

THE MEANING OF COLLEGE ACCESS AND  
PERSISTENCE FOR LOW-INCOME, FIRST-  
GENERATION COLLEGE STUDENTS

By

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## **Chapter I**

### **INTRODUCTION TO THE STUDY**

The number of first-time students entering higher education institutions as first-generation college students is significantly lower in comparison to the percentage of students with college-educated parents who enter college direct from high school. Between 1992 and 2000, only 22% of students entering college were identified as first-generation college students (Chen & Carroll, 2005). In addition to facing access barriers such as knowledge of admissions and financial aid processes, first-generation college students admitted to postsecondary institutions encounter certain challenges within those environments that affect their persistence and retention. The socioeconomic background of many first-generation college students is another factor that can complicate the higher education experience. A significant amount of research indicates that first-generation college students from low-income backgrounds are less prepared than other students for the academic rigor or the culture of higher education (Engle & O'Brien, 2002; Filkins & Doyle, 2002; Hsiao, 1992; Pascarella & Terenzini, 1991; Richardson & Skinner, 2000). The lack of collegiate experience within families combined with limited financial resources impedes higher education success for some students. "First-generation students are likely to enter college with less academic preparation and to have limited access to information about the college experience, either firsthand or from relatives" (Thayer, 2000, p. 4).



The literature identifies these common variables that limit the number of low-income, first-generation college students enrolling in higher education institutions and hinder the ability of these students to be successful academically: a lack of supportive social systems, academic un-readiness, financial constraints, the inability to navigate the college process, and few or limited personal educational aspirations (Engle, Bermeo & O'Brien, 2006; Orbe, 2004). For instance, parents play a prominent role in communicating education values to their children. According to Perna (2005), "Although most parents want to promote their children's educational attainment, economic, social and psychological barriers often limit the ability of low-income and minority parents to do so (p. 9)." Students who have academic performance issues in high school and parents with no higher education backgrounds make curricular choices regarding subjects like mathematics that limit their access to college (Choy, 2001). These students typically also have no understanding of how to manage finances for college or navigate financial aid processes (Thayer, 2000). Additionally, personal support systems and peer relations have an influential effect upon educational choice. "As they begin to take on the symbols of the college culture...first-generation students often sense displeasure on the part of acquaintances, and feel an uncomfortable separation from the culture in which they grew up" (Hsiao, 1992, para. 3). First-generation, low-income higher education students might experience overwhelming levels of social disorientation as they attempt to navigate new collegiate environments while attempting to maintain connections with the familiar.

First-generation, low-income college students face challenges with regard to their success once they enter colleges and universities. Student success is defined through the literature in terms of persistence, retention and degree attainment (Brock, 2010; Horn &

Berger, 2004; Whitt, 2005). Admission into a higher education institution is no guarantee that these students will make satisfactory academic progress or succeed in completing programs. According to Engstrom and Tinto (2008b), “For too many low-income students, the open door of American higher education and the opportunity it provides has become a revolving door” (p. 47). Despite overcoming barriers, such as lack of college knowledge to gain entry to college, certain student populations are still at risk to not succeed. This is due to issues such as lack of academic preparation, social integration, or effective support services.

Developing resources and providing support for first-generation college students from low-income backgrounds is an important consideration for higher education institutions. Because of their open access missions, this is particularly true for community colleges who admit the largest portion of this particular student demographic. Student success is influenced by institutional fit, relationships with members of the college community, organizational processes and norms (Brock, 2010). Research suggests that focusing on areas such as remedial education for academically underprepared students, learning cohorts, advisement interventions, and other services, can improve persistence and success for groups such as first-generation, low-income college students. “Students’ success requires institutional investment in structured and carefully aligned activities directed toward their success” (Engstrom & Tinto, 2008, p. 50).

In a report funded by the Pell Institution, researchers indicate that the 4.5 million first-generation college students from impoverished backgrounds who attend 2-year or for profit institutions are detrimentally affected by this choice (Engle & Tinto, 2008). These data suggest that higher education institutions, particularly two-year colleges,

should invest considerable time and resources to develop meaningful interventions to understand trends and respond to the needs of these students. An implication of this study is that there is not an increased likelihood that first-generation college students in community college settings will matriculate to universities to attain baccalaureate degrees. These findings are surprising in that two-year institutions have missions and structures that are designed to support high risk learners. Historically, the open access admissions policies of public community colleges have led to the creation of institutional models that are flexible and responsive to the needs of learners (Shannon & Smith, 2006). Students can take a part-time course of study with more variety with regard to class times to complete an associate degree or generally transfer credits through articulation agreements with local universities (Chen & Carroll, 2005). It is critically important that community colleges continue to recognize and respond to the needs of these learners, as well as identify and develop effective practices that ensure academic success.

### **A Statement of the Problem**

The purpose of this study was to examine whether a college access program at a community college mitigated institutional and environmental barriers that have historically impeded the academic success of first-generation college students from low-income backgrounds. Referred to in this study as the College Access Program or CAP, it was offered at Middle State Community College (MSCC) in Oil County in a mid-western state.

CAP is an innovative community college program developed to provide 100% financial support and other institutional resources to attend college for those directly coming from high schools within Oil County, the geographic boundaries of MSCC's service area. The college resources provided through CAP include targeted recruitment

efforts, free financial aid workshops, a social orientation activity, a mandatory CAP 101 workshop, access to a virtual community environment (e.g., web communications), enrollment support, academic advising, the successful completion of a mandatory college orientation course, and an annual community service obligation (see Table 1). According to Lohfink and Paulsen (2005), “Helping students discover and understand opportunities for success in terms of the academic, the social, and the financial dimensions of different types of institutions are (sic) important and mutually reinforcing” (p. 420). The CAP initiative was designed to broaden higher education access by eliminating issues such as financial limitations and lack of college knowledge which are perceived as key barriers to college entry and academic success.

