TRANSFER CAPITAL AND ACADEMIC PLANNING: FACILITATING SUCCESSFUL

TWO- TO FOUR-YEAR TRANSFER IN NORTH TEXAS

Lynette M. O'Keefe, B.A., M.S.

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APPROVED:

Dale Tampke, Committee Chair
Allen Clark, Committee Member
Marc Cutright, Committee Member
Jan Holden, Chair of the Department of
      Counseling and Higher Education
Jerry Thomas, Dean of the College of
      Education
Mark Wardell, Dean of the Toulouse
      Graduate School

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The study of transfer has been historically important and now approaches critical proportions. Current and historical patterns of enrollment and attainment in American higher education combined with the economic, demographic, political, and social realities of the 21st century drive the need for increased research and more effective practice for successful transfer of students from two- to four-year higher education institutions. An emerging theory for framing transfer success is transfer capital, which recommends academic planning, financial aid, and admissions advising as primary interventions to increase the rate and success of transfer. This mixed-methods study examined the academic planning portion of transfer capital to assess the effect of academic planning on the number of hours transferred, number of leveling courses needed, excess hours, and grade point average (GPA). Quantitative assessment measured differences among new transfer students enrolling between Spring 2012 and Fall 2013. Qualitative assessment was conducted with advisors and leadership that were part of the transfer advising program examined in this study. ANOVA indicated significant findings at the .05 level for each variable except GPA. Qualitative findings provided context and primary themes of institutional context, academic planning, financial aid knowledge, and institutional partnerships. Findings provide direction for practice as well as further research.

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CHAPTER 1

INTRODUCTION

Background of the Study

Researchers have studied transfer for decades, yet much work remains to be completed. The study of transfer has been historically important, and now approaches critical proportions. Current and historical patterns of enrollment and attainment in American higher education combined with the economic, demographic, political, and social realities of the 21st century drive the need for increased research and more effective practice for successful two- to four-year transfer. President Obama has challenged the United States to once again become the most educated nation by 2020. Nichols (2011) indicated that at the current rate of degree attainment and population growth, the United States will be 24 million degrees shy of this goal. In addition, the workforce needs are similar; by the year 2025, an estimated 15-20 million educated workers will be needed to fill job needs created by industry growth and the retirement of current employees (American Association of Community Colleges [AACC], 2012a). Underscoring the substantial work to be done are the demographic trends of the United States, and the distribution of students enrolled in postsecondary education.

National demographic trends indicate growth among the groups traditionally underrepresented in higher education, including large increases in the Hispanic and African American populations. The Caucasian population, which has historically been the most educated, is experiencing a decline in number and is not expected to rebound. Compounding these demographic issues is the fact that community colleges serve disproportionate numbers of Hispanic, African American, low-income, and/or first-generation students (AACC, 2012a). Overall, community colleges enroll 44% of all undergraduate students (AACC, 2012b).

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Research indicates that between 50-80% of students who enter community colleges intend to transfer to a four-year institution (Smith, Miller, & Bermeo, 2009). The actual rate of transfer is estimated at 25-39% overall, and the rate is even lower for students from underserved populations (AACC, 2012a).

Students who begin their academic work toward bachelor degrees at community colleges are 15-20% less likely to complete those degrees, even when controlling for ability, socioeconomic status, and individual characteristics (Pascarella & Terenzini, 2005). This discrepancy does not, however, appear to be the result of a deficit in the student or the community college education but, rather, a problem with the mechanics of transfer (Handel, 2011a, 2011b). Students who do successfully transfer from the community college to the university are just as likely to attain their degrees as students who began at the university (Adelman, 2006; Bowen, Chingos, & McPherson, 2010; Handel, 2011b; Handel & Williams, 2012; Mullin, 2012b; Pascarella & Terenzini, 2005). As Handel (2011) pointed out, these data suggest that the problem does not lie in either supply or demand; there are plenty of students aspiring to transfer, and those that do perform as well or better than native students. Therefore, it seems that the issue is in the connection between two- and four-year systems.

Statement of the Problem

Students with baccalaureate aspirations who begin their academic careers at two-year institutions are less likely to transfer to four-year institutions, and therefore are less likely to attain bachelor's degrees than students who initially attend four-year institutions (Pascarella & Terenzini, 2005). Community college enrollments are on the rise, and students who attend community colleges are more likely to be from one or more historically underserved groups, including ethnic minorities, first-generation, and/or low-income students (AACC, 2012a).

Population growth trends, which show rapid increases in Hispanic and African American populations, emphasize the need for better understanding and practice of transfer.

An increasing volume of researchers studying the links between two- and four-year institutions have suggested two primary challenges for transfer: sociocultural disconnects for historically underserved students, and issues with the awarding and applicability to degrees of transfer credit (College Board, 2011; Handel, 2011b; Handel & Williams, 2012; Laanan, Starobin, & Eggleston, 2010). A small number of researchers (Handel, 2011b; Laanan, Starobin, & Eggleston, 2010) have linked sociocultural issues to advocacy for improved and increased academic planning for credit transfer. They indicate that transfer students are often doubly handicapped; transfer students tend to be from historically underserved populations, and lack the cultural capital necessary for college success. Compounding this issue is the specific knowledge needed to navigate the transfer process. Their research findings indicate that increased academic planning that includes provision of knowledge for the transfer process – or "transfer capital" – can address both issues simultaneously.

<div align="center">Purpose of the Study</div>

The goal of this dissertation research is to study transfer capital and intervention as an emerging theory for successful two- to four-year transfer. As transfer capital is a new and still developing concept, this is a mixed-methods case study. In the Fall 2010 term, the University of North Texas funded seven full-time staff members based in Admissions to serve as "transfer advisors," based 80% of their time at local community college campuses and the other 20% providing transfer advising services to walk-in students at the university. They were tasked with the provision of academic planning services for transfer as well as with assisting students in successfully navigating the actual process of transfer (admissions, financial aid, etc.). This

model is in line with current recommendations in the literature but has not yet been studied. The primary recommendations from the literature regarding the increase of transfer capital include: academic planning for course selection and sequence, assistance with navigating the admissions process, and assistance with navigating the financial aid process. This study focused on the first of these recommendations, and here is that recommendation: academic planning.

In the period from Fall 2010 to Fall 2012, the seven transfer advisors served approximately 1,700 community college students with an expressed intent to transfer. In this study, the researcher provides descriptive statistics and analyzed differences using ANOVA among three groups: students with services available that did receive academic planning assistance, students with services available that did not receive academic planning assistance, and students with no services available for outcome variables of GPA, number of hours transferred, number of leveling course hours needed after transfer, and number of excess hours taken. Then, *t-tests* were used to measure differences on: race, gender, and age for the same outcome variables. The results of these analyses were used to develop qualitative protocols for interviews with transfer advisors and the leadership responsible for development and oversight of the transfer advising program. In addition to conducting in-depth interviews with the transfer advisors and program leadership, research included a review of training materials and program development for transfer advisors. This study resulted in recommendations for improving transfer and academic planning, and contributes to both research and practice for two- to four-year institution transfer.

In sum, the goals of this research were to:

1. Explore the program development and design of the transfer advisor program
2. Explore the advisors' experiences during transfer advising sessions

3. Determine whether there are differences in the academic outcomes of students who received transfer advising services and students who did not

4. Add to the development of transfer capital as an emerging framework for understanding transfer student success.

Significance of the Study

Practical Significance

This study, describing the impetus, design, execution, and results of a transfer intervention originating at the four-year institution, contributes to practice in terms of actions the four-year institution may take to increase successful transfer. The study also informs potential partnerships between four-year and two-year institutions. In the current political and economic climates, calling for increased efficiency and accountability with fiscal and human resources, these contributions are valuable for practitioners across a variety of levels.

In addition to these campus-level applications, findings potentially contribute to legislative policy development. A large and increasing volume of students with baccalaureate aspirations choose to begin their academic careers at two-year institutions.   This creates pressure for more effective transfer mechanisms, given the documented baccalaureate achievement gap between students who begin at two-year institutions versus those who begin at four-year institutions. Additional pressures include the demographic patterns in population growth and community college enrollments, as well as the need for ever-increasingly responsible stewardship of limited fiscal and human resources. Federal, state, and institutional policymakers benefit from research informing practice on increasing successful transfer.

Academic Significance

This study contributes to filling a gap in the literature. While much research has been conducted regarding the role of the two-year institution in terms of transfer, there is little with regard to the role of the four-year institution. Among recent findings in the literature is the emergence of transfer capital as a theoretical framework. This study contributes to the volume of literature regarding transfer capital as a viable theory for increasing successful transfer. A common recommendation focused on transfer and based in transfer capital is that four-year institutions must have a sustained presence on community college campuses, and must provide increased and early guidance focused on academic preparation and planning to community college students intending to transfer (Handel, 2011a). This study is focused on that recommendation.

Definition of Terms

Transfer: In this study, transfer will refer to student movement from a two-year institution to a four-year institution.

Transfer GPA: The grade point average (GPA) earned at the community college prior to transfer.

Number of hours transferred to the university: The number of hours earned prior to transfer and accepted for credit by the university.

Number of leveling courses needed following transfer: The number of courses needed below the classification level of a student at the time of transfer. For example, if a student transfers as a Junior, the number of leveling courses needed would be the number of freshman and sophomore level courses the student must take at the university to earn his or her degree.

Number of hours enrolled in during the first university term: The number of hours a student takes during his or her first term at the university.

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GPA after the first university term: The student's grade point average for the first term of university courses.

Academic performance: The student's performance related to GPA, leveling courses needed, number of excess hours transferred or taken, and/or graduation rate.

Attainment rate: The rate of bachelor degree attainment.

Theoretical Framework

Transfer Capital

The emerging theory of transfer capital is an extension of cultural capital (Handel, 2011b; Laanan, Starobin, & Eggleston, 2010). Cultural capital, defined as the intangible property provided to children of middle- and upper-class families as a supplement or substitute for economic capital, is directly related to educational choices and experiences (McDonough, 1997). Researchers Laanan, Starobin, and Eggleston (2010) and Handel (2011b) proposed that cultural capital alone may not be sufficient to address the needs of transfer students.

The needs of transfer students are unique from the needs of high school students entering college. As previously noted, students who enroll in community college are more likely to be from one or more historically underserved groups, and therefore are already more likely to need supplementary provision of cultural capital. In addition to traditional cultural capital needs, transfer students need information to help them navigate the transfer process itself and the different cultures of two-year and four-year institutions (Handel, 2011b). The transfer process is often complex, and requires unique knowledge (Laanan, Starobin, & Eggleston, 2010). Students who enter four-year institutions immediately following high school must complete the application process and complete a clearly prescribed set of courses and standardized tests. Though cutoff points for course completion and test scores vary, the basic knowledge necessary

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for four-year college entry following high school is uniform in nature. Transfer students, however, must complete the transfer application process, which is often complex and can vary widely by institution. Additionally, transfer students must understand and prepare for specific major requirements at each four-year institution of interest. These issues led to the development of transfer capital as an emerging theory for two-year to four-year transfer.

Research Questions

1. Are there performance differences among students who a) received academic planning services from a transfer advisor, b) had services available but did not receive them, and c) had no services available?

2. How was the program developed, and how was it modified over time?

3. What were the experiences of the transfer advisors providing academic planning services?

Limitations

The limitations of this study include issues in similar studies. As is common in social science, the data and methods in this study do not establish causal links. However, the results provide information and direction for both practice and further research. Again, as in much social science research, the students in the sample that received services self-selected to receive academic planning from a transfer advisor. There is a potential self-selection bias in the sample. Students who choose to receive academic planning may have latent traits such as motivation that is higher than other students, and/or they may already possess more transfer capital than other students (as evidenced by their awareness of transfer advising and the value of such services). Steps taken to ameliorate the issue of self-selection bias include variables such as GPA (both transfer and university), hours transferred, and hours enrolled in during the first university term,

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to account for similarities and differences among students that may be indicative of latent traits impacting the study. A final limitation is that the program was not in existence long enough to estimate the effect of academic planning services on actual baccalaureate completion. While the goal of the program was to not only increase successful transfer, but to increase the rate of timely graduation achieved by transfer students, at this time, there is not sufficient data to assess this effect.

<div align="center">Delimitations</div>

In this study, there were three primary delimitations imposed. The most significant is that the sample was limited to the students in the population to only students that actually transferred to the university. While studying students that did not transfer would no doubt be useful, the inclusion of these students is logistically difficult, and the focus on unsuccessful students falls outside the scope of this project. The second significant delimitation is that this study was focused solely on the transfer advisors from the university. The scope of this project was limited to the provision of services from the university to students at community college campuses. Further, the program under study was specifically developed by the university, and by limiting the qualitative sample to university staff, the researcher was assured that each individual interviewed received the same training and information. Introducing non-university staff addresses another issue – that of inconsistent training and information provision – and was not within the scope of this project. Finally, this project focused on the academic planning piece of transfer capital theory, to the exclusion of admission and financial aid recommendations found in current literature on transfer capital. This decision was made to narrow this study sufficiently for research purposes, and because it has been identified in the literature as the portion of transfer capital theory with the most potential for impact on practice.

Organization of Study

This study is presented in five chapters. Chapter 1 includes the background of the study, statement of the problem, purpose of the study, definition of terms, theoretical framework, research questions, limitations, and delimitations. Chapter 2 includes a review of literature, including the history of higher education in America, with specific emphasis on the purpose of the university and the development and purposes of the community college; demographic, economic, and political patterns of change, particularly over the latest twenty years and looking into the future; and a discussion of human capital, cultural capital, and transfer capital. Chapter 3 is focused on Methodology, and for both quantitative and qualitative methods, includes selection of participants, instrumentation, data collection, and data analyses. Chapter 4 contains the findings from this study, including descriptive statistics of the student sample, results from the quantitative analyses, and results from the qualitative analyses. Chapter 5 provides a summary of the study and a discussion of the findings, including practical and academic significance, recommendations for further research, and conclusions.

CHAPTER 2

LITERATURE REVIEW

Introduction

From its earliest roots, higher education in America has been purposefully developed to serve the needs of the nation (Cohen, 1998). There have been many marked periods of change throughout the history of American higher education. The system has moved from an elite system of class rigidity to a highly varied system of opportunity. The two-tiered (two-year and four-year) system that has served generations of Americans well, and provided otherwise unavailable opportunities for economic stability and social mobility no longer serves individuals or the nation as a whole in a sustainable manner. There is great need for a more educated citizenry, yet postsecondary attainment has been stagnant for the past forty years. Although completion has been static, patterns of enrollment have shifted greatly, presenting new challenges. Additionally, the current global information economy has created the need for new levels of educational attainment for a greater number of people. Present conditions in enrollment, demography, economics, and politics have resulted in the need for a new adaptation in American higher education.

