate 44.7% of these students. In contrast, the community colleges enrolled over 1.7 million students in 2010. Because the community college system does not use admission criteria, all applicants have the ability to enroll.

Was this decrease in access for students due to competitive admissions, the rising cost of fees shutting out those who are less advantaged, or a lack of desire to pursue higher education due to the fear of incurring debt or lack of jobs available? The California Master Plan's viability has been questioned because while the plan was seen as a model for the future, some believe the model no longer works (Burdman, 2009; Callan, 2009; Zingg, 2010). Access for all students may not be possible. The state budget crisis has affected the ability for campuses to enroll more students as well as to assist students in their progression towards their degree due to limiting the availability of classes. According to the National Association of College Admission Counseling's State of College Admission Report (2010), even with the low yield rates, colleges are having a hard time predicting enrollment because students are applying to more than one college due to the uncertainty of college admissions.

This unpredictability does not make colleges ability to manage their enrollment any easier. The concept of enrollment management is designed to address how colleges and

universities create programming and services to maintain their enrollment targets. Hossler (1984) defines enrollment management "as a process or an activity that influences the size, the shape, and the characteristics of a student body, by directing institutional efforts in marketing, recruiting, and admissions, as well as pricing and financial aid" (p. 6). Enrollment targets are not just from the amount of applications that come into a university, but a campus's overall target. This includes how many students at the respective institution progress each semester and ultimately graduate. If a campus had a poor retention rate, it would require more students to enroll to account for the increased number of students leaving. Campuses already need to factor into their enrollment the number of students who graduate. The enrollment funnel examines not only the students entering in, but who progresses, and ultimately graduates.

Examining enrollment management at a campus seeks to determine if there is a coordinated effort to achieve institutional targets over a period of time. According to Dolene (1988), as cited in Penn (1999), "a successful enrollment management program changes the way the institution perceives its constituencies, confronts challenges, exploits opportunities, and manages resources" (p. 17). The purpose of having enrollment management in place is to address meeting enrollment targets in good and bad economies. When resources are good and a campus wants to invest resources in increasing its enrollment, how would a campus address that? When resources are tight, how does a campus respond? This is what is happening in California now. As mentioned previously, the number of high school graduates may flatten or decline, but college enrollment aims to increase. For systems of higher education, like the California State University, how do campuses address enrollment management?

According to Hossler and Bean (1990), enrollment management has two goals: exert more control on the characteristics of the student body as well as the size of the student body.

At some institutions, enrollment management is viewed by high-level administrators and faculty as a function of admissions. However, the definition of enrollment management encompasses the admission of new students and the retention of already enrolled students. Because of this, enrollment management should be a campus wide effort.

Enrollment management research is not new to higher education. Private institutions have utilized enrollment management as they rely on endowments and tuition dollars to support the institution. The ability to enroll and retain students is important for them as every student makes a difference in their bottom line. However, for public universities this concept may be new. The California Master Plan served campuses well because it segmented students into different populations of students. For high school graduates, the UC got the top 14%, the CSU top 33%, and the community college all the rest. For some CSU campuses, enrollment management meant simply enrolling all students who met the minimum qualifications. However, given the constraint of resources, the CSU cannot enroll as many qualified students as before. As a result, some campuses have had to limit their enrollment and raise their admission standards. This concept known as impaction has affected the ability for the CSU to provide access to higher education for all qualified students.

Given the volatile economics, campuses cannot rely on taking student enrollment for granted. Each student counts, and it is important for campuses to realize that "the size and character of the student body also requires strategic decisions from senior-level administrators" (Hossler & Bean, 1990, p. 6). This study aims to look at what decisions senior level administrators at the various CSU campuses have made.

Purpose of the Study

The purpose of this study is to obtain university administrators perceptions of enrollment management activities on their campus. While the CSU may be one system, they are still 23 individual campuses each with their own unique characteristics. In addition, to their characteristics, each campus may be at different points in their enrollment. Some campuses have been around longer so they may have already dealt with their enrollment during turbulent and prosperous economics. Some campuses may be more popular than others and the academic quality of their students may be different. Each campus may be conducting different enrollment management activities that contribute to their overall enrollment management plan. The purpose of this study is to obtain, document, and identify the best practices of enrollment management activities that each CSU campus is conducting.

Research Questions

Through this study of enrollment management practices, the following research questions will be asked:

1. What practices and activities are being used at each CSU campus?
2. What do selected university administrators at each campus perceive to be the most and least effective strategies and/or resources to create an effective enrollment management plan?
3. What differences (if any) exist in the perceived effectiveness of enrollment management activities and practices within a single campus?
4. How do enrollment management activities vary amongst the CSU campuses and are there any predominant practices?

Significance of the Study

Knowing what other campuses are doing related to enrollment management can assist the institution in maintaining their enrollment targets. Identifying best practices assists campuses in improving where they feel they may be lacking in their own campus's enrollment management.

Studying enrollment management at the CSU is significant because given the budgetary constraints of California, the CSU needs to prepare for whatever the future brings. The ability to plan allows a campus to prepare for change as well as help it decide what it wants to become, such as the characteristic of what they want their student body to look like. Specifically, if campuses need to manage their growth, the identification of best practices will prevent a reinvention of the wheel. It will assist a campus that is not experiencing enrollment constraints to prepare in the event it has to declare impaction.

For institutions outside of California, examining enrollment management practices allows them to learn what institutions are doing to reach their enrollment goals given California's budgetary situation. For higher education in general, enrollment management is consistently examined as different colleges and universities are experiencing different university climates. Examining the California State Universities and their enrollment management practices will contribute to the research that has already been studied.

For parents and students in the college search process, knowing what a campus is doing to assist its students in persisting towards completion of their degree may assist in the college decision-making process. With students submitting a greater number of applications the predictability of knowing where students are likely to enroll is minimalized. For students in the college search process, knowing how a campus's best practices will aid in learning what that campus is doing to admit, retain, and ultimately graduate its students.

Conceptual Foundation

This study is framed by the conceptual foundation of student enrollment practices in higher education. Three theoretical frameworks contribute to the concept of enrollment management. Alexander Astin (1975a) researched the relationship between financial aid and student persistence. Astin found that "the source and amount of financial aid can be important factors in the student's ability to complete college" (p. 22). Vincent Tinto suggested that students have characteristics such as academic ability, what type of high school they came from, and family background such as socioeconomic status and parental expectations, all of which influence the student's initial commitment to complete a college degree. (Braxton, 2000; Tinto, 1975). This commitment also influences the student's ability to integrate into a university and successfully persist. The experiences a student has inside and outside of the classroom can influence their decision to stay at a university versus depart (Coomes, 2000). In addition to the experience the student has at a university, its structure can influence how well it is fulfilling its mission. Bolman and Deal's (2000) structural framework looks at how an organization's work is divided and coordinated. "Clear; well-understood roles and relationships and adequate coordination are key to how well an organization performs" (p. 44).

Enrollment management practices for public institutions in California are influenced by Executive Orders provided by the system-wide Chancellor's Office. These Executive Orders provide guidelines that all campuses must adhere to. Orders can range from providing guidelines for student organizations and activities to the implementation of a program supporting math and English remediation. Coupled with these executive orders is the requirement for campuses to follow Title V California Code of Regulations. Laws the CSU must follow because they are

funded by the state. These regulations can range from what graduation requirements are to the standards for admission.

Mandates from the Chancellor's Office coupled with adherence to law make enrollment management at a CSU different than private institutions. The concept of enrollment management is influenced by how a university is organized; how its departments such as Financial Aid, Advisement, and Retention Programs provide programming; the connection the student forms with the university. All these can influence a student's decision to persist. In turn, the ability to persist affects a campus's enrollment targets which is why efforts that a campus is doing to influence their enrollment needs to be studied.

Key Definitions

Terms that will be useful to the reader are broken into two groupings: 1) enrollment management areas and 2) terms specific to the California State University system. As stated previously, enrollment management can shape a student body through a series of interactions between various institutional efforts. These institutional efforts can come in the form of any of the following areas:

Academic Advising. "merge the student's goals, program choices, social development, and education to the rest of life" (Benson, 1993, p. 30). "facilitate the integration of student's academic goals with their personal, social, and career goals" (Walsh, 1979, p. 447).

Academic Assistance Programs. "institutional services that help students improve their academic skills (reading, writing, study skills, and so on)" (Thomas, 1990, p. 192).

Admissions and Recruitment. Colleges and universities providing activities to develop prospects, convert prospects to applicants, and turn admitted applicants into enrollees (Wright, 1995).

Career Planning and Placement. ability for a university to "work hard at maintaining contact with potential employers, helping students find jobs, and keeping track of both the rate of job placement and the rate of admission to graduate schools" (Hossler & Bean, 1990, p. 11).

Financial Aid. role has changed "from supporting traditional goals of 'access and choice' to recruiting students and maximizing institutional revenues" (Ort, 2000, p. 19).

Freshmen. "student who has earned no college credit beyond the summer immediately following high school graduation" (California State University Office of the Chancellor, 2011, p. 3).

Impaction. occurs when the number of applications received from fully qualified applicants during the initial filing period exceeds the number of available spaces.

Institutional Research. "provide the information and understanding necessary to influence the processes controlling both the number and characteristics of the enrolled student body" (Davis-Van Atta & Carrier, 1986, p. 73).

Marketing. "the analysis, planning, and implementation, and control of carefully formulated programs designed to bring about voluntary exchanges of values with target markets for the purpose of achieving organizational objectives" (Kotler, 1982, p. 6). "finding the right fit between student and college and enrolling the right number of students" (Wright, 1995, p. 12).

Master Plan of Higher Education. also known as the Donahue Higher Education Act. The act segregated public college/university systems of the University of California, California Community Colleges, and the CSU to serve distinct populations of California.

Orientation. "introduces students to service providers on campus and help them learn location of buildings and offices [and at the same time] increase anticipatory socialization of new students by introducing them to the norms and culture of the campus" (Hossler & Bean, 1990,

p. 9).

Retention Programs. Using studies that look at why students leave, and persist, programs are designed to "improve communication between students and campus personnel, or they alter the campus environment in some way" (Hossler & Kemerer, 1986, p. 7).

Student Services. Co-curricular programs such as science clubs, residence life activities, intramural sports, student health and counseling services that can affect retention decisions of students (Bean, 1990). The California State University (CSU) is one of four systems of higher education in California, compromised of 23 campuses. The CSU is designated to serve the top 1/3 of California high school graduates and all transfer studens with a minimum 2.0 grade point average and completion of a prescribed minimum number of units. Some terms that will set the stage for the uniqueness of the CSU are as follows:

Transfer. "one who has enrolled in a community college or university other than a CSU following high school graduation. Students with fewer than 60 transferable semester (90 quarter) units are considered lower division, and those with 60 or more transferable semester units are considered upper division transfers" (California State University Office of the Chancellor, 2011, p. 16).

Key Assumptions

The CSU is one system within the State of California that provides programs on 23 different campuses. Those programs may vary by campus. There are minimum admissions standards to which all applicants must adhere. These include completion of a set of college preparatory coursework, grades, and test scores for first time freshmen. For transfer students, admissions standards include grade point average and the completion of a minimum number of units and coursework. It is assumed that all CSU campuses follow the same minimum basic

admissions practices and procedures when evaluating their applicants. Targeted participants for this study oversee respective areas involved in enrollment management. Since job descriptions are approved by the Chancellor's office, it is assumed that amongst each of the CSU campuses, the specific positions targeted have the same or similar duties. In addition to performing duties, it is also assumed that all university level administrators being asked to participate in the study are qualified and knowledgeable in their position and have the decision-making authority to assess and implement enrollment management activities in their areas. It is also assumed that each of the participants has internet access readily available to them within the course of their daily activities and if they agree to participate, they will provide true and accurate responses to the best of their knowledge. Lastly, it is assumed that the University websites are current and accurately reflect the current practices for each individual campus.

Limitations of the Study

This study will only be focusing on one of the three systems of public higher education within California. The California State University (CSU) system is the focus of this study because of this researcher's employment status within the system, which is supportive and interested in providing access to the potential participant pool.

Summary

Problem and purpose were articulated above. Chapter two will provide a discussion of the relevant literature pertaining to enrollment management practices in higher education. Specific literature and sources generated from the CSU, Chancellor's Office will also be reviewed. Chapter three proposed the methods for this study.

Chapter Two: Literature Review

Enrollment management has been a concept commonly associated with admissions. Its presence has been ever evolving due to a number of historical events. After World War II, college and universities saw an increase in enrollment in higher education. With the passage of the Serviceman's Readjustment Act (GI Bill of Rights) in 1944, veterans were rewarded for their service and provided funds to seek education. This education was to assist being employable after their military service was completed. In 1950, college enrollment was 1.1 million students greater than they were in 1940. This influx required college and universities to adjust by providing services and new buildings. Veterans were not the only who benefited from educational funding. In 1965, the Higher Education Act was passed which resulted in "a comprehensive set of aid programs- grants, loans, and work study- to meet the needs of the nation's students. The Higher Education Act firmly committed the federal government to student aid as a vehicle for assuring access to higher education" (Coomes, 2000).

Having this access was important to colleges and universities because this allowed for students to be able to finance their education. During the 1960's and early 1970's, there was a boom in college enrollments. However, that boom halted by the mid-1970's due to a decline in high school graduates. The decline in graduates and the anticipated effects on college enrollment contributed to the emergence of enrollment management. Enrollment management as an organizational function emerged due to the availability of aid to finance education, the decline of high school graduates, which contribute to college enrollment, and the emergence of research that examined how students choose a college and what factors contribute to their retention.

For colleges and universities, the trifecta of events was cause for concern. Thus, the development of enrollment management. While financing was available to help students pay for

college, the decline of enrollment caused an examination of how students would choose which college to attend. These factors do not mean that universities are without control of their fate. On the contrary through the examination of its enrollment patterns, institutional activities and data, universities can have a better handle on what its student body will look like.

Evolution and Definition of Enrollment Management

Enrollment management can have many definitions. Hossler and Bean (1990) have defined it as a "set of activities and an organizational framework that enabled colleges and universities to influence student enrollments" (p. 4). Kemerer, Baldridge, and Green (1982) view enrollment management as both a concept and procedure. As a concept, enrollment management is the intentional approach of ensuring a constant flow of students into a university to maintain its vitality. As a procedure, it is a set of activities allowing for the interaction of the university with its students. Hossler and Kemerer (1986) also view enrollment management as linking "research on student college choice, student-institution fit, and student attrition" (p. 6). By focusing on why students leave or stay allows an institution to see where it stands amongst students. Once a campus knows this information, it can change itself to increase student persistence, which ultimately, helps the university in its enrollment goals. Before one can examine components of enrollment management, one must look at how a student chooses a college and why they persist.

Student Choice and Persistence

A student's choice to attend a university can be made hastily or through a thought out process. Some students select campuses because they believe in the school's academic programs, while others choose campuses because they like the football team. Either way a student's choice to attend a university is usually through a three-step process that consists of

predisposition, search, and choice. While students are in middle school through high school, their time and stage of life influences each stage of the decision to enter college. During the predisposition stage, students are contemplating their educational and career aspirations and formulating their intentions of whether they will seek postsecondary opportunities. During this phase, parents have a strong influence in this decision. (Cabrera & La Nasa, 2000).

According to Hossler, Schmit, and Vesper (1999), "the single most important predictor of post secondary educational plans is the amount of encouragement and support parents give their children" (p. 24). Frequency of conversations between parents and students regarding their hopes, dreams, and expectations contributes to this. After parent encouragement, student achievement is the next predictor on whether students will go to college. As grade point average of students increase, the likelihood of them going to college will increase (Hossler et al., 1999). This is not in every case, but at least in the majority of cases.

The search stage involves creating a list of institutions students desire to attend based on the gathering of information. The gathering of information can range from college visits and fairs, school counselors and friends. In a survey conducted by (Hossler et al., 1999), " students were more interested in obtaining more information about career opportunities in areas related to their interest, college administration requirements, and financial assistance" (p. 28). During this search process, cost of attendance and the ability to pay are factors in the final stage called choice. When students ultimately apply and choose to enroll at an institution, they can view the decision from two different perspectives, economic and social (St. John, Paulsen, & Starkey, 1996 as cited in Cabrera & La Nasa, 2000). Economics assume a rational approach in that students weigh the costs and benefits of each institution and compare one another, resulting in a decision. The social approach looks at the "extent to which high school graduates'

socioeconomic characteristics and academic preparation predispose them to enroll at a particular type of college and to aspire to a particular level of postsecondary educational attainment" (Cabrera & La Nasa, 2000, p. 12). For example, if a student attends a high school with a low college going rate, students may aspire to attend a community college or opt not to attend at all.

Once a student makes the decision to enroll in a college or university, it becomes the responsibility of the university and student to maintain enrollment and successfully progress. Too often at universities, it is easier for institutions to focus on the recruitment of students versus the retaining of them. "Retention is everyone's business, while recruitment appears to the business of an identifiable group" (Bean, 1990, p. 147). A college can provide funds and support to an admissions and recruitment office, but because retention belongs to multiple offices, the ability to celebrate retention versus place blame for attrition is difficult to assess.

A student's decision in departing from a university prior to graduation is a complex decision occurring over time (Bean, 1990). Bean's research findings conclude that students leave a school because they don't fit in. Astin (1975b) stated that "students who are socially integrated into a campus are much more likely to receive a degree than those who are socially isolated" (Kemerer et al., 1982, p. 90). Socially integrated can be defined as having a part-time job, declaring a major early, living on campus and participating in a club or organization. The students are integrated into the campus culture and have formed an interactive relationship with fellow students and faculty.

Tinto postulates that academic and social integration influence a student's subsequent commitments to the institution and to the goal of college graduation. The greater the student's level of academic integration, the greater the level of subsequent commitment to the goal of college graduation. Moreover, the greater the students level of social integration, the greater the

level of subsequent commitment to the focal college or university (Braxton, Hirschy, & McClendon, 2004; Tinto, 1975).

On the contrary, students who don't fit in are typically undecided about their major, have limited interaction with their peers or dissatisfied with their campus (Kemerer et al., 1982; Williams 1986). Some of the dissatisfaction for students is because campuses did not meet their expectations. Williams (1986) advise that colleges/universities would do well as part of enrollment management to determine the "factors [that] have significantly influenced the goals and expectations of entering students" (p. 39). If students are under the belief that a school has a vast social scene and students come to find out it is not, that can lead to disappointment, thus dissatisfaction.

The ability to understand why students select an institution and decide to leave is important to enrollment managers because students are the lifeblood to the school. The enrollment of a student body affects the bottom line budget for a campus. For private schools, at least 70% of their total revenue is generated by student tuition payments (Kemerer et al., 1982). For public schools, "almost every formula for state funding depends primarily on a student count of some kind. A subsidy is usually awarded to an institution by counting its full-time equivalent (FTE) enrollment figures on a designated census date" (Kemerer et al., 1982, p. 92). For the California State University System, funding is based off this formula.

Having a student enter your institution and then leave costs an institution in two ways: 1) the money spent to recruit the student and 2) the potential revenue lost by the student being enrolled. Besides financial, a student's relationship with their campus can affect its long term image. If a campus has a high attrition rate, it can hurt the recruitment of students. For high school students, word of mouth is a form of gathering college information and if former students

return to their old high school with negative impressions of their college, this can hurt future recruitment. Alumni are also affected. If the perception of a university's reputation has decreased, this can affect alumni donations. Attrition is a vicious cycle, which "affects the public image of a college, which impairs potential recruitment from high schools in the area, decreases donor support, and thus contributes to a lower public image" (Kemerer et al., 1982, p. 99).

Most universities have taken little action to reduce attrition. According to Bean (1986a), "a high attrition rate shows a failure on the part of the institution to select or to socialize students to the academic and social values of the college or university" (p. 48). Going back to the definition of enrollment management, examining a student's flow through the university whether it be towards graduation or leaving the institution is vital to the campus.