Table 1

*MSCC Interventions: Direct from High School Students*

College Intervention	CAP Students (Oil County Residents)	All Students (Non-Oil County Residents)
College Strategies Course	✓	✓
Annual Community Service Requirement	✓	
Social Activity	✓	
Free Financial Aid Workshop	✓	✓
CAP 101 Orientation	✓	
Free Tuition & Fees	✓	
Bookstore Loan or Free Textbooks	✓	
Targeted Recruitment Efforts	✓	
Mandatory Academic Advisement	✓	
Enrollment Sessions	✓	
Online CAP Web Group	✓	
Total	10	2

Note. Eligible students receive a textbook stipend; all are offered a small book loan.

The President of MSCC engineered the creation of the CAP program in response to a rapidly increasing state high school drop-out rate (Hanna, 2009). After taking a

college team to study a few similar small-scale and large-scale access programs at other higher education institutions, a small leadership group with support from the local Board of Regents developed CAP. Because of a unique funding mechanism between MSCC and the local community, Oil County high school graduates were targeted for participation. In addition to the Oil County residency and a high school graduation requirement, criteria were established for eligibility including an eight semester high school transcript with a minimum 2.0 cumulative GPA and the completion of the Free Application for Federal Student Aid (College Access Program Quick Facts Card, 2008). A cohort system was developed to track each entering class of high school graduates. Recruitment efforts were specifically targeted at school districts with high numbers of underrepresented student populations. One particular public school district had a disproportionate number of students who met the threshold for the free and reduced lunch program. Consequently, CAP now in its fourth year of existence has attracted a significant number of first-generation, low-income college students. CAP students account for more than half of the high school population who are entering MSCC as first time college students.

### **Theoretical Framework**

Attempting to understand how the experience of students within higher education settings influences their decisions to stay or to leave is an ongoing quest for student affairs professionals. The work of Vincent Tinto has informed additional retention theories and provided a central framework to explore the question of whether the MSCC College Access Program affects persistence for the low-income, first-generation college students who are participating in the initiative. Tinto (1975, 1987, 1993) initially posited that much like Emile Durkheim's classic suicide study linked social inclusion and

mortality, college student departure is affected by the level of social integration experienced by first-time students. The relevance of Tinto's perspective to this study is evident in that a major objective of CAP is to facilitate the successful integration of freshmen into the college experience to increase their retention. Tinto (2000a) describes the complexities of student engagement and learning contending persistence is influenced by academic and social involvement. In *Taking Student Retention Seriously: Rethinking the First Year of College*, Tinto (2000a) references his ongoing work concerning student integration and the contributions of other educational theorists like George Kuh, Ernest Boyer, and Alexander Astin, stressing that involvement or engagement are congruent with the concepts of academic and social integration.

Tinto's pioneering research on college student integration was the best suited theoretical lens for analyzing the affect of CAP participation for first-generation, low-income college students. According to Tinto (1998), access and persistence must be considered mutually reinforcing. CAP is structured to offer post-secondary access and orientation to collegiate processes. It is important to understand what students participating in the CAP program experience while learning how to negotiate seminal aspects of the collegiate experience. Community colleges continually confront the challenge of first-generation, low-income, minority students who have less personal resources, academic preparation and greater responsibilities such as work obligations. Consequently, these institutions must have a better understanding of how student integration efforts equate with student success (Engstrom & Tinto, 2008).

Some theorists (Bensimon, 2007; Tierney, 2008) have challenged the relevance of Tinto's theory of integration by arguing that this approach does not account for the

variability of students and generalizes the collegiate experience. While newer lenses influenced by critical theory have added to the understanding of student integration and retention, the value of Tinto's paradigm is that it is comprehensive and continues to be a probative tool exploring student success. The theory proffered by Tinto (1993) places a primary emphasis on social and academic integration of college students which are hallmarks of CAP at MSCC. Using this theoretical perspective to frame this research was appropriate given the intent was to measure whether access to college and integration into college culture positively affected the retention and success of first-generation, low-income students.

### **Research Questions**

According to Creswell (1994), research questions should serve as signposts to direct each reader through the research design and process. "Perhaps the most difficult task of the researcher is to design good questions, research questions, that will direct the looking and the thinking of the researcher enough and not too much" (Stake, 1995, p. 15). Using a case study approach the following research questions were used to guide this study:

1. How do first-generation college students from low socioeconomic backgrounds describe their collegiate experience?
2. How does CAP influence low-income-background-first-generation-college-students' understandings of the college experience?
3. How does the theoretical work of Tinto on student retention inform the explanation of those experiences?
4. What other realities are revealed in this study?

## **Definition of Terms**

Because this study contains terms that have multiple meanings throughout the research literature and within society it is important to explain the intended manner in which certain terms will be used in this paper. Creswell (1994) notes, “Researchers define terms so that readers can understand the context in which the words are being used or their unusual or restricted meaning” (p. 106). Within the context of this research, a first-generation college student was defined as, “. . . a student who is the first in his/her family (mother, father, or siblings) to complete a college education” (Payne, 2007, p. 1) with an associate or bachelor degree. A student from a low-income background was defined as a student who had an Expected Family Contribution (EFC) low enough to qualify the student to receive Pell Grant funding. The income levels vary from year to year and are based upon family size, annual taxable income and the poverty level established by the federal government each year (United States Department of Education, 2010). Pseudonyms were used to refer to the interview subjects, actual research site, location and access program.

## **Significance of the Study**

The need to develop initiatives at the community college level to create access opportunities for first-generation, low-income college students is significant because economic and academic gaps increase the likelihood that many of these students attend two-year schools because of the lower cost and open admissions practices. Recent research has suggested that two-year colleges have failed to retain and matriculate students (Engle & Tinto, 2008). Yet, the body of literature indicates that persistence and completion rates for first-generation college students mirror those of students from a



generational college history background Choy, 2001; (Nunez & Cuccaro-Alamin, 1998). Statistically, these low-income, first-generation college students continue to enroll at higher rates in community colleges.