Historical Background of the Problem

In order to understand the current state of higher education in America, and the needs of the nation and its citizens, it is helpful to understand how the current system evolved. Through its many forms, American higher education has held remarkably true to its ideals of upholding the integrity of the traditional university while serving the public good. From the earliest colonial institutions to the current complex system, higher education in America has endlessly

adapted, and no doubt will do so now, as the nation and its people look to postsecondary education to help them meet their needs.

Colonial Establishment of Higher Education

The first 150 years of American higher education, from the 1630s to the 1780s, were characterized by religious and civil education blended with the liberal arts curricula of the European model (Brubacher & Rudy, 1968; Cohen, 1998). The two defining tenets of colonial development were independence and religion. The colonists valued independence from the rigid social and economic structures of Europe, and this enterprising spirit was evident from the beginning among the colonies. They did not value education as a means to a professional or vocational career. Apprenticeships and other home- or on-the-job training were sufficient, and more or less, allowed the colonists the freedom to choose their own paths. This newfound freedom meant that men were not tied to the roles they had been born into, and the notion that each generation could achieve more than the previous one quickly became ingrained in the identity of the colonies. The colonists had the beginnings of the American dream, but had not yet linked opportunity to postsecondary education.

The colonists did not have need of education as a means to career development, but they did have need of an educated clergy and a way to imbue society with religious and public service values (Cohen, 1998; Rudolph, 1962). Early colleges were established to meet this need. The European model provided a classical education, and gave an example of how higher education might be leveraged to sustain social development within the tenets of religion. It was in this vein that the early colleges were developed, and the religious and civil leaders of the growing colonies were educated accordingly. The early colleges did not directly interact with the majority of

colonists; nonetheless, they played a significant role in shaping the colonies that would become America.

Higher Education Expands with the New Nation

The end of the American Revolution in 1783, westward expansion, and European immigration ushered in sweeping social changes. Higher education, which had been so instrumental in shaping social and civic development in the colonies, rapidly expanded and morphed to meet the varied needs of the new nation (Cohen, 1998). America grew quickly in terms of both territory and population (native and immigrant). Along with this expansion came booming growth in manufacturing and agriculture, as well as the development of numerous religious denominations. The evolving needs of the young nation resulted in a proliferation of a variety of higher education institutions (Brubacher & Rudy, 1968; Geiger, 2005). The newly created states that had no colleges established them according to their unique needs, and the states that had existing colleges changed the missions and curricula to suit their new needs.

Many of the previously existing and new colleges maintained a liberal education focus, often meshing liberal arts and religious education (Cohen, 1998; Geiger, 2005). Others focused on educational reform, typically to include the ideas of the enlightenment, republican education, and/or the Jeffersonian concept of curricular differentiation (Cohen, 1998). New colleges opened (and closed) by the hundreds; an estimated 700 new colleges opened and closed before the Civil War (Rudolph, 1962). A high volume of these reflected the diversity of religious denominations represented in the expanding country, and others catered specifically to the professional and vocational preparation needs resulting from burgeoning manufacturing and agricultural industries. These differences gave rise to the first clear and widespread discussion in American higher education regarding the purpose of postsecondary schooling (Geiger,

2005). While academics and proprietors of the colleges debated the overarching purpose of a college education, the country continued to grow rapidly, and colleges continued to expand accordingly. The background discussion continued as well, and laid the groundwork for several iterations of academic reform to come.

Early Differentiation of Higher Education Sectors

Demographic and economic pressures resulted in burgeoning demands of higher education across the spectrum of available options (Cohen, 1998; Geiger, 2005). The single-sector model of higher education continued trying to meet all of the demands placed on it by the growing society, and leaders continued discussing the ideal arrangement. The first dividing lines for higher education sectors emerged from these discussions and from the realities of expected deliverables. As the population grew, the need for ministers, doctors, lawyers, and other professionals grew and these careers became professionalized, requiring more education than they previously had. In addition, the advent of railroads greatly increased the opportunity to supply goods to distant locales; the north with manufacturing, and the south with agriculture. Education and training for newly developed work opportunities for vocational and professional fields was booming.   In addition to these changes, the early- to mid-19th century saw the establishment of the first women's colleges, and even a few colleges that admitted African American students (Brubacher & Rudy, 1968). This growth continued unchecked until the Civil War began (Brubacher & Rudy, 1968; Cohen, 1998). At that time, approximately 250 colleges were in operation, in contrast to the nine colonial colleges that existed just 60 years before.

Academic Reform After the Civil War

There is a general consensus among scholars of the history of higher education that the end of the Civil War marked the beginning of academic reform (Cohen, 1998; Geiger, 2005; Rudolph, 1962).   The post-war period, beginning in 1865, was characterized by industrialization and the struggle to achieve a cohesive national identity. Similar to the years following the American Revolution, the nation looked to its colleges to provide necessary social structure and forward motion. Despite the persistent differences between the North and South, the principles of opportunity, upward mobility, and public service were deeply ingrained in the American identity.

Higher education in this period was a reflection of the issues affecting the nation at large. Fueled by reconstruction and industrialization, this period proved to be the tipping point for academic reform. Industrialization created increased pressure for vocational education, and colleges struggled to both maintain their identity and serve the changing nation. In response to these issues, the Morrill Acts of 1862 and 1890 directly impacted the development of colleges and curricula (Geiger, 2005; Rudolph, 1962). The first Morrill Act allotted land and endowment funds. Each state received 30,000 acres of land per senator and representative; the funds from the land sale were provided to the newly created colleges for the purposes of creating endowments (Rudolph, 1962). The legislation regarding the new land-grant colleges specifically indicated that the new colleges must teach agricultural and mechanical arts, and that these curricular requirements could not be met at the expense of excluding classical or scientific studies (Geiger, 2005; Rudolph, 1962). The second Morrill Act provided annual federal funding directly to the land-grant colleges, helping to ensure their success leading up to two successive eras of large-scale growth (Geiger, 2005).

Higher Education Branches into Distinct Sectors

In response to the need for provision of both new and traditional services, American higher education expanded horizontally and vertically (Brubacher & Rudy, 1968). Curricular (horizontal) expansion included classical and liberal arts studies, scientific inquiry, and the continued rise of both professional and vocational education. Vertical expansion first included the four-year and graduate education models, following the two-year model.

The four-year and graduate education models. The formalized four-year and graduate education models grew out of the existing universities, largely as the result of the German education influence and emphasis on scientific inquiry (Brubacher & Rudy, 1968). German universities were known for their strict adherence to research and the scientific model. Early on during the academic reforms following the Civil War, the German model served as an example of what many leaders identified as the true purpose of a college education – the discovery and dissemination of knowledge. Closer to the beginning of WWII, in the early 1930s, the German model really took root in American universities. This occurred for two reasons: long before America got involved in WWII, Hitler expressed anti-academic sentiments (Cole, 2009). He passed laws that effectively removed academic Jews from their positions, and many non-Jewish scholars chose to leave their positions in Germany, Austria, and Hungary. Scholars across all disciplines came to the United States, though the scientists had the most impact. This coincided with the second reason for the shift to the German university model that became (and remains) prevalent among universities: America needed to capitalize on scientific discovery to win the war and maintain its global status. The most effective way to do this was through the university system. The academic reform resulting in four-year and graduate education models for

American universities originated the same way most other changes in higher education had: the nation had a need, and turned to its universities to serve the public good.

The two-year model. Shortly preceded by the development of the four-year and graduate education models, and spurred by the increasing pressure on higher education, the two-year model was developed (Cohen & Brawer, 2008). The two-year model first appeared in the early 1900s, and such institutions were termed "junior colleges." The impetus for the early junior colleges was threefold: the number of high school graduates greatly increased, the newly industrialized nation needed workers, and the universities, with their existing missions and traditions, had set a different path. The first forty years in the history of junior colleges were marked by several iterations of what it meant to be a junior college. The two primary iterations included the provision of lower-level collegiate courses and the offering of terminal vocational education. Toward the end of this period, most junior colleges integrated general and vocational education, which would then develop into the current "community college" model.

During the period from the Civil War to World War II (WWII), all of these factors firmly established the university as the engine of opportunity for the American people and the country as a whole. This idea of education as opportunity was transformative, and while the debate about the purpose and appropriate structure for higher education continues, the academic reforms of the late 19th and first half of the 20th century have endured.

Mass Higher Education

Throughout the eighty years between the Civil War and WWII, the American higher education system grew in institutional number and type, curricular offerings, and enrollments. This growth laid the foundation for the following thirty years, 1945-1975, often referred to as the Mass Higher Education era, or the Golden Age of American Higher Education (Cohen, 1998).

The expansions of the previous era came into their full form, spurred by a variety of events and trends.

American universities post-WWII. America emerged from WWII as a global force, largely due to the scientific discoveries made at the nation's universities (Cohen, 1998; Cole, 2009). During the war, the federal government had funded universities a total of $3.5 billion to research radar and the atomic bomb. The success of those efforts served as endorsements for future federal funding, and continued direct federal support for university research shaped university development long after WWII.

In addition to federal funding for research, universities were impacted by the influx of returning WWII veterans. The economy had recovered from the depression of the 1930s, and to maintain economic health, the country needed to avoid widespread unemployment among WWII veterans (Cole, 2009). Just before the end of the war in 1944, the Serviceman's Readjustment Act (GI Bill) was passed as a means of stemming unemployment by channeling returning veterans into education for new job opportunities (Clark, 1998). Although the GI Bill was never conceptualized as a tool for educational change or upward mobility, that is certainly what it became. By 1950, more than two million servicemen had used GI benefits to attend college, and total enrollments were double the 1.5 million they had been prior to the war (Cohen, 1998; Geiger, 2005). In addition to providing a new federal funding source benefitting primarily public institutions, the GI Bill marked the change in the U.S. from an elite higher education system to one of mass higher education. In the eighty years prior, a college education had become loosely linked with opportunity for personal and national prosperity. The GI Bill ushered in a more tightly coupled relationship between the two, and provided the first large-scale statement that higher education was not just for the elite.

Development of the community college. The burgeoning demands for space and

resources that resulted from the events of WWII gave rise to mass expansion of higher education,

and especially of community colleges. (Cohen, 1998; Cohen & Brawer, 2008). Community

colleges began in the early twentieth century as the answer to a need that universities were

unable or unwilling to serve, and when such demands increased rapidly post-WWII, "the

community colleges thrived on the new responsibilities because they had no traditions to defend,

no alumni to question their role, no autonomous professional staff to be moved aside, no

statements of philosophy that would militate against their taking on responsibility for everything

(Cohen & Brawer, 2008, p. 3)."

The idea of higher education as a route to prosperity for the general public rather than a

commodity reserved for the elite was soon entrenched in American ideals (Cohen, 1998; Cole,

2009). Accordingly, demand for higher education drastically increased. Within six years of the

end of WWII, over half of higher education enrollments were veterans attending college on the

GI Bill, and many sought opportunities for vocational education (Clark, 1998). In addition to the

growth in veteran enrollment, American society at-large began to seek more higher education

opportunities (Cohen & Brawer, 2008). Community colleges offered both terminal vocational

education and general education courses that could be transferred to universities toward a four-

year degree. This flexibility was attractive to many students, and caught the attention of state

and national leaders.

The Truman Commission report, Higher Education for American Democracy (United

States, 1948), highlighted community colleges as the route to prosperity for many individuals

who could benefit from postsecondary education. The Commission stated that in order to gain

the rewards higher education offered to the general public,

it will be necessary to develop much more extensively than at present such opportunities as are now provided in local communities by the 2-year junior college, community institute, community college, or institute of arts and sciences. The name used does not matter, though community college seems to describe these schools best; the important thing is that the services they perform be recognized and vastly extended. (United States, 1948, p. 37)

The report repeatedly emphasized education as the American route to prosperity, and acknowledged that the existing system reinforced inequality:

One of the gravest charges to which American society is subject is that of failing to provide a reasonable equality of educational opportunity for its youth. For the great majority of our boys and girls, the kind and amount of education they may hope to attain depends, not on their own abilities, but on the family or community they happened to be born, or worse still, on the color of their skin or the religion of their parents. (United States, 1948, p. 27)

This statement, and the overall content of the Truman Commission report, embody the overlap of social and educational concerns that characterized at least the following twenty years of American higher education.

Changes in the 1950s and 1960s. For about ten years, both community colleges and universities grew with the tide of veterans and increased demand among the growing American citizenry (Cohen, 1998; Cohen & Brawer, 2008). In the mid-1950s to the 1960s, American society was defined by Civil Rights and the Vietnam War. Once again, universities were faced with pressure from the government and from society for change.

Legislative change. There were two primary changes delineated by the government during this time. The first was the extension of the 1954 *Brown v. Board of Education* decision to higher education with the *Florida ex rel. Hawkins v. Board of Control* case in 1956 (Cohen, 1998). Desegregation occurred quickly in some states, and more slowly in others. Then, in 1964, the Civil Rights Act was passed, speeding desegregation in areas where it had lagged, and in short order, the Civil Rights Act impacted women's rights and higher education opportunities as well.

The second major change implemented by the federal government was the Higher Education Act (HEA) of 1965, designed to address some of the difficulties accompanying rapid expansion and new enrollment patterns (Cohen, 1998). The HEA established new federal funding options for both students and institutions, most notably federal student aid. By providing financial means to higher education for anyone that needed it, this legislation led to a realization of the idea that higher education was in the service of the masses rather than reserved for the elite.

Social change. Social change during the 1950s and 1960s was intertwined with the legislative change described above. Unique contributions of social change to higher education primarily resulted from civil unrest as a result of the Civil Rights Movement and the Vietnam War (Cohen, 1998). The college-age population acted as catalysts for change, and colleges themselves were swept up in their demands. Civil rights and the Vietnam War sparked a strong push for equality for women and minorities, and activism on college campuses became common. First viewed simply as a platform for affecting social change, universities themselves quickly became the object of student protests. Students perceived universities as complicit in the war effort and in maintaining social inequalities (Cohen, 1998).

Issues of access and equality in higher education were forced into focus by students

protesting the Selective Service Draft (Cohen, 1998; Cole, 2009). For the first half of the war,

students who were enrolled in college, making "satisfactory progress" toward a degree, ranked

highly in their class, and/or in graduate school were given first preference for draft deferments.

Higher education had become an enterprise available en masse following WWII, but the system

clearly favored middle- and upper-class students. Privileged students were more prepared for

higher education, performed better, and attended graduate school at higher rates. Social trends

and student demands resulted in an increased focus on access, in both the research and practice

of higher education.