Enrollment management is not solely an examination of recruitment efforts. The interconnectedness of financial aid, programs such as academic advisement, career planning, orientation, retention programs and where a university positions itself in the market compose enrollment management. All of these influence the size and characteristics of the student body and can be added to an enrollment management system. "On each campus institutional goals, history, resources, and politics shape the nature of the enrollment management system" (Hossler & Kemerer, 1986, p. 7).

Components of Enrollment Management

A review of the literature has found the following ten components consistently studied in enrollment management.

Marketing. When one thinks of the term marketing, the idea of selling comes to mind along with negative images among academicians. The idea of marketing is associated negatively

with promotional advertising. However, in the context of student recruitment, Kotler (1982) defines marketing as "the analysis, planning, implementation, and control of carefully formulated programs designed to bring about voluntary exchanges of values with target markets for the purpose of achieving organizational objectives" (p. 6). The key difference between the ideas of marketing versus selling is the focus of marketing on targeted populations versus a broader audience and gaining mass appeal.

The target audience does not have to be one specific group, but rather a university can have more than one targeted market. The markets can be "defined by sets of institutional attributes that interact to define various market niches and segments of institutional types" (Kalsbeek & Hossler 2009, p. 4). Basically, once a university knows where it falls within the grand scheme of higher education, it can begin to focus on how it meets the needs of students. For the CSU, the Master Plan of Higher Education helped define its niche by segmenting the population it serves. By servicing the top one-third of every high school graduate, the CSU has identified one of its target markets. Within that population, the various CSU campuses can continue to refine additional target groups.

Besides the targeted markets of diverse prospective students, colleges and universities can also have different sets of markets such as the surrounding employers or industries that have employment needs for college graduates. In addition, the college/ university can have a market of regions that they serve through the academic programs they are offering, such a campus with a film program that feeds into the movie and entertainment industry.

Marketing within higher education is a form of service marketing; meaning consumers are purchasing a service. Because they are purchasing a service, as opposed to a product, it is often intangible and consumers do not know what they are getting until after the service has been

provided and there is no refund policy. The long term benefits of that purchase will not be seen until later. For students seeking higher education, the decision to enroll in a university is risky and students face uncertainty when making that decision. It is the job of enrollment managers to mitigate that risk and decrease the uncertainty (Clark & Hossler, 1990).

A method to reduce the risk of uncertainty is to make the intangible- tangible through a campus visit. This allows students to experience the campus. The managed campus visit is the closest schools can come to actual pre-purchase testing of their product. Research has shown that the campus visit is the most influential factor in a student's decision to enroll in a college or university (Abrahamson & Hossler, 1990; Hossler, Braxton, & Coopersmith, 1989). Organizing an event like this and alleviating uncertainty involves the area of admissions and recruitment, which will be discussed in the following section.

As part of marketing and knowing where a university fits, it is important to know who the competitors are and how the university compares. This concept is known as positioning. Once a campus knows this, then they can "identify different types of students who might be attracted to the institution, and developing special recruitment literature and practices for them" (Kemerer et al., 1982, p. 77). How a campus can determine where they fit can be done in a variety of ways. 1) Using publicly available data. By using ones own campus data of enrollment, the campus can obtain state's data to see how much share the campus took from the overall number, whether it is gains or losses. This will allow the campus to see where it falls. 2) Using test score data. Since students take standardized tests such as the SAT or ACT, college and universities can study the profile of the students who send their scores to them. The college/university can gain insight to what other colleges/universities students are sending their scores to; but also

> how the overlap group differs between those in the highest test score range, and those prospective students in the highest test score range, and those prospective students in the lowest score range or how these rates of overlap vary by prospective students' intended area of study or by demographic attributes. (Kalsbeek & Hossler, 2009, p. 5)

3) In addition to using data of students sending test scores, colleges and universities can find out where students ended up enrolling who did not enroll at their institution. The National Student Clearinghouse data can help provide this information.

By knowing a university's position, it helps policy makers set realistic goals so as not to make the error of setting expectations beyond the university's actual market. If there is a desire to change the market, then resources, time, and a plan are necessary. The strategies involved in marketing an institution can be designed to enhance name recognition, provide exposure for the university, motivate prospective students to apply or seek additional information, and to encourage students to matriculate (Abrahamson & Hossler, 1990).

Having an idea of where a campus fits in the market can also aid in their retention effort. "The work of defining and building a successful retention strategy needs to be grounded in a shared understanding of the limits and opportunities by this environment and the institution's position within it" (Kalsbeek, 2013b, p. 101). If a campus knows its marketing position, they can know what type of student they have and center retention activities around the student.

Within the marketing of a university, it is important for a university to not try to be all things to all people and attract students who are unlikely persist. This wastes time, energy, and resources. By not knowing how a university lies in the greater scheme of the higher education market, it can "result in the failure of enrollment and marketing strategies or at the very least insufficient use of institutional resources to achieve desired enrollment goals" (Kalsbeek &

Hossler, 2009, p. 5). The ability to know its position is key to a campus's enrollment management.

Knowing one's market helps a university examine its enrollment goals and the type of students they want to attract. This can be difficult because what a campus wants may be different than what they are set to do. "The market context ties together into one cohesive fabric all of the institution's enrollment goals and illustrates how those goals are not only demonstrably interconnected but very often in a conflict with each other" (Kalsbeek & Zucker, 2013, p. 19). This is seen with campuses trying to increase the academic quality of students through increased grade point average or test scores. However, for campuses within the California State University system, it may be in conflict with the CSU mission of serving the top 33% of the high school graduating class and providing access.

Once one knows where it fits, marketing activities can be designed to recruit target populations.

Admissions and recruitment. For the success of enrollment management to work relies on the admissions, retention, and graduation of students. Admissions and recruitment personnel are necessary to ensure information about the university is flowing to prospective students and counselors. Once a campus has determined its market, administrators can develop a comprehensive recruitment plan (Kemerer et al., 1982).

The role of a recruiter or an admissions counselor is to inform the consumer about the university and its values. Having an effective marketing plan would mean the recruiter does not have to "sell" the university but rather convey "focused, frequent, and content-specific information" (Adams, 2009). The student in turn can determine whether or not the information conveyed matches with their values and what they're looking for in an institution. This part of

the college decision-making process helps students find their right fit, which helps universities in their retention.

The admissions and recruitment office on a college campus can have the responsibility of disseminating information about the campus, but also be responsible for the admission evaluation of the incoming applications. At private colleges, the admissions and recruitment office may also conduct interviews or read applications essays. For the CSU, the admissions and recruitment functions may be combined into one office or separated. This organizational structure varies campus by campus. Other recruitment practices a campus can conduct are the creation and dissemination of promotional literature known as recruitment brochures, follow up phone calls to students, visits with high school and community colleges, attendance at college fairs, and maintaining relations with high schools and community college counselors.

Each recruitment strategy used needs an assessment component to determine if it is reaching its desired goal. An enrollment manager's responsibility is to ensure each recruitment activity is meeting its intended outcome, whether it be generating a lead or convincing a student to matriculate.

Often times when confronted with enrollment problems, it is easier to employ the "throw money" strategy: to solve a problem, throw money as it. Ihlanfeldt (1980) notes that, it is not uncommon for campuses to spend more than a thousand dollars to recruit and enroll a student. However, throwing money at the issue is not a long-term solution as it can be quite expensive and money could be spent wisely with better benefits (Kemerer et al., 1982). The assessment process of recruitment activities aids in this.

The admissions and recruitment office can be the first step in the enrollment process but it is finding the right student fit that benefits the university. From an economic standpoint,

> the cost of attracting students to college, that is recruitment expenditures divided by the number of new students, is often measured in thousands of dollars. The income from the retention of a full-time student can be measured in the tens of thousands of dollars. (Bean, 1990, p. 147)

Once students enroll in a university, it still takes work to retain and ultimately graduate them. One of the techniques to do this is through proper academic advisement.

Academic advisement. The purpose of academic advising is to "merge the students' goals, program choices, social development, and education to the rest of life" (Benson, 1993, p. 30). "The role of the advisor is to facilitate the integration of students' academic goals with personal, social, and career goals" (Walsh, 1979, p. 447). Faculty, a full-time professional staff person, or a trained peer advisor can conduct academic advising. Stereotypically, one may view an advisor's role as keeping track of students' progress towards their degree ensuring they are meeting requirements (Walsh, 1979). However, the academic advisement office plays a key role in retention. When provided the correct academic information and students are able to equate this in a personal positive meaningful way, it increases the likelihood that a student will remain enrolled (Bean, 1990). A poor experience such as inadequate academic advising will have a negative effect on retention.

The delivery of academic advisement services and whether or not it has been effective has been raised as an issue since the 1980s (Kemerer et al., 1982). The quality of academic advisement is under scrutiny. Academic advising in reference to college experiences is rated as low in national surveys. (Astin, Korn, & Green, 1987; Goomas, 2012, p. 59; Keup & Stolzenberg, 2004). Some universities have addressed this by being proactive with their students. Whether it be conducting advising sessions in the residence halls (Johnson & Morgan,

2005) or requiring a one-semester long freshmen course that incorporates advising, the goal is to increase the quality of service. The allotted time for advisement opportunities are precious that a self-guided interactive web-advising tutorial, at the University of Wisconsin, is offered so that routine information is provided. As a result, the time with advising is developmentally focused and individualized rather than going over basic information (Johnson & Morgan, 2005).

Academic advisement can begin as early as orientation and can continue throughout the rest of a student's journey through college. Multiple interactions is key because academic advisement is usually the only service that guarantees multiple and prolonged interaction with students and faculty. This is important because it provides a venue to develop positive experiences which affect attitude and relationships between the student and the university which can affect retention (Coll & Draves, 2009; King, 1993). Another enrollment management component that can affect retention is the area of career planning and placement.

Career planning and placement. When students enter into a university, they are more likely to persist if they have career plans. (Thomas, 1990). By providing career planning and placement services, schools have a tool to increase retention. Types of activities and services include:

> career counseling and testing, courses in career exploration, career, graduate and professional school information in libraries, career exploration and job placement workshops, internships and other forms of practical experience, and on campus interviews with representatives of prospective employers and graduates and professional schools. (Thomas, 1990, p. 195)

These activities help students prepare themselves in making decisions necessary for post graduation.

While some students may go through their college experience solely attending classes; others may join activities to socially integrate. According to Kemarer et al. (1982), consistent research findings have found "that on-campus jobs provide a focal point around which the student develops an integrated social life" (p. 104). While gaining employment experience, students who work on campus have access to interacting with campus personnel and having a reason to remain on campus. By forming a connection, it aids in their retention.

Aside from just being employed on campus, having services to assist students in career planning helps shape and decipher their career and major plans. "Students who have chosen a career-specific major are less likely to leave the university before completing a degree, and we also find that they have a clearer reason for attending the university" (Willcoxson & Wynder, 2010, p. 186). When a student knows their major and what career field they want, their decisiveness can create a stronger tie to the university to achieve their goals. For those unsure of their career and major, schools would be "best to serve their students and prevent attrition when they assist students to discover their unique talents and promote their development" (Schearer, 2009, p. 58). Academic advisement and career counseling would go hand in hand with this development. Once a student knows their career goals, it can help decide a major that "in turn increases the odds of a successful graduation and than transition into one's chosen career" (Shearer, 2009, p. 58).

Career services activities such as internships provide students with practical experience. The practical experience can be rewarding and interesting thus retaining and reinforcing their career and academic interests. By hosting graduate school and career fairs, it can reinforce a student's decision to attend the school. When students see potential employers on campus, it's

perceived evidence that "people outside the school believe that their education is of high quality" (Thomas, 1990, p. 196). All of these activities can reinforce retention.

Learning/academic assistance programs. As part of student's integration into campus culture, it is necessary for universities to teach students effective habits so that they can be successful. Some entering freshmen come in with more advanced skills than other. Skills such as already set study habits, note taking and ability to enter into college level courses (i.e. Math/English). Others do not have the skills so it is the responsibility of the student and university to assist with gaining these skills. Good study habits are important to survive college.

> Among the necessary study skills and habits are time-management skills and skills in reading, writing, note-taking, preparing papers, critical thinking, and studying for exams. Programs that improve these skills are likely to enhance retention for students deficient in these areas. (Bean, 1990, p. 160)

Having learning assistance programs helps students meet the expectations the university has of them and their personal goals. Assistance with learning can come in the form of tutorial programs, peer study groups, or student success strategy workshops. Remedial and developmental course offerings are other forms of learning assistance. Not every student may use these activities but without them students who do not enter a university academically prepared may not succeed. Each student entering into a university has different skills sets so learning assistance programs assist with any deficiency in skills.

The activities do not have to address college students, but may help students prior to entering into college. Federal programs like TRIO and AVID help increase awareness of college and students' academic skills. The benefit to enrollment management in creating a college ready pipeline is a school can recruit their student body from this. These types of programs can range

from “high school- college bridge programs or coordinating curriculum between secondary and postsecondary teachers” (Arendale, 2010, p. 4). The CSU system has implemented programs such as the Early Assessment Program (EAP) and Early Start to better prepare students to get to college level Math and English. EAP provides curriculum instruction to Math and English teachers, while Early Start provides opportunities for students to work on their Math and English remediation prior to their freshmen year in college.

Learning assistance programs can exist in the form of preparatory programs but also activities throughout a student’s college journey.

Institutional research. Decisions within the context of enrollment management cannot be made without the use of data. Joe Saupe (1990), as cited in Volkwein (2008), states that institutional research is a “set of activities that support institutional planning, policy formation, and decision making” (p. 5). Institutional research’s role in enrollment management is to “provide the information and understanding necessary to influence the processes controlling both the number and characteristics of the enrolled student body” (Davis-Van Atta & Carrier, 1986, p. 73). Not having data of information to help in the decision making can force decision makers to rely on intuition which may not always reach the desired outcome. Intuition may be biased, whereas having research grounded in objectivity can aid in enrollment management conversations.

Institutional research can be summarized, by Pat Teranzini (1999), into three tiers of organization. The first tier is technical and analytical where basic facts of a university are provided- “admissions, enrollment, degrees awarded, faculty workload, faculty-student ratio- all the elements that add up to describing the basic profile of the institution” (Volkwein, 2008, p. 5). The second tier is focused on issues such as resource allocation, enrollment goal planning and

setting, and program evaluation. This can be more budget related to an institution (Davis-Van Atta & Carrier, 1986). The last tier is contextual which focuses on the external factors of a university- what's happening with the future student body, field of education, and economics of the state. All tiers when combined influence enrollment management. The role of an institutional research office has changed from providing descriptive statistics to analysis and evaluation (Volkwein, 2008). In the past 10 years, institutional research has been tasked to look at enrollment projections, modeling of different scenarios involving financial aid and admissions, and revenue forecasting.

Institutional researchers receive questions such as- will an institution continue to meet enrollment targets? How can an institution increase its yield? What happens to the applicant pool if the school were to lose a certain demographic? How does the university compare to the competition and where does it fit in the market? Having objective research and data to gain insight into these questions aids those in charge of making enrollment decisions.

Institutional research may exist as a stand alone office, but depending where it reports can determine what its focus of research is. Commonly, an institutional research office reports to the chief academic officer. If so, their research is academically focused- examining faculty workload and items related to the academic instruction of students. When reporting to the chief financial officer, an institutional research office is focused on budget analysis and resource allocation. In a division of student affairs, studies will tend to focus on "campus climate, residential life, freshmen year experience, retention and diversity, and effectiveness of student services, and how they might be improved" (Volkwein, 2008, p. 10).

Institutional research complements all areas within enrollment management. It can be a partnership that influences all areas of campus. From a student recruitment vantage, institutional

research offices can examine what type of student applies. Research can be conducted that looks at geographic location, gender, ethnic background, SAT and ACT scores. Having this information can assist with marketing efforts and informs a campus on where it stands in relation to the competition. In examining retention, the office of institutional research can see what students a campus is losing to attrition. Is there a certain demographic leaving or are there course preventing the persistence of students? Having information and facts can change processes and policy. "The information and analyses the institutional research officer brings to the enrollment management effort potentially enable him or her to influence policies adopted by the enrollment management program" (Davis-Van Atta & Carrier, 1986, p. 86).

Orientation. Once a student decides to enter into a university, orientation, coupled with academic advisement, help create a lasting impression on the student. It can either reinforce the student's decision to enroll or be a turn off. Students will know within their first month of enrolling of there or not they will stay. Orientation is not only just showing students about building locations and services, but it introduces students to the social norms and culture of the campus (Hossler & Bean, 1990). This acclimation is potentially important in retention efforts. As stated previously, students are likely to persist if they feel they fit in. Fitting in can mean making contact with an advisor, faculty member, or fellow classmates (Thomas, 1990).

Orientation facilitates this by providing a venue for students to make those connections. It is one thing for universities to open the doors for students to come in, but it is another to have them transition into the university. Providing an orientation program allows for the ease and transition of these students. Orientation alone does not establish these connections, but the collaboration of various departments contribute to this and enrollment management. Having

multiple departments assist in the transition of students takes the burden off of one office and is a collective of the university.

Typical orientation programs can be one day or one- week sessions, but an ideal transition program would be those that last one semester to a year. Some universities have decided to extend the orientation program and have "orientation courses". Usually, these can be a semester long with the goal of ensuring that no student "floats into college without proper advisement or a strong peer group" (Kemerer et al., 1982, p. 106).

Financial aid. For some students, the cost of attending an institution and the perceptions on the ability to pay may affect student persistence. Financial aid is important because it can serve as an economic means to pay for college. Prior to the 1980's, the federal government introduced different financial aid programs such as the National Defense Student Loan Program, College Work-Study, and the Educational Opportunity Grant to provide dollars to students so they can attend their institution of choice and for college and universities to create a diverse class. By the mid- 1980's, the relationship between student aid and enrollment shifted. From access and choice to one that is focused on generating revenue and increasing enrollment (Kurz, 1995; Ort, 2000).

The purposes of financial aid programs are not always explicit. The most common purpose is to "provide greater access to higher education for students, to assure that students complete their studies, to provide an incentive for students to perform well academically, to award merit; to influence student choice, and to redistribute wealth" (Astin, 1975a, p. 3). The method of providing access to higher education varies at the state and federal level. At the state level, institutions are supported first financially and then students. By providing money to the institution, states can charge tuition that is below the real cost. Conversely, the federal

government supports students, first, and then institutions second. Federal aid programs are targeted for the most financially needy students (Ort, 2000).

Over the last two decades, support for federal help in financing education has flattened and emphasis has been on loans rather than grants. The difference between these two types of aid is grants do not have to be paid back, while loans collect interest and are expected to be repaid in a given time frame. At the state level, due to budget constraints, support has decreased as well. Higher education is competing for support along with the "increased cost of supporting prisons, Medicaid, and other social programs combined with a declining tax revenues produced by a weak economy" (Kurz, 1995, p. 8). Across the nation, costs and prices at colleges and niversities have increased in the last ten years (Russo & Coomes, 2000). This is a concern for enrollment management as financial aid used to be a means of providing access and choice. Now, due to increased costs and budget constraints, financial aid is being used in a savvy way to recruit students.

For private institutions because of the increased costs, financial aid is being used as a leverage tool to entice students to enroll. They have the ability to manipulate a scholarship package. For public institutions, like the CSU, they do not have the ability to manipulate tuition, also known as "tuition discounting". For private schools, tuition discounting is considered a scholarship. The students "do not have to pay the amount of tuition bill covered by the award, but the institution does not receive income" (Russo & Coomes, 2000, p. 39). Other forms of scholarship include endowments and annual giving. These bring money into the university but can be provided to offset student costs.