### **Summary**

The opportunity to access higher education and succeed at college continues to be a challenge for first-generation college students from low-income backgrounds (Richardson & Skinner, 2000). Personal and institutional barriers such as financial limitations and knowledge of college culture affect these students. The purpose of the study was to understand how and to what degree these barriers were addressed for first-generation college students from low-income families in a college access program. Vincent Tinto's (1993) social integration model provided the theoretical framework to explore the problem. Measuring the effectiveness of college access and success initiatives is critically important for community colleges who are investing in programs and interventions during a time of dwindling resources and increasing public interest. An analysis of related literature was integral to informing and framing understanding of higher education access and success issues for students from first-generation, low-income families.

## **Chapter II**

### **REVIEW OF RELATED LITERATURE**

In devising an approach to understanding the literature surrounding my research problem, several categories of focus were developed. First, the meanings of access, persistence and success within the culture of higher education are explored as they relate to first-generation college students from low-income families. Second, there is a review of the relevant concepts in Tinto's underpinning work on student integration along with some related theoretical support from other researchers. Third, to build upon Tinto's ideas about integration, the following core elements of institutional culture which serve as "mechanisms that integrate students into the life of the institution: (Tierney, 2008, p. 68) are explored: academics, college knowledge, and structural inequity. Lastly, the role of technology and the application of its solutions to the research population in this study are reviewed.

Institutional barriers such as academic culture and faculty perceptions must be understood and navigated by first-generation college students from lower socioeconomic backgrounds. Some community college faculty experience ethical dilemmas with regard to managing the faculty-student relationship (Hardy, 2002). The tension between an open access mission and performance criteria expectations can be reflected in faculty attitudes towards students and programs. The perception that first-generation college students are

academically underprepared might factor into the classroom culture and faculty inferences about students in CAP.

Cultural competence, or knowledge about an environment, including its rules and codes, along with possession of the skills to engage and negotiate ways through it effectively are fundamental to being successful within any setting (Cross, Bazron, Dennis & Isaacs, 1989). The application of this understanding within a higher education setting implies that students who become proficient with these skills can learn how to integrate themselves successfully into the college process. Students who enter into an educational environment that is radically different from their previous experiences may feel marginalized and unwelcome (Thayer, 2000). Higher education also has systemic components that can effectively disenfranchise the uninitiated first-generational college student from a disadvantaged background. These perceptions may be reinforced by the inevitable structural inequity that exists within higher education that is rooted in time and circumstance. “Normative behavior and institutionalized practices can be demeaning to some individuals or groups (Kuh & Whitt, 1988, p. 100). The theory of structural inequity holds that structures and systems are built with inherent biases which can hinder or obstruct access for the inexperienced (Caplan & Nelson, 1973). Historically, access to higher education has been limited for certain groups. Consequently, current policies and practices exist that can effectively disenfranchise a first-generation college student with a lower socioeconomic status. Finally, institutional culture is another element that can produce obstacles for the first-generation college students from lower socioeconomic backgrounds. The norms, policies, practices, rules, paradigms and ways of doing business can be both explicit and implicit. Schein (1992) theorizes that organizational culture

thrives on “a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration” (p. 12).

Environmental barriers such as community culture affect postsecondary access. For instance, there is a great deal of literature about the first-generation phenomena, including recent research that highlights the role that socioeconomic disparities can play in educational success (Engle, Bermeo, & O’Brien, 2006). The theoretical lenses of educational psychology provide a framework for understanding the influence of personal belief systems on self efficacy, resilience, cultural competence, attitudes, and behaviors as they relate to college preparedness, and aspirations for college success (Paulsen, 1990; Perna, 2000).

### **Access and Success**

“Since the National Defense Education Act of 1958, a primary objective of federal higher education policy has been to increase access to higher education for those who would not otherwise attend, especially those from low-income backgrounds” (Tinto, 2004, p. 3). Brock (2010) notes that access to a college education has increased dramatically over the past 40 years. In the fall of 1965, approximately 5 million students were enrolled in an American college or university. By 2005 that number had increased to 17.5 million. This 300% increase in college enrollments coincided with changing public opinion about the ability to afford a college education. In the mid-1960’s the federal government established a number of programs that made college education accessible to low-income, first generation college students, the most important of which were the federally subsidized loan program, Pell Grants, and the TRiO programs. According to a *Digest on Education Statistics (2007)* article by Snyder, Dillow, and

Hoffman (2008), attendance at two-year institutions increased during the same period. The American Council of Education, in a report titled *Minorities in Higher Education*, indicates that the rates of attendance for women and minority students increased substantially between 1970-2005.

Research on persistence and completion rates show differences between genders and racial and ethnic groups. Asian and Pacific Islanders have the highest rates. Non-Hispanic whites have the second highest. Blacks and Hispanics have the lowest rates of persistence and completion. Women enrolled at public universities have a persistence and completion rate that is higher than that for men. Rates of persistence and completion are also lower for non-traditional students, which are defined as students who do not attend college directly from high school, students who work full time, and students who are single parents. Susan Choy (2002), in her work entitled *Findings from the Condition of Education 2002: Nontraditional Undergraduates*, describes how students who do not complete a college prep curriculum—especially in math and reading—have a lower rate of persistence in college. Moreover, the literature also shows those students who take remedial courses also have low rates of persistence and completion.

A recently published comprehensive monographic on college access and success that spans two decades identifies some of the prominent literature associated with college choice and access (Bergerson, 2009). This review of pertinent theories and research builds upon the prior work of theorists such as Michael Paulsen and examines the economic, psychological and sociological perspectives on college choice and student access. Studies have shown that variables such as the cost of college, the financial resources available to pay tuition, and perceptions about the value of a degree are

economic factors that can influence the decision to attend a college or university (Paulsen, 1990). Another aspect of choice is how students' psychological perspectives of institutional climate and culture can affect whether they will attend a higher education institution. Sociological factors such as racial diversity, parents' level of education, income, peer groups and academic readiness have a demonstrated affect on access to higher education. According to Strange and Banning (2001), "A transactional relationship exists between college students and their campus environments; i.e., the students shape the environment and are shaped by it" (p. 201).