Community colleges: the gateway to the middle class. Enrollments increased across all

sectors during the mass higher education era. However, there were differences in patterns of

increase (Cohen, 1998; Cole, 2009). As previously noted, universities mostly maintained their

existing missions. They enrolled more students, but this was largely due to increases in

population growth and the rate of high school graduation. The greater number of available

students seeking admission allowed the universities to be more selective about admission while

still increasing enrollment (Geiger, 2005). Regional universities handled some overflow from

students not admitted to the top tier. However, it was the community colleges that grew most

dramatically during this period. Of the 600 new public institutions opened, 500 were community

colleges (Cohen, 1998).

Community colleges enrollments appeared to exemplify the role of community colleges

as social equalizers. Cohen and Brawer (2008) estimate that 90-95% of Americans had a

community college within driving distance (25 miles) by the mid-1970s. Enrollments in

community colleges made up approximately 50% of total college enrollments (Cohen, 1998).

Further evidence is provided in the ratio of private to public enrollments. Prior to WWII, enrollment in private versus public institutions was about equal. By 1975, this ratio had tipped toward public institutions, which enrolled 79% of students. Perhaps more telling, however, are the academic and economic impacts of community colleges. Community colleges had developed to fill a specific need, and they continued to embrace the provision of need-based issues as their mission (Cohen & Brawer, 2008). During the 1960s, job opportunities for individuals with only a high school degree decreased, as did the economic value of such jobs. At this same time, students' preparation for higher education at the time of high school graduation began to decrease. Community colleges moved to fill these gaps. They offered continuing education, remedial education, vocational training, and courses designed for transfer. Cohen and Brawer (2008) indicate that many individuals and families attained previously unavailable social mobility as a result of a community college education, resulting in economic gains on a national scale.

The wealth of students seeking enrollment allowed state universities to increase enrollments while being more selective about the students to fill those slots (Geiger, 2005). Many students who were not admitted to the flagship institutions found a place at a regional university, and more still enrolled in the ever-growing number of community colleges. All told, enrollments during this period grew from two million to eleven million; 45% of young adults attended a two- or four-year institution versus 15% previously (Cohen, 1998; Geiger, 2005). Thanks to legislative and social changes during the mass higher education era, access to higher education had expanded to reach virtually anyone who wanted to go, As a result, income, racial, and gender gaps were smaller than at any previous time. Although inequality persisted,

especially along lines of race and income, changes in postsecondary access reinforced the idea that anyone could attain upward mobility.

The mass higher education era is defined by a marked increase in access for students previously unable to enroll due to issues of finance, race/ethnicity, and/or gender (Cohen, 1998). At first, mass increase in college access was an unintended effect of the effort to stem unemployment and sustain economic stability following WWII (Cohen, 1998; Cole, 2009). By the end of the era, however, college access had become a movement unto itself. Legislative and social change had made it clear that by restricting college access (*de jure* or *de facto*), social inequality was enforced, and the college-age population was no longer willing to accept this reality.

Enrollment Growth Slows, but Patterns Shift

The waves of growth spurred by significant social and legislative change slowed between 1975 and 1995 (Geiger, 2005). Postsecondary enrollment continued to grow, but at a much slower pace. Rather than a large sum total growth, there was some growth accompanied by shifting in the characteristics of enrolling students and where they chose to go to college (Cohen, 1998). Social acceptance of women working outside the home continued to grow, as did the number of single mothers. These two trends resulted in a growth in the number of women attending college, shifting enrollments (and later, graduations) to be majority-female. Additionally, the relatively new student aid options from the original HEA and the expansion to include Pell grants in 1972, led to a rise in non-traditional student enrollment. Growth in the enrollment of ethnic minorities continued as a result of the Civil Rights movement, Equal Opportunity, Affirmative Action, and demographic trends. During this time, higher education practitioners, researchers, and policymakers were primarily focused on expanding access and

increasing enrollments from traditionally underserved populations. This focus was maintained until the 1990s, when a combination of social, demographic, and economic changes defined the need for renewed consideration of the role of higher education.

Several trends in the 1990s gave rise to the current issues facing higher education in America (Cohen, 1998; Geiger, 2005). The population continued to increase, the focus on intentional access remained, and college enrollments began to grow at a rapid pace once again. However, it was the widespread use and development of the internet that had perhaps the most significant impact. The advent of the internet and other rapid technological development beginning during the mid- to late-1990s ushered in a new economy, based on information. The information economy has fundamentally changed nearly every aspect of our daily lives, and higher education is no exception. Studies suggest that higher education in America will need to adapt to the new job market, significant demographic shifts, and the current climate of data-based action and accountability (AACC, 2012a).

Echoes of the original American colonies are evident in higher education today. The interpretation of colonial ideals has shifted over time to include women and minorities, and to embrace secular rather than religious education; however, the common threads of freedom, opportunity, and public service have remained. Throughout history, higher education has shifted and expanded to accommodate the evolving needs of the nation. Previous incarnations of higher education have been developed in response to changes in the economic engine, to social events and movements, and to demographic changes. All of these things shape what the public needs, and American higher education has always striven to provide public good. Recent events have led higher education to a new period of change: the economy has shifted from industrial to information on a global scale, and the United States is facing significant shifts in demography.

These two issues, together with the current realities of the economy, job market, and characteristics of higher education enrollment and completion, have resulted in a new period of change for higher education.

<div align="center">Higher Education in the 21st Century</div>

The current challenges facing higher education are largely carried over from the developments of the 1990s: rapid technological advancement resulting in the current information economy, and significant shifts in demography. As a result of these issues, higher education once again finds itself at what Clark Kerr (1963) once described as a "hinge of history" – connected to the past but swinging in another direction. Kerr's next comments apply as much today, if not more, than they did fifty years ago: "We are just now perceiving that the university's invisible product, knowledge, may be the most powerful single element in our culture, affecting the rise and fall of professions and even of social classes, of regions and even of nations (pp. xi-xii)." Kerr's keen and enduring observation rings true, and cuts across today's economic, demographic, and political sectors.

Economic Landscape

For the first thirteen years of the 21st century, America has struggled economically (AACC, 2012a). The nation has suffered two recessions and the unemployment rate climbed rapidly, reaching a high of 9.9% in 2010, before leveling off in 2012 and drop to 7.7% in February 2013 (Bureau of Labor Statistics [BLS], 2013; National Bureau of Economic Research [NBER], 2013). This period exacerbated the income gap between upper- and lower-income Americans; following 30 to 40 years of stagnation, median family income declined 7% between 2000 and 2010 (AACC, 2012a). The AACC (2012a) notes that the economy and job market are unlikely to bounce back to previous levels without an increase in higher education attainment.

According to the AACC and the Urban Institute, a child born poor in the US today is more likely to remain poor than at any previous time in history. Approximately 23% of American children were born into poverty in 2011, with more than a fifth of them likely to be poor as adults (Ratcliffe & McKernan, 2010).

The shift from an industrial to an information economy is clearly a turning point, and Americans must adapt (AACC, 2012a; Carnevale & Desrochers, 2004). A generation ago, a college degree or credential was required for only about 25% of jobs. In 2007, that figure was 59%, and is projected to climb to at least 66% by 2018. There is need for an additional 20-25 million college-educated individuals to meet projected demands by 2025.

Postsecondary education needs in the current financial and information economy. America has historically looked to its institutions of higher education as the providers of public good, the disseminators and discoverers of knowledge, and the engines of social and economic opportunity (Carnevale & Desrochers, 2004; McClenney, 2004). Over time, higher education has been called to expand (never retract) its functions, and serve increasing volumes of students (Cohen & Brawer, 2008; Geiger, 2005). American higher education has built on these three core functions many times over, each time to the betterment of the nation, and even leading the United States to the forefront of global influence (Cohen, 1998). America remains a global superpower, but in recent years, the educational standing that has kept the nation at the top has slipped, and the slide will result in the loss of economic and possibly political power if appropriate actions are not taken (AACC, 2012a). Once again, the nation is looking to its higher education system to address these issues.

America is currently ranked 16th in the world for educational attainment (AACC, 2012a). Not only is America no longer the top producer of college graduates, but it is struggling to

graduate enough students to fill the needs of the current and future job market. Increasing degree attainment so that economic and global standing are maintained is critical. In 2004, Carnevale and Desrochers made a sharp observation regarding the overlap of the postsecondary and economic sectors in America:

> In today's economy, access to postsecondary education or training has become the threshold requirement for individual career success…Unlike European welfare states that guarantee access to income and benefits irrespective of individual educational performance, our increasing reliance on education as the arbiter of economic opportunity allows us to expand opportunity without surrendering individual responsibility. As a result, we emphasize equality of educational opportunity rather than equality of economic outcomes. (p. 39)

Demographic Landscape

The statement above cuts to the heart of a primary issue facing higher education, alongside economic pressure. Educational opportunity in America is not equitable across different races/ethnicities, income levels, and measures of social status such as first-generation or single-parent homes (AACC, 2012a; Carnevale & Desrochers, 2004; Handel, 2011b; Mullin, 2012a; United States, 1948). Unfortunately, the two largest brackets of underserved students – those of minority racial/ethnic backgrounds and/or from low-income homes, are growing at the fastest rates (Passel & Cohn, 2008).

Growth over the last twenty years has occurred primarily among non-White individuals (Passel & Cohn, 2008; Prescott & Bransberger, 2012). The Caucasian population has been in slight but steady decline, as has the African American population. The Native American population has remained relatively flat. Conversely, there has been notable growth among the

Asian/Pacific Islander and Hispanic populations. In particular, the Hispanic population has undergone significant growth resulting from both immigration and native births. From 1970 to 2005, Hispanic immigrants from Mexico continually increased, before leveling off from 2005-2010 (Passel, Cohn, & Gonzalez-Berrera, 2012). The impact of immigration includes not only immigrants themselves, but the families that they establish in the United States. Between 1990 and 2010, Hispanic births grew by 45.4% (Prescott & Bransberger, 2012). As the fastest-growing demographic, and also the group with the lowest college attainment rates, it is important that researchers, practitioners, and policymakers understand college-going within the context of the overall and Hispanic population trends (Santiago & Callan, 2010). Finally, enrollments of low-income students are another area of concern in the 21st century. Recent economic conditions have widened income gaps, and more Americans have fallen into the bottom income quartiles (AACC, 2012a; Mullin, 2012a). This situation, combined with heighted social awareness of the need for a postsecondary degree or credential, the literature indicates that researchers, practitioners, and policymakers should pay careful attention to college-going and attainment among low-income individuals.

Before educational attainment can be improved, it is necessary to understand the current state of postsecondary enrollment trends. A detailed discussion on national demographic trends is provided in a subsequent section; here, an overview is provided regarding enrollment trends impacting postsecondary education at the current point in time. The number of high school graduates increased steadily from 1990 to 2011, peaking at 3.4 million (Prescott & Bransberger, 2012). College enrollment growth increased accordingly, and was also impacted by higher college-going rates among new high school graduates. Growth was concentrated more heavily in the first ten years of the 21st century; enrollment growth increased by 37%, from 15.3 million to

21 million (U.S. Department of Education, 2012). During this same time, the gaps between upper- and lower-income families increased. Overall enrollments have grown rapidly, but this is only a small piece of the puzzle that has led to the current challenges. Recent studies suggest three primary points of interest that are magnified in light of current educational needs and the recent peak enrollment figures. In no particular order, the issues include: a) enrollment growth has not been equal across income or ethnic groups, and additionally, has not tracked proportionally with changes in racial demographics; b) enrollment growth has not translated to an increase in attainment; c) enrollment growth has not been proportionally split between the two-year and four-year sectors.

Enrollment growth by race/ethnicity and income. As with overall population trends, the majority of enrollment growth in higher education over the past twenty years or so has been among non-White populations (Prescott & Bransberger, 2012). The Hispanic population is the fastest-growing, and these data are borne out in college enrollments as well. The past forty years of high immigration rates contributed heavily to the number of college-age students and non-traditional (older, English language learners, etc.) enrollees, as well as to increasing the projected birth rates among the Hispanic population over several decades to come (Passel, Cohn, & Gonzalez-Berrera, 2012). These trends are perhaps the most impactful with regard to current differentiation by sector and attainment, and will be critically important to the future of higher education in America (Mullin, 2012a).

It is important to consider enrollment by race/ethnicity because there are clear gaps among different groups with regard to postsecondary enrollment (Bowen, Kurzweil, & Tobin, 2006). Overall, enrollment has increased across all racial/ethnic groups. However, Bowen, Kurzweil, and Tobin note that discrepancies remain with regard to the rate at which students

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from different groups enroll. White students aged 16-24 enroll in higher education at a rate of about 65%, compared to 55% of African American students and less than 50% of Hispanic students. Compounding this issue is the fact that enrollment growth has not tracked proportionally with demographic changes.

Bowen, Kurzweil, and Tobin (2006) indicate that this may be the result of a disproportionate concentration of minority populations among low-income households. Less than 11% of White and Asian families live below the poverty line. In contrast, a quarter of Hispanic families and nearly a third of African American families are in the lowest income quartile. These characteristics are displayed in college enrollment rates: 54% of students in lowest income quartile enroll, versus 82% from the top quartile. This is a concern across all ethnic groups. The Hispanic population is the fastest growing, and the African American population is sizable (Taylor, Fry, Velasco, & Dockterman, 2012). The White population is shrinking, but the number of White students living in poverty is larger than the number of minority students (though proportionally smaller). Community colleges enroll 41% of all impoverished undergraduate students (Mullin, 2012a). The effects of uneven college enrollment become even more pronounced when considering the resulting completion rates.

Enrollment and attainment. In general, students from higher income families are better prepared for college and enroll at higher rates (Bowen, Kurzweil, & Tobin, 2006). Accordingly, they graduate at higher rates. As previously discussed, these students also tend to be from White backgrounds, and historically underserved minorities continue to enroll and graduate at lower actual and proportional levels. Although enrollment gaps by race/ethnicity and income are obvious, Bowen, Kurzweil, and Tobin (2006) note that they are smaller now than ever before, although this narrowing has not occurred with regard to graduation rates. The difference in

completion rate by ethnicity ranges from 12 to 20 percentage points. There is a 34 percentage point difference between attainment rates for students in low- and high-income families (44.2% and 78.2%, respectively). This is true even for academically top-performing students from underserved backgrounds (Roy, 2005). High-performing students from low-income backgrounds attain bachelor degrees at a rate of 29%, compared to 74% for high-income students. Strikingly, the completion rate for high-achieving, low-income students is lower than for low-achieving, high-income students. Inequities in enrollment and attainment by race/ethnicity and income level are evident. A more granular view of enrollment and completion behavior at the two- and four-year levels brings these issues into sharper focus.