Besides grants and scholarships, loans are a part of a financial aid package. Today, loans are the primary source of aid. "Since the 1970's, loans have increased one-fifth to more than half

of all aid" (Russo & Coomes, 2000, p. 49). The pulling of loans has shifted the burden of paying for college from the institution to the student. This has affected the access and retention of students.

When students are in the college search process, the cost of attending the school almost inevitably comes up. The receipt of a financial aid award, regardless of level, psychologically affects a student because it projects to the student that the institution wants them (Abrahamson & Hossler, 1990; Freeman, 1984; Hossler, Schmit, & Vesper, 1999; Jackson, 1978). A financial aid package can mean the difference between a student attending their first choice school versus their second choice. Chapman and Jackson (1987), as cited in Hossler et al. (1999), researched that for high-quality students, it would take at least $2,000 to "moderately increase the probability that a student would enroll in their second choice school instead of their first choice college. To increase the probability by 50% required aid awards of more than $5,000" (p. 94). College costs and the ability to pay have a direct influence on a student's choice to enroll as well as persist through a university (St. John, 2000).

Tinto mentioned previously that social and academic integration is important in college persistence. However, students need to be able to afford to go to school, before they can focus on the social and academic integration. Besides tuition, college costs include books, personal expenses, and depending on the student- housing. While paying for the cost of classes may be covered, students still need to consider those other expenses and determine if their financial aid package will cover it. Loans have become a concern because as students pull out money, they will need to manage their burden of debt. Institutions are therefore responsible for ensuring that students understand what it means to pull out loans and how to manage it.

As federal and state funding becomes increasingly limited, enrollment managers need to examine the role of financial aid and how students are influenced. By doing so, they can make decisions on how to "invest in student grants, how much to emphasize loans and work, and whether to consider drastic alternatives, such as price reductions [tuition discounting]" (St. John, 2000, p. 72).

Retention programs. Besides financial aid, retention programs are a factor in student persistence. According to Braxton et al. (2004), retention programs refers to "intentional institutional actions that devote college or university resources to the aim of increasing student persistence" (p. 55). The resources can take the form of funding, personnel, and space. A key to retention is the word intentional. It is one thing to offer programs and activities with the thought of increasing persistence, but it is more effective if the program is purposeful and meets the students' needs.

Programs that show high retention rates have the following characteristics (Thomas, 1990):

1) They are comprehensive and coordinated. No one department is responsible for retention, but rather the institution as a whole bears the responsibility. Because of this, multiple departments may collaborate with one another. This can be collaboration of professional staff within academic and student affairs, faculty, and students. Aside from collaboration, a comprehensive retention program would focus on several areas of student's involvement both academically and socially. This can be from engagement in the classroom, meetings with peer advisors, and social programs in the residence halls.

2) Faculty and staff take the initiative to establish and maintain contact with students. It is one thing to be available to students, but it is another to seek students out. Whether it be a faculty

member seeking students who are having difficulty, or being available outside of the classroom, or staff encouraging participation in student activities. The non-passive involvement with students aids in retention efforts.

3) The use of data and information informs the university personnel so they can better understand the student and their needs. For students who do leave, follow up surveys inquiring about perceptions and reason for leaving can assist an institution with how they may improve. They may not be able to save everyone as each student has different reasons for leaving, but it helps provide understanding.

Some, but not all universities, have retention officers in charge of monitoring student retention and gathering necessary data. Not every campus takes the time to focus on why students leave and how they can increase retention. According to Kemerer et al. (1982), "research reveals that most institutions take little action to reduce student attrition" (p. 100). This may be because some schools have large recruitment pools to draw from that they have a steady stream of students wanting to enroll. Another reason for the lack of attention to retention is the organization and administration of it. As mentioned previously, student recruitment usually lies in an office and for some universities it is easier to evaluate and provide resources compared to retention. If retention is everyone's responsibility, how does an institution manage responsibilities, resources, and hold individuals/areas accountable? A good retention program is one that is organized and is a collaborative effort. However at some institutions, "retention efforts are decentralized, difficult to evaluate, and not under the jurisdiction of a single administrator, [are] understaffed, and under-budgeted" (Kemerer et al., 1982, p. 103).

Sample retention efforts include a First & Second Year Program that monitors the progress of freshmen and sophomore students. Learning communities that allow for social

interaction amongst students, but also "change the manner in which, students experience the curriculum and the way they are taught" (Tinto, 2006, p. 2). Programs such as early warning systems help identify students academically at risk to guide them to services such as intensive advising, counseling, and tutoring services.

Non-traditional students, age 25 or above, and commuter students are a big focus for retention efforts. At most college campuses, efforts tend to be focused on traditional, residential students. At times, commuter students have felt like second-class citizens. This has slowly changed as institutions have relooked at their efforts. Some campuses have opened up facilities for commuter students, developed social activities, and changed operating hours of services to ensure student needs are met. Commuter students are more likely to drop out of school than those that live on campus (Kemerer et al., 1982). Today, non-traditional students make up 43% of all colleges in the nation (Wyatt, 2011).

Retention efforts at a university may also be competing with campus priorities. "Calls for creating an institutional culture focused on retention must compete with simultaneous calls on campus for creating a culture of assessment, a culture of philosophy, a culture of compliance, a culture of excellence, a culture of tolerance, and so on" (Kalsbeek, 2013b, p. 102). Rather than try to compete with an institution's priorities, strategically it is best to integrate retention efforts into the university's core activities. Kalsbeek (2013b) proposes the 4 P's framework of profile, progress, process and promise when considering retention strategies. In this model, profile looks at the predictability of retention and graduation rates based on an institution's profile and market position. Progress refers to the effort that the university is doing to ensure students are progressing toward degree completion. Not just focusing on keeping the student at the university, but rather keeping and helping students progress. Process is when an institution

examines “processes and policies that either help or hinder all students’ continuous enrollment” (Kalsbeek, 2013b, p. 109). Promise is labeled as a university ensuring that “the student’s experience is consistent with how the market sees the value of the institution’s brand” (p. 109). Did the campus deliver on its value that is promised students and do the students see the value?

All efforts to assist with retention should have the same goal in mine to have collaborative efforts and create a positive atmosphere for students.

Student services and activities. A student’s integration into a campus is not just through faculty and the classroom, but also through interaction with campus staff, administrators, and other students. This interaction can take place in social settings. “Residence-life and student activities programs provide important opportunities for students to develop friendships and to become involved in campus life” (Hossler & Bean, 1990, p. 10).

Not one single program will increase retention, but rather a collection of programs. Using staff, faculty, administrators, and other students to help with changing students’ attitudes and habits, all these methods contribute to increasing retention (Bean, 1990). Fostering student involvement increases retention as well (Astin, 1975b). By providing avenues for students to interact with one another and make a connection, it is a step towards retaining them. The avenues can be through organized programming provided by campus housing, social events by students activities, or as simple as informal gathering places” (Bean, 1986b; Bean, 1990). Support offices such as counseling services and health services help students with psychological, mental, & physical health area. They also assist with decreasing attrition.

Enrollment Management Organizational Structure

Now that components of enrollment management have been identified, the execution of all the components needs to be managed. If all programs and services conducted their business

without coordination, it would create chaos. Enrollment management fails at a university because there is a lack of access to data on the student body. Another reason is there is apathy towards enrollment problems- either faculty & administrators are not aware or they do not care. Finally, a campus can have a lack of coordination. While recruitment may be organizationally in an admissions office, retention may be in multiple departments. Because of this, "making efforts to attack attrition and maintain enrollments requires coordinated action involving both academic and student affairs coordinators" (Kemerer et al., 1982, p. 28).

To get a handle of these efforts, Kemerer et al. (1982) outlined four possible organizational structures for enrollment management. Each has their own advantages and disadvantages.

Enrollment management committee. The enrollment management committee is usually the first response by an institution in addressing enrollment concerns. This organizational structure is composed of campus departments such as directors of admissions, registrar's office, and financial aid. Dean of students and faculty are also represented. An enrollment management committee has the least impact on the organizational structure of a university as it just brings the areas together. The purpose of the committee is to look at marketing and student recruitment efforts. The benefits of having an enrollment management committee is that it can "be an effective vehicle for educating large numbers of faculty and administrators about marketing and retention, which can be a good way to build campus support for enrollment management activities" (Hossler, 1990, p. 47). Institutional money is not required to implement the committee and if quick actions are required for minor problems, the committee is useful.

Disadvantages to having an enrollment management committee is what it has little to no influence on policy-making decisions that would have major impact. Membership within a

committee may rotate after 3-4 years so it is difficult to maintain consistency for the long term (Hossler, 1990). While the committee may be a good starting point for informing, to be effective over time it needs to involve into a centralized organization.

The staff coordinator: "Director of enrollment management." The designation of a director of enrollment management appoints an individual to oversee enrollment management efforts. Little restructuring of the organization may be required. The position is "typically a middle-level administrator with assigned responsibilities to coordinate and monitor the institutions enrollment management activities, primarily admissions and financial aid" (Penn, 1999, p. 18). The director of enrollment management can also take on other roles such as monitoring the interdependency of areas and developing and implementing an institutional marketing plan (Kemerer et al., 1982). The interdependency is key to monitor as academic affairs may introduce a new major and rely on recruitment efforts to get the word out. Changes in financial aid policies can affect the number of students enrolled which affects housing, student services, and academic planning. Other duties of this position include providing the campus community with enrollment figures, projections, and results of marketing research.

Advantages to the director approach is that the position helps to diminish organizational confusion and duplication of effort. By monitoring departments' efforts, the director of enrollment management can examine the interconnectedness of departments and programs. Pending reporting lines, either to the President, Provost, or another vice president, this position can have some influence over the coordination of activities (Kemerer et al, 1982). The director of enrollment management can also work with an oversight committee similar to that of an enrollment management committee in facilitating communication and educating the campus community.

Disadvantages to this type of model is that it may not be able to integrate into the organization. Individuals within this role need to work with multiple areas and gain support and cooperation. If the individual cannot build relationships, then it has little influence. The position would be responsible for making sure all coordinated efforts are processing as one, but would not have the decision making or budgetary influence to affect change within those proceeses. A successful individual in this position would have the interpersonal skills to negotiate the organizational structure, and the respect from other areas to follow. Without the right person, the model will fail (Dixon, 1995; Hossler, 1990; Kemerer et al., 1982).

The enrollment management matrix. Within this model, a senior level administrator is put in charge. "An existing senior-level administrator such as the vice-president for student affairs, academic affairs, or institutional advancement directs the activities of the enrollment management matrix" (Hossler, 1990, p. 48). The matrix itself is grouped by activities and their impact on various stages of the enrollment cycle. Kreutner and Godfrey (1980-91), as cited in Kemerer et al., (1982) discussed four area groupings of activities: marketing, enrollment, retention, and research. Pending the function of the department, it is placed into one of these groups. There is not a reassignment to another division or vice president. Each area grouping has a distinct goal that does not overlap into another grouping. The activities of each one are limited so they avoid duplicate efforts & overlapping into other areas. The appointed senior-level administrator oversees the operation and is responsible for evaluating the effectiveness of its personnel and programming. The position then reports these findings to the President and other senior-level administrators. Each area is working with at least two senior level administrators- their direct administrator and this position.

The benefit to this type of model is the concentrated effort by the institution to see movement within enrollment management. There is not a "reshuffling of subordinate units, but rather requires that they work together for good enrollment management" (Dixon, 1995, p. 8). The model also allows for faculty to participate especially in activities such as recruitment. By doing so, it decreases the inclination for faculty to blame enrollment problems on the admissions area (Kemerer et al., 1982). By organizing the matrix under a senior-administrator, it puts enrollment management issues into the forefront of campus concerns. This prevents issues from being pushed aside by other competing campus priorities. If resources are needed for enrollment management programming, the senior level administrator can bring it to their counterparts and timely decisions can be made.

Disadvantages to this model are the ability for departments to put enrollment management efforts in their priority of tasks. For some, enrollment management may not be their priority. While a senior- level administrator is responsible, they cannot monitor every department. In addition, the cooperation of all areas involved is essential. "If midlevel administrators who are part of the matrix report to another vice president who is not in agreement with the enrollment management goals, problems will arise" (Hossler, 1990, p. 49). The overseer of the matrix not only needs to ensure all areas work together, but that any issues are addressed with campus support.

The enrollment management division. This is the more radical of organizational structures in that it requires a major restructuring of the organizational chart. Considered the most centralized, this model has a vice president or associate vice president assigned all responsibility of the enrollment management activities. This division would encompass all those departments and for a large functional unit. The division would need high levels of administrative support and the president would have to become a strong advocate of this model.

By having this type of model, all areas that are involved within enrollment management are brought together and strategies are easier to coordinate and implement (Hossler, 1990). Caren and Kemerer, the individuals who proposed this model, believe the vice president of this model be "sufficiently integrated into the decision and policy-making structure to ensure that enrollment management concerns receive adequate administrative attention" (Kemerer et al., 1982, p. 39). The overseer of this division has the authority to gain cooperation and at the same time holds the accountability. Any concerns can be brought to the President and addressed accordingly.

The drawbacks to this model include the timing of the restructuring. The model works best in implementing when there is an enrollment management crisis. Not every institution has the time, resources, and ability to attempt this type of reorganization. It is difficult to create a new division if an institution has been established for a period of time. The movement of a department from one vice president to another can create poor relations. Employee morale may suffer, particularly amongst those who have been at the institution for awhile (Hossler, 1990). Also, this type of structure is not instant and cannot be implemented in a short period of time, with the exception of a crisis period and the change is called for. A process like this needs to

occur over time and not be implemented haphazardly or long term effects may be politically and economically costly.

Enrollment Management Research

Enrollment management as a term has been around for thirty years, but in the early 80's was when its importance had grown. Enrollment management has been studied at different levels.

Peters and Keihn (1997) studied enrollment management planning at the University of Wisconsin system (UW system). The UW system had a three phase system-wide enrollment management plan. The phases were called Enrollment Management I (EM I), from 1987-1990, Enrollment Management II (EM II), from 1991- 1994, and Enrollment Management III, from 1994 and on. UW system is composed of twenty-six campuses merged from the University of Wisconsin and Wisconsin State Universities.

During the 1980s, UW system was experiencing an all time student full time enrollment (FTE) and headcount. This unplanned enrollment stretched dollars and resources could not keep pace. While FTE enrollment increased by 16%, sixteen hundred fewer class sections were not offered. As a result, student and parent complaints regarding access to courses, inadequate facilities, large class sizes, and overall decrease in quality of education was voiced. The increase in student enrollment was fueled by UW's "tuition revenue-management policy that created a short term incentive for institutions to admit more students than they could absorb fiscally" (Peters & Keihn, 1997, p. 38). By admitting the students, UW was able to keep the tuition revenue. The problem was that the tuition revenue did not cover the cost of educating the student. In the long run, the educational quality suffered. To fix this, EM I and , later, EM II were developed. By implementing the two enrollment management phases, the UW system

decreased student enrollment by 13,000 FTE. The enrollment management plans were considered a success because the amount spent per student reached the national average, freshmen qualifications increased, access did not decrease, student and parent complaints were minimized, and resources now matched student enrollment.

Enrollment management phase III was developed in response to a projected increase in high school graduates of more than 40,000 over a six-year period (1995-2001). Whereas EM I and EM II were a top-down implementation, EM III was developed with an opportunity for the general public to be informed and offer their opinion. The EM III plan addressed how many students the system would be able to enroll and developed other methods of access to students. Some of the methods included offering distance learning courses and increasing faculty workload. While the plan was approved by the UW system board of regents, state legislature actions affected its success. With a property tax-relief measure requiring the state to pay for 2/3 of K-12 public costs, funds that may have previously gone to the UW system were now diverted. The system received a net reduction in $33 million of state support. Coupled with this, enrollment was down by 1% in 1995. High school graduates were still high, but retention was down at the schools. The economy may have been a factor in enrollment as students that left the UW system were able to find employment due to availability of jobs. Peters and Keihn's study concluded that having a systemwide three-phase plan over a course of a number of years requires collaboration and flexibility. It is important with planning to have a periodic review and wide dissemination and buy-in.

In 2007, Simmons studied the effectiveness of enrollment management planning at four California community colleges (Simmons, 2007). Her study found that through interviews with key stakeholders in enrollment management, the community colleges did not have formalized

written enrollment management plans. Retention also seems to be the weakest aea for all colleges, along with the inability to track and evaluate students.

Besides enrollment management planning, enrollment manager roles were researched. In Stewart's (2004) research, he reviewed position descriptions of enrollment management positions with the hope of being able to define an enrollment manager's role. His study found that institutional research and data was important to enrollment management strategy. Enrollment needed to be an institution-wide issue and not just one department's responsibility. The enrollment manager themselves needed to be a collaborator and advocate for resources in order to be successful.

Enrollment management models were also reviewed in a large system. In LoBasso's (2006) research, he examined the enrollment management models within 28 Florida community colleges. He found that enrollment management had been implemented at some level based on the word "enrollment" being in the title of a position or office. LoBasso also examined what offices were under enrollment management and the divisions they were in. Lastly, enrollment management existed at the community college because each campus wanted to increase enrollment.

Perceptions by administrators on their view of enrollment management has also occurred outside of California. In Williams's (2001) research, she examined administrators' perceptions of enrollment management practices at the state technical colleges of Georgia. Abston (2010) looked at the practices at the community college level in the state of Alabama. Abston discovered that seven of the ten enrollment management components were practiced. Williams also discovered that many of the enrollment management components were also available. However, a focus needed to be put on retention and academic advisement.

As stated previously, enrollment management can be implemented in response to a crisis. No event was truer than post-Hurricane Katrina. Jones, Das, Huggins, and McNeeley's (2008) research examined enrollment management practices after the catastrophe and how some colleges handled it. For Delgado Community College, the first effort administrators needed to do was locate where their students were. They changed their marketing and recruitment tactics by visiting retail stores and registering students on the spot. Employees attached magnetic signs to their cars encouraging students to go back to school. A phone bank staffed by faculty was established at one of the campuses to answer student questions. The phone bank and establishment of a website provided communication to students. Technology aided in the retention of students by offering online instruction for those who were displaced. In addition to academic support, student services, such as counseling services, was also essential for student success.

For credibility, it was crucial for an institution to have student record data accounted for and have a back up. Having multiple back ups and student information storage sites was deemed important because of being able to account for student's academic credit.

In addition to an enrollment management plan, a business contingency plan in place prior to a disaster was advised. Recommendations included relocation plans, communication strategies for faculty, staff, and students, record storage, and partnerships with other agencies (Jones et al., 2008). Also recommended were an emergency enrollment plan that examined the overall enrollment view, enrollment status, how to grow enrollment, and assessment. In response to a crisis, it is essential for a campus to be prepared and be inventive in their practices. Tactics for responding include how to address "graduates, retention, advising, admissions, financial aid, student records, and recruiting" (Jones et al., 2008, p. 182).

Today, Obama is also calling for the accountability of universities in degree attainment in order to meet his vision of the United States having the most number of graduates. The idea of retention and student success has been part of the ongoing conversation of enrollment management, but now there is a focus on it. No longer is enrollment management just looking at the recruitment of students, but is now looking at retention and student persistence. Kalsbeek (2013b) has proposed his 4P's framework to look at student retention. O'Keefe (2013) explored why students leave and what universities are not doing to retain their students. O'Keefe found that students need to have a sense of belonging and universities need to invest in providing a welcoming environment for that. If not, the result could not just mean a loss of students, but also revenue to the university and tax payer dollars. As cited in O'Keefe (2013), according to the American Institutes for Research, entitled *Finishing the First Lap: the Cost of First Year Attrition in America's Four Year Colleges and Universities*, it was revealed that the US spent "$6.8 billion in subsidies paid to colleges and universities to fund the education of students who exited tertiary education after one year [and] $2.9 billion in state and federal grants were paid to students who did not pursue a college education beyond their first year" (pp. 605-606). This type of expenditure with no return on investment is a call for enrollment management to be at the forefront of conversations with campus stakeholders.