As understandings regarding college access evolved, more inclusive theories (Chapman, 1981; Litten, 1982) emerged to account for the experiences of diverse student populations, including minority groups, gender-based distinctions, and socioeconomic differences. Hossler and Gallagher (1987) identify a three stage model of how students make college choices. The personal influences, the search process, and institutional choice make up the three components of this model. The ideas of Pierre Bourdieu (1977, 1987, 1993) regarding social, economic and cultural capital are referred to as the social reproduction theory. This research has been widely explored, particularly by researchers attempting to understand the role these factors play in terms of equity and access for particular populations. According to Bergerson (2009), "In addition to attempting to develop new models to explain the college choices process, researchers are employing different paradigms, allowing them to illustrate the societal and systemic inequities that shape students' postsecondary decisions" (p. 46). A range of studies uses Bourdieu's capital framework to understand how economic, social and cultural factors affect college choice for students from low-income backgrounds or students who are first-generation

college students (Perna, 2000, Tierney, 2002). Recent research shows that access gaps continue to exist for students from lower socioeconomic backgrounds. For instance, “Students from low-income families are considerably less likely to attend college full-time than are students from higher income families. Further, low-income students are more likely to work full-time while attending college” (Tinto, 2005a, para. 6).

Implications exist for student access and success as statistics show that the income factor influences the rate of transfer for community college students and degree completion.

These findings lead to the questions of whether two-year higher education institutions can positively reverse the pattern of low-income, first-generation college students who drop out or fail to seek out a four-year degree.

### **Tinto’s Theory on Student Integration**

Vincent Tinto has espoused a theory on student integration that has been both venerated and challenged by educational theorists and practitioners through the course of several decades. His 1975 work exploring the causes of college student drop-out led to the development of what was initially termed, “Theory on Student Departure.” Tinto explored the idea that students’ backgrounds as well as connections to higher education institutions influenced their retention or decisions to not leave college. He theorized that student departure was analogous to a well known sociological study by the French sociologist Emile Durkheim that connected suicide rates with levels of social interaction (Tinto, 1975).

In 1987 and 1993, Tinto published and republished *Leaving College: Rethinking the Causes and Cures of Student Attrition* and, in each edition, refined his ideas about the role of academic and social relationships to student success. These two central concepts

(i.e., academic and social integration) formed the basis of a theory on student integration. “Central to this model was the concept of integration and the patterns of interaction between the student and other members of the institution especially during the critical first year of college and the stages of transition that marked that year” (Tinto, 2005b, para. 3). Through evolution of his original model which focused on why students were prone to leaving college, Tinto refined his ideas to focus on why students stay in college. He concluded that opportunities for involvement or engagement were critical to the student experience. Tinto stated, “Research is clear that students quickly pick up expectations and are influenced by the degree to which those expectations validate their presence on campus (2003b, para. 11).

Tinto acknowledged the continued progression of student retention theory through research by theorists like Alexander Astin (1987), as catalogued through the work of Ernest Pascarella and Patrick Terenzini (1991). He noted the following key shifts: (1) The diverse backgrounds of college students and related social and cultural forces are now understood to inform and transform interpretations related to student persistence; (2) Institutional differences such as two-year versus four-year schools, residential versus commuter campuses, and geographical locations reshape the definition of involvement and expand the forums where meaningful student engagement takes place; (3) The complexities of student success have led to the development of an array of economic, psychological and sociological models on student retention (Tinto, 2005b, p. 3.). The growing presence of populations such as first-generation, low-income college students in higher education settings have served as mechanisms for building upon the foundation of the theoretical framework of Vincent Tinto.



“Tinto’s (1993) theory of integration was unique to the field of student development because it was one of the early theories that focused on explaining voluntary departure from colleges and universities as an issue not just with the student, but also with the institution” (Wolf-Wendel, Ward, & Kinzie, 2009, p. 414). Higher education scholars continue to cite the relevance of student integration theory as it relates to the identification of mechanisms that bond students to colleges through activities, interactions and opportunities for participation to ensure persistence and success (Christie & Dinham, 1990; Tierney, 2008). In his research Tinto identifies conditions for student success which include levels of support, engagement and even expectation. “Students are more likely to persist and graduate in settings that hold high and clear expectations for student achievement” (2000b, p. 2). Wolf-Wendel, Ward, and Kinzie (2009) clarify the distinctions between Tinto’s ideas and other student retention theorists by outlining the major components such as the role of academic and social integration in influencing perceptions and interactions with faculty, staff and other students.

In recent literature, Tinto (2000b, 2003b, 2005b) discusses the need for higher education institutions to engage in policy change and institutional shift regarding creating programming and services that promote academic and social integration. He contends that one of the most effective means of creating systemic and meaningful program is to establish learning communities and engage faculty along with student affairs professionals in bona fide changes to pedagogy, practice, and institutional culture (Tinto, 2003a). According to Tinto, learning communities are vehicles to create shared knowledge, shared knowing and shared responsibilities which in turn positively “enhances student learning and persistence” (p. 6). His recent writings indicate that the

higher education discourse should move beyond the proven theory that students who are socially and academically integrated persist and complete degrees into a focus on developing institutionalized, comprehensive models for student success (Tinto & Pusser, 2006).

### **Institutional Culture-Faculty**

Since one intention of this study was to examine how higher education culture affects academic success, it was important to understand how the attitude and practice of faculty members toward first-generation college students affect student academic success and to identify literature that relates to the faculty experience with these students. “A deeper understanding of cultural issues in groups and organizations is necessary to decipher what goes on in them but, even more important (sic), to identify what may be the priority issues for leaders and leadership” (Schein, 1992, p. 5). Schein outlines key components of culture that must be studied to understand groups. To understand faculty attitudes, the researcher should be able to identify the shared meanings and formal/informal philosophies belonging to the group. Rosenholtz and Wilson (1980) discuss the importance of autonomy, meritocracy and egalitarianism within the faculty culture. Their work explains how core faculty values such as autonomy affect perceptions about students entering higher education without adequate academic knowledge or preparation. Some research suggests that faculty values (e.g., autonomy, specialization and the primacy of research and publication) often interfere with undergraduate education (Gaff, 1997; Wergin, 2001). Hardy (2002) describes the codes of ethics that can be found within the faculty community and how these moral responsibilities influence faculty attitudes toward students. Wilcox and Ebbs (1992) place particular emphasis on the

obligation that faculty have to create trust between them and their students indicating that, “Students are vulnerable before and unequal to the scholar” (p. 1). Research is clear that faculty interaction with students in the classroom and outside of the classroom has a direct affect on persistence (Tinto, 2000b).