Enrollment growth and transfer in the two-year sector. As with college enrollment and attainment by race/ethnicity and income level, growth in the public two- and four-year sector has not been evenly split. Growth in the two-year sector has occurred at a rate more than double that of four-year growth (Bowen, Kurzweil, & Tobin, 2006; Handel & Williams, 2012; Taylor, Fry, Velasco, & Dockterman, 2012). Much of this discrepancy can be attributed to growth in minority and low-income populations, as well as the growth in attainment goals for these groups. An additional contributor is a higher rate of traditional-age, middle- and upper-class students attending community colleges with the intent to transfer to a four-year institution for completion. Researchers have found this to be the result of current economic and college pricing trends (Handel & Williams, 2012; Mullin, 2012a). It should be noted that some of this growth is also due to an increase in older workers seeking new or additional vocational training, though these students are not the focus of the current research.

Enrollment at community colleges exceeds eight million for-credit students, representing 47% of all undergraduates (Handel & Williams, 2012; Mullin, 2012b). Although 42% of all

college enrollments are non-White, community colleges enroll more than 50% of minority students as well as the majority of low-income and first-generation students (AACC, 2012a; AACC 2012b; College Board, 2011; Mullin, 2012b; Handel & Williams, 2012; Taylor, Fry, Velasco, & Dockterman, 2012). The need to increase educational attainment among these groups is pressing, and the transfer rate is lower for underserved students than for other groups. Hispanic students and African American students have the lowest transfer rates, at 20% and 25%, respectively. Figures are less clear for first-generation and low-income students, but researchers indicate that they are lower than for other students (Handel & Williams, 2012; Roy, 2005).

In addition to a sizeable and growing number of underserved students enrolled at community colleges, recent enrollment trends indicate a higher volume of middle- and upper-class students beginning their degrees at community colleges (Mullin, 2012a). This trend contributes to the marked uptick in the number of students aspiring to attain a bachelor's degree. It should be noted that community college enrollees across all races/ethnicities and income levels increasingly aspire to bachelor degree attainment. Approximately 80% of community college students have baccalaureate aspirations, yet less than a third of those actually transfer to a four-year institution (Handel & Williams, 2012). This is a particular concern, because research increasingly shows a penalty of 13-15% (and higher for underserved students) in baccalaureate attainment rate for students who begin their college careers at a community college (Handel, 2011b; Handel & Williams, 2012; Long & Kurlaender, 2009; Mullin, 2012b; Pascarella & Terenzini, 2005).

These enrollment and transfer trends make sense in the historical context of the community college mission. However, correcting this issue has not always been a priority. For

much of the second half of the 20th century, there was a blanket approach to increasing access to higher education (Cohen, 1998). Though much of the access gained for low-income and minority students was at the community college level, it was a step up from previous availability, and also provided opportunity to enter the middle-class for individuals who previously could not do so (Cohen & Brawer, 2008). A review of literature shows that toward the end of the 20th century, awareness and concern regarding these inequities started to spread. Current trends have converged to create a situation in which it is now essential to resolve issues of equity and transfer (Engle & Lynch, 2009; Handel, 2011b; Handel & Williams, 2012). The movement toward a global information economy has resulted in the need for workers to attain a higher level of education to fill open jobs (AACC, 2012a; Carnevale & Desrochers, 2004). Meanwhile, the minority populations with the highest attendance at community colleges (and the lowest rates of attainment) are growing rapidly, while the White population is decreasing (Mullin, 2012a; Passel & Cohn, 2008; Prescott & Bransberger, 2012; Taylor, Fry, Velasco, & Dockterman, 2012). These trends are occurring in a globally competitive information economy. Both the literature and the national conversation focus on higher education (two- and four-year) as a prominent route for maintaining global economic and political standing. Examples of this focus in the literature are numerous, and are well stated by researchers at the AACC and the College Board (AACC, 2012a; College Board, 2011; Handel, 2011b; Handel & Williams, 2012; Mullin, 2012b). Public rhetoric at the national level is evident from the Obama administration, and is represented at the state level through programs such as Texas' Closing the Gaps initiative (Texas Higher Education Coordinating Board [THECB], 2013), Kentucky's Stronger by Degrees program (Kentucky Council on Postsecondary Education, 2013), and numerous merit aid programs across

the nation designed to increase college-going and/or degree attainment for low-income and/or high achieving students.

Political Landscape

Postsecondary education in America is highly politicized in the current economic and demographic climates. The spirit of the political conversation on higher education is captured well in the 2006 Spellings Commission report (United States, 2006). Margaret Spellings, then-secretary of education in the George W. Bush administration formed a Commission on the Future of Higher Education. The Commission was formed at a time when researchers, practitioners, and policymakers had begun to note that the U.S. postsecondary education system and its constituents must adapt to the information economy in order for the nation to maintain global status. The report was comprised of five main sections: access, affordability, quality, accountability, and innovation. These items make up the backbone of the current political focus on higher education.

Issues of access concern the demographic and income equity concerns discussed above (United States, 2006). Concerns of affordability included the ability of low-income individuals' ability to pay for college, particularly in light of recent economic circumstances. The report section on quality is concerned with ensuring that American students receive higher education of sufficient quality to be competitive on a global scale. Accountability recommendations were robust, and have not reached full form at the present time, but reporting requirements are more stringent and public data are much more available than they have been in the past. Finally, the section on innovation underscores that particularly in the information economy with an often intangible product, innovation and creativity should be considered as learning outcomes.

The Obama administration has largely emphasized these same issues, particularly focusing on access, affordability, and accountability (White House, 2013). Under the Obama administration, community colleges in particular have been in the spotlight, especially for issues of access and affordability. President Obama has issued a challenge to each American to complete at least one year of higher education or post-secondary training, and has made it a national imperative that by 2020, America will once again have the highest proportion of college graduates in the world. This call has been embraced by various research and philanthropic groups, including the College Board (College Completion Agenda), and the Bill and Melinda Gates Foundation (Completion by Design).

There has been recent debate, as often occurs during periods of high unemployment and economic unrest, about the value of a college degree, and whether everyone should have one (Bok, 2006; Bowen, Chingos, & McPherson, 2010). There does not appear to be consensus among researchers, policymakers, and practitioners regarding this issue – a quick search of the internet or scholarly materials shows this. However, it is clearer that many believe each student should have the option to go to college (Carnevale & Desrochers, 2004; Epstein, 2009). Carnevale and Desrochers (2004), quoted earlier, indicate that in America, education is the gateway to economic opportunity. As quoted on Inside Higher Ed, economist and Urban Institute fellow Robert Lerman adds to this idea when asked whether everyone should have a college degree: "I don't certainly want to be on record saying that people shouldn't be encouraged who are qualified and motivated to go to college (Epstein, 2009). Whatever one's opinion about this issue, the research indicates that the current level of education in America will not suffice to maintain global status and compete in the marketplace (AACC, 2012a; Bowen, Chingos, & McPherson, 2010; White House, 2013). To this end, political focus is on not just

baccalaureate attainment, but on two-year degrees, certificates, and vocational training, as well as the simple provision of an extra year of college work. The new occupational realities of the information economy clearly indicate that jobs will remain empty or be filled by foreign workers with postsecondary credentials if American educational attainment does not increase. Within this context, bachelor's degrees for all are not advocated – but nonetheless, increased baccalaureate attainment is needed. If improvements are not made, younger generations will not even reach the educational status of older Americans today: AACC (2012a) notes that "the compact between the generations is threatened, the promise of America as the land of opportunity is at risk, and the nation's children and grandchildren stand to lose (p. vii)." The Obama administration's focus on postsecondary attainment as defined by a broad array of options is clearly focused on education as a means to opportunity, and to ensuring the future of America's children and grandchildren. Current economic, demographic, and political landscapes as well as present enrollment patterns indicate that community colleges will be key to achieving our national goals, in terms of two-year degrees and certificates as well as transfer. Two- and four-year institutions must forge new paths to work together for student success.

Transfer Trends

Current trends in two- to four-year transfer are driven by three primary enrollment trends previously discussed: higher college enrollment rates among minority populations combined with a concentration of those students at community colleges, higher numbers of middle- and upper-income students attending community colleges with intent to transfer, and a high level of social awareness of the need for a higher level of education (Handel, 2011b; Handel & Williams, 2012). Community colleges currently enroll eight million students in for-credit courses, and as many as eight of out ten express intent to transfer and earn a baccalaureate degree (Handel &

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Williams, 2012; Mullin & Phillipe, 2013). Of students who do complete bachelor degrees, 23%

transferred from a community college, and 47% have taken at least one course from a

community college (Handel & Williams, 2012; Mullin, 2012b).

The transfer rate challenge. These trends indicate that there is an ample supply of

baccalaureate-aspiring students attending two-year colleges, leading to the question of why less

than a third of them successfully transfer. Current literature typically addresses at least one of

two predominant themes: sociocultural and/or transfer policy issues.

Sociocultural issues. Until recently, researchers, practitioners, and policymakers have

often pointed to Burton Clark's cooling-out process to explain the gap between the number of

aspiring and actual two- to four-year transfers (Clark, 1960; Clark, 1980; Hellmich, 1993). As

defined by Clark, cooling-out describes the naturally occurring process by which community

college students whose aspirations exceed their abilities are diverted from transferring. Clark

described this as the dominant explanation for the gap between community college students'

baccalaureate aspiration and attainment rates. Critics of this theory indicate that it is based on an

assumption that the dominant culture applies to everyone, and that it penalizes students who are

not part of that culture (Handel, 2011a). As previously discussed, community college

enrollments are predominately made up of historically underserved students who do not fit the

mold of the dominant culture. Current researchers have extrapolated the tenets of Becker's

human capital theory (1975), Bourdieu's cultural capital and habitus (Bourdieu, 1977), and

McDonough's (1997) exploration of these theories as applied to college choice and attendance,

and begun to examine whether transfer students' success may be tied to a specific kind of capital

(Handel, 2011a; Handel, 2011b; Laanan, Starobin, & Eggleston, 2010). An emerging theory of

transfer capital as an alternative to cooling out will be discussed in detail in a subsequent section.

The observation of a cultural disconnect appears to have merit; several researchers have found that even after controlling for demographic and academic factors, students who successfully transfer from a two-year to a four-year institution complete baccalaureate degrees at the same rate or higher when compared to native students (Adelman, 2006; Bowen, Chingos, & McPherson, 2010; Handel, 2011b; Handel & Williams, 2012; Mullin, 2012b; Pascarella & Terenzini, 2005). As Handel (2011) pointed out, these data suggest that the problem does not lie in either supply or demand; there are plenty of students aspiring to transfer, and those that do perform as well or better than native students, and there is clear and immediate demand on a national scale to increase the baccalaureate completion rate. Therefore, it seems that the issue is in the connection between the two- and four-year systems. Increasingly, Handel and others have begun to investigate flaws in the transfer process as an alternative explanation for persistently low transfer rates amid current enrollment conditions.

Transfer policy issues. When studying challenges in the transfer process, transfer of credit is the most common issue of note in the literature (College Board, 2011). The issues associated with transfer policy include: awarding of degree-applicable credit and articulation, uneven policy development and implementation between sectors, and a lack of incentives for the sectors to work together to increase transfer student success.

Credit awarded by universities for community college courses has been a dominant theme of transfer literature over recent years (Handel & Williams, 2012). There is general sense among community colleges that universities consider them inferior, and hold back on awarding credit for community college courses (College Board, 2011; Miller, Erisman, Bermeo, & Smith, 2011). There is some truth to this; universities are not always forthcoming with credit for transfer courses – but the reasons may be misunderstood (College Board, 2011; Handel & Williams,

2012). Interviews between the College Board and four-year university administrators in 2011

indicate that the issue is more often whether course credits will apply to specific degree

programs, not whether the credit will be accepted at all. Handel and Williams (2012) affirmed

this statement:

> The reason transfer students struggle to have credits applied toward the four-year degree
>
> probably has more to do with the complexity – and capriciousness – of the transfer
>
> process than anything approaching a scheme by four-year institutions to short-change
>
> students.   Most four-year institutions accept community college credit, but how they
>
> apply this credit toward the baccalaureate degree, especially in the absence of an explicit
>
> articulation agreement, is often haphazard. (p. 18)

Regardless, community college perceive this inconsistency as a slight, and in discussions of

credit acceptance and applicability, community colleges point out that their students perform

well when they do transfer (Adelman, 2006; Bowen, Chingos, & McPherson, 2010; College

Board, 2011; Handel, 2011b; Handel & Williams, 2012; Mullin 2012b; Pascarella & Terenzini,

2005). Compounding this issue is the fact that decisions on credit applicability are often highly

decentralized, and are frequently made at the department or individual faculty level (Cutright,

Fann, Jacobs, & Bower, 2010). In Texas, policymakers have attempted to ameliorate this issue

in part through the Texas core course policy. This policy outlines a common core set of general

education courses that universities are required to accept as credit toward core completion.

Though well-intentioned, this policy does not guarantee that transferred credit will be applied to

the student's degree program; only that the credit will be accepted by the university. This leads

back to the issue discussed above with decisions on credit applicability. Without clear guidance

and explicit academic planning, students end up taking more hours than necessary and extending

their time-to-degree. Additionally, some researchers suggest that this policy may be a disincentive to community colleges, and this will be discussed below.

The most current research regarding transfer deals directly with the issue of awarding degree-applicable credit, or articulation (Cohen & Brawer, 2008; Ignash & Townsend, 2001). Articulation agreements, both general and program-specific, between community colleges and universities have surged in popularity recently (though they have been around since at least the early 1980s) as one way to smooth the transfer path for students (College Board, 2011; Miller, Erisman, Bermeo, & Smith, 2011; Townsend & Twombly, 2001). Articulation agreements, especially in states with comprehensive policies on articulation, have improved the acceptance of transfer credit for many students. Challenges remain with regard to the ability of articulation to cover the array of options at the community college and the university, as well as with the conveyance of information about articulation to students. Citing Kintzer and Wattenbarger (1985), Ignash and Townsend (2001) outlined the four types of articulation: 1) formal legislation mandated though policy and/or a higher education master plan, 2) system-specific policies that give general direction for transfer, 3) voluntary partnerships, and 4) special program-specific vocational agreements. Ignash and Townsend (2001) indicated that the most common types are 2 and 3, though more states are beginning to adopt formal legislation. Students encounter challenges with both system-specific and voluntary partnerships due to a lack of uniformity and a potential need to plan for multiple transfer sites (if the student will be applying to more than one transfer institution). Formal legislation can be tricky to navigate as well, for many of the same reasons. An additional issue associated with formal legislation is the lack of incentives for two- and four-year sectors to work toward transfer success (both individually and together), and even outright disincentives (whether intentional or not) (Cutright, Fann, Jacobs, & Bower, 2010).