Summary

The literature review of the literature examined the emergence of enrollment management, the role student college choice has, components of enrollment management, and the types of organizational models available. The next chapter presents the methodology of the study.

Chapter Three: Methods

The purpose of this quantitative, comparative study was to assess the enrollment management practices of the 23 campuses of the California State University (CSU) system. Through an electronic survey process and campus website reviews, the following research questions was addressed.

1. What practices and activities are being used at each CSU campus?
2. What do selected university administrators at each campus perceive to be the most and least effective strategies and/or resources to create an effective enrollment management plan?
3. What differences (if any) exist in the perceived effectiveness of enrollment management activities and practices within a single campus?
4. How do enrollment management activities vary amongst the CSU campuses and are there any predominant practices?

Description of Design/Research Methodology

For the purposes of addressing the above research questions, a non-experimental quantitative research design was proposed; specifically a comparative research design. As McMillan & Schumacher (2006) describe, when a researcher investigates differences in perceptions and practices among groups, comparisons are possible. The intention of the research was to determine similarities and differences among campuses regarding enrollment management practices.

The research consisted of using a survey. The administration of a survey obtained directors perceptions towards different activities/practices associated with enrollment management. Administrators were asked to rate whether a certain activity related to enrollment

management existed at their campus and how effective they perceived it to be or could be if used.

Process for Selection of Data Sources

An assumption that occurs within enrollment management is that campus efforts are focused on admission application and recruitment activities. If there were problems with enrollment, it has historically been focused on the front end. "Problems in enrollment management, were frequently defined as the need to recruit and admit an adequate number of students, with little concern for the aftereffects" (Penn, 1999, p. 2). However, enrollment management involves more than just the perspective of admissions and recruitment. It is important that additional viewpoints are considered.

> Campus administrators and faculty often see students through too many narrow lenses that limit a comprehensive view. There is an admissions lens, the faculty lens, the student affairs lens, and occasionally the student outcome lens. Seldom, however, is there one panoramic view of students. (Hossler & Bean, 1990, p.18)

In this study, campus presidents, vice presidents of student affairs, chief academic affairs officers, dean of the faculty, directors of admissions, registrars, directors of financial aid, and directors of student life/activities, directors of recruitment, advising, communications and marketing, institutional research, and enrollment managers were invited to participate in a survey. These individuals were selected because their roles on campus have a significant influence on enrollment management. Names and contact information for these respective individuals were found by accessing each individual CSU campus website and compiling a roster of the individuals currently in these positions. Considering the 23 campuses, 299 individuals

were invited to participate in the research. For any particular campus, it ranged from 8-14 individuals.

Data Gathering Instruments

The primary survey instrument was adapted from surveys by Dr. John Fuller (1998) and Dr. William Webber (1988). In Webber's study, he attempted to examine admission directors' perceptions of enrollment management at selected four-year public institutions in the US South. Webber had based his survey on a previous study by Gauntner (1980), which looked at perceptions of student personnel services by Veterans Affairs Coordinators. Webber's survey was from enrollment management literature and leaders in the field at that time. Dr. Fuller further adapted Webber's survey for his research.

Surveys conducted by Fuller and Webber requested demographic data of the institution and the availability, need, and perceived effectiveness of ten components of enrollment management activities (Hossler, 1984). (see Table 1)

Table 1

Ten Components of Enrollment Management

1.	Marketing
2.	Admissions and Recruitment
3.	Academic Advising
4.	Career Planning & Placement
5.	Academic Assistance Programs
6.	Institutional Research
7.	Orientation
8.	Financial Aid
9.	Retention Programs
10.	Student Services & Activities

Webber and Fuller both requested for participants to rank order their preference of one of four enrollment management organizational models identified by Kemerer et al. (1982). These included: a) Staff Coordinator: "Director of Enrollment Management"; b) The Matrix System; c) Enrollment Management Division; and d) Marketing Committee

Webber identified activities and programs that were each associated with Hossler's enrollment management components. The activities and programs came from a review of the literature and consultation with enrollment management professionals. As a result, 101 activities and programs were developed for the survey. Fuller modified Webber's survey by narrowing the items down to 59 items for his research.

Because the California State University is a unique system, Fuller's survey was further modified and validated for the purpose of this study. The number of listed activities was decreased to eliminate those that do not pertain to the CSU and also to prevent survey fatigue due to the length of the survey. One additional question was added for participants to provide any campus activities they have found to be effective that were not listed. Appendix A provides a draft of the survey while Appendix B contains the permission to use the Fuller survey instrument.

Validity of Survey Instruments

Webber followed a two-step validation process for his survey instrument. In content validity, the researcher attempts to answer if the "items measure the content they were intended to measure" (Creswell, 2009, p. 149). Webber had the items selected for the survey instrument reviewed for clarity, content, and readability. Those reviewing the items were five faculty and staff members from East Texas State University. Their positions were from the areas of admissions, enrollment management, university advancement, and counseling. The individuals

held the title of vice president, director, assistant director, or department head. Each provided feedback to Webber on the list of enrollment management activities. Webber modified his items based upon this and then had a panel review his questionnaire for validation. His panel consisted of six reviewers who had experience in enrollment management and established reputations in enrollment management research and publications. After an elaborate interactive process, Webber had 88 agreed upon statements, narrowed down from an original 101.

For Fuller's research, he deemed the quantity of statements as too many and sought to narrow it down. He took this survey instrument and provided it to eight administrators from the areas of student services, academic affairs, and institutional development at West Virginia State College. Each administrator reviewed each of the statements in the components of enrollment management and recommended items for deletion. If four or more reviewers agreed upon an item to delete, Fuller deleted the item. As a result, his questionnaire was now 59 items instead of 88. Fuller also changed the Likert-type scale in the effectiveness section to have five choices instead of three upon recommendation from his advisor.

Request for permission to use Dr. Fuller's survey as the basis for this research was obtained. Verbal and written confirmations were obtained (see Appendix B). Modifications included a reduction of activities as well as adding an area where participants could provide additional items they deemed to be effective enrollment management practices. Two members within higher education who have experience with enrollment management and the California State University validated the modified survey. Their combined experience of over 20 years is in the fields of admissions, recruitment, and the registrar's office. As former directors of enrollment management areas, these administrators were aware of the activities and budgetary constraints that occur in the California State University system.

Reliability of Data Gathering Instrument

Webber and Fuller's studies have been replicated in other studies using different campuses. Their surveys have been slightly modified resulting in a review by expert panels to ensure validity and reliability. To enhance reliability, consistency in data collection was necessary. To ensure this, McMillan and Schumachher (2006) state that subjects will be provided with the same directions, time frame to answer the questions, and the survey instrument will be at the appropriate reading level and language. It is important that the reader understand the questions being asked. This is why Webber had experts in the field read the activities and statements for clarity and readability. As well, the modifications of the survey for use in this study will also undergo a new validation process. To ensure reliability of this modified instrument, the content experts also participated as pilot subjects. They each took the survey to determine if the length of the survey was sufficient to prevent survey fatigue. In addition, they provided feedback on the wording of the questions as well as quantity of questions.

Data Gathering Procedure

With Internet technology available, the primary data survey was administered online. The survey was developed in the commercial tool- *Survey Monkey*; an Internet survey tool. Using this mode of administration is advantageous because it allowed for "reduced cost and time, quick response, easy follow-up, and the ability to survey a large population" (McMillan and Schumacher, 2006, p. 239). The request for participation (see Appendix C) was communicated via email to the published e-mail addresses of the targeted population. Any concerns regarding limiting responses for those who do not have access to the Internet and email are mitigated in that all personnel within the California State University system are provided

with a campus email account and access to the Internet and a computer. Appendix D contains the follow-up e-mail to prospective participants.

To increase the response rate, follow up emails and phone calls were made within one week of distribution of the invitation to participate. (see Appendix E). The survey was closed within two weeks of initial distribution.

In the invitation to participate, there was a link to the survey. Prior to starting the survey, participants were provided with an explanation of the purpose of the research. In addition, informed consent was provided and if the individual elected not to participate, they opted out and exited the survey. If they elected to continue with the survey, they were led through a series of webpages containing survey questions. Participants were asked a few demographic items. However, there was no requirement other than identifying their CSU campus that must be completed in order to proceed with the survey. The survey asked participants to indicate which enrollment management activities were used at their campus and also the perceived effectiveness for each. In addition, they were asked about the campus's enrollment management decision-making process and encouraged to add any additional comments about any other activities they feel are relevant.

Human Subjects Considerations

This study involved human subjects and met the Federal requirements for research considered to be Exempt (45 CFR 46.101). Targeted subjects are employed by a Public Institution of Higher Education and their contact information was publically available in each campus's website. In the introduction to the survey as well as the initial request for participation, the researcher was open and honest by providing full disclosure of the purpose of the research and how it related to enrollment management. (see Appendix D and Appendix F). There was

very minimal risk to them if they chose to participate which was only if there was a breach in confidentiality. To minimize this risk, participants were asked to complete a survey with the only identifying information being the campus which they represent. There were multiple individuals invited from each of the campuses so the possibility of identifying any single individual was unlikely and identity was further protected by using the electronic survey process which striped the IP address from the data prior to the responses being accessed by the researcher. Survey Monkey uses an encrypted process called Secure Sockets Layer (SSL). SSL is a protocol initially developed for transmitting private information over the internet. In addition, the links and survey pages are secured by Verisign Authentication Services during transmission from the researchers account to the respondents and vice versa.

All participants were informed that their responses were anonymous and kept confidential. Each participant responded to a list of enrollment management activities and indicated if it existed on their campus and their perceived level of effectiveness. With individual identity protected, the process for completing the survey was expected to take no more than 30 minutes to complete. This time was based from feedback provided by the pilot study. The topic of the survey was focused on availability of campus activities and opinions regarding their effectiveness which was not considered to be sensitive topics nor potentially threatening to their employment status. As the survey involves their work setting and represent routine inquiries into perceptions about student services, the burden of participating was also considered minimal at most and occurred most likely using campus-issued technology and during work time. To ensure the appropriateness of this activity, permission to invite participants was obtained through the CSU Chancellor's Office. Inquiries made to the Chancellor's Office determined that no further

permission was needed and each individual invited to the survey determined whether or not he or she wanted to participate (see Appendix G and Appendix H).

All communication with potential subjects was electronic. If the individual chose to participate, they were requested to answer questions providing their perception of activities that contribute to components of enrollment management. In order to protect the participant, at any point in time during the survey, the individual could stop the survey and exit without penalty.

The researcher further protected the confidentiality of the participant through Survey Monkey's security policy. Access to the survey template and data required a secure login and password to which the researcher was the sole possessor. The data collected by SurveyMonkey is owned by the researcher and data collected was not sold or provided to a third party, unless in the event of a subpoena, per the company's privacy policy. Once the data had been collected, it was downloaded onto a password protected computer to which the researcher is the sole owner of the login and password. The data will be stored in a privacy protected folder and kept for a period of no more than five years.

An application requesting Exempt status for this research was submitted to the GPS-IRB. In addition, a petition to alter the informed consent process was requested in order to not have a direct connection between the survey and the consenting subjects. The CSU Chancellor's office had indicated it will accept the decision of Pepperdine's GPS-IRB and not require an additional submission to their internal, IRB committees (see Appendix G).

Data Analysis

Survey data were received via a spreadsheet format from the electronic survey tool provider. This data was subsequently imported into the Statistical Package for the Social Sciences (SPSS) which was used to analyze the data. Descriptive statistics was performed

including means and ranking of activities by perceived effectiveness. To determine differences by campus, Analysis of Variance (ANOVA) procedures were used.

Summary

This chapter provided a summary of the methodology used in the study, detailing the design of the study, selection of data resources, review of survey instrument, and the validity and reliability of the instrument. The following chapter will provide the results of the findings and analysis to assist in answering the following research questions:

1. What practices and activities are being used at each CSU campus?
2. What do selected university administrators at each campus perceive to be the most and least effective strategies and/or resources to create an effective enrollment management plan?
3. What differences (if any) exist in the perceived effectiveness of enrollment management activities and practices within a single campus?

How do enrollment management activities vary amongst the CSU campuses and are there any predominant practices?

Chapter Four: Results

The survey was distributed to administrators in the following areas at all 23 California State University campuses: University Presidents, Student Affairs, Provost, Deans of faculty, Admissions, Registrars, Financial Aid, Student Life, Recruitment, Advising, Communications, Institutional Research, & Enrollment Managers. Recipients received an email with a link to the survey.

Two hundred and ninety-nine administrators were contacted for participation. Ninety participants responded of which 67 completed the entire survey and 23 partially completed. Of the partially completed, only surveys which had at least two enrollment management components completed were utilized. This resulted in 9 surveys being included in the results and the remaining 14 discarded. In total, 76 surveys were utilized (84% of those responded). Table 2 shows the number of respondents by CSU campus.

Table 2

Response by CSU Campus

Campus	Response Count	Campus	Response Count
Prefer Not To Answer	7	Northridge	3
Humboldt	6	Pomona	3
Channel Islands	5	Sacramento	3
San Bernardino	5	San Diego	3
San Francisco	5	San Marcos	3
San Luis Obispo	5	Maritime Academy	2
Chico	4	Stanislaus	2
San Jose	4	Dominguez Hills	1
Bakersfield	3	Long Beach	1
East Bay	3	Los Angeles	1
Fresno	3	Monterey Bay	1
Fullerton	3	Sonoma	0

The greatest number of respondents preferred not to indicate the campus at which they are employed at. By campus, Humboldt State University had the most number of respondents.

Sonoma State University did not have any respondents. However, it is undetermined if they are included in the "Prefer Not to Answer" group.

Enrollment Management Components

The thirty-five questions asked on the survey pertained to enrollment management activities and then were categorized into an enrollment management component. Table 3 demonstrates which activity belongs to which enrollment management category.

Table 3

Enrollment Management Activity Categories

Enrollment Management Component	Activity Number (Survey Question)				
Marketing	Q1	Q2	Q3		
Admissions & Recruitment	Q4	Q5	Q6	Q7	
Academic Advising	Q8	Q9	Q10	Q11	
Career Placement	Q12	Q13	Q14		
Learning Assistance	Q15	Q16	Q17		
Institutional Research	Q18	Q19	Q20		
Orientation	Q21	Q22	Q23		
Financial Aid	Q24	Q25	Q26		
Retention	Q27	Q28	Q29	Q30	Q31
Student Services	Q32	Q33	Q34	Q35	

By knowing which activities corresponded to the component, it would help identify which components of enrollment management existed.

Participants in the survey were asked if an activity existed and to rate their perception of the effectiveness of the enrollment management activity. They did so by indicating 1 for most effective with a sliding scale to 5 for not very effective. Not applicable was selected if the activity did not exist or the administrator was unsure. The average effectiveness ratings for the activities are displayed throughout the document.

Marketing. More than half of the respondents indicated that their campus practiced the activity of having a short and long term plan outlining enrollment objectives as well as a method of coordinating marketing efforts. Fewer than half of the respondents indicated that their campus utilized marketing surveys to determine their institutions competitive position. Table 4 indicates the availability of the activity at a CSU Campuses, while Table 5 indicates the number of CSU campuses that conducted the activity.

Table 4

Existence of Marketing Activity on Their Campus

Activity #	Activity	Total Respondents	Activity Exists On Campus	
			n	%
Q1	Marketing Surveys	76	22	29%
Q2	Plan Outlining Enrollment Objectives	76	60	79%
Q3	Method of Coordinating Marketing Efforts	76	40	53%

Table 5

Number of CSU Campuses that Conduct Marketing Activities

Activity #	Activity	Number of CSU Campuses that Conduct Activity	% of CSU Campuses
		n	
Q1	Marketing Surveys	14	60.9%
Q2	Plan Outlining Enrollment Objectives	21	91.3%
Q3	Method of Coordinating Marketing Efforts	17	73.9%

Table 6

Average Perceived Effectiveness of Marketing Activities

Campus	Marketing Surveys	Plan Outlining Enrollment Objectives	Method of Coordinating Marketing Efforts
Bakersfield	1.00	2.00	2.33
Channel Islands	3.00	3.00	3.00
Chico	2.33	2.50	3.25
Dominguez Hills		3.00	1.00
East Bay	3.00	2.00	3.50
Fresno		3.00	
Fullerton	4.00	3.00	
Humboldt	3.00	2.50	2.50
Long Beach		1.00	
Los Angeles		1.00	2.00
Maritime Academy			
Monterey Bay		2.00	3.00
Northridge	1.00	2.00	3.00
Pomona		3.50	
Sacramento	3.00	2.00	3.00
San Bernardino	3.00	1.67	3.50
San Diego	1.00	1.33	1.50
San Francisco		2.00	2.00
San Jose	4.00	3.50	5.00
San Luis Obispo	1.20	1.75	1.67
San Marcos	4.00	2.50	2.00
Sonoma			
Stanislaus	2.00	4.00	2.00
Prefer Not to Answer	4.00	3.20	3.33

For those campuses that utilized marketing surveys, at least four campuses, Fullerton, San Jose, San Marcos, and those who Preferred Not to Indicate Their Campus, perceived those surveys as not effective at their campus. Bakersfield, Northridge, San Diego, and San Luis Obispo perceived this activity to be highly effective (see Table 6).

21 campuses indicated that they have a plan outlining short and long term enrollment objectives. A majority of the administrators, with the exception of administrators from CSU Stanislaus, indicated that their plan was effective. Some responders indicated that coupled with

the enrollment management objectives; a focus needs to be on retention as well and not just bringing in students. To achieve the enrollment objectives, an administrator stated that coordination and collaboration of staff and stakeholders is necessary.

Of the campuses that had a method of coordinating marketing efforts, only once campus, San Jose, perceived their activity to be less effective. The remaining campuses indicated their practice to be effective. Dominguez Hills perceived their method as highly effective on their campus.

Admissions and recruitment. Tables 7 and 8 give a summary of admission and recruitment activities.

Table 7

Existence of Admissions & Recruitment Activity on Their Campus

Activity #	Activity	Total Respondents	Activity Exists On Campus	
			n	%
Q4	Use of current students	76	66	87%
Q5	Campus visits by groups of students	76	75	99%
Q6	Use of alumni	76	45	59%
Q7	Recruiters making high school visits	75	70	93.3%

Table 8

Number of CSU Campuses That Conduct Recruitment Activities

Activity #	Activity	Number of CSU Campuses that Conduct Activity	% of CSU Campuses
		n	
Q4	Use of current students	22	95.7%
Q5	Campus visits by groups of students	22	95.7%
Q6	Use of alumni	19	82.6%
Q7	Recruiters making high school visits	22	95.7%

Table 9

Average Perceived Effectiveness of Recruitment Activities

Campus	Use of Current students	Campus visits by groups of students	Use of alumni	Recruiters making high school visits
Bakersfield	1.50	1.67	1.00	1.67
Channel Islands	2.00	1.80	3.00	1.50
Chico	2.00	1.25	3.00	2.50
Dominguez Hills	2.00	4.00	2.00	4.00
East Bay	3.00	2.00	4.00	2.67
Fresno	2.33	3.00	4.00	1.50
Fullerton	1.67	1.33	4.00	1.33
Humboldt	2.50	1.33	2.17	1.67
Long Beach	3.00	3.00		3.00
Los Angeles	1.00	1.00	1.00	1.00
Maritime Academy	2.00	1.00	2.00	3.50
Monterey Bay	2.00	1.00	2.00	2.00
Northridge	1.00	1.00	3.00	2.00
Pomona	2.00	2.33	3.00	2.50
Sacramento	2.33	2.00	3.33	1.67
San Bernardino	2.20	1.40	2.50	1.40
San Diego	1.33	1.00	1.33	1.33
San Francisco	1.50	2.00	2.50	1.80
San Jose	1.67	1.50	2.50	1.50
San Luis Obispo	1.60	1.80	2.75	3.33
San Marcos	3.00	1.33		2.00
Sonoma				
Stanislaus	2.00	1.50		1.50
Prefer Not to Answer	2.00	2.00	3.40	2.00

Over 50% of the respondents indicated that all the admissions and recruitment activities were practiced on their campus (see Table 7). All of the CSU Campuses indicated that the recruitment activities, such as the use of current students, having campus visits, and recruiters making high school visits, existed on their campus (see Table 8). While a majority of campuses use alumni contacts in recruiting, Long Beach, San Marcos, Sonoma, and Stanislaus indicated that it did not exist.