Faculty culture is developed through an extensive process of cultural transmission. ”The values, beliefs and attitudes held by faculty reflect their socialization experiences and in essence mirror faculty culture” (Tierney & Rhodes, 1994, p. 1). Academicians confront stress in their working environments from a variety of sources. The most obvious external stressor is student populations which can be particularly heterogeneous at the two-year level. According to Seldin (1987), there are, “too many tasks, too little time” (p.14) for college faculty. Meeting the needs of a growing student enrollment places added pressure on already overworked faculty (Van Ast, 1999). Seldin (1987) notes, “Professors are dismayed at the lack of preparation and resentful about using valuable class time to teach what the students should already know” (p. 18). Van Ast also suggests that national data for two-year higher education institutions indicate that there is a mismatch between faculty expectation and student performance. The perceptions of CAP students with regard to their interactions with faculty at Midwestern State Community College will be of interest in this study.

It is vital to study the literature to understand faculty attitudes and approaches to working with first-generation, low-income college students, particularly those who might be regarded as academically underprepared. However, there are gaps in the literature that might be addressed effectively through further inquiry. For instance, do first-generation college students from low income backgrounds perceive their relationships with faculty

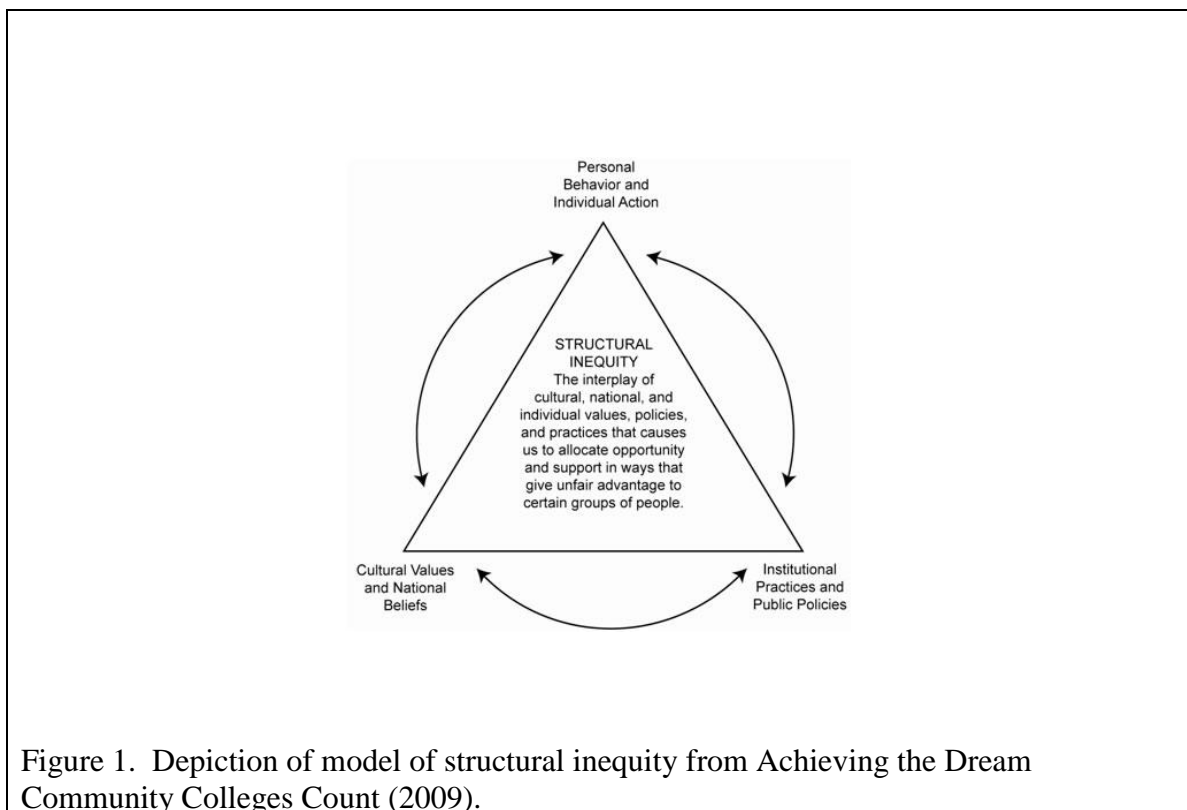
as vital to their educational success? “It is evident that the classroom setting is important, especially as it may shape academic integration and social integration” (Demaris & Kritsonis, 2008, p.2). Since the classroom experience accounts for a substantial amount of time spent at a college campus, then this understanding is critical.

### **Institutional Culture-Norms, Rules and Practices**

It is important to understand organizational culture and behaviors because “individuals do not interact in a vacuum, and events do not occur in isolation” (Cherrington, 1989, p. 11). Students who feel acquainted or familiar with their educational environment are more inclined to believe that the institution is a “fit” for them (Demaris & Kritsonis, 2008). Higher education, like any institution, has rules, values, norms, and practices that can dictate processes, shape understandings, and transmit culture. According to Kezar and Eckel (2002), colleges or universities that seek to make comprehensive changes in response to a rapidly changing and dynamic environment must understand the complexities within their institutional environments. For those within an organization it is often difficult to recognize the extent to which institutional norms and rules influence the integration of new persons into a group setting. “Members of an organization often take its culture for granted and do not truly evaluate its impact on decisions, behaviors, and communication or consider the symbolic and structural boundaries of organizational culture until external forces test it” (Keup, Walker, Astin & Lindholm, 2001, p.3). First-generation college students who are from disadvantaged socioeconomic backgrounds often do not have the skills or understanding necessary to navigate particular contexts within higher education.