These are somewhat helpful, but disjointed and often difficult-to-navigate articulation agreements as well as general issues in awarding of credit discussed above are common themes in current research, and indicators are clear that there is much work to be done.

As noted by Cutright, Fann, Jacobs, and Bower (2010), studying Texas policy as an example may provide valuable insights for others; additionally, the present research will be conducted using data from Texas community colleges and a Texas university. Policy development and implementation, in Texas and in other states, has been largely uneven between the two-year and four-year sectors. Policies often favor one sector or the other, or have unintended consequences for institutions and/or students. Cutright, Fann, Jacobs, and Bower concisely outlined several examples of this issue. For example, at the state level, Texas requires all universities to report to the state on their actions taken to increase transfer. Though the intent is to understand and promote transfer-positive behaviors among universities, the policy has engendered conflict due to uneven consideration of shared responsibility, as community colleges are not required to report similar actions. Additionally, while reporting is required, the state does not require evidence of efficacy, and reporting may be surface-level, excluding measures of actual invested effort. Another example may be found in the common course numbering requirements in Texas. Community colleges are required to have common course numbers, but universities are not. This means that universities' evaluation of transcripts is simplified, but course planning for transfer is difficult. Cutright, Fann, Jacobs, and Bower cite an example of a large Texas university that "simply reverses the numbering of micro and macro economics courses (p. 8)," which results in transfer students erroneously enrolling in a course they have already taken. Finally, there are similar kinds of issues at the institutional level. An example

may be found in the lack of a consistent format for transcripts in the state of Texas, or in the earlier-discussed issue on core completion and degree applicability.

In addition to issues of articulation and degree-applicability of transfer credit, and issues of policy development and implementation, the lack of incentives (and some presence of disincentives) is an issue of note in the literature (Cutright, Fann, Jacobs, & Bower, 2010; Handel & Williams, 2012). Even in times of relative prosperity, institutions logically prioritize their actions in part on incentives or return-on-investment structures. In the current fiscal climate, incentives and return-on-investment are top considerations in the priorities of both community colleges and universities. Researchers clearly note that there is a broad lack of incentives at federal and state levels for transfer (Handel & Williams, 2012). Instead, the focus is on headcount enrollments and degree completions (Cutright, Fann, Jacobs, & Bower, 2010; Handel & Williams, 2012). This means that community colleges are rewarded at both federal and state levels for keeping students enrolled in classes, and there it is not fiscally advantageous to encourage transfer before completion of an associate's degree. Universities are also not rewarded for transfer completions (Cutright, Fann, Jacobs, & Bower, 2010). For example, in Texas, universities receive higher levels of funding for junior- and senior-level enrollments, which would seem to be a financial incentive for transferring students who have already accumulated credit; however, universities are not given financial reward for graduating these students (though they do receive such incentives for graduating students who entered the university as new-from-high-school freshmen). This serves to encourage more enrollment of new freshmen, while transfer students are not often prioritized. These issues with transfer policy – challenges with articulation transfer credit award and applicability, uneven policy development and implementation across two- and four-year sectors, and a lack of incentives for successful

transfer – weigh heavily in current research on two- to four-year transfer. More research is needed to drive understanding of these challenges and inform the development of solutions to increase successful transfer.

   Resolving sociocultural and academic issues to increase transfer. The two primary issues represented in the literature regarding challenges to transfer are potential sociocultural disconnects for historically underserved students, and issues with transfer policy (articulation & awarding of credit, uneven policy development and implementation, and a lack of incentives) (College Board, 2011; Handel, 2011b; Handel & Williams, 2012; Laanan, Starobin, & Eggleston, 2010). Work has begun toward a better understanding of sociocultural disconnect among historically underserved students in community colleges, and has been coined "transfer capital" (Handel, 2011b). Researchers, practitioners, and policymakers also continue trying to understand and resolve issues of transfer credit (AACC, 2012a; College Board, 2011; Handel, 2011b; Handel & Williams, 2012). An increasing volume of researchers has suggested improved, early academic planning provided from the four-year institution to prospective two-year transfer students as a means of successfully choosing and transferring degree-applicable courses. Lending support to the idea that students need more, earlier, and better academic planning services, the AACC (2012a) found that nearly 90% of community college students believe that academic planning and advising is important – but less than a third indicate receipt of these services. The effects of this issue are clear: AACC (2012a) notes that "the community college landscape is littered with lost credits that do not add up to student success (p. 9)." Additional support for increasing academic advising can be found in data that show a surplus of students enrolling in coursework for low-demand fields, and a shortage of students enrolling in courses

for high-demand fields. Providing early, effective academic advising has the potential to offset some of these concerns.

A small number of researchers (Handel, 2011b; Laanan, Starobin, & Eggleston, 2010) have linked sociocultural issues to advocacy for improved and increased academic planning. They indicate that transfer students are often doubly handicapped; transfer students tend to be from historically underserved populations, and lack the cultural capital necessary for college success; compounding this issue is the specific knowledge needed to navigate the transfer process. Their research findings indicate that increased academic planning that includes provision of knowledge for the transfer process – or transfer capital – can address both issues simultaneously.

<div align="center">Theoretical Foundation</div>

Before the emerging theory of transfer capital can be addressed, a discussion of human and cultural capital, which are at the root of transfer capital, is prudent. Generally speaking, capital refers to an investment made with the expectation of future returns. When Gary Becker (1975) began applying capital theory to human behavior in the 1950s and 1960s, his ideas were novel (Febrero & Schwartz, 1995). Becker's work on capital, behavior, and economic theory is broad, and has had such impact that in 1992, he was awarded the Nobel Prize in Economic Sciences "for having extended the domain of microeconomic analysis to a wide range of human behaviour and interaction, including nonmarket behaviour (The Nobel Foundation, 2013)." Becker's work has had great impact on the study of higher education, primarily through his writings on human capital.

Human Capital

Becker published his first work on human capital as applied to education in 1964. He proposed that people invest in higher levels of education because of an assumed monetary return in the future (Becker, 1975; Febrero & Schwartz, 1995). Until that point, the expenses associated with higher education were considered as purely consumptive. He found that that there are monetary returns to each successive level of education attained. Other researchers have replicated his work with the same result; for example, Weisbrod and Karpoff (1968) and Blundell, Dearden, Meghir, and Sianesi (1999) found that there are economic gains to higher levels of attainment, even when controlling for other variables (ability, motivation, etc.). Becker's other findings in *Human Capital*, however, have had the most long-reaching impact on the field of higher education. In retrospect of the historical circumstances of the 1960s it may be expected that research findings would indicate differential returns to educational investment. Becker's findings that there are differences within and between groups such as race/ethnicity, age, gender, and even field of study were a new concept. Additionally, Becker examined a variety of potential contributors that may explain differences in education and earnings, and found that not only did individual differences such as ability and ambition impact the rate of return on educational investment, but so did the educational attainment and success level of the parents. These final two findings immediately sparked a number of new studies in educational outcomes and differentials, as well as giving rise to research on the connections between education and unemployment. The influence of this seminal work on higher education research and practice is evident.

Habitus and Cultural Capital

Bourdieu's research on habitus is a natural extension of Becker's work, and directly addresses issues of differential return on investment based on individual and familial characteristics (Bourdieu, 1977; Grenfell & James, 1998). The two fit together well, but Bourdieu's work was not developed in response to Becker's human capital. Though Bourdieu's writings were not translated into English until the 1970s, he was developing the theory of habitus in France during the same years that Becker was working on human capital in the United States. In short, habitus may be defined as "an acquired system of generative schemes objectively adjusted to the particular conditions in which it is constituted (Bourdieu, 1977, p. 95)." In practice, habitus is the impact of past experiences on present perception and resulting action.

Bourdieu applied the term "capital" to the social outcomes of habitus (Bourdieu, 1977; Grenfell & James, 1998). He found this an apt description because capital is more easily quantifiable than the abstract habitus. Capital is not available to everyone equally, and the payoff for capital investments may be variable along a number of factors (Bourdieu, 1977). Bourdieu defined three forms of capital: economic, social, and cultural. Economic capital is defined as fiscal currency. Social capital is defined by an individual's social network. Cultural capital is the product of education, as defined by personal characteristics (learned knowledge or speaking accent, for example), objects such as books, and connection to institutions (Grenfell & James, 1998). The three forms of capital are the foundation for habitus. Habitus may define the level of education available to an individual, and/or the outcome achieved.

Twenty years later, McDonough (1997) published her work examining the role of habitus in both the family and school environments on college choice. She found that capital begets capital, and students with privileged home and school environments had more educational

choices, and were better informed to take advantage of educational opportunity than other students. Like Bourdieu, McDonough found that habitus, and particularly the social and cultural aspects, are a function of social class. The education system largely rewards the dominant culture, creating difficulty for individuals outside of the dominant culture. McDonough's study was comprised of high school students who mostly intended to enter four-year institutions immediately following high school graduation. Her work put a face on cultural capital, habitus, and education, and there is potential to build on McDonough's findings to better understand and serve students. Current community college enrollment trends include increased enrollment from historically underserved students, as well as in traditional student enrollments. These issues, as previously detailed, make it imperative that the transfer rate be increased across the board, and particularly for historically underserved and growing populations. Recent attention to these issues has come in the extension of theories on human capital, habitus, and cultural capital as applied to transfer and education. The result has been the recent emergence of a theory of transfer capital.

Transfer Capital

The concept of transfer capital was first presented in Laanan, Eggleston, and Starobin's (2010) study on transfer experience of two- to four-year transfer students. The idea of "transfer shock," first proposed by Hills (1965), indicates that the transition from the two-year institution to the four-year is not seamless, and that challenges are manifested in academic performance (Handel, 2011a; Laanan, Eggleston, & Starobin, 2010; Townsend & Wilson, 2006). Laanan, Eggleston, and Starobin (2010) sought to transcend the "given" of transfer shock by examining the transfer process for unique contributions to the outcome of transfer. Their findings supported the idea that transfer students may need a unique set of knowledge, not fully described by

existing habitus or capital theories. Specifically, the authors indicate that habitus resulting from familial and school backgrounds, including the two-year institution and perceptions/interactions with the four-year institutions must be conducive to accurate and adequate information regarding the transfer process.

Handel (2011a) elucidates the idea that transfer capital is not the same as general college-going information. He notes that the kinds of knowledge that transfer students needs is fundamentally different from the knowledge needed to enter a four-year institution immediately following high school. These students largely complete the same requirements to prepare for potential entry into a variety of four-year options: they take standardized tests, fill out similar applications, and have clearly delineated prerequisite courses. In contrast, transfer students must navigate entrance requirements for each institution they are interested in. These requirements can vary widely, and may extend to a variety of admissions policies and serious differences in the courses accepted for specific majors. Handel (2011a) stated that

> …the students attending community colleges are often those least likely to possess the information that is necessary to make the transition to a four-year institution, the responsibility falls to two- and four-year institutions to fill that gap; that is, to provide the essential cultural capital they need. (p. 415)

It is this statement that encompasses the value of research on the emerging transfer capital theory. The present research aims to more fully develop the emerging transfer capital theory by exploring differences among students (described in detail below), development and execution of the transfer advisor program, and the experiences of transfer advisors.

CHAPTER 3

METHODS

Introduction

The goal of this mixed-methods study was to research the impact of academic planning services, in the framework of transfer capital by: a) determining whether there were statistically significant performance differences between groups of students who had services available and received advising, students who had services available but did not receive advising, and students who had no services available, specifically with reference to the following:

i.   Number of leveling course hours taken following transfer

ii.   GPA following transfer

iii.   Number of hours transferred to the university

iv.   Number of excess hours taken;

b) analyze differences among students who received services by demographic groups (gender, race, and age) for these same outcomes, using *t-tests*, and c) conducting document analysis and in-depth interviews with the transfer advisors and program leadership responsible for providing transfer advising services to assist potential transfer students in academic planning.

Mixed-methods were used in order to both a) establish whether a variable has a predictable relationship with another variable, and b) to explore how the predicted relationship (or other related variables/relationships) occur (Tashakkori & Teddlie, 2008). The quantitative analysis portion includes ANOVA to consider the statistical relationship of increased academic planning and performance outcomes. The *t-tests* for students who received treatment were conducting to measure differences among demographic groups (gender, race, and age) for the same outcome variables. Using the results of those analyses, semi-structured interviews were

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developed, conducted, and exploratory and theme analyses performed, related to the relationship between academic planning and performance outcomes. Historical document analysis, conducted between the ANOVA and interview processes, examined job postings and training materials to assess the alignment of academic planning procedures with the recommendations from the literature, as well as contrasted with the actual experiences of the transfer advisors.

Selection of Participants

Quantitative

Historical student data for new transfer students ($N = 13,104$) entering a large, public university in Texas from the Spring 2012, Summer 2012, Fall 2012, and Spring 2013 terms provided the sample for the quantitative portion of this mixed-methods study. The University in the study was a public four-year research institution with the Carnegie Classification of High Research Activity (Carnegie Foundation, 2013). Approximately 36,000 students enroll each year, of which approximately 4,000 (11.1%) are new transfer students.

Table 1

Demographic Characteristics of the Student Sample

Characteristic	*n*	%
Age at the time of transfer (Years)		
>18	14	0.1
18-20	4813	36.7
21-23	4457	33.9
24-26	1469	11.1
27-30	899	6.8
>30	1468	11.1
Gender		
Male	6559	50.0
Female	6561	50.0
Race/Ethnicity		
African American	1892	14.4
American Indian	206	1.6
Asian/Pacific Islander	719	5.5
Caucasian	7296	55.6
Hispanic	2386	18.2
Non-Resident	419	3.2
Other	202	1.5

The majority (64%) were traditional college age (18-22 years old), and a cumulative total of 89 percent were aged 30 or younger. The sample was evenly split among male and female transfer students, with 6,559 males and 6,561 females. Ethnic breakdown included 7,296 Caucasian, 2,386 Hispanic, 1,892 African American, 719 Asian/Pacific Islander, 419 Non-Resident, 206 American Indian, and 202 Other students. The average GPA was 2.5, with an average of 79.8 hours transferred. Once at the four-year institution, students enrolled in an average of 11.21 semester credit hours in their first term. Students needed an average of 3.16 leveling courses following transfer.

Qualitative

Participants for the qualitative portion of this study included four transfer advisors who were responsible for providing academic planning services to students at approximately 40

community college campuses over the four terms represented in the data sample. Additionally, two leaders responsible for design and oversight of the transfer advisor program were interviewed, and provided documentation of hiring and training materials for review.