Table 9 indicates the perceived effectiveness of the admissions and recruitment activity on their campus. The use of current students in the recruiting process was perceived to be effective to highly effective at a majority of CSU campuses. Having campus visits by groups of prospective students such as a College Day Event was also deemed effective to highly effective. Campuses like Los Angeles, Maritime Academy, Monterey Bay, Northridge, and San Diego deemed their visits as very effective. In contrast, CSU Dominguez Hills indicated their activity as not being effective.

Of the campuses that utilized alumni contacts, East Bay, Fresno, & Fullerton administrators did not perceive the practice to be effective. In contrast, Bakersfield and Fresno perceived the practice to be very effective.

The practice of having recruiters make high school visits was present on every CSU campus and the practice was perceived to be effective to highly effective on their campus. One campus, Dominguez Hills, indicated the practice was not as effective.

Some of the administrators indicated that recruitment is a combination of activities and not just one activity that helps a university. Online and usage of social media was a suggested effective practice. An administrator also mentioned predictive modeling can be used to develop an applicant pool that a campus can mine students from.

Academic advisement. Tables 10 and 11 give a summary of academic advisement activities.

Table 10

Existence of Academic Advisement Activity on Their Campus

Activity #	Activity	Total Respondents	Activity Exists On Campus	
			n	%
Q8	Faculty receive specialized training	76	27	35.5%
Q9	Professional staff are trained	76	68	89.5%
Q10	Undeclared freshmen receive special advisors	74	50	67.6%
Q11	Peer advisors used	75	49	65.3%

Table 11

Number of CSU Campuses that Conduct Advisement Activities

Activity #	Activity	Number of CSU Campuses that Conduct Activity	% of CSU Campuses
		n	
Q8	Faculty receive specialized training	17	73.9%
Q9	Professional staff are trained	22	95.7%
Q10	Undeclared freshmen receive special advisors	19	82.6%
Q11	Peer advisors used	17	73.9%

Table 12

Average Perceived Effectiveness of Academic Advisement Activities

Campus	Faculty receive specialized training	Professional staff are trained	Undeclared freshmen receive special advisors	Peer advisors used
Bakersfield	3.00	2.33	2.50	
Channel Islands		2.33		3.33
Chico	3.00	1.50	2.25	2.50
Dominguez Hills	4.00	4.00	4.00	4.00
East Bay	5.00	1.33	3.50	3.00
Fresno	4.00	3.00	3.00	3.00
Fullerton	2.00	2.67	2.00	3.00
Humboldt	3.33	2.50	2.17	2.00
Long Beach	2.00	1.00	1.00	2.00

(continued)

Campus	Faculty receive specialized training	Professional staff are trained	Undeclared freshmen receive special advisors	Peer advisors used
Los Angeles		1.00	1.00	
Maritime Academy	2.50	2.00		
Monterey Bay		2.00		
Northridge	5.00	1.00	1.33	2.00
Pomona	4.00	2.67	2.67	4.00
Sacramento	3.00	1.67	2.00	2.67
San Bernardino	3.33	2.60	2.40	2.00
San Diego	1.00	1.00	1.50	2.33
San Francisco		1.50	2.50	2.00
San Jose	4.00	1.75	1.33	2.00
San Luis Obispo	4.00	1.60	3.00	1.60
San Marcos		3.30	4.00	
Sonoma				
Stanislaus	1.50	1.50	2.00	2.00
Prefer Not to Answer	3.00	2.00	2.20	2.75

While 89% of respondents said that professional staff are trained to be academic advisors, only 36% have said that faculty received specialized training. This could be of concern considering that faculty see students on a daily basis and have more influence versus the time students go into see a professional advisor. Not having faculty trained in advising could result in poor academic advisement (see Table 10).

In Table 11, the CSU campuses practiced some form of academic advisement activities. While 22 of the 23 campuses had professional staff trained, not every single campus practiced faculty training or utilized student peer advisors. This indicates that campuses may be relying heavily on professional staff to conduct academic advisement.

The level of effectiveness among the campuses also varied. While Stanislaus and San Diego perceived their effectiveness of faculty receiving specialized training as high, campuses such as Dominguez Hills, East Bay, Fresno, Northridge, Pomona, San Jose, and San Luis Obispo, perceived theirs as fairly low. Thirteen of the CSU campuses felt their professional staff

training was effective. Only twenty CSU campuses had undeclared students receiving specialized advisors. All but San Marcos and Dominguez Hills perceived their use of these specialized advisors as high in helping to achieve their enrollment objectives. In addition to professional advisors, some campuses used peer advisors to assist fellow students. Pomona and Dominguez Hills did not find this as effective compared to the other eighteen campuses that did (see Table 12).

Some of the administrators did not believe any of the practices worked and were in the process of redeveloping their advisement plans. Others indicated that students need to be taught on their own and receive tools to manage their own advisements. Tools would consist of degree evaluation, four-year road map, and expectations of graduation in 4 (or 2) years. The role of faculty and staff would be more of a coach rather than advisor.

Career placement. Table 13 displays the number of respondents that said career placement activities existed on their campus. Only 40.8% of respondents stated that credit courses for career planning exist on their campus. Of the CSU campuses, only fourteen campuses said they existed (see Table 14). The majority of campuses found the activity as effective with the exception of East Bay that did not. 61 (80.3%) of respondents said their campus offered assistance in helping graduates find employment. Almost every CSU campus with the exception of two had employment assistance programs. The level of effectiveness was between effective and very effective (see Table 15). The campus which did not was Stanislaus. Less than 60% of those who responded said their campus has data on graduates and their job placement. Nineteen CSU campuses had these data. The campuses which didn't say this data existed were Long Beach, Los Angeles, and Stanislaus. Campuses which did not perceive the

activity as being effective on their campus were Bakersfield, Fresno, Sacramento, San Jose, and San Marcos.

Some administrators believe that research and internship opportunities were most effective in helping to achieve enrollment management. Others indicated visiting first year experience classes by career center staff helped educate students and staff. More than one administrator recommended that career advising needs to be coupled with academic advising. Participating in the beginning of a student's academic and continuing in the second year to aid in retention.

Table 13

Existence of Career Placement Activities on Their Campus

Activity #	Activity	Total Respondents	Activity Exists On Campus	
			n	%
Q12	Credit courses on career planning	76	31	40.8%
Q13	Employment Assistance	76	61	80.3%
Q14	Data of graduate placement	76	44	57.9%

Table 14

Number of CSU Campuses That Conduct Career Placement Activities

Activity #	Activity	Number of CSU Campuses that Conduct Activity	% of CSU Campuses
		N	
Q12	Credit courses on career planning	14	60.9%
Q13	Employment Assistance	21	91.3%
Q14	Data of graduate placement	19	82.6%

Table 15

Average Perceived Effectiveness of Career Placement Activities

Campus	Credit courses on career planning	Employment Assistance	Data of graduate placement
Bakersfield	2.33	2.00	3.50
Channel Islands	2.33	2.33	3.00
Chico		2.00	2.75
Dominguez Hills		2.00	2.00
East Bay	4.00	2.67	1.00
Fresno		2.00	4.00
Fullerton	2.00	2.00	2.33
Humboldt		3.25	3.00
Long Beach		3.00	
Los Angeles		3.00	
Maritime Academy		1.50	1.00
Monterey Bay		2.00	3.00
Northridge	1.00	3.00	2.33
Sacramento	2.33	2.67	4.00
San Bernardino	2.33	2.25	2.50
San Diego	2.00	1.50	2.67
San Francisco	1.50	3.00	2.00
San Jose	2.50	3.00	3.75
San Luis Obispo	2.00	1.50	2.00
San Marcos	1.00	3.00	4.00
Sonoma			
Stanislaus	3		
Prefer Not to Answer	3	2.50	2.33

Learning Assistance

Table 16

Existence of Learning Assistance Activities on Their Campus

Activity #	Activity	Total Respondents	Activity Exists On Campus	
			n	%
Q15	Academic & Reading Skills Support	73	70	95.9%
Q16	Faculty Tutors	73	25	34.2%
Q17	Student Tutors	73	67	91.8%

Table 17

Number of CSU Campuses That Conduct Learning Assistance Activities

Activity #	Activity	Number of CSU Campuses that Conduct Activity	% of CSU Campuses
		n	
Q15	Academic & Reading Skills Support	22	95.7%
Q16	Faculty Tutors	16	69.6%
Q17	Student Tutors	22	95.7%

An overwhelming majority (95.9%) of respondents stated that support in the areas of academic and reading skills existed on their campus. Student tutors were used on the campuses, but not necessarily as much with faculty tutors (see Table 16). Table 17 displayed how many CSU campuses practiced learning assistance activities. All campuses had academic and reading skills support as well as used tutors. There is a difference in the number of CSU campuses that use faculty tutors. Only 16 of the 23 CSU campuses utilized faculty. While having faculty tutors on campus is good, the perceived effectiveness varied (see Table 18). All campuses perceived their skills support as effective to highly effective. Of those who used faculty tutors, 88% of the CSU campuses felt it was effective. Campuses such as East Bay and San Jose did not. Using student tutors was perceived as effective to highly effective.

Table 18

Average Perceived Effectiveness of Learning Assistance Activities

Campus	Academic & Reading Skills Support	Faculty Tutors	Student Tutors
Bakersfield	2.00		2.33
Channel Islands	2.40	2.33	2.20
Chico	2.00	2.00	2.25
Dominguez Hills	2.00		2.00
East Bay	2.67	5.00	2.00
Fresno	2.33	3.00	3.00
Fullerton	1.67	1.00	1.67

(continued)

Campus	Academic & Reading Skills Support	Faculty Tutors	Student Tutors
Humboldt	2.40		2.33
Long Beach	2.00	2.00	2.00
Los Angeles	1.00		1.00
Maritime Academy	1.50		2.00
Monterey Bay	2.00	2.00	3.00
Northridge	1.50	1.00	2.50
Pomona	2.33		3.33
Sacramento	2.00	2.67	2.33
San Bernardino	2.40	2.00	2.50
San Diego	2.00	2.00	2.50
San Francisco	1.60	2.00	2.20
San Jose	2.75	4.00	2.00
San Luis Obispo	2.00	1.00	2.00
San Marcos	1.33	2.00	2.00
Sonoma			
Stanislaus	2.00	2.00	2.00
Prefer Not to Answer	2.67	1.00	2.50

Institutional research. Tables 19 and 20 give a summary of institutional research activities.

Table 19

Existence of Institutional Research Activities on Their Campus

Activity #	Activity	Total Respondents	Activity Exists On Campus	
			n	%
Q18	Coordination of Institutional Research	70	61	87.1%
Q19	Generating data on attrition	70	65	92.9%
Q20	Generating data on service area	70	54	77.1%

More than 75% of the respondents stated that the activities above existed on their campus (see Table 19). Almost all of the CSU campuses stated their campus practiced institutional research activities (see Table 20). It appears that this practice occurs across the majority of the CSU system, with the exception of Maritime Academy and Sonoma.

Table 20

Number of CSU Campuses That Conduct Institutional Research Activities

Activity #	Activity	Number of CSU Campuses that Conduct Activity	% of CSU Campuses
		n	
Q18	Coordination of Institutional Research	20	87.0%
Q19	Generating data on attrition	21	91.3%
Q20	Generating data on service area	21	91.3%

Table 21

Average Perceived Effectiveness of Institutional Research Activities

Campus	Coordination of Institutional Research	Generating data on attrition	Generating data on service area
Bakersfield	1.50	2.00	1.50
Channel Islands	3.33	3.67	3.75
Chico	2.33	2.33	2.50
Dominguez Hills	4.00	3.00	3.00
East Bay	2.67	2.33	2.67
Fresno	2.00	2.00	2.00
Fullerton	1.50	1.50	1.50
Humboldt	2.67	2.50	2.25
Long Beach	2.00	2.00	1.00
Los Angeles	1.00	1.00	1.00
Maritime Academy			
Monterey Bay		2.00	3.00
Northridge	1.00	1.33	1.67
Pomona	3.00	3.00	2.50
Sacramento	4.00	3.00	2.33
San Bernardino	1.75	1.50	2.00
San Diego	1.00	1.00	1.00
San Francisco	2.00	2.20	2.0
San Jose	3.50	2.50	3.00
San Luis Obispo	2.33	2.00	1.00
San Marcos	2.67	2.67	2.67
Sonoma			
Stanislaus	2.00	1.50	2.00
Prefer Not to Answer	2.25	2.20	2.33

Table 21 displays the perceived level of effectiveness by campus. The coordination of institutional research was perceived as effective or higher by three-quarters of the campuses. Particularly, campuses such as Los Angeles, Northridge, and San Diego perceived their coordination of institutional research as very effective. On the contrary, Channel Islands, Dominguez Hills, San Jose, and Sacramento did not. All the campuses, with the exception of Channel Islands, felt their generation of data on attrition was effective. This holds true for data on service area as well. Long Beach, Los Angeles, San Diego, and San Luis Obispo perceived the practice to be very effective on their campus.

Administrators indicated that additional data such as retention and applicants by school, major, academic level, and admission status was an effective practice for them. It was also commented that institutional research provides more historical data that helps with short term enrollment goals. However, current data was provided by another area to help with enrollment management. In one particular campus's case, it was the Division of Technology. It may be of use in future studies to consider where campuses obtain their data in making enrollment management decisions.

Orientation. Table 22 displays the number of respondents that indicated the enrollment management activity on their campus. For each of the activities, over 80% of administrators said the activity was practiced. Across all the CSU campuses, they all seemed to have practiced having a parent orientation, transfer orientation, and having registration occur at orientation as shown in Table 23. The perceived level of effectiveness for all the campuses tended to be high as no activity was deemed not effective (see Table 24).

Administrators indicated its best for orientation to be mandatory for freshmen and transfer students. It was also recommended for orientation to be combined with other

campuswide events that are open to the public. This might be for use of shared resources or to show the public what the campus is doing. One responder indicated that students register prior to orientation and then meet with faculty at their orientation. Another commented that detailed academic information and expectations should be brought up at orientation for incoming students.

Table 22

Existence of Orientation Activities on Their Campus

Activity #	Activity	Total Respondents	Activity Exists On Campus	
			n	%
Q21	Parent Orientation	69	65	94.2%
Q22	Orientation includes Registration	69	58	84.1%
Q23	Separate transfer orientation	69	64	92.8%

Table 23

Number of CSU Campuses That Conduct Orientation Activities

Activity #	Activity	Number of CSU Campuses that Conduct Activity	% of CSU Campuses
		n	
Q21	Parent Orientation	22	95.7%
Q22	Orientation includes Registration	21	91.3%
Q23	Separate transfer orientation	21	91.3%

Table 24

Average Perceived Effectiveness of Orientation Activities

Campus	Parent Orientation	Orientation includes Registration	Separate transfer orientation
Bakersfield	2.00	1.33	2.00
Channel Islands	2.00	1.75	3.20
Chico	1.67	1.00	1.00
Dominguez Hills	2.00	2.00	2.00

(continued)

Campus	Parent Orientation	Orientation includes Registration	Separate transfer orientation
East Bay	1.67	1.67	2.00
Fresno	2.00	1.67	3.00
Fullerton	2.50	2.00	2.50
Humboldt	2.00	2.50	2.83
Long Beach	2.00	1.00	2.00
Los Angeles	1.00		1.00
Maritime Academy	2.00		
Monterey Bay	1.00	1.00	2.00
Northridge	2.50	1.00	2.33
Pomona	3.00	2.00	2.00
Sacramento	2.00	1.33	1.33
San Bernardino	2.00	1.25	1.50
San Diego	1.00	1.00	1.00
San Francisco	1.50	1.00	1.25
San Jose	1.75	1.00	2.50
San Luis Obispo	2.00	1.00	1.50
San Marcos	1.33	2.00	2.00
Sonoma			
Stanislaus	2.00	1.00	1.50
Prefer Not to Answer	2.17	1.20	2.20

Financial aid. Very few respondents stated that their CSU campus practiced activities related to financial aid (see Table 25). Less than 43% said their campus practiced an appreciation by staff and faculty of the role price played in the college selection process. Only 60% knew of a merit scholarship program and less than 15% stated their campus offered housing scholarships.

Table 25

Existence of Financial Aid Activities on Their Campus

Activity #	Activity	Total Respondents	Activity Exists On Campus	
			n	%
Q24	Appreciation by faculty and staff	68	29	42.6%
Q25	Merit Scholarship Program	68	41	60.3%
Q26	Housing Scholarships	68	10	14.7%

While respondents for an appreciation of the role of price were less than 43%, the distribution of respondents from the CSU campuses was from at least seventeen (73.9%) CSU

campuses (see Table 26). This is the same for the number of campuses that has a merit scholarship program- 19 campuses (82.6%). The number of CSU campuses that had housing scholarships was 8, which represented only 34.8% of total CSU campuses.

Table 26

Number of CSU Campuses That Conduct Orientation Activities

Activity #	Activity	Number of CSU Campuses that Conduct Activity	% of CSU Campuses
		n	
Q24	Appreciation by faculty and staff	17	73.9%
Q25	Merit Scholarship Program	19	82.6%
Q26	Housing Scholarships	8	34.8%

Table 27 displays the level of effectiveness of each activity by each CSU campus. Most of the CSU campuses found their appreciation of price in the college selection process by faculty and staff as effective. However, campuses like Pomona, San Marcos, and those preferred not to answer found that their faculty and staff appreciation was not effective. Monterey Bay and Long Beach did not find their merit based scholarship program as effective in helping to meet their enrollment objectives. Of the few campuses that offered housing scholarships, San Diego found it effective in helping to achieve their enrollment objectives as opposed to Long Beach & San Luis Obispo.

Many responders indicated that conducting outreach to students is an effective practice. Students are made aware of financial aid opportunities and how to navigate the process. In addition, processing student's financial aid award early and in a timely manner would assist students. This would allow students to compare financial aid offers and determine what institution would be right for them.

Table 27

Average Perceived Effectiveness of Orientation Activities

Campus	Appreciation by faculty and staff	Merit Scholarship Program	Housing Scholarships
Bakersfield	2.50	2.50	
Channel Islands	3.25	2.25	2.00
Chico	3.00	3.00	3.00
Dominguez Hills	3.00	2.00	
East Bay	3.00	3.00	
Fresno		3.00	
Fullerton	2.00	3.00	
Humboldt	3.25	2.60	3.50
Long Beach	2.00	4.00	4.00
Los Angeles	1.00		
Maritime Academy			
Monterey Bay		4.00	2.00
Northridge	2.00	2.00	
Pomona	4.00	3.00	
Sacramento	3.00	3.00	
San Bernardino	2.00	2.33	
San Diego	3.00	1.00	1.00
San Francisco			
San Jose		2.50	3.00
San Luis Obispo	2.00	2.67	4.00
San Marcos	4.00	3.00	
Sonoma			
Stanislaus	3.00	3.00	
Prefer Not to Answer	5.00	3.25	

Retention. Tables 28 and 29 give a summary of retention data.