## Institutional Culture-Structural Inequity

The literature describes inherent inequities within social systems. Achieving the Dream (AtD), a national initiative to increase student persistence and success for students at two-year institutions, provides resources, research, and support to a consortium of community colleges from across the country. One particular area of focus identified by AtD is structural and cultural barriers in higher education. The AtD Equity Resource Center proposes a model of structural inequity that describes how the interplay of personal behavior, institutional practice, and cultural values benefits certain persons or populations at the expense of others (Achieving the Dream Community Colleges Count, 2009, Figure 1).



Further, AtD suggests that colleges can identify and deconstruct these inherent impediments for students through an intentional process of inventorying and developing direct interventions. Recent research about the first-generation college student phenomena highlights the role that socioeconomic disparities can play in educational success, including how lack of awareness or knowledge of systems, rules, and expectations can inhibit educational success (Engle, Bermeo, & O'Brien, 2006). These systemic components can disenfranchise effectively the uninitiated first-generation college student from a disadvantaged background. Tierney (2008) describes the enacted collegiate environment where "The assumption is that participants develop assumptions about the nature of the organization from their social construction of the organization's culture based on historical traditions, current situational contexts, and individual perspectives" (p. 11).

Historically, access to higher education has been limited for certain groups. Students who enter into an educational environment radically different from their previous experiences may feel marginalized and unwelcome (Thayer, 2000). These perceptions may be reinforced by the inevitable structural inequity that exists within higher education that is rooted in time and circumstance. Academic readiness is a component of the preparedness gap, and national research is focused on the high levels of students entering colleges and universities in need of remedial education. There is a potential developmental gap in institutional literacy as well. If the probability for success for low income, first-generation college students can be reasonably linked to the need to be adept at accessing, comprehending, and navigating the college process, then the newly minted College Access Program (CAP) might also serve as a developmental intervention.

Like academic proficiency, the need for higher education literacy or institutional knowledge has been linked to student persistence. “Knowledge about college throughout the middle and high school years plays an important role in securing access to higher learning, from cultivating college aspirations to choosing an appropriate college and getting financial aid” (Vargas, 2004, p. 6).

### **Technology**

As technology becomes more widely used within higher education settings and the use of personal technologies more prevalent, particularly for the current generation of college students, the opportunity to use technological tools to conduct research is gaining more currency. “Colleges and universities around the country are scrambling to keep pace with innovations in technology, both to flaunt their abilities as cutting-edge research institutions and to engage a generation of students armed with camera phones, Wi-Fi laptops, and Google” (Hallett, 2005). As faculty experiment with technology within the classroom to re-deliver course content and engage student learning, the opportunity to use virtual tools to connect with students in other college settings is being actively explored. Instant Messaging (IM) technology is typically used for social communication, but is beginning to be used in work and educational settings.

One study found that students were more candid and willing to participate in classroom activities when given the opportunity to use mobile phones and handheld interactive devices to provide computer based responses (Freeman, Blayney & Ginns, 2006). There is a dearth of literature that describes how technologies have been successfully and, in some cases, unsuccessfully integrated into college classes as a means to increasing academic engagement for students accustomed to the frequent use of social

networks, IM, blogs, texting and other forms of electronic posting to communicate (Bennet, Maton, & Kervin, 2008; Gasson & Agosto, 2008; Lohnes & Kinzer, 2007).

The population of direct-from-high-school students identified for this study is referred to as the Millennial Generation or Generation Y. One particular facet of this generation, which distinguishes it from previous groups, is the broad-based knowledge and use of technology within their daily lives. A survey conducted by the Pew Research Center found that 54% of a group of 18 to 25 year olds reported that they regularly used social networking technologies and that 51% had used text messaging tools within the last 24 hours (McKendrick, 2009). Using IM technologies to interview college students could be an effective technique for engaging and communicating with them.

### **Summary**

Student access, persistence, and success in higher education are fairly broad themes within the literature. Research has been focused on how these factors affect first-generation college students as well as low-income college students (Choy, 2001). The perennially referenced theory on student departure by Vincent Tinto is relevant to the problem being explored in this study and serves as the means to interpret the data collected. Understanding the other elements such as academic experiences, gaining cultural capital, and navigating inherent inequalities within the system are critical to student integration. Technology can serve as a vehicle to explore these ideas and engage college students in a meaningful dialogue about their experiences, particularly students from the millennial generation (Hallett, 2005). The literature in this study serves as a means for grounding the research process.



## **Chapter III**

### **METHODOLOGY**

The purpose of this case study was to explore whether a college access program (CAP) at a community college mitigates certain barriers to academic success for first-generation college students from low-income backgrounds. Vincent Tinto's (1993) theory on student integration provided an effective general construct to explore the meaning of the college experience for first-generation, low-income students. A case study approach was chosen to provide thorough descriptions and understandings of focused questions in a compressed period of time (deMarris & Lapan, 2004). The research questions which helped to shape the study were as follows:

1. How do first-generation college students from low socioeconomic backgrounds describe their collegiate experience?
2. How does CAP influence low-income-background-first-generation-college-students' understandings of the college experience?
3. How does the theoretical work of Tinto on student retention inform the explanation of those experiences?
4. What other realities are revealed in this study?

I attempted to refine my data collection plan, including clarifying procedures, the relevancy of my proposed research questions, and the effectiveness of using Instant Messaging (IM) as a data collection method through a pre-ethnographic interview with one CAP student who met the research criteria (Yin, 1994). While the specific information collected in this pre-ethnography was not used within the study, it was the basis for triangulating some of the feedback collected from students identified as research subjects. The understandings gleaned in this manner allowed me to recognize themes and touchstones, and ensured a thorough and robust data collection (Guba & Lincoln, 1998). I was able to hone the research questions and ensure that each line of inquiry was understandable and relevant to the study purpose, allowing me to establish baseline mechanics for using an IM environment.