Interviewees ranged from two to twenty-six years of experience working with transfer students, with a wide range of time at the university: less than a year to 26 years. Each interviewee, excepting one, had previous experience with transfer students at another institution, including two individuals with experience at a community college institution. The one without previous experience has been working at the same institution with transfer students for 26 years. The group was diverse in terms of age and race/ethnicity, including African American, Asian American, and Caucasian individuals who ranged in age from the mid-twenties to mid-fifties.

Instrumentation

Quantitative analysis for this study was based wholly on historical data and statistical methodology. The results of the quantitative analysis (described below) led the development of the qualitative semi-structured interviews.

Attached in the appendix, the semi-structured interview questions were designed to explore quantitative findings showing significant differences in enrolled transfer students by GPA and whether services were received, available but not received, or not available. Questions also explored the transfer advisors' experiences of student needs, and whether the student needs matched the expectations of program designers. Questions for leadership included outcomes information on academic performance, hours earned, and hours applied to four-year degrees. Finally, the questions included basic information about the professional experiences of staff, the impetus for program design, and recommendations for the future.

Data Collection

Quantitative

Historical student data for quantitative analysis was collected from the University's Office of Institutional Research & Effectiveness. Variables collected included: whether transfer advising services were available, and if so, whether the student chose to use these services; GPA, number of hours transferred in, classification at time of transfer, number of leveling hours taken following transfer, major, race, gender, and age.

The number of hours transferred in reflects the number of hours completed at the previous institution(s) and accepted for credit by the university. This variable was used to determine the classification. Classification at the time of transfer was defined as Freshman (0-30 hours transferred), Sophomore (31-60 hours transferred), Junior (61-90 hours transferred), and Senior (90+ hours transferred). Number of leveling hours taken following transfer is calculated as follows. The data was pulled in the Summer 2013, and includes any course-taking activity from the time of transfer through the Spring 2013 semester. The number of leveling hours taken is calculated by tallying the number of classes taken below a student's classification level at the time of transfer. For example, if a student transferred as a Junior, classes taken at the freshman or sophomore level are considered to be leveling classes. This variable was selected because the researcher hypothesized that students receiving academic planning services would need fewer leveling courses than students who did not receive services (whether available or not). Finally, university GPA was defined as the GPA on classes taken at the university during the first semester of attendance. This variable was selected as a measure of transfer shock, to test the hypothesis that increased academic planning services reduce transfer shock. The hypothesis of this study is that students who received advising services will have needed fewer leveling

courses, will have transferred fewer excess hours, and will have a higher university GPA following transfer.

<center>Data Analysis</center>

Quantitative data analysis included descriptive statistics, and four one-way analyses of variances (ANOVAs) across three independent variable groups: services available and received, services available and not received, and no services available. Dependent variables (one ANOVA each) include: number of hours transferred in, number of leveling course hours needed, number of excess hours taken, and university GPA after one term. ANOVA was selected as a statistical method because the researcher needed to identify differences among three groups of students across multiple variables (Gall, Gall, & Borg, 2006). Finally, ANOVA is helpful in this study because it reduces the error term for analyses where more than one factor is involved (Cramer & Howitt, 2004).

Following ANOVA, *t-tests* were performed with the group who received services to measure differences for gender, race, and age for the number of hours transferred in, number of leveling course hours needed, number of excess hours taken, and university GPA after one term. For these analyses, ethnicity was defined as minority (African American, American Indian, Asian/Pacific Islander, Hispanic, Non-Resident, or Other) or non-Minority (Caucasian), and age was defined as traditional college age (18-22 years) or above traditional college age (23 or more years).

Qualitative data analyses included document review and in-depth interviews with transfer advisors and program leadership. Documents will be reviewed for content and coded for theme analysis. Documents include:

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- Job posting and descriptions for transfer advisors, to assess the education and experience required for the positions as well as the described purposes and activities of the positions;

- To evaluate the training received by transfer advisors, and assess alignment with stated purposes as well as with tenets of transfer capital.

Interviews were recorded, transcribed, and coded for theme analysis. Program leadership (Executive Director of Undergraduate Admissions and Associate Director of Transfer Recruitment) as well as the transfer advisors were interviewed. Interview questions were designed to query advisor experiences, expectations and actual interactions, outcomes, and future planning.

Summary

This mixed-methods study utilized quantitative data analysis using ANOVA to determine whether there are statistically significant differences between groups of students who had services available and received advising, students who had services available but did not receive advising, and students who had no services available. Then, *t-tests* were used to measure differences along demographic variables. Qualitative analyses included document review and semi-structured interviews with program leadership and transfer advisors. Documents reviewed included program genesis and training information, and semi-structured interview protocols were developed based on the ANOVA results as well as current literature regarding academic planning, transfer capital, and transfer advising.

CHAPTER 4

RESULTS

Quantitative Results

There were four one-way ANOVAs conducted to compare the effect of academic

planning services on GPA, hours transferred in, leveling course hours taken, and excess hours

taken (one ANOVA each) in three groups: services available and received, services available and

not received, and no services available. Results are summarized in Table 2, below.

Table 2

One-Way Analysis of Variance for the Effects of Academic Planning Services on Four
Dependent Variables

	Services Received		No Services Received		No Services Available				
Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*	*p*	η^2
Transfer hours	83.96	36.16	85.15	37.68	73.01	43.72	144.73	.000	.022
Leveling courses	3.27	.20	2.91	.04	3.47	.04	45.80	.000	.007
Excess hours	.75	.03	.81	.01	.70	.01	45.80	.000	.016
GPA	2.61	1.13	2.56	1.14	2.54	1.17	.78	.460	.000

In the ANOVA comparing the effect of academic planning services on hours transferred

in, there was a significant effect at the *p<.05* level. Post-hoc comparisons using the Bonferroni

correction indicated that the mean score for hours transferred in for students who had services

available and received them was significantly different than for students who had no services

available. Similarly, the mean score for hours transferred in for students who had services

available and did not receive them was significantly different than for students who had no

services available. However, there was not a significant difference between students who had

services available and received them and students who had services available and did not receive

them.

Taken together, these results suggest that students who had academic planning services available transferred more hours than students who did not have planning services available. It should be noted that since there is not a significant difference between students who received services and students who had services available but did not receive them, that this finding does not necessarily indicate an effect of the intervention. This is discussed further in the following chapter.

In the ANOVA comparing the effect of academic planning services on the number of leveling course hours needed, there was a significant effect at the $p<.05$ level. Post-hoc comparisons using the Bonferroni correction indicated that the mean score for the number of leveling course hours needed for students who had services available and did not receive them was significantly different than for students who had no services available. There were no significant differences between students who had services available and received them and students who had services available and did not receive them and there were no significant differences between students who had services available and received them and students who had no services available. Taken together, these results indicate that while there are significant differences, they are not explained by academic planning services. Students who had no services available required the highest number of leveling courses, on average, while students who had services available but did not receive them required the lowest number of leveling courses, on average. This is discussed further in the following chapter.

In the ANOVA comparing the effect of academic planning services on the number of excess hours taken there was a significant effect at the $p<.05$ level. Post-hoc comparisons using the Bonferroni correction indicated that the mean score for the number of excess hours taken by students who had services available and did not receive them was significantly different than

students who had no services available. There were no significant differences between students

who had services available and received them and students who had services available and did

not receive them and there were no significant differences between students who had services

available and received them and students who had no services available. Taken together, these

results indicate that while there are significant differences, they are not explained by academic

planning services. Students who had no services available had the fewest number of excess

hours, on average, while students who had services available but did not receive them had the

highest number of excess hours, on average. This is discussed further in the following chapter.

In the ANOVA comparing the effect of academic planning services on GPA there was

not a significant effect between groups at the *p<.05* level.

There were 12 *t-tests* performed to measure differences among the students who received

services along demographic variables of gender, ethnicity, and age for GPA, hours transferred in,

leveling course hours taken, and excess hours taken. Results are summarized in Tables 3, 4, and

5 below.

Table 3

Academic Outcome Differences Between Male and Female Transfer Students Who Received
Academic Planning Services

| | Male | | Female | | | | | Cohen's |
Academic Outcome	*M*	*SD*	*M*	*SD*	*df*	*t*	*p*	*d*
GPA	2.58	1.12	2.62	1.14	282	-.25	.951	2.98
Transfer hours	84.69	39.09	83.68	33.94	282	.23	.306	2.74
Leveling course hours	3.15	3.08	3.36	2.90	282	-.58	.990	6.91
Excess hours	.73	.44	.76	.43	282	-.62	.219	7.38

There were no significant results for differences among students receiving services by

gender for GPA, transfer hours, leveling course hours, or excess hours.

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Table 4

Academic Outcome Differences Between Traditional-Age and Older Than Traditional-Age Transfer Students Who Received Academic Planning Services

	Traditional-Age		Older					Cohen's
Academic Outcome	*M*	*SD*	*M*	*SD*	*df*	*t*	*p*	*d*
GPA	2.59	1.06	2.62	1.22	282	-2.23	.036	-0.26
Transfer hours	67.27	25.28	108.88	35.65	282	-11.51	.000	1.37
Leveling course hours	3.46	2.95	2.98	3.01	282	1.35	.713	.16
Excess hours	.65	.48	.90	.31	282	-4.85	.000	.58

There were significant results between traditional-age and older than traditional-age transfer students who received academic planning services for transfer hours and excess hours. Traditional-age transfer students who received academic planning services had fewer transfer hours than older students, and accordingly, also had fewer excess hours. These findings are consistent with qualitative results indicating that often, older students have been to more institutions and attempted more courses and/or degrees than younger students. Interestingly, there is not a significant difference for GPA, though qualitative interviewees reported that older students have higher GPAs.

Table 5

Academic Outcome Differences Between Non-Minority and Minority Transfer Students Who Received Academic Planning Services

	Non-Minority		Minority					Cohen's
Academic Outcome	*M*	*SD*	*M*	*SD*	*df*	*t*	*p*	*d*
GPA	2.79	1.11	2.36	1.11	282	3.20	.753	.38
Transfer hours	83.71	36.13	84.65	36.42	282	-.22	.463	2.62
Leveling course hours	3.51	3.24	2.95	2.57	282	1.58	.018	.19
Excess hours	.69	.47	.84	.37	282	-2.94	.000	.35

There were significant results between non-minority and minority transfer students who received academic planning services for leveling course hours and excess hours. Non-minority

transfer students who received academic planning services took more leveling course hours than minority transfer students who received academic planning services. Interestingly, minority transfer students who received academic planning services had more excess hours than non-minority students.

<div style="text-align: center">Qualitative Results</div>

Interviews

Qualitative interview findings with two program leaders and four transfer advisors revealed four primary themes: issues of institutional context and program development, academic planning, financial aid, and institutional partnerships. Historical document findings will be presented as appropriate as part of the thematic discussion. Following these thematic findings, transfer student outcomes as observed by program leadership and transfer advisors will be presented.

Institutional context and program development. The institution in this study has historically enrolled more than 50% of its students from transfer populations, the majority of which transferred from two-year institutions. Program leadership stated that transfer has been a part of the regional identity of the institution, and transfer-friendliness has long been a goal for the university. As noted by the Executive Director of Undergraduate Admissions, the institution began staffing specifically for transfer in the mid-1990s – far ahead of most other four-year institutions. She said that at that time, focus was not only on transfer recruitment, but also on programs and plans specifically designed for transfer student as well as course-to-course guides for transferring and applying courses to degrees. Despite a high level of success with regard to transfer enrollment, the Executive Director still saw a need for more services for transfer

students, and particularly with regard to advising for course planning for various majors, stating with regard to her idea:

> We wanted to be able to go out into the field and have the transfer advisors who were recruiters be able to say [to students] 'we can help you see how these courses transfer into the major,' which isn't something we had been able to do in the past.

She had proposed such a program several times, and was unable to get institutional support (in terms of both fiscal and human resources). However, in the Fall 2010, amid a number of challenges facing public higher education in Texas, the enrollment of new transfer students at the university dropped by 5% - an unexpected and unprecedented event. This resulted in senior administration at the university making it an institutional priority to increase transfer enrollment. The proposed plan to hire transfer advisors to be based at the community colleges, and to train them to provide advanced, major-specific advising for course planning to potential transfer students early on in their community college careers was put in place. Six new transfer advisor positions were approved and funded for one year. In addition, there were already six transfer-focused recruiters employed. Also, an associate director position was approved to lead the new transfer advising program. Though this program was not designed explicitly to address transfer capital, program design fits very well with transfer capital recommendations (Handel, 2011a; Handel, 2011b; Laanan, Starobin, & Eggleston, 2010). When asked about the purpose of the program, one program leader simply said "It was to help the students better plan what courses to take." An advisor elaborated, saying "To help them understand the core curriculum and what will transfer to their major because that's key for transfer students." Dedicated personnel for transfer advising is a top recommendation in the emerging transfer capital framework.

All program leadership and advisors that were interviewed stated that the goal of the transfer advising program was to increase the number of transfer students entering the university and to set them up for success with better course planning for entering their majors, resulting in fewer non-applicable courses and fewer excess hours. One individual said

> To achieve this, the transfer advisors were trained in admissions and recruitment, but also spent a full month with the university's academic advisors, learning plans and the ins and outs of applicability, and observing and assisting with advising transfer students at orientation.

Program leadership was clear during interviews that this training with academic advising was a major shift spurred by the institutional directive to increase transfer enrollment, and that the culture of the institution has not historically been one of shared responsibility, particularly between admissions recruiting/advising and academic advising. Program leadership stated that they did not believe the academic advisors would have trained the transfer advisors under other circumstances, and that the institutional culture was the reason for the following events. After the initial push for the transfer advisor program, the academic advisors "didn't invite them to meetings, didn't invite them for training, didn't invite them to work orientation…" Even during the height of the transfer advising program, leadership noted that the academic advisors and/or their departments were hesitant to allow the transfer advisors to speak on behalf of the department with regard to course planning:

> In almost every college and school, there was hesitation to hand of a lot of the information to the transfer advisor. Matter of fact, we only had one college that jumped in it and stayed pretty much the whole time.

The colleges and departments allowed the transfer advisors varying degrees of freedom to advise for course planning. Some allowed full advising for their majors, others allowed partial advising for the major, and still others allowed very little beyond the core. Somewhat addressing this issue, the transfer advisors were able to arrange "transfer days" for prospective transfer students to talk with the academic advisors one-on-one, which had previously not occurred until a student was admitted. In addition to bridging the gap between transfer advisors and academic advisors, transfer days filled an observed need from the field:

> The handoff between academic advising and on-campus was still hard. Even though we were meeting them in the field, the transfer students still wanted that actual meeting with the academic advisors on campus.