Table 28

Existence of Retention Activities on Their Campus

Activity #	Activity	Total Respondents	Activity Exists On Campus	
			n	%
Q27	Efforts for commitment to retention	67	62	92.5%
Q28	Faculty instructed on retention roles	67	39	58.2%
Q29	Staff instructed on their retention role	67	51	76.1%
Q30	Follow up on drop outs	67	24	35.8%
Q31	Barriers investigated	67	45	67.2%

Table 29

Number of CSU Campuses That Conduct Retention Activities

Activity #	Activity	Number of CSU Campuses that Conduct Activity	% of CSU Campuses
		n	
Q27	Efforts for commitment to retention	22	95.7%
Q28	Faculty instructed on retention roles	20	87.0%
Q29	Staff instructed on their retention role	22	95.7%
Q30	Follow up on drop outs	12	52.2%
Q31	Barriers investigated	19	82.6%

In activities related to retention, the most prevalent practice that existed was the campus's effort to generate an institutional commitment to student retention (92.5%) (see Table 28). The least available was a campus's efforts to follow up on students who had previously dropped out. As displayed in Table 29 amongst the CSU campuses, the range of retention activities seemed to be prevalent appearing in a majority of campuses. The exception, again, is the follow up on drop outs. It does not appear to be a practice amongst all the campuses. Only twelve CSU campuses reported to following up on student drop outs.

Table 30

Average Perceived Effectiveness of Retention Activities

Campus	Efforts for commitment to retention	Faculty instructed on retention roles	Staff instructed on their retention role	Follow up on drop outs	Barriers investigated
Bakersfield	2.00	3.00	2.33		2.00
Channel Islands	2.67	2.67	2.00	3.00	3.00
Chico	2.50	2.50	2.67	3.00	2.50
Dominguez Hills	3.00	3.00	3.00	5.00	5.00
East Bay	3.00	3.50	4.00	3.00	2.33
Fresno	2.33	3.00	3.00	3.00	2.50
Fullerton	1.50	2.00	2.50	3.00	2.00
Humboldt	2.00	3.00	2.40	2.67	2.50
Long Beach	1.00	2.00	1.00		3.00
Los Angeles	1.00	1.00	1.00	3.00	1.00
Maritime Academy	2.50	4.00	1.50		
Monterey Bay	3.00		3.00		
Northridge	1.67	2.00	2.33		2.00
Pomona	2.33	3.50	2.67		3.50
Sacramento	2.33	3.50	3.50	2.67	2.67
San Bernardino	2.00	3.00	2.67	3.00	3.00
San Diego	1.00	3.00	2.00		
San Francisco	1.67	2.00	1.67		2.00
San Jose	1.67	3.50	2.33	3.67	2.25
San Luis Obispo	1.67	2.67	2.00	4.50	2.00
San Marcos	1.67		3.00		
Sonoma					
Stanislaus	2.50	2.00	2.00		3.00
Prefer Not to Answer	3.00		3.00	3.67	3.50

Long Beach and Los Angeles reported that their efforts to generate institutional commitment to student retention were perceived to be very effective (see Table 30). Administrators from East Bay, Maritime Academy, Pomona, Sacramento, and San Jose

perceived their efforts in regard to faculty being instructed on their role in retention as least effective. In contrast in looking at staff being instructed on their role in retention, East Bay and Sacramento's efforts were deemed as least effective. Long Beach and Los Angeles administrators perceived theirs to be very effective. One responder indicated that staff makes an effort to increase retention. However, there is little effort from academic departments. This makes it difficult for them to have a fully effective retention program.

For efforts to follow up on students who previously dropped out, no campus perceived their efforts to be very effective. Some campuses deemed their efforts effective, but campuses such as Dominguez Hills, San Jose, San Luis Obispo, and administrators who prefer not to answer ranked them toward a lower level of effectiveness. CSU campuses, Bakersfield, Fullerton, Humboldt, Los Angeles, Northridge, San Diego, San Francisco, San Luis Obispo, ranked their retention activity of investigating and quantifying barriers to student persistence as very effective. Schools with perceived low effectiveness, Dominguez Hills, Pomona, and those who preferred not to answer, may look to the high effective campuses for guidance.

Student services. Table 31 displays the existence of student services activities. 85% of respondent stated that a strong residential life program existed on their campus. The percentage was much lower for other activities: 65.7% student activities are evaluated, 45.5% offering programs for community students, and 62.1% for student services for non-traditional students.

Amongst the respondents who said there was an evaluation of student activities on their campus, there was a wide distribution of CSU campuses which conducted the activity (see Table 32). Of those who responded, Bakersfield, Dominguez Hills, Los Angeles, Maritime Academy, San Diego, San Francisco, and San Luis Obispo perceived their evaluation to be very effective. San Marcos indicated their practice was not as effective (see Table 33). With the exception of

Long Beach and Sonoma, not reporting they had a strong residential program, all other campuses indicated they did. Their perceived level of effectiveness was effective to highly effective with no campus reporting it was least effective.

Table 31

Existence of Student Activities on Their Campus

Activity #	Activity	Total Respondents	Activity Exists On Campus	
			n	%
Q32	Evaluation of Student Activities	67	44	65.7%
Q33	Strong Residential Life Programs	67	57	85.1%
Q34	Programs for Commuting Students	66	30	45.5%
Q35	Services for non-traditional students	66	41	62.1%

Table 32

Number of CSU Campuses That Conduct Student Activities

Activity #	Activity	Number of CSU Campuses that Conduct Activity	% of CSU Campuses
		n	
Q32	Evaluation of Student Activities	20	87.0%
Q33	Strong Residential Life Programs	21	91.3%
Q34	Programs for Commuting Students	16	69.6%
Q35	Services for non-traditional students	18	78.3%

Seventeen CSU campuses reported they had programs for commuting students. The only campus which reported that its practice was least effective was San Jose, along with those who preferred not to indicate their campus. 82.6% (19) of the CSU campuses had services for non-traditional students. Maritime Academy and San Luis Obispo perceived their efforts to be not as effective as some of the other CSU campuses.

Table 33

Average Perceived Effectiveness of Student Activities

Campus	Evaluation of Student Activities	Strong Residential Life Programs	Programs for Commuting Students	Services for non-traditional students
Bakersfield	1.00	1.00	2.00	2.67
Channel Islands	2.33	2.20	2.33	2.33
Chico	2.50	2.00	3.00	2.50
Dominguez Hills	2.00	3.00	3.00	3.00
East Bay	3.00	2.00	3.00	3.00
Fresno		3.00		2.00
Fullerton	2.50	2.00	2.50	1.50
Humboldt	2.40	1.67	2.67	2.75
Long Beach				
Los Angeles	1.00	1.00		3.00
Maritime Academy	2.00	2.50		3.50
Monterey Bay	2.00	2.00		
Northridge	1.50	1.33	1.50	1.33
Pomona	2.50	1.50	2.50	2.67
Sacramento	3.33	2.33	3.00	2.00
San Bernardino	2.67	2.00	2.00	2.25
San Diego	2.00	1.50	2.50	2.00
San Francisco	2.00	2.33	2.00	2.00
San Jose	3.00	1.67	4.00	2.50
San Luis Obispo	2.00	1.25	2.00	3.67
San Marcos	3.50	3.00	3.00	
Sonoma				
Stanislaus	3.00	1.00		
Prefer Not to Answer	2.33	2.50	3.50	2.50

Perceived Differences in Effectiveness of Enrollment Management Activities

Because the variables used were nominal and numeric, an ANOVA analysis was used. The dependent variable was the enrollment management activity and the independent variable

was the CSU campus. The significance level (α) was .05. The activities which had the greatest difference in effectiveness are displayed in Table 34. A comprehensive list of the ANOVA analysis is available in Appendix G.

Table 34

Most Perceived Difference in Level of Effectiveness

Component		Activity	df	F	ρ
Marketing	Q2	Plan Outlining Enrollment Objectives	23	1.81	.04
Recruitment	Q5	Campus visits by groups of students	23	1.96	.02
Career Placement	Q12	Credit Courses on Career Planning	23	2.24	.01
Institutional Research	Q18	Coordination of Institutional Research	23	1.98	.02
Retention	Q30	Follow-up on dropouts	23	1.83	.04

A majority of the enrollment management activities did not have a significant difference in perceived effectiveness amongst the responders. The activities that did have a difference are from the components of Marketing, Recruitment, Career Placement, Institutional Research, and Retention. The activities that showed a significant difference in perceived effectiveness amongst the CSU campuses were plans outline long and short term enrollment objectives, campus visits by groups of prospective students, credit courses on career planning, coordination of institutional research and campus's ability to follow up on those students who have dropped out.

Enrollment Management Structure

The structure of enrollment management was asked of all survey participants.

Table 35

Area Responsible for Coordinating Enrollment Management

	n	%
Individual	7	10.45
Committee	33	49.25
Division	27	40.30

A majority of respondents said that a committee was responsible for coordinating enrollment management on their campus (see Table 35). Of the campuses that responded for individual, the titles of that person were usually an assistant or associate vice president, vice provost, or provost. If a responder selected a committee, they indicated what campus areas make up the enrollment management committee. The predominant areas that make up an enrollment management committee are the Vice President of Student Affairs, Academic Affairs, & Provosts office. Faculty and Deans are involved and departments such as admissions, institutional research, and student success programs are frequent (see Table 36). For a division, the areas that made up the division are displayed in Table 37. If enrollment management were a division, the predominant area that compose it are admissions, registrar, financial aid, student support programs, and outreach & recruitment.

Table 36

Areas that Comprise Enrollment Management Committees

Department/Area	*n*	Department/Area	*n*
Vice President Student Affairs	23	Outreach & Recruitment	6
Academic Affairs	17	Housing	6
Admissions	14	Finance/Budget	6
Faculty/Senate/Department Chairs	14	Marketing	4
Enrollment Services/Enrollment Management	13	Information Technology	3
Deans/Associate Deans	12	Students	2
Provost/Vice Provost	10	Advancement	2
Institutional Research	10	Staff	2
Student Success Programs (i.e. Student Life, Educational Opportunity Program, Disability)	10	Academic Advising	2
Registrar	9	Don't Know	1
Undergraduate Studies	7	Associated Students Inc.	1
Financial Aid	7	Extended Education	1
Graduate Studies	6	Diversity Director	1

Table 37

Areas that Comprise Enrollment Management Division

Department/Area	*n*	Department/Area	*n*
Admissions	18	Enrollment Management	3
Registrar	18	Veterans	2
Financial Aid	16	Enrollment Management Systems	2
Student Support Programs (i.e. Educational Opportunity Program, federally funded Grant programs, Early Assessment Program)	11	Testing Office	2
Outreach & Recruitment	10	Communication/Public Affairs	1
Academic Advisement	8	Information Center	1
Orientation	5	Academics	1
Student Affairs	5	Housing	1
Institutional Research	4	Undergraduate Studies	1
Academic Affairs	4		

Respondents were also asked if the selected coordinator of enrollment management, whether it be an individual, committee, or division, was effective. If they did not believe it was effective, they could indicate which structure they prefer. Table 38 displays the result.

Table 38

Perceived Effectiveness of Enrollment Management Coordination

	n	%
Yes	51	77.27%
No	15	22.73

A majority of respondents felt their enrollment management structure was effective. For those that did not feel it was effective, five suggested for a committee and three suggested for a division. Some of the respondents also indicated that for enrollment management to be effective there should be stronger leadership and authority. There was a need for there to be ongoing meetings and resources provided to execute enrollment management.

Chapter Five: Summary, Conclusions, and Recommendations

President Obama has a dream for the United States to be able to continue to compete in a global economy. He called for the US to produce the highest percent of college graduates in the world by 2020. Possessing a college degree not only increases one's employment prospects, but also financial ones as well. The earning potential of someone with a college degree is higher than those who do not. However, for a state like California, earning a college degree can be difficult. Student fees and state support fund public colleges and universities. In tough economic times, state allocations for higher education can decrease. As a result, colleges and universities, like the CSU, may be limited on the number of students it can serve.

The interest in pursuing a college degree has not decreased. While high school graduation rates have not increased, nationally, college enrollments have. California was seen as a model for higher education with the implementation of the California Master Plan in 1961. The plan was created to address the influx of people migrating to California and allow for access to a baccalaureate education. One of the institutions to offer these degrees is the California State University system. Over the last couple of years, the CSU has seen an increase in applications and not every qualified student can be accommodated. Coupled with this is the unpredictability of student behavior because they are applying to more than one university. This affects CSU campuses because it makes it difficult to manage enrollment.

The concept of enrollment management helps colleges and universities address its operation and delivery of services in order to achieve their enrollment targets. In fluctuating economic times, enrollment management helps campuses respond and parse resource to ensure enrollment remains optimal. Knowing how a campus manages enrollment helps in the decision making process for campus decision makers. While the CSU is one system, they are composed

of 23 individual campuses which each possess their own characteristics. The purpose of this study was to examine university administrators' perceptions of enrollment management activities. Administrators were used because they are often the decision makers when it comes to allocation of resources. By finding out administrators' perceptions of these activities, campus planners can use this information to guide their efforts. This research helped identify the practices and activities being used at the CSU campuses and what efforts were prevalent. Also, activities identified that were deemed as most and least effective and if there were any differences in perceived effectiveness. Having this type of information will help CSU campuses, particularly those not impacted, in managing their own enrollment.

The conceptual foundation around this research looked at Astin's research of financial aid and student persistence (Astin, 1975a). Having the money to be able to pay for college effects one's ability to finish college. Tinto (1975) also suggested that students have certain characteristics such as academic ability, socioeconomic status, and parental influence, which contribute to a student's commitment to earning and completing a college degree. Lastly, Bolman and Deal's (2000) structural framework examined how an organization is divided and coordinated to carry out its duties. The CSU is governed by Title V California Code of Regulations and Executive Orders from its central Chancellor's Office. Enrollment management at a campus level is influenced by how its departments are organized to provide services and influence the connection the student has with the campus. These all contribute to a student's desire and ability to complete a degree which are key in enrollment management.

Enrollment management was developed because of the availability of funds to finance one's education, a response to a decline in high school graduates in the 60's and 70's, and research completed that studied how students select a college and what factors aid in their

persistence. The concept of enrollment management allowed for colleges and universities to have an influence on what their student body is composed of. Students go through a three-stage process of predisposition, search, and choice, when selecting a university (Cabrera & LaNasa, 2000). Predisposition is the influence of family on a student's aspiration to pursue a college degree, Search is investigating the options available and choice is making the decision of where to attend. Once a student enters a university, it is a mutual relationship between the student and university to help the student progress and, ultimately, graduate. A university helping the student to remain engaged, thus decreasing the chance of leaving, and the student partaking in the opportunities available.

A review of the literature discovered ten components studied in enrollment management. These components are as follows: marketing, recruitment, academic advisement, career planning and placement, learning/academic assistance programs, institutional research, orientation, financial aid, retention programs, and student services and activities (Hossler, 1984). In addition to the components, the enrollment management structure at each of the CSUs was identified. The responsibility of the coordination of enrollment management could rely either on an individual, department, or division. Each has its own pros and cons. Enrollment management research that already exists pertains to practices (Jones, et al., 2008) and their perceived effectiveness (Abston, 2010; Williams, 2001), enrollment management models (LoBasso, 2006), enrollment manager roles (Stewart, 2004), and student persistence (Kalsbeek, 2013a; O'Keefe, 2013).

A quantitative, comparative study was done to research administrator perceptions of enrollment management activities from the ten different components. Campus administrators consisting of University Presidents, Vice President of Student Affairs, Provost, Deans of faculty,

Directors of Admissions, Registrars, Financial Aid, Student Life, Recruitment, Advising, Communications, Institutional Research, and Enrollment Managers were invited to participate in a survey. The survey was adopted from Dr. John Fuller and Dr. William Weber. Their survey was further modified to eliminate activities not conducted by the CSU and to minimize survey fatigue. The final survey consisted of thirty-five questions. Survey participants were asked to indicate if certain enrollment management activities existed on their campus and their perceived effectiveness. This survey was completed online through SurveyMonkey and analysis was done through SPSS.

Research Question 1*: What practices and activities are being used at each CSU campus?*

Key Finding 1: The activities within the marketing component vary amongst the campuses.

Each campus, with the exception of Maritime Academy, states they have a plan that outlines its enrollment objectives. This is particularly important to have because once a campus knows its enrollment goals; they can begin their strategy on how to achieve it. Marketing surveys to determine an institution's competitive position was not available at all CSU campuses. This is particularly problematic because without knowing its position, a campus would not know what types of students would be the right fit to attend there. Operational resources would be wasted rather than refined. Lastly, a method of coordinating campus wide efforts only existed at 17 of the CSU campuses. Without a coordinated effort, campuses may be conveying different messages or there may be a conflict in what market areas the campus should aim for. For example, certain campus constituents may want increased international students, while another may want more science, technology, engineering, and math (STEM) majors. All require resources so the campus would need to prioritize how those resources get distributed.

Key Finding 2: Recruitment activities seemed to be very common at a majority of the CSU campuses.

All of the CSU campuses, excluding Sonoma, utilized current students in the recruitment process, had campus visits by groups of students, as well as placed an emphasis on recruiters making high school visits. Not all the CSU campuses made use of alumni contacts in the recruitment process. Recruitment is the marketing of the university. Marketing is a form of promotion, but using alum or current students convey the value of the institution. It gives a face to the brand that the university is trying to establish. For campuses that are not impacted, they should considering using alums as a tactic to help spread the word about the campus.

Key Finding 3: CSU campuses have designated personnel to assist in the advisement of students.

All the CSU campuses have professional staff that are trained. This means there are dedicated personnel in the advisement of students. Once students are enrolled at a campus, it is important to guide them in their progress towards a degree. Advisement is also important because it aids in the retention efforts. Providing faculty with specialized training and using peer advisors is not prevalent at all the campuses. The same goes for undeclared majors receiving special academic advisors. Professional staff may be also utilized to achieve this. While faculty may be used in the advisement experience, it is recommended that they are trained as well. Poor advisement can result in negative retention due to misinformation given to students. The use of peer advisors may not be prevalent as usually they are paid positions and operational resources may not be readily available. As an alternative, campuses should consider employing counseling interns. This allows graduate students to gain experience and contribute to their intern hours. In turn, campuses have additional staff to assist with advising.

Key Finding 4: Few of the CSU campuses offer freshmen credit courses on career and educational planning.

As Thomas (1990) stated, if students have career plans, then they are more than likely to persist. It is recommended for campuses to offer courses to help students on career planning, particularly for undeclared students. If students are not tied to anything academically, this may result in them leaving. Students who already know what they want to do will be more connected to the campus. A majority of the CSU campuses offer assistance to its students in locating full time employment after graduation. This is key because those graduates are free advertising for the university's programs. Graduates help create the reputation of the campus. If companies have good employees coming from a particular campus, then they will want more like them. Companies can recruit potential employees by participating in employment fairs. If students see them on campus, then it reinforces their decision to stay because employers see the value of their degree. Campuses that collect data on the job placement of its students can use this data in their marketing as well. By being able to know where graduates are placed, this can help support why the institution is one a student should consider attending.

Key Finding 5: Almost all the campuses had academic assistance programs in reading and study skills as well as use student tutors.

In order for students to be able to succeed, learning assistance programs help students with any deficiencies. Because the CSU serves such a diverse group of students, each student coming in has a different skill set level. While not every student may use these types of support programs, they are good for the ones who need them. The use of student tutors provides a peer relationship. Again, in helping to retain students, these programs are helpful. Not many CSUs

employ the use of faculty tutors. CSU campuses should consider investing in this because of the impact faculty have on the student's relationship with the campus.

Key Finding 6: Institutional research activities are practiced among a majority of the CSU campuses.