The data collection included both electronic and face-to-face interviews with key informants and program participants and a review of program-related documents. Conducting research through such procedures and techniques allowed the approach to the research questions to be both holistic and emergent (Creswell, 2003). The data collection process underwent continual revision as I adjusted to the limitations and realities of conducting a study of this size and scope. The analysis of the data was primarily focused on interviews and interaction with the CAP students (Hays, 2004). In this manner, I intended to better understand the experiences of students in this CAP program.

One method to gain trust was to share with each of the research subjects my college teaching and student services background. I also identified my status and experiences as a first-generation college student from a lower socioeconomic background. I discussed the nature, scope and purpose of my research. The supervisor for the CAP

program reports directly to me. My intention was to reference him only as a key informant who could provide context for the program. I did not anticipate any reluctance on his part to provide responses as we regularly work together to address and resolve issues that arise from implementing the program. My goal was to employ qualitative strategies that complement the research questions and provide the best means for obtaining data from my subjects.

### **Participants**

Ten students participated in IM interviews and five of those students agreed to a follow-up interview. All participants were CAP students with a minimum of one year of experience in the program. Although efforts were made to recruit from both genders, all of the participants who followed through with participation were female. There was also a racial/ethnic mix and, interestingly, the majority of the students who interviewed were either Latino or African-American.

### **Data Collection**

To gather the data, I focused on the CAP students and key administrators at Middle State Community College (MSCC). This institution was chosen because of the recent development of CAP to provide access to college for high school graduates in Oil County. Initially, I interviewed two college administrators who served as key informants to the research because of their broad knowledge of the program and its processes. I then interviewed via (IM) the 10 students who were a part of the CAP program. These interviews ranged from 80 to 90 minutes in length. Follow-up in-person interviews were conducted with five of those who were a part of the original IM interview group. These

interviews were more in-depth lasting over an hour in most cases and explored emerging themes and ideas from the other data collection processes (See Appendices F and H).

I focused on identifying students who entered the program after the second year of its existence and who met the criteria of first-generation college student from a lower socioeconomic background as defined within this research project. These students were more likely to have participated in all program-related interventions, having completed at least a full academic year in the program. I narrowed the pool to students enrolled for at least half time (six hours) each semester while in CAP because their level of college interaction would be more consequential. To identify students for this study, recruitment materials such as flyers and CAP targeted emails were used. Individuals such as College Strategies instructors who have direct contact with these students were solicited to get their assistance in recruiting students. To develop a pool of prospective interviewees I worked with the CAP Office to communicate to CAP program participants. I attended two CAP activities to recruit students directly. These events were seminars to provide second-year CAP students information about transfer institutions, their volunteer service obligations and requirements for continued participation in CAP. The sessions were optional although the students were offered a few hours of volunteer service for participating.

A personal email request to recruit the interviewees was sent to the generalized group of approximately 1500 CAP students who had been in the program at least one year (Patton, 2002). Following my IRB approved protocol, informed consent was obtained from the students who agreed to participate by providing them with an electronic document outlining the scope, purpose and planned use for my research or in

some instances meeting the student in person to have them sign the document (see Appendix C). Students who did not want to meet in person sent an email from their official college email account indicating their consent to participate in the study. This communication served as an official verification of identity and permission to access student information in the absence of an in-person meeting. While I used other data collection methods, the interviews with multiple student informants were the most informative in providing a richer set of responses that could then be triangulated with other available sources of information concerning the CAP (Marshall and Rossman, 1999). My intention was to use an IM environment to conduct interviews with the students chosen for this study. GoogleTalk, the IM provider to conduct interviews, was chosen because of its portability and functionality. It was fairly simple to navigate after a brief orientation for students who were unfamiliar with the product. Also, it was easily and freely downloaded onto most computers including those available in student computers labs at MSCC. GoogleTalk also allowed IM exchanges to be stored and accessed. Hinchcliffe and Gavin (2009, p. 322) posit that, "Using synchronous online interviewing with IM as the communication platform may enable more accurate data and access to fuller exploration of student positive social support networks." The researchers argued that this method yields better results as the online dialogue allows for anonymity, limits interruptions, and improves the accuracy of interview transcription. "However, access to technology is not equitable across sociodemographic categories since it is determined by resources available to the schools, communities, and households" (Du, Havard, Sansing, & Yu, 2004, p. 274). One potential challenge in using this method was the possibility of a digital divide in terms of access to technology for students from lower

socioeconomic backgrounds. One solution was to direct subjects to use one of the numerous computer labs around the college with extended hours of operation. Access to a computer with internet connection was a barrier for some students. I offered the option of an in-person interview with these students, but after additional communication via email and telephone a meeting time was eventually scheduled. In some of these cases the students failed to complete the processes required for participation. One male student set up three separate meeting dates at an MSCC outreach site where he could use a college computer, but did not appear for any of the scheduled times. Once this emerged as a problem, it raised the issue of whether difficulties such as a lack of computer access could contribute to other adverse consequences for first-generation college students from low income families.

Although the principal means of data collection was IM interviews with CAP students, in-person interviews were conducted with administrators from MSCC. One interviewee was a key informant because of his role managing the program. The other source was the President/CEO of MSCC who was the chief architect of the original program. Understanding the administrative vision and motivation for creating CAP helped characterize the institutional culture concerning issues of access and student success. These two individuals enriched the data in the case study by providing source interviews (deMarrais & Lapan, 2004). They were asked to respond to several semi-structured interview questions, and they also granted permission to audiotape the sessions for later transcription (see Appendix G).