Transfer days were open to anyone that wanted to attend, and held on the main campus of the university. Otherwise, following training, the transfer advisors were based at a community college campus four days per week, and in the office on the main campus seeing walk-in transfer appointments one day per week. As previously noted, dedicated personnel is a primary recommendation for increasing transfer capital, and this is emphasized by Handel (2011a) when transfer advisors are positioned at the community college rather than at the university.

The transfer advisors served 43 community college campuses. These campuses, and the advisor schedule for visiting them, were chosen through a combination of proximity to the university and volume of transfers from each campus to the university. Within a 100-mile radius, nearly all community college campuses receive at least some transfer advising services. The frequency and duration of visits depended on how many students typically transfer from each campus. At the beginning of the program, transfer advisors were each trained to be 'generalists' regarding course planning, and then each had one or two specialty areas, such as the College of

Education or College of Business. The advisors would all rotate between all campuses so that

each campus would have contact with the specialist for each area. After one semester, the

associate director reached out to the community colleges regarding how well the program was

working for them and their students, and how it might be improved. The program leader who

developed the modification said that

> After going back and talking to the administration on the community college campuses,
> we found that they didn't necessarily want that [rotating specialist advisors]. What they
> wanted was consistency. They wanted to see a consistent face so that they know when
> they're talking to their students who to send them to.

The community colleges indicated that it was too difficult to remember each of the 12 transfer

advisors and their respective specialty areas, plus their schedules. Program leadership modified

the transfer advising paradigm so that each advisor had a set of assigned campuses, simplifying

the schedule for the community colleges. Each advisor cross-trained with the others in specialty

areas, and utilized instant messenger between campuses as a means of efficiently communicating

with each other when a complex, major-specific question was presented. This worked well for

the community colleges, and reduced the travel time for advisors. However, the transfer

advising program did not remain fully staffed for long, and additional challenges were presented.

A program leader stated that

> About seven months into it, we started losing transfer advisors…so for about seven
> months, we had a really good program, we were headed in the right direction, and I think
> we were meeting perceived and actual needs…and looking at it now, I would say that at
> this point, we are not meeting the perceived or actual needs of the majority of the
> students for sheer volume of students versus the number of transfer advisors that remain.

Transfer advisors that were interviewed also indicated a need for more personnel, with one commenting that "it would be good to have more people, because we're pulled in so many different ways…I'm stretched between seven different campuses, so I can only be at each one once every other week, or you know, twice a month."

As noted by program leadership during interviews, the transfer advisor program had been a "wish list" item for Admissions for several years, and was supported by senior administration following a decline in new transfer enrollments. After the initial one-year period of the transfer advising program, support (fiscal and symbolic) from the administration dwindled. Leadership observed that there was less pressure campus-wide to support the transfer advisors, and the one-year transfer advisor positions were not renewed (although four positions that had been repurposed within the department remained). As of Fall 2013, the transfer advising program had shrunk from 12 advisors and an associate director at its height to four advisors and an associate director. Both leadership and the advisors noted the difficulty for the advisors to adequately serve all 43 community college campuses included in the original program, and the Director said that the fast-paced, travel-heavy schedule burns advisors out: "A challenge of this program has been that it is very hard work for the transfer advisors. I do feel like, and I've used this word before, we burn them out." This is compounded by a low entry-level salary and few opportunities for promotion. Program leadership acknowledged that data regarding the efficacy of this intervention is necessary if efforts are to continue and if administrative support is to be renewed. This program was designed to do exactly what the literature recommends (though it was not designed around the literature): provide increased availability and outreach for academic planning to community college students, as early and as often as possible (Handel, 2011a; Handel, 2011b; Laanan, Starobin, & Eggleston, 2010). The next subsection will discuss the

details of the academic planning theme that emerged from interviews with the leadership and advisors.

   Academic planning. The most prevalent theme that emerged from interviews was, unsurprisingly, academic course planning. The program was designed to increase the occurrence and efficacy of course planning, and course planning is the top recommendation for increasing transfer capital with an intended result of increased transfer with more applicable hours and lower incidence of excess and/or non-applicable hours (Handel, 2011a; Handel, 2011b; Laanan, Starobin, & Eggleston, 2010). The advisors identified a focus on academic planning as the primary distinguishing feature between the transfer advising program and general transfer recruiting. Without exception, each advisor and program leadership spoke extensively about transferability versus applicability, and the need to plan accordingly to take hours that will transfer directly into the major at the university. When asked whether students understand this difference, one advisor said "I usually explain that before they have to ask, because most students don't understand that though something may be transferrable, that doesn't necessarily mean that it's going to fit in your degree." A first step noted by program leadership is keeping transfer guides current and accessible. During interviews, the leadership focused on maintaining current guides, and even gave an example of finding posted transfer guides that were four years old prior to the start of the transfer advisor program. The advisors focused more on making sure that both students and community college personnel could find them and use them easily. Guides are important, but transfer advisors noted that they are not a replacement for face-to-face advising. The advisors indicated that the most common concern from transfer students is whether and what courses will transfer. There were two primary concerns consistently brought

up regarding course planning and transfer: 1) transferability versus applicability, and 2) the need for early advising.

The issue of transferability versus applicability concerns the fact that just because a course transfers from the community college to the university does not mean it applies to the degree a student is interested in earning. One advisor summed this issue up by saying:

> Most students just want to know if their coursework will transfer. Everything will transfer as along as it's college level and the institution is accredited. But let's talk about 'will it apply to my degree program.' And that's an invitation to talk about excessive hours, too.

This issue is complex. One advisor cited a primary example: even if a student completes core courses and receives core credit, there could be additional lower-level courses needed to satisfy the requirements of the major. Less concrete, but still a serious and common problem is when a prospective transfer student self-advises and takes a variety of courses which may or may not transfer, or apply to any requirements (core or major). If a student has engaged in academic planning/advising and/or followed a transfer guide, he or she could plan to take courses that will transfer and that may satisfy both the core and the major. An advisor summed this up well:

> You can tell if a student has been following transfer guides or if they've just been taking classes from an array…you will see if a student has just been randomly picking classes to take, they're picking the wrong classes. And you can just look at the transcript and see that they've just taken all these elective courses. And then there's the students who you can tell have met with an advisor and are trying to complete the core. And they're on a pathway. You can tell.

Along these lines, literature indicates that students may or may not realize that there is a difference between transferability and applicability, and even if they are aware of the difference, they may need assistance in planning (Laanan, Starobin, & Eggleston, 2010). Interestingly, three of the four advisors interviewed stated that students are generally aware of the applicability issue. If this is truly the case, and if this holds true in other regions, it moves the focus from awareness and action to a more pointed concentration on action. Illustrating this point, one advisor noted that:

> These students have been brought up through a secondary system where they've quite literally been told exactly what to do at every step, and the autonomy that we [the university] expect really isn't, it should be, but it isn't there…so these transfer guides that are clear as a bell are a godsend to them because they're being told exactly what to do and they can depend on it.

Even so, there is the second issue of concern regarding course planning, transfer, and applicability: early advising is a must. Both interviewees and recommendations from the literature indicate that the ability to advise for maximum benefit includes the need to reach students early in their community college careers. The transfer advisor program was distinguished from recruitment efforts because of its focus on academic planning as well as relationship-building with students from an early point in their community college careers. One advisor described this difference succinctly: "You know, everywhere has an English degree, everywhere has a psychology degree. But what makes the difference here I think is that we really focus on that relationship with students." Another advisor was more detailed in her analysis:

Because we have the reputation of being a number one transfer institution in the state of Texas and we're kind of the leaders, I think more is expected of us than probably at other institutions. I think we do go above and beyond what is expected of a transfer advisor at other institutions…we created this role, and we developed it. We're expected to know more about academic advising.

The leadership and advisors both indicated that students need to be advised early with regard to planning for transfer so that they can maximize the number of hours that are applicable to the core and the major, and so that they can sequence their courses to transition into the major as seamlessly as possible. In order to do that, developing good relationships with students is essential. Open lines of communication can clear the way for students to resolve a variety of issues, including academic planning, admissions, financial aid, and simply reassurance that all the pieces are in place. Three of four advisors interviewed indicated verbatim that students have heard "horror stories of problems with transfer and losing credits." All of the advisors noted that part of the relationship-building is quieting these fears through reassurance that plans are correct and effective, and the other part is helping the student to feel comfortable moving from a community college environment to a very large university. Navigating the difference in culture and being 'more than a number' is something the advisors were attuned to when talking with potential transfer students. One advisor, talking about the transition and fears of transfer students, specifically with regard to the institution in the study, said

36,000 students…they [transfer students] hear that they're just a number. Once you meet a transfer advisor, I think that kind of dispels a lot of that. I'm able to tell them what will transfer, so that eases a lot of it, but I think it also reflects an early and good relationship.

Later on, this same advisor said "I think relationships are so important. I think our generation, like 20-something to mid-30-something, our generation is really big on building relationships." This relationship-building is another reflection of transfer capital provision recommendations as described in the literature (Handel, 2011a; Handel, 2011b; Laanan, Starobin, & Eggleston, 2010).

The combination of advising early and clear academic planning both play into a primary challenge expressed by the transfer advisors and delineated in transfer capital literature: understanding how things work (Handel, 2011a; Handel, 2011b; Laanan, Starobin, & Eggleston, 2010). The advisors overall indicated that students need to be more educated about how things work. The literature indicates that students often do not understand or are simply unaware of the difference between transferability and applicability. The advisors found that regardless of an understanding of applicability, students needed assistance in selecting and planning to transfer applicable courses. Further, the transfer advisors indicated that students may have some fear or intimidation about shifting from the community college to a large university, regarding process and connection to resources. Outcomes following the implementation of the transfer advising program will be discussed in a subsequent section. The next subsection will describe observations and experiences that program leaders and advisors discussed regarding financial aid.

Financial aid. The transfer advisors and program leadership expressed in their interviews that financial aid was a considerable issue for transfer students. Students were concerned about whether they would get financial aid, how it was different from the community college, and how much additional out-of-pocket cost would be associated with transfer to the university. All of the advisors indicated that students were generally concerned about financial aid:

Usually, their main concern is how they can get financial aid or how they can continue it.

A lot of them don't realize that they can continue to get financial aid at the four-year

institution, so they'll ask about that. But it's more that they don't know.

Some are confused about the process of applying for aid at the university, and many did not

know what to expect in terms of a cost difference and how much of the difference might be

covered by financial aid. Still others inquired about the availability of scholarships for transfer

students. All of the advisors indicated that they unequivocally told students that financial aid is

available in a similar fashion to the community college with regard to the application process and

types of aid (federal, state, institutional, private). One advisor indicated that he told students that

Financial aid at the community college is based on the cost of attendance at the

community college, and at the university, their financial aid award is based on the cost of

attendance at the university. Yes, the financial aid award will go up, and so will their

out-of-pocket contribution, but their out of pocket will not be the entire difference, just a

percentage more.

Scholarships are a bit trickier, and the advisors generally told students that there are some

scholarships available, and provide instructions for the scholarship application. Program

leadership echoed these concerns, and indicated that more financial aid opportunities for transfer

students would be a benefit to easing the transfer process. This theme is supported in a wealth of

research on challenges with transfer, and is summed up nicely by Mullin (2012a) in his brief on

the student body and needs at community colleges.

In addition to these issues, program leadership and one advisor raised concerns about

financial aid changes at the federal and state levels creating challenges for students seeking to

transfer. Aid cuts at both levels make it more likely that the price difference between community

college and the university will not be wholly covered by aid, and that financially disadvantaged students will have more difficulty transferring and completing a four-year degree. The Director said that

> …we got a lot of comments about money and financial aid, and the Texas grant specifically. Because of differences in the way the Texas grant was going out, they didn't get as much money as they expected, it was more expensive than they expected…and we didn't address that issue as part of our program.

The advisors indicated a concern that students who are already intimidated or fearful about transfer may be further discouraged by these kinds of financial aid changes. This is another area that could potentially benefit from the early and open communication that the transfer advisors promote among themselves, community college personnel, and students. As noted by program leadership and two advisors, financial aid was a central concern for students, but the transfer advisors were trained in admissions and academic advising, not financial aid. They were limited in their knowledge of in-depth financial aid knowledge, and were therefore limited in their ability to assist students with financial aid concerns. This issue will be considered further in the discussion section. In the next subsection, the final theme that emerged from the interviews, the role of institutional partnerships in transfer, will be discussed.

Institutional Partnerships. A final theme that emerged from the interviews with program leadership and transfer advisors was that of the role of institutional partnerships between community colleges and universities in helping students successfully transfer. Underscoring all of the observations and experiences expressed by the transfer advisors and program leadership was the necessity of the institutions themselves working together so that students can reach their goals. They indicated that institutions needed to coordinate on a basic level to form connections

between personnel, so that both the community college and the university knew who to connect students to on either side for assistance. Program leaders also indicated that better connections between staff would also help to address issues and concerns and modify transfer programs as needed. One of the program leaders stated that in her experience, the community college advisors were pleased with the transfer advising program:

> They have been so thankful that we've implemented this and it's not just a recruiter sitting at a table talking about how great football games are. That it was actually a substantial piece to the program, talking about the academics, and they could actually rely on us and trust that we know what we're talking about when we talk about what classes students should take…From my background, coming from a community college, it is very hard to remember what every university wants. To have the university come out and say 'we'll provide that for you, in person, and I can be your contact person' has really helped out the community colleges and they're very thankful.

One of the advisors noted that making better connections was essential for early work with transfer students, and indicated that the earlier each institution can work with the student, the better. This advisor stated that if the community college and the university could work together as soon as a student expresses an interest in transfer, to provide degree audits for the purpose of transfer, that would be ideal. Another advisor seconded this, and went a step further, identifying articulation agreements as a positive step but not enough toward the kind of collaboration that is needed. Further, leadership noted that amid the current higher education climate, increased partnership among institutions would only grow in importance. One program leader stated that she thought this program took steps in the right direction:

I think that relationships that were kind of ok have grown into great relationships with the

community college leaders. I think it's been a really great program and I hope that it

continues to grow as a program with a new direction.

This final theme is broad, and these interviews highlighted institutional partnerships as a means

to an end. Further exploration of the role of partnerships will be explored in the discussion

section. The next subsection considers transfer student outcomes reported by program leadership

and advisors.

Outcomes. The program in this study was designed to increase the enrollment of transfer

students, and included many elements of transfer capital, particularly with regard to academic

planning. It is important to explore outcomes for this institution to determine whether continued

investment and support for the transfer advising program is warranted. It is important to

consider outcomes for the literature to further the conversation about transfer capital, and more

importantly, contributors to transfer success.