Data is more important than ever in helping a campus with their enrollment goals. For campuses that do not have a coordinated approach, it is recommended in order to prevent the duplication of surveys and the potential for conflicting data. Data helps drive the other enrollment management components. The practice of generating data on attrition and service area exists at 21 of the 23 CSU campuses. Obtaining this data contributes to the decision-making that composes enrollment management. Knowing where students come from and their academic eligibility helps determine what type of students an institution has. Data on why students persist or leave helps campus know what they are doing right and what needs to be improved. This also helps drive where resources should go.

Key Finding 7: Orientation activities are practiced in almost all the CSU campuses.

Not all campuses have registration in their orientation. However, it is something to consider for those campuses that do not since registering for classes is almost the final step in enrollment besides showing up on the first day of classes. If an orientation provides a good experience for students, then it reinforces their decision to attend that campus. Registering is the logical next step for them. While orientation programming tends to focus on freshmen, it is recommended for CSU campuses to pay attention to transfer students as well. They make up a good portion of the CSU student body. 21 of the CSU campuses have a separate transfer orientation because transfer student needs are different and they need assistance in transitioning into a campus as well. Campuses should not assume that transfer students know how what

university expectations are. Now more than ever, parents are active participants in their children's lives. Also known as helicopter parents, these parents want to be part of the transition for their student in college life so a parent orientation is provided in 22 of the 23 campuses.

Key Finding 8: Few CSU campus administrators are aware of their campus's financial aid activities.

While the distribution of CSU campuses having financial aid activities is broad, the quantity of administrators aware of these activities was low. Financial assistance is key to student persistence. Nineteen of the CSU campuses have reported they have a merit scholarship program. As tuition for institutions increase, a scholarship program is a way to recruit students and incentivize them to attend. Scholarships can range in different increments of dollar amounts and normally pay for tuition first. Having a housing scholarship can help pay for living on campus. Few CSU campuses offer this. Living on campus is another means for a student to be connected to a university and be retained. University advancement and fundraising offices should consider this option in their efforts. Having scholarships for housing is another way to offset the total cost of a student's education. For students attending a university, social and academic integration affect student persistence.

The cost of a university can affect a student's ability to attend. Not everyone has the financial standing to be able to pay for school with their own means so having a campus appreciation by faculty and staff of the role price plays in the college selection process is important. Less than 75% of the CSU campuses have this appreciation, while nearly 71% of students in the CSU receive financial aid. It is recommended for campuses to develop this appreciation as their students are coming from different socio-economic backgrounds.

Key Finding 9: CSU campuses have an institutional commitment to student retention, but need to focus on other retention efforts.

Similar to understanding the role price plays in the college selection process, it is important for a university to have an institutional commitment to retention. It is one thing for campuses to work hard at recruiting a student to their university, but it is another in retaining and having them persist. Having students leave and drop out can affect the "university brand". Fortunately, CSU administrators have indicated their commitment to this. A good retention program has the characteristic of faculty and staff being involved. For the CSU, the practice of having faculty know their involvement is not at the same level as the staff. As stated before, faculty has daily interaction with their students so it is suggested that campus administrators work with faculty on emphasizing their role in student retention.

Practices that the CSU campuses should improve upon are data collection as it pertains to why students leave and barriers that affect their persistence. Few CSU campuses reported that they follow up on their drop outs and universally do not investigate barriers to persistence. Following up on drop outs is key data that can be used for institutional improvement. The CSU is recognizing the need to investigate barriers to student persistence. Within the last two years, the CSU have provided separate funding to campuses to have them investigate courses that are considered bottlenecks. The CSU defines bottleneck as "anything that limits a student's ability to make progress toward a degree and graduate in a timely manner" (Smith, 2013, p. 1). The CSU Chancellor's Office goal is to find out what campuses are doing to address bottlenecks, see what is working, and possible apply funds to that across the CSU campuses. CSU campuses should continue to research student persistence and develop continued programming to address this.

Key Finding 10: CSU campuses provide student activities focusing on residential life but are not consistent in addressing commuter and non-traditional students.

Apart from academic integration, students need the social aspect as well. Having student activities helps students form relationships, thus increasing the likelihood they will remain at the university. A method to do this is having a strong residential life program. Twenty-one of the CSU campuses reported having a residential life program. For students who live on campus, it is important for them to have activities to do. This way when they need to do something besides study; it helps alleviate stress, form friendships, and further engrain themselves into the campus.

While activities tend to center around residential students, the CSU could improve upon the existence of programs for commuting students and helping them be connected to the campuses. Some campuses have formed commuter clubs to help students form relationships. Non-traditional students can be adult students who are returning to school after a long period of absence or part time students who do not take a full load of coursework and attend class a couple of nights a week. Campuses could offer classes on a variety of days and times as well as services available to this population in the evening or on weekends. The delivery of course instruction may need to be altered as well. Online only or a hybrid of online and face-to-face are options that can be considered. Only eighteen CSU campuses have reported having services for non-traditional students. This can hurt a CSU campus if they do not address non-traditional student needs because those students could have a poor experience resulting, again, in a negative reputation for the campus.

Research Question 2*: What do selected university administrators at each campus perceive to be the most and least effective strategies and/or resources to create an effective enrollment management plan?*

Key Finding 11: The most effective strategies that have assisted campus enrollment revolve around the enrollment management components of orientation, recruitment, and student activities.

The most effective practice is having an orientation program where registration for students is involved. A recommendation for campuses is to use registration as an incentive for students to attend orientation so that campuses have a captured audience to receive the same academic message. The ability to register, as discussed earlier in the chapter, helps students achieve one step closer in the enrollment process. Another practice deemed effective is the offering of a parent orientation. Because parents are an integral part of students lives, providing them a venue to help them understand what their child will be transitioning into helps provide another support system to the students. Universities should see parents as partners in the education process and provide them tools necessary to assist their son or daughter.

Two other effective strategies come from the admissions and recruitment component. Having prospective students visit the campus to either take a campus tour or participate in a preview day is vital to the marketing of the campus values. Students have an opportunity to envision themselves studying at the campus. It becomes a tangible experience to them. In terms of enrollment management, the recruitment of students is the first part of the enrollment process. Campuses should try to generate prospects and therefore mine this pool into potential applicants and then eventual students. Students may not always be able to make it to the school's campus so another activity is to have recruiters make high school visits. This adds a personal touch and

allows a relationship to be formed early on between the student and the university. These visits can occur as early as the 9th grade and continue to be nurtured through the senior year. This relationship can influence a students' decision to attend.

Key Finding 12: Enrollment management practices deemed least effective involve financial aid, faculty, and retention.

The least effective practice was a campus's ability to follow up on drop outs. Campuses should spend time finding out why a student leaves prior to graduation. If campuses have a reputation for students leaving, then that negatively affects the brand. The training and utilization of faculty in retention and advisement should be improved upon as well. It is considered some of the least effective practices because it may not be done well. Faculty have almost daily contact with students so using them in enrollment management is vital. Funding for housing scholarships needs to be more effective. Campuses should consider how to obtain additional funding for this. Living on campus aids in a student's college experience and not every student can afford it. Particularly, first generation college students can benefit from an on-campus living experience. Lastly, staff and faculty should develop an appreciation for the role price plays in student's college selection choice. This can be addressed through new employee and faculty orientation. Students come from all backgrounds and means and this appreciation will help employees understand their students better.

Research Question 3: ***What differences (if any) exist in the perceived effectiveness of enrollment management practices within a single campus?***

Key Finding 13: A plan outlining short and long term enrollment management objectives and its effectiveness varied across the CSU campuses.

Campuses that are non-impacted, such as Channel Islands, Bakersfield, and East Bay, may not have the same approach to how they plan for enrollment compared to impacted campuses such as Long Beach, San Diego, and San Luis Obispo. For the non-impacted campuses that want to change what their enrollment plan looks like, they should consider how impacted campuses handle their enrollment so they do not have to reinvent the wheel. For non-impacted campuses, they may be in a situation where they have to take all eligible students. This is not enrollment management. Campuses, regardless of its impaction level, should begin to shape its class. Campuses need to determine what they want their student body to look like. How many out of state students, international students, students in a particular major, grade point average, etc. need to be considered.

Key Finding 14: Campus visits by prospective students are perceived differently by administrators.

Administrators should consider how receptive their campus is to visiting students. For some impacted campuses, there are questions about whether a campus preview day is necessary because they already have more than enough applicants which is how the campus got to be impacted in the first place. There may not be as much support and participation if campuses do not see the value in a campus preview day. The same can be said for a campus tour. A campus tour experience can consist of showing prospects buildings, while some campuses may be more interactive where students are given the opportunity to participate in a class or current students meet with them to provide their perspective on their college journey. Just like a business, campuses should view the campus visit as a marketing tool that is always preparing for the future. They cannot just rest on what they have, but need to constantly seek out more students.

Key Finding 15: The effectiveness of freshmen having credit courses on career and educational planning varies.

While it is not offered at every campus, the campuses that do have it vary on whether it is effective in helping to achieve their enrollment management goals. Campuses should research this activity and receive feedback from students. This activity may reinforce a student's reason for attending a university. It helps them focus on their major and begin to visualize the possibilities after graduation. Rather than wait until senior year to explore job prospects, students should receive career planning early to better prepare them for when they do reach their senior year.

Key Finding 16: The coordination of institutional research on CSU campuses is not consistent.

While the activity is practiced on a majority of CSU campuses, the effectiveness varies. Campuses should study how this is being done on their campuses. Having a central data reporting area is key to supporting institutional planning, policy formation, and decision making (Saupe, 1990; Volkwein, 2008). Campuses that have an effective institutional research are using that data to help look at enrollment projections and develop different enrollment scenarios. Having this information will help decision makers in where to put resources and help shape campus enrollment.

Key Finding 17: CSU campuses effectiveness in following up on drop outs is not consistent.

Campuses that do not take an active role in following up with drop outs are missing out in obtaining key information that will help them improve. Campuses should consider conducting follow up surveys to inform them of why a student is not persisting. Is it due to financial issues,

availability of course offerings, or academic performance? Knowing why a student leaves is just as important as why a student chooses to attend. As mentioned previously, campuses spend a lot of money recruiting students so when students leave before they graduate, it is a poor return on investment.

The perceived effectiveness of activities can vary by the different CSU campuses. For those campuses who perceive to be doing an activity well, it would be to the advantage for a campus that is not doing an activity well to turn to them for assistance.

Research Question 4. ***How do enrollment management activities vary amongst the CSU campuses and are there any predominant practices?***

Key Finding 18: The predominant enrollment management component used within the CSU is recruitment.

Based upon the number of respondents and the distribution of CSU campuses, recruitment activities were the most prevalent. Using current students, conducting campus visits by prospective students, and visiting high schools were all represented in the CSU. Other practices were represented across the 22 responding campuses, but not so much that practically every activity was being conducted. The literature supports this in that most higher education institutions put more resources in recruitment if they want to influence their enrollment. The term "throw money" strategy is easier to employ because it is easier to see the results. It is recommended that CSU campuses redirect resources to help a student be retained and persist as in the long run it will have a better return on investment.

Key Finding 19: Enrollment management is typically handled by a committee and consists of areas from Academic Affairs, Student Affairs, and faculty.

Across CSU campuses, a majority of respondents stated that enrollment management is handled by a committee. This means that enrollment does not rest with one individual but rather multiple areas partake in that responsibility. There is most likely leadership to coordinate the departments that form this committee, but the representation is more high-level administrators. A majority of respondents stated that these members included the areas of academic affairs, student affairs and faculty. These are the right groups to include, but it is recommended to also include representation from the finance side. Considering that resources are to be expended to achieve the enrollment targets, it would help to bring in someone from the budget office. Also, very few campuses had student representation. This should be considered. Having a student voice on the committee would be beneficial to receive honest feedback and their perspective can assist in the decision-making.

A division of enrollment management might put enrollment management on the forefront of a University's priority, but then it would appear that enrollment management is handled by one area rather than departments coming together. It becomes a campuswide effort when it is done by a committee. Regardless of what areas make up the responsibility of overseeing enrollment management, it is recommended for there to be strong leadership to help guide the many stakeholders involved and communication is key so that everyone is on the same page.

Conclusions

Conclusion 1: Certain components of enrollment management, such as recruitment and institutional research, could be standardized.

In an effort to maximize limited resources, CSU campuses have the same minimum admission requirements, so campuses could standardize the delivery of recruitment activities to convey these requirements. Whether it be centralized recruitment activities from the CSU

Chancellor's Office or specialized recruitment experts representing all CSU campuses, having someone knowledgeable of all 23 campuses can assist in helping student be able to make the choice of which institution to attend.

All institutional research activities should collect the same type of data. CSUs should continue the practice of reporting on their students, which would offer a reliable comparison between campuses. Standardizing the point in time collection of data and type of data will help in providing a more accurate picture of students that could aid in persistence and retention efforts.

Conclusion 2: Enrollment management components such as academic advisement and learning assistance must stay within the choice of campus so they can have the latitude to meet the needs of the students they serve.

Each CSU campus has unique aspects of their academic programs so they need individual campus advisement to address this. While the basic requirements for completing a degree are similar amongst the CSU campuses, there are unique campus requirements that campus advisors need to be able to convey.

Each CSU campus serves a unique set of students on their campus so learning assistance activities need to be modified to address the characteristics of the student body. Each student arrives into a university with different skills sets. Because of this diversity, campuses need to be prepared to assist so that students can achieve their goal of graduating.

Conclusion 3: Enrollment Management activities focus on the goal of student retention and persistence.

From the enrollment management activities and literature presented, the majority of activities centered on the theme of influencing student retention and persistence. Providing

positive experiences through the utilization of student service activities, affect a student's desire to want to persist. Having poor perceptions on the effectiveness of activities involving faculty, could create negative student experiences that could affect campus branding, student's desire to remain at the campus, and alumni relations. These activities directly affect the revenue stream to the university.

Overall Recommendations

CSU campus administrators can use this study to be able to improve upon their campus enrollment management plans a number of ways:

1. It would benefit a CSU campus if they were to communicate better with one another on their campus regarding enrollment management activities.

Some administrators did not know if an activity existed. The ability to communicate and inform is key in order to keep enrollment management at the forefront of university priorities. Whether this communication is done through an organizational restructure to bring all enrollment management departments together or to form a committee, it is essential for campus stakeholders to inform one another of what is going on with all things related to enrollment.

2. CSU campus administrators should focus on a student's holistic experience.

Campuses need to spend more resources and time on following up on drop-outs and not just recruiting students. Implementation of early warning systems can help decrease the number of drop-outs and take a proactive approach rather than be reactive. Also, just because a university practices an enrollment management activity, does not necessarily mean that the campus is doing it well. Student satisfaction surveys should be administered periodically so that campuses can get a pulse on the students.

3. CSU campuses need to make an effort to consistently mine data.

Having data helps the decision makers. Marketing surveys to determine an institution's competitive position, data on graduate job placement, follow up on drop outs and what barriers exist preventing student persistence are all types of data points that should be researched. Campuses need to adopt a continuous improvement model and look to how they can improve their services and offerings. Particularly as it relates to university accreditation, the ability to look introspectively and know what to fix is something that accrediting agencies look for.

Recommendations for Further Research

To further this study, a number of recommendations are made:

1. While administrators' perceptions have been examined, this study should be replicated with staff.

Staff are usually the front line and can have a pulse on what is occurring at the student level. Having their perception of the effectiveness of enrollment management activities can be compared with perception from the administrators. This will provide a much broader approach to enrollment management activities and what is effective and not effective.

2. Consider replicating the study using other public higher education institutions in California.

Replicating this study with the University of California schools and California community colleges, one would be able to see if the same enrollment management practices occur within the different systems of higher education. All of these entities receive public funding so it would be beneficial to see if these institutions encounter the same challenges.

3. Using another large system of higher education outside of California.

The CSU is considered one of the largest systems of higher education in California. Examining other large systems like those in University of Texas (9 campuses) or City University of New York (11 campuses) can help the CSU system compare itself. Studying other systems

may help the CSU learn of other innovative practices occurring outside of California that has yet to be tapped.

Internal and External Validity

This study has some limitations. The research focused on the California State University system so it does not address the other public university systems within the state such as the University of California and California Community Colleges. Each of the systems receive public funding so they may encounter the same challenges and studying one system is one approach. As recommended in further research, the other two systems should be researched. In addition, the administrator level of the participants was not identified. The researcher assumed that all individuals had the same knowledge and decision-making authority as it relates to enrollment management activities. A Director of an enrollment management component, such as Financial Aid or Recruitment, may have more knowledge and responded differently to the survey questions as opposed to a Provost or President who has limited interaction with enrollment management areas.

To minimize these limitations, the persons involved in the survey were knowledgeable in their positions. In order to achieve the positions the participants are in, some acquired knowledge related to the components of enrollment management were necessary. The survey instrument used was a valid reliable measure that was adapted for the purposes of this study. It was further tested for validity by individuals who have years of experience in enrollment management and have been employed by the California State University system. The survey data was analyzed using valid statistical software. Members within the California State University further supported the study since Directors were quick to respond to the request for participants.

Closing Comments

President Obama's call for more college graduates is not an unrealistic concept. As financial resources become scarce for public institutions, it is up to those institutions to examine how their resources are spent and strategically place the resources where they are maximized.

Enrollment management is not a new concept. Private institutions have been utilizing this method to manage their enrollment. As funding for higher education competes with other state priorities, it is important for a university to strategically look at their campus enrollment. By examining these components, campuses can have a realistic picture of how they are doing to attract, maintain, and graduate students.

Having an enrollment management plan will help stakeholders look at how resources can be distributed to ensure campus enrollment goals are met. Campuses that utilize data, examine enrollment not just from a recruitment perspective, but also about the student experience will have a better approach to managing their enrollment and addressing future obstacles that they may encounter.

The demand for higher education will not decrease so institutions need to respond in the form of access and persistence. As students are graduated in a timely manner, it makes room to take more students in. The ability to graduate students is heavily influenced on the number of classes available, the student's ability to pass those courses, and likelihood of gaining employment.

The cycle of higher education to meet President Obama's goal of increasing college graduates for the global economy is an ideal concept. However, it can be difficult to achieve because of the limited dollars provided to state institutions and the state of the economy in providing opportunities for employment. An institution's response to this is determining how

the resources provided can be utilized to its fullest and still be able to serve students. The use of an enrollment management plan can help achieve this.

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APPENDIX A

Enrollment Management Questionnaire

(To Be Inputted In an Online Format)

Please indicate campus at which you are currently employed.
(All responses will be kept confidential and reported in a format to not identify you at your particular campus. If you desire, you can select "Prefer Not to Answer").

o	Bakersfield
o	Channel Islands
o	Chico
o	Dominguez Hills
o	East Bay
o	Fresno
o	Fullerton
o	Humboldt
o	Long Beach
o	Los Angeles
o	Maritime Academy
o	Monterey Bay
o	Northridge
o	Pomona
o	Sacramento
o	San Bernardino
o	San Diego
o	San Francisco
o	San Jose
o	San Luis Obispo
o	San Marcos
o	Sonoma
o	Stanislaus
o	Prefer Not to Answer

Part B. Enrollment Management Activities

Hossler, Bean, and Associates (1990) define "enrollment management as an organizational concept and systematic set of activities whose purpose is to exert influence over student enrollments". The purpose of this study is to attempt to identify perceived best practices of enrollment management in the California State University system.

Instructions: This questionnaire is to identify perceptions of enrollment management components and their activities. These activities may or may not be available on your campus.

For each component, there is a list of activities. After each activity, indicate if the activity exists and your perception of their level of effectiveness at your campus.

Component: Marketing		**Does Activity Exist?**			**Level of Effectiveness at your campus**				
	Activity	Yes	No	Don't Know	Very Effective (1)	2	3	4	Not Effective (5)
Q1	Marketing Surveys to Determine Institution's competitive position								
Q2	A plan outlining short and long-term enrollment objectives								
Q3	A method of coordinating campus-wide marketing efforts								

Considering the activities below, which activity do you consider most effective in achieving your enrollment management?

☐	Marketing Surveys to Determine Institution's competitive position
☐	A plan outlining short and long-term enrollment objectives
☐	A method of coordinating campus-wide marketing efforts
☐	None of the Above.

If none of the above, please provide a marketing activity that your campus does that you believe is most effective in achieving enrollment management.

Component: Admissions & Recruitment		**Does Activity Exist?**			**Level of Effectiveness at your campus**				
	Activity	Yes	No	Don't Know	Very Effective (1)	2	3	4	Not Effective (5)
Q4	Use of current students in the recruiting process								
Q5	Campus visits by groups of prospective students; e.g., College Day event								
Q6	Use of alumni contacts								
Q7	Emphasis placed on recruiters making high school visits								

Considering the activities below, which activity do you consider most effective in achieving your enrollment management?

☐	Use of current students in the recruiting process
☐	Campus visits by groups of prospective students; e.g., College Day event
☐	Use of alumni contacts
☐	Emphasis placed on recruiters making high school visits
☐	None of the Above

If none of the above, please provide an admissions & recruitment activity that your campus does that you believe is most effective in achieving enrollment management.

Component: Academic Advisement		**Does Activity Exist?**			**Level of Effectiveness at your campus**				
	Activity	Yes	No	Don't Know	Very Effective (1)	2	3	4	Not Effective (5)
Q8	Faculty are given specialized training to be academic advisors								
Q9	Freshmen with undecided majors are given special academic advisors								
Q10	Peer advisors are used for academic advising								

Considering the activities below, which activity do you consider most effective in achieving your enrollment management?

☐	Faculty are given specialized training to be academic advisors
☐	Freshmen with undecided majors are given special academic advisors
☐	Peer advisors are used for academic advising
☐	None of the Above

If none of the above, please provide an academic advisement activity that your campus does that you believe is most effective in achieving enrollment management.

Component: Career Placement		**Does Activity Exist?**			**Level of Effectiveness at your campus**				
	Activity	Yes	No	Don't Know	Very Effective (1)	2	3	4	Not Effective (5)
Q11	Freshmen are offered credit courses on career and educational planning								
Q12	Assistance in locating full-time employment after graduation								
Q13	Generating data on job placement of graduates								

Considering the activities below, which activity do you consider most effective in achieving your enrollment management?

☐	Freshmen are offered credit courses on career and educational planning
☐	Assistance in locating full-time employment after graduation
☐	Generating data on job placement of graduates
☐	None of the Above

If none of the above, please provide a career placement activity that your campus does that you believe is most effective in achieving enrollment management.

Component: Learning Assistance		**Does Activity Exist?**			**Level of Effectiveness at your campus**				
	Activity	Yes	No	Don't Know	Very Effective (1)	2	3	4	Not Effective (5)
Q14	Academic support programs in reading & study skills								
Q15	Tutors who are faculty mentors (mentor emphasis)								
Q16	Tutors who are students (peer emphasis)								

Considering the activities below, which activity do you consider most effective in achieving your enrollment management?

☐	Academic support programs in reading & study skills
☐	Tutors who are faculty mentors (mentor emphasis)
☐	Tutors who are students (peer emphasis)
☐	None of the Above

If none of the above, please provide a learning assistance activity that your campus does that you believe is most effective in achieving enrollment management.

Component: Institutional Research		**Does Activity Exist?**			**Level of Effectiveness at your campus**				
	Activity	Yes	No	Don't Know	Very Effective (1)	2	3	4	Not Effective (5)
Q17	Coordination of institutional research								
Q18	Generating data on the number of students enrolled compared with attrition by classification								
Q19	Generating data on the institution's primary service area								

Considering the activities below, which activity do you consider most effective in achieving your enrollment management?

☐ Coordination of institutional research
☐ Generating data on the number of students enrolled compared with attrition by classification
☐ Generating data on the institution's primary service area
☐ None of the Above.

If none of the above, please provide an institutional research activity that your campus does that you believe is most effective in achieving enrollment management.

Component: Orientation		**Does Activity Exist?**			**Level of Effectiveness at your campus**				
	Activity	Yes	No	Don't Know	Very Effective (1)	2	3	4	Not Effective (5)
Q20	Freshmen orientation conducted for parents								
Q21	Freshmen orientation includes registration for classes								
Q22	A separate transfer orientation								

Considering the activities below, which activity do you consider most effective in achieving your enrollment management?

☐ Freshmen orientation conducted for parents
☐ Freshmen orientation includes registration for classes
☐ A separate transfer orientation
☐ None of the Above

If none of the above, please provide an orientation activity that your campus does that you believe is most effective in achieving enrollment management.

Component: Financial Aid		**Does Activity Exist?**			**Level of Effectiveness at your campus**				
	Activity	Yes	No	Don't Know	Very Effective (1)	2	3	4	Not Effective (5)
Q23	Developing an appreciation by faculty and staff of the role price plays in the college selection								

	process								
Q24	An established merit-scholarship program								
Q25	Housing scholarships are offered								

Considering the activities below, which activity do you consider most effective in achieving your enrollment management?

☐ Developing an appreciation by faculty and staff of the role price plays in the college selection process
☐ An established merit-scholarship program
☐ Housing scholarships are offered
☐ None of the Above

If none of the above, please provide a financial aid activity that your campus does that you believe is most effective in achieving enrollment management.

Component: Retention		**Does Activity Exist?**			**Level of Effectiveness at your campus**				
	Activity	Yes	No	Don't Know	Very Effective (1)	2	3	4	Not Effective (5)
Q26	An effort is made to generate an institutional commitment to student retention								
Q27	Faculty are instructed on their role in retention								
Q28	Staff are instructed on their role in retention								
Q29	Follow-up on students who have previously dropped out								
Q30	Barriers to student persistence are quantified and investigated								

Considering the activities below, which activity do you consider most effective in achieving your enrollment management?

☐ An effort is made to generate an institutional commitment to student retention
☐ Faculty are instructed on their role in retention
☐ Staff are instructed on their role in retention
☐ Follow-up on students who have previously dropped out
☐ Barriers to student persistence are quantified and investigated
☐ None of the Above

If none of the above, please provide a retention activity that your campus does that you believe is most effective in achieving enrollment management.

Component: Student Services		**Does Activity Exist?**			**Level of Effectiveness at your campus**				
	Activity	Yes	No	Don't Know	Very Effective (1)	2	3	4	Not Effective (5)
Q31	Student activities are evaluated to determine their impact on students' needs and expectations								
Q32	A strong residential life program								
Q33	Student life programs for commuting students								
Q34	Student services for non-traditional students								

Considering the activities below, which activity do you consider most effective in achieving your enrollment management?

☐ Student activities are evaluated to determine their impact on students' needs and expectations
☐ A strong residential life program
☐ Student life programs for commuting students
☐ Student services for non-traditional students
☐ None of the Above

If none of the above, please provide a student services activity that your campus does that you believe is most effective in achieving enrollment management

Part C Organizational Structure

1. Who on your campus is responsible for coordinating enrollment management?

   ☐ Individual
   What is the title of that person?

   ☐ Committee
   Which areas are represented on that committee?

   ☐ Division
   If division, which areas make up that division?

2. Based on what you selected above, do you believe that is effective in coordinating enrollment management?
   - ☐ Yes
   - ☐ No

     If no, which format would you recommend?

APPENDIX B

Approval from John Fuller, Ph.D.

John L. Fuller, Sr., Ph.D.
[redacted]

Ginger Reyes
[redacted]

February 24, 2012

Dear Ms. Reyes:

This letter provides you with permission to use my survey instrument from my dissertation in whole or in part.

Sincerely,

John L. Fuller, Ph.D.
[redacted]

APPENDIX C

Initial Email to Participants

Dear Colleague:

I am writing in hopes that you can take time out of your busy schedule to assist in a brief research study. My name is Ginger Reyes and I am the Interim Associate Vice President for Student Affairs in the area of Enrollment Services at California State University Channel Islands. I am a doctoral student at Pepperdine University and conducting my research on university administrators' perceptions of enrollment management practices in the California State University system.

You have been selected to participate in this survey due to your current position at your campus. By completing this survey, you will be assisting in providing information to add to the body of knowledge of enrollment management.

You will receive within a week an email with a link to the survey. Please note: information is anonymous and results will be displayed in a format that will not single out any one individual.

I appreciate your time in advance and hope you consider taking the survey. If you have specific questions about the research study, you may email at ginger.reyes@csuci.edu or (805) 437-8521.

Sincerely,
Ginger Reyes

APPENDIX D

Follow Up Email to Subjects

Dear Colleague:

Greetings! I hope you are doing well. Recently, you received an email invitation to participate in a research study. The purpose of the research is to seek your perception of enrollment management practices in the California State University system.

I hope you consider taking the time to complete the survey in order to add to the body of knowledge on enrollment management. Please be assured that all data will be kept confidential and results will be displayed in a format to not single out any individual.

If you would like to participate in the survey, please click here.

I appreciate your time.

Sincerely,
Ginger Reyes
Doctoral Student
Pepperdine University

APPENDIX E

Informed Consent Prior to Beginning Survey

You are being requested to participate in a research study of "University Administrators' Perceptions of Enrollment Management Practices in the California State University system". This study is being administered by Ginger Reyes, a doctoral student in Organizational Leadership at Pepperdine University. This research is being conducted under the guidance and supervision of Dr. Kay Davis, Dissertation Chair.

What Is The Study About?

This study seeks to obtain from university administrators within the 23 California State University campuses their perceptions on the availability and effectiveness of enrollment management activities at their campus.

Why Is It Important?

Data from this study will add to the knowledge of enrollment management and seek to identify best practices of enrollment management decisions in the California State University system.

Why Have I Been Asked To Participate In This Study?

You have been selected for this study because your position is one in which it is involved in the enrollment management process.

How Many Other Individuals Will Be In This Study?

Participation has been requested from all 23 CSU campuses and 299 university administrators.

What Will I Be Asked To Do In This Study?

If you agree to participate, you will be asked to answer questions in a web-based survey.

How Much Time Will I Spend Being In This Study?

The survey should take no more than 30 minutes.

What Are The Perceived Risks Associated With This Study?

There are no perceived risks by participating in this study.

Will My Privacy And Confidentiality Be Protected?

Yes. You are requested to provide your campus that you are employed at. However, you can also elect to not answer. All information gathered will be kept confidential. The administrator will secure survey results in a password-protected format.

What Are My Rights As A Participant?
Your participation is voluntary and you can terminate the survey at any time. However, your input is important to the success of the research study.

Who Do I Call If I Have Questions Or Problems?

For questions regarding this study, please contact me, Ginger Reyes at ginger.q.reyes@pepperdine.edu or (805) 437- 8521. You may also contact my dissertation chair, Dr. Kay Davis at kay.davis@pepperdine.edu

Do you consent to continue?

Yes
No

(Clicking Yes will take participant to survey)

APPENDIX F

Institutional Research E-mail from CSU Chancellor's Office

From: Hirano-Nakanishi, Marsha [mhirano-nakanishi@calstate.edu]
Sent: Thursday, December 22, 2011 9:52 AM
To: Reyes, Ginger (student)
Subject: RE: Inquiry re. Research

I do not need any paperwork from you. Each campus director (not sure what type of director you will be inviting) will reply at his/her discretion within the policies, procedures, and practices of the campus.

-----Original Message-----
From: Reyes, Ginger (student) [mailto:Ginger.Reyes@pepperdine.edu]
Sent: Thursday, December 22, 2011 9:31 AM
To: Hirano-Nakanishi, Marsha; Baker, Gale
Subject: FW: Inquiry re. Research

Dear Ms. Hirano-Nakanishi and Ms. Baker:

Greetings, I am following up on the email trail below and the response from Dr. Garcia. I'm inquiring if each of you will need any paperwork from me for my dissertation research. If not, I appreciate a response back that you are aware of my research and that you understand the nature of my research since I am only using public, published data and gathering opinions from campus directors regarding enrollment management practices.

Any response you can provide would be appreciated.

Sincerely,
Ginger Reyes
Doctoral Student

From: Garcia, Philip [pgarcia@calstate.edu]
Sent: Monday, December 19, 2011 9:10 AM
To: Reyes, Ginger (student)
Subject: Re: Inquiry re. Research

I don't need any paper work from you. Each IR director will make the choice to reply.

----- Original Message -----
From: Reyes, Ginger (student) <Ginger.Reyes@pepperdine.edu>

To: Garcia, Philip
Cc: Hirano-Nakanishi, Marsha; Baker, Gale
Sent: Mon Dec 19 09:01:12 2011
Subject: RE: Inquiry re. Research

Dear Mr. Garcia:

Thank you for your prompt reply. I should have clarified further that my study for enrollment management will consist of sending electronic invitations to the campus directors to participate in an opinion survey about enrollment practices. I will not be requesting any student data and campus director contact information will be obtained from the website.

If this doesn't change your necessity for paperwork, could you please reply back with a statement that you are "aware of your research and understand you will be using only public, published data about campus services and gathering opinions via electronic surveys from campus directors about enrollment practices". This will assist in my IRB process for Pepperdine University.

I appreciate any assistance you can provide me.

Sincerely,
Ginger Reyes

From: Garcia, Philip [pgarcia@calstate.edu]
Sent: Wednesday, December 14, 2011 1:57 PM
To: Reyes, Ginger (student)
Cc: Hirano-Nakanishi, Marsha; Baker, Gale
Subject: RE: Inquiry re. Research

Ms. Reyes:

Since you sent your message to me, I assume you are planning to include CSU data in your dissertation. If you intend use the published findings we post on the web (http://www.calstate.edu/as/), then I would think an IRB approval would be unnecessary. The same would be true if you were to use published findings on CSU students that were posted by a third party, like the California Postsecondary Education Commission (http://www.cpec.ca.gov/OnLineData/OnLineData.asp). Both sites list counts and statistics for applications received, admission outcomes, and enrollment outcomes. The CSU site also publishes re-enrollment rates for undergraduates that enter the University as new freshmen or transfers.

If you are planning to ask for unpublished CSU data, then you need to submit to the Chancellor's Office a data request under the California Public Records Act (GOVERNMENT CODE SECTION 6250-6270). Our General Counsel will review your submission and determine if the

data requested are permissible for public release. Keep in mind that any request for individual student records that was granted would be accompanied by a price tag for the cost of production. The text below comes directly from the Government Code:

The requester shall bear the cost of producing a copy of the record, including the cost to construct a record, and the cost of programming and computer services necessary to produce a copy of the record when either of the following applies

(1) In order to comply with the provisions of subdivision (a), the public agency would be required to produce a copy of an electronic record and the record is one that is produced only at otherwise regularly scheduled intervals.
(2) The request would require data compilation, extraction, or programming to produce the record.

Regards,

PG

Philip Garcia
Senior Director of Analytic Studies
CSU Office of the Chancellor
562.951.4764 (Office)
562.951.4837 (Fax)

-----Original Message-----
From: Reyes, Ginger (student) [mailto:Ginger.Reyes@pepperdine.edu]
Sent: Wednesday, December 14, 2011 8:24 AM
To: Garcia, Philip
Subject: Inquiry re. Research

Dear Mr. Garcia:

My name is Ginger Reyes and I am a doctoral student (EdD) at Pepperdine University in their Organizational Leadership program. I am in the process of completing my dissertation in enrollment management. I am inquiring to see if I need to do any paperwork for the CSU or if you need anything from me as I will be going through the Institutional Review Board (IRB) process at Pepperdine University.

Any response you can provide would be greatly appreciated.

Sincerely,
Ginger Reyes
Doctoral Student
Pepperdine University

APPENDIX G

Comprehensive List of Differences in Perceived Effectiveness

Component		Activity	df	F	ρ	Component		Activity	df	F	ρ
Marketing	Q1	Marketing Surveys	23	.50	.96	Institutional Research	Q18	Coordination of Institutional Research	23	1.98	.02
	Q2	Plan Outlining Enrollment Objectives	23	1.81	.04		Q19	Generating data on attrition	23	1.01	.48
	Q3	Method of coordinating marketing efforts	23	1.38	.17		Q20	Generating data on service area	23	1.34	.19
Recruitment	Q4	Use of current students	23	.85	.66	Orientation	Q21	Parent orientation	23	.58	.93
	Q5	Campus visits by groups of students	23	1.96	.02		Q22	Orientation includes registration	23	1.20	.29
	Q6	Use of alumni	23	1.03	.45		Q23	Separate transfer orientation	23	1.47	.12
	Q7	Recruiters making high school visits	23	.97	.51	Financial Aid	Q24	Appreciation by faculty and staff	23	1.00	.48
Academic Advisement	Q8	Faculty receive specialized training	23	1.08	.40		Q25	Merit Scholarship Program	23	.93	.56
	Q9	Professional staff trained	23	1.72	.05		Q26	Housing scholarships	23	1.47	.12
	Q10	Undeclared freshmen receive special advisors	23	1.55	.10	Retention	Q27	Efforts for commitment to retention	23	1.27	.24
	Q11	Peer advisors used	23	1.12	.36		Q28	Faculty instructed on retention roles	23	1.63	.07
Career Placement	Q12	Credit Courses on Career Planning	23	2.24	.01		Q29	Staff instructed on their retention role	23	.71	.82
	Q13	Employment Assistance	23	1.14	.34		Q30	Follow-up on dropouts	23	1.83	.04
	Q14	Data of graduate placement	23	1.67	.06		Q31	Barriers investigated	23	1.00	.48
Learning Assistance	Q15	Academic reading & study skills support	23	1.01	.47	Student Activities	Q32	Evaluation of Student Activities	23	.77	.75
	Q16	Faculty tutors	23	1.46	.13		Q33	Strong Residential Life Program	23	.83	.68
	Q17	Student tutors	23	.72	.81		Q34	Programs for commuting students	23	.51	.96
							Q35	Services for non-traditional students	23	1.46	.13

APPENDIX H

IRB Exempt Status Approval

PEPPERDINE UNIVERSITY

Graduate & Professional Schools Institutional Review Board

April 9, 2013

Ginger Reyes
[redacted]

Protocol #: E0213D14
Project Title: Identified Enrollment Management Practices in the California State University System

Dear Ms. Reyes,

Thank you for submitting the revisions requested by Pepperdine University's Graduate and Professional Schools IRB (GPS IRB) for your study, *Identified Enrollment Management Practices in the California State University System*. The IRB has reviewed your revisions and found them acceptable. You may proceed with your study. The IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations 45 CFR 46 - http://www.nihtraining.com/ohsrsite/guidelines/45cfr46.html that govern the protections of human subjects. Specifically, section 45 CFR 46.101(b)(2) states:

> (b) Unless otherwise required by Department or Agency heads, research activities in which the only involvement of human subjects will be in one or more of the following categories are exempt from this policy:
>
> **Category (2) of 45 CFR 46.101.** research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: a) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and b) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit a **Request for Modification Form** to the GPS IRB. Because your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the GPS IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the GPS IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the GPS IRB and the appropriate form to be used to report this information can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* (see link to "policy material" at http://www.pepperdine.edu/irb/graduate/).

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval. Should you have additional questions, please contact me. On behalf of the GPS IRB, I wish you success in this scholarly pursuit.

Sincerely,

Doug Leigh, Ph.D.
Chair, Graduate and Professional Schools IRB
Pepperdine University
Graduate School of Education & Psychology
6100 Center Dr. 5th Floor
Los Angeles, CA 90045
Doug.Leigh@pepperdine.edu
W: 310-568-2389
F: 310-568-5755

cc: Dr. Lee Kats, Vice Provost for Research and Strategic Initiatives
Ms. Alexandra Roosa, Director Research and Sponsored Programs
Dr. Kay Davis, Graduate School of Education and Psychology