Program leadership and transfer advisors indicated that the number of transfer students

entering the university went up after the first year of the program, but not as much as anticipated.

When they looked into the issue and talked with students who spoke with a transfer advisor or

even applied but did not enroll, they found two main reasons for delaying enrollment. The first

was that better academic planning showed many students that they had more courses available to

take at the community college that would transfer into the major than the student may have

realized. The second issue was financial aid challenges. The community college costs less, and

with federal and state financial aid cuts, this has become more important to students.

Despite a smaller than expected increase in enrollment numbers, program leaders

indicated that transfer students who did enroll had better academic profiles than in previous years.

Program leadership indicated in their interviews that one of the metrics examined each semester is the GPA of new transfer students. They stated that the average GPA of a transfer student prior to the transfer advising program was approximately a 2.5 on a 4.0 scale. After the program was implemented, the average GPA went up to a 3.0, and has held stable. They reported no noticeable difference with regard to the average number of hours brought in and indicated that while there is not data to show whether the number of applicable hours increased and non-applicable hours brought in decreased, that due to the significant attention to appropriate advising for this purpose, expectations were such that this would be the case.

Finally, leaders noted that their awareness and intentional efforts to strengthen relationships with community college advisors did result in more open communication and a better ability to serve students on both sides of the transfer. Both program leadership and transfer advisors indicated that improved relationships between the community colleges and the university have resulted in better services and better information for students.

Summary

Four primary themes emerged from interviews with transfer advisors and program leadership: institutional context, academic planning, financial aid, and institutional partnerships. The program was designed to address issues of academic planning, though leadership indicated that financial aid issues were not expected to be so prominent. The emphasis on institutional partnerships was perhaps a tacit expectation, and emerged as an important factor in this program. Outcomes were not as positive as expected in terms of enrollment increase, though it should be noted that enrollment did increase. While not immediately beneficial (and in fact, potentially harmful to the university) the effect of the transfer advising program was a delay in transfer as students took more hours at the community college due to a lower cost and student awareness of

an increased number of transfer courses available. An additional and more positive benefit was an increase in the academic performance of incoming transfer students, as evidenced by increased average GPAs. The program has not yet been in existence long enough to gauge overall outcome with regard to performance at the university and completion.

In addition to these findings, interviews revealed a complicated institutional culture with regard to the transfer advising program. The administration supported and funded this initiative in response to a drop in transfer enrollment. However, program leadership had observed need for this kind of work prior to this and was unable to gain traction due to strict lines of division among academic advisors and admissions advisors. With administrative support behind the effort, progress was made. Support has since dwindled, perhaps due to a lack of attention following increased transfer enrollment or perhaps due to a lack of evidence of success for the program other than some enrollment increases. Both scenarios have been expressed verbally by program leadership. When support from senior administration decreased, several positions were lost and the number of advisors decreased. Additionally, willingness to collaborate between departments was reduced or eliminated for many areas. This complicated structure provides a high need for outcomes information, and may make it more difficult to assess true impact.

CHAPTER 5

DISCUSSION

This study utilized mixed methods to examine the outcomes of a transfer advising program. Quantitative analyses were performed to compare the effect of academic planning services on GPA, hours transferred in, leveling courses taken, and excess hours taken. Qualitative analyses provided context for the transfer advising program as well as insight into the design, implementation, successes, challenges, and outcomes. This section will contain a discussion on the meaning of findings, incorporating recommendations for future practice and research.

The transfer advising program, while not specifically designed to address transfer capital, fits very well with the tenets of transfer capital, and particularly, academic planning. Assessing this program within the transfer capital framework provides clear metrics and indicators of next steps, both for programming and theoretical development. The most prominent quantitative finding was a significant difference between the means for the number of hours transferred in by students who received services and students who had no services available. Students who received advising transferred, on average, 11 credit hours more – equivalent to nearly a full-time semester credit load. If the reported findings from the transfer advisors and leadership regarding the reason that students who received advising may delay transfer hold true, this could be further evidence that students following advising and transfer plans could be taking the maximum number of courses available at the community college that will transfer directly to the major. However, the average number of hours transferred is very high; above 70 for students who did not have services available and above 80 for those who received services. These figures are too high to be fully applicable to the baccalaureate degree, which is 120-128 credit hours maximum

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in Texas, with only 60-66 hours of lower-division courses (that would be available at a community college). It is possible that with such a new program, students had taken a number of non-applicable hours prior to advising, and then realized that there were applicable hours to be taken at the community college, resulting in a higher than expected number of hours transferred. It would be helpful to complete a follow-up to this study, examining completion differences. It is recommended that institutions that implement a similar program provide support and funding for at least two years, and preferably three, to allow for comprehensive assessment of both transfer activity and completion outcomes.

Interestingly, there was no difference between the students who received advising and those who had services available but did not receive them. This indicates that transfer advising may not have been the variable that impacted the significant difference in students who received advising and students who had no services available. In this event, other potential factors should be considered. Further study is strongly recommended to assess the pattern of high volumes of transfer hours in conjunction with advising and transfer planning, particularly contrasting students who receive advising from their first semester at the community college with those who received services later on in their community college careers.   Additionally, it would be of value to complete a future study that includes interviews with students that transferred, and possibly, those that did not. It is likely that students who received transfer advising and transfer guides shared that information with their peers, and that the impact of transfer advising is a wider circle than just the student who received intervention. This kind of information would be valuable for both the research and practice of intervention for transfer capital, and may provide some contextual explanation for puzzling quantitative results.

Due to the lack of significant findings based on services received and/or available and hours transferred, a *t-test* was performed to examine whether significance may be found between gender, age, or ethnicity. The *t-test* revealed differences by age (traditional and older-than-traditional age students). Traditional-age students (18-22 years) transferred significantly fewer hours than older students, and also had fewer excess hours. As previously noted, this aligns with qualitative interviewee statements that older students often have a long history of attempted course hours and/or degrees, and bring more hours with them upon transfer. It makes sense given the difference in the number of hours transferred that older students would also have more excess hours. It is this final point, about excess hours, that bears further discussion. It is easier to advise students without previous college attempts to take the right courses; it is less clear how to minimize excess hours for students who already have a long transcript of previous course attempts. The most likely solution isn't a full answer, but it may be that early advising early in the present enrollment for such students is the best possible solution. That may not eliminate the issue of excess hours, but it may help minimize this issue. An additional option worth considering in future research is the opportunity for and use of clean slate policies for students who have old transcripts littered with hours that will not apply to the degree being sought.

The results of this study include additional findings that may not be explained by the transfer advising program. Both the number of leveling courses and the number of excess hours taken by transfer students had significant differences between students who had services available but did not receive them, and students who had no services available. Neither outcome variable showed significant differences between students that received services and either of the other two groups. A potential explanation that should be further explored lies in the way that the frequency and duration of transfer advisor visits to the community colleges were determined.

Community college campuses that have historically been stronger feeders for the university in terms of enrollment numbers received increase frequency and duration of transfer advisor visits, and these campuses also happen to be located in areas with higher socio-economic status (SES). Because students who live and attend school in higher-SES areas are known to perform better with regard to post-secondary outcomes, these findings may be an artifact of this and the transfer advising schedule. Further study of these issues is strongly recommended. Specifically, a study like this one would benefit from the addition of zip code disaggregation to put a finer point on the role of SES in the findings. An additional challenge for this type of analysis, and the reason that zip code information is recommended (rather than community college campus, or some other metric) is that not all community college districts report have a FICE (Federal Interagency Committee on Education) code for each campus. Some districts have a single code for the entire district. The FICE code is a unique identifying number assigned to each community college district or campus, and is typically used for financial aid and federal reporting purposes. The issue at hand is that without the unique identification code, the university cannot tell which campus a student primarily attended. Because community college districts can span a large area, containing a variety of economic conditions, there may be differences within the district that would help explain differences in transfer capital and outcomes. A policy change in FICE code reporting is recommended as a potential solution, and this issue should be further considered through available research methods (such as zip code information) as well as assessed in terms of policy and implications.

The ANOVA results discussed above concerning leveling course hours and excess hours present puzzling results, and the *t-tests* performed with groups minority and non-minority students provide further results for leveling course hours and excess hours that bear additional

consideration. The *t-test* results indicated that non-minority students require significantly more leveling course hours following transfer than minority students, but that non-minority students have fewer excess hours than minority students. Recommendations for future study of these complex issues include disaggregating the minority group by ethnicity, as well as inclusion of the other variables that may function as interacting variables. Examples could include academic, demographic, and non-cognitive contributors. All of these items were outside of the scope of this study, but the complexity implied in these findings is intriguing, and research into the details could provide avenues for better research, practice, and policy.

Qualitative findings largely support transfer capital as an emerging theory of transfer behavior. This is a positive support for continued development of transfer capital as a framework for increasing successful transfer. Each piece of support for newly emerging theoretical perspectives and for the continual development of better practices is valuable, and this research provides additional direction for continued study. Academic planning is the centerpiece of transfer capital theory, and the most significant findings of this study (both quantitative and qualitative) concern academic planning. As academic planning is key for all points of successful transfer, it is encouraging that findings indicate the need for continued research. Despite this positivity, if transfer capital as a theory is to continue developing, and if it is to continue being applied to practice, more empirical evidence is necessary. Though quantitative and qualitative findings of this study are encouraging, further work is recommended particularly for quantitative findings.

Specifically, further research is recommended regarding the lack of statistically significant results between the group of students who received services and the group that had services available but did not receive them. The hypothesis of this study, grounded in transfer

capital, was such that there would be meaningful differences between these two groups. In addition to considerations previously discussed regarding zip code and/or campus differentiation, it may be helpful to study this issue utilizing a statistical method that would allow for fine-grained parsing out of individual characteristics, such as race/ethnicity, gender, and age. Additional variables that could be studied for possible insight include academic performance prior to college enrollment, such as high school GPA, high school curriculum, and standardized test scores. It may also be valuable to study these same students on measures of non-cognitive traits, such as motivation, locus of control, stability, and time management skills, to name a few. The present study makes contributions to both research and practice, but the results raise many more questions and provide several additional avenues for continued research.

Other aspects of transfer capital theory, such as financial aid knowledge, are also supported by the present research, and additional consideration is warranted. Additional work could include clear focus on these aspects, whereas this study was more focused on academic planning. It should be reiterated that academic planning is not the sum total of transfer capital and that financial aid knowledge is also an important theme in the literature. It may be that cross-training in a similar fashion to the academic advising cross-training described in this study may be beneficial for staff that are based in community colleges. Future studies could focus on, or at least include, financial aid variables. Recommended items for consideration include overall financial aid eligibility and receipt, proportion of costs covered by financial aid, as well as disaggregation by type of aid received (grant, loan, etc.).

In sum, this study contributes to practice by indicating a clear need for open communication and strong relationships between two- and four-year institutions, within the institutions themselves, and between college personnel at both institutions and the students

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themselves. Specifically, academic planning and financial aid advising appear to be indicated as effective, and support the transfer capital framework. Academically, this study contributes to continued research on transfer capital as an emerging theory for transfer. This study resulted in clear direction for both practice and research, and is an early step toward a line of research dedicated to increasing transfer and research on effective transfer in the present climate of increased need for higher education and increased attention and accountability for effective solutions.

APPENDIX

QUALITATIVE PROTOCOLS

<u>Historical Document Analysis</u>

Job posting and descriptions for transfer advisors

- Purpose: to assess the education and experience required for the positions as well as the described purposes and activities of the positions

Training materials

- To evaluate the training received by transfer advisors, and assess alignment with stated purposes as well as with tenets of transfer capital

Semi-Structured Interview Protocol: Program Leaderships (Executive Director of Undergraduate Admissions & Associate Director of Transfer Admissions)

I. General Information

    1. What is your name and position?

    2. How many years have you held this position?

    3. Briefly describe your previous experience working with transfer students.

II. Transfer Advisor Program Information

    4. What was your role in developing the transfer advisor program?

    5. What was the purpose of the transfer advisor program?

    6. Describe how the transfer advisor program is different from previous transfer recruitment efforts.

    7. How many transfer advisors were part of the program?

    8. How many campuses received transfer advisor services?

    9. How were the campuses chosen to have transfer advisor services?

    10. What were the perceived needs of transfer students to be addressed by the transfer advisors?

    11. Do you have a sense of whether the perceived needs were the actual needs expressed by students?

        a. If so, can you provide examples?

        b. If not, please describe the differences.

    12. Please describe any additional needs that you did not expect.

    13. Do you think that the transfer advisors addressed those needs (perceived and/or actual)?

        a. If so, how?

b. If not, what could have been done differently?

14. Did you modify the transfer advisor program at any time while the program was still active?

   a. If so, how?

   b. Why?

15. What were the outcomes of the transfer advisor program regarding enrollment numbers?

16. What were the outcomes of the transfer advisor program regarding the academic credentials (GPA) of transfer student applicants?

17. What were the outcomes of the transfer advisor program regarding the number of applicable hours transfer students bring?

18. What were the outcomes of the transfer advisor program regarding the number of non-applicable hours transfer students bring?

19. What permanent changes have been made in the way that the university interacts with transfer students as a result of your experiences with the transfer advisor program?

Semi-Structured Interview Protocol: Transfer Advisors

I. General Information

1. What is your name and position?

2. How many years have you held this position?

3. Briefly describe your previous experience working with transfer students.

4. How many campuses did you provide with transfer advising services?

5. How many students did you advise?

II. Transfer Advisor Program Information

1. In your view as a transfer advisor was the purpose of the transfer advisor program?

2. How was the transfer advisor program different from other transfer recruitment efforts?

3. How did your training prepare you to advise the students you provided services to?

4. Can you describe anything that you were not trained on, that would have been helpful to you in advising students?

5. What were the most common issues you advised transfer students on?

6. Were these issues the ones you expected students to have?

    a. If so, please describe/give examples

    b. If not, what were the differences in your expectations and your experiences?

7. Do you think you were able to meet the needs of the students you advised?

    a. Why or why not?

8. Did you notice any trends in the characteristics of students you advised with regard to:

    a. Issues with the transfer process – course planning, admissions, financial aid, etc.

        i. Examples?

    b. Number of hours earned/applicable/non-applicable

        i. Examples?

    c. Major

        i. Examples?

    d. Financial aid concerns

        i. Examples?

    e. Academic planning needs

        i. Examples?

    f. Academic performance/GPA

        i. Examples?

    g. Demographics

        i. Examples?

9. What do you think could improve transfer advising services with the goal of increasing successful transfer rate?

10. What do you think could improve transfer advising services with the goal of maximizing applicable credits from the community college?

11. Based on your experiences as a transfer advisor, do you have any additional thoughts or observations regarding the needs of transfer students?

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