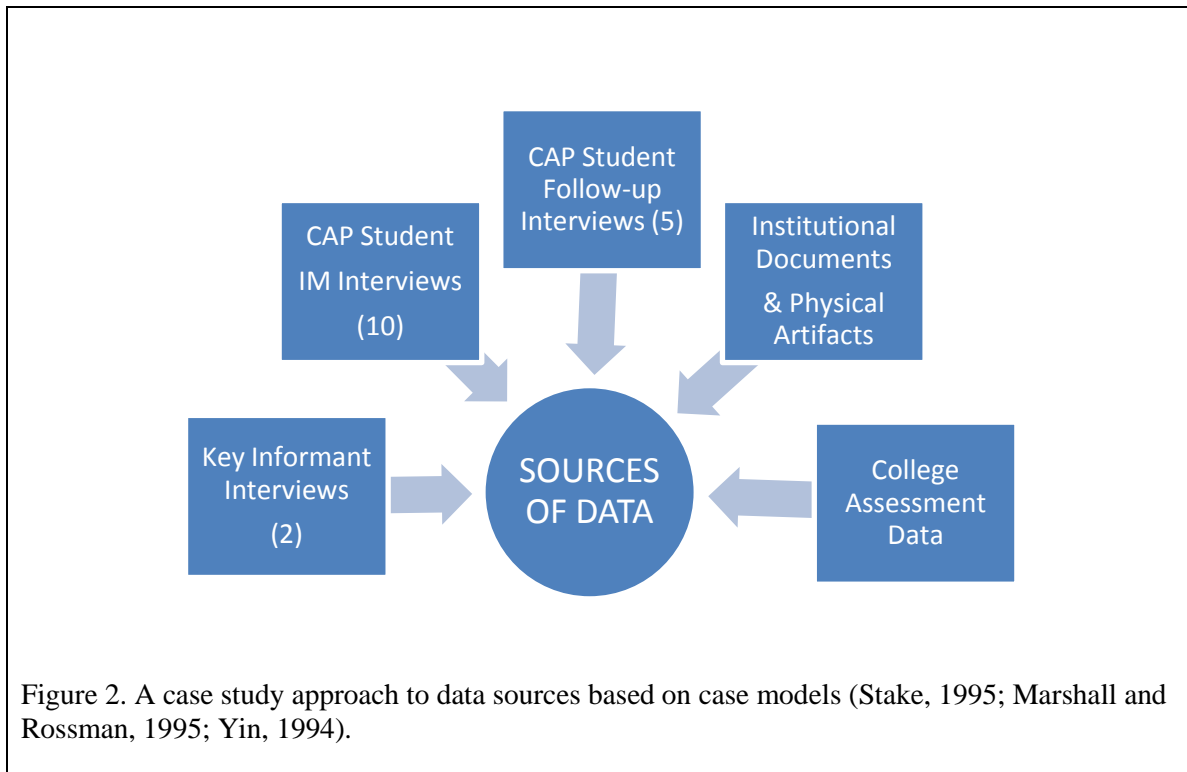
The 10 students who participated in this stage of the process were recruited using a range of methods. Flyers approved by the OSU Institutional Review Board (IRB) and

MSCC IRB were electronically posted on the CAP webpage. An announcement about the research participation opportunity was sent to all CAP students. Information was also shared about the project at two seminars for CAP students in their second year. The most effective means of recruiting students for the interviews was through third parties. Orientation instructors, student organization advisors, college staff who work with special student populations, the coordinator of a TRiO program and the coordinator of an outreach center were instrumental in identifying and communicating with CAP students about the research. These efforts resulted in IM interviews with the CAP students. The IM interviews varied in the amount of time to conduct them, but they typically ranged between one and two hours.

While conducting the IM interviews, I determined that several students discussed experiences with the potential for further exploration. At the conclusion of their scheduled IM interviews, I asked these students if they would be willing to participate in a follow-up interview to explore in more detail some of the information they shared. All of the students initially agreed, and five actually completed 60-90 minute follow-up interviews in a variety of campus-based locations.

According to Marshall and Rossman (1999), “In the early stages of qualitative inquiry, the researcher typically enters the setting with broad areas of interest but without predetermined categories or strict observational checklists” (p. 107). Institutional documents, external information, and assessment data were gathered to help ground the primary source data of interviews (see Figure 2). For example, the materials developed by MSCC to promote the program and minutes from CAP planning meetings were useful as additional sources for triangulating the data and the research questions. “Sometimes a

pattern of important information that adds to the complete description of the case is revealed while collecting or analyzing the data (Hays, 2004, p. 232). The additional methods of data collection allowed for richer, more contextualized information to aid in analyzing, organizing and making sense of the setting and the subjects.



### **IRB Process at MSCC and OSU**

The IRB application process at MSCC was fairly detailed and involved an application over 20 pages in length that required several weeks to complete. Questions regarding the research purpose, data collection process, confidentiality protections, participant recruitment methods, interview questions and protocols among other items were addressed. A rough draft was submitted to the IR Director at MSCC for critical feedback. Her recommendations regarding records maintenance were incorporated into the document. The completed application did not require a full board review, and was



vetted by the chair of the IRB Committee. After an approximate two week wait, a letter arrived from the MSCC IRB chair authorizing the research project. A final copy of the paper must be provided to the IRB Committee once the research process concludes.

Prior to finishing and submitting the IRB application to OSU, two research ethics training courses had to be taken. After successfully completing these, a final version of the OSU application to IRB was submitted along with the letter of approval from the MSCC IRB Board. A full board review of the application was not required, and the IRB Office returned the application with several revisions within a relatively short period of time. Recommended edits included revising the recruiting materials, clarifying the length of time that data would be stored and revising the consent form for the IM interviews. After the application was resubmitted, a phone call was received from the IRB chair requesting clarification on a problem with an attachment without updates that had been erroneously emailed. Approximately two days after this telephone discussion, a letter of approval arrived from the OSU IRB Board with stamps on the materials authorized for use by the researcher.

### **Instant Messaging (IM) Interview Method**

This study employed an uncommon technique for collecting data from the research subjects. That method employed IM technology for the initial data collection with CAP students in place of a traditional face-to-face interview. This approach was taken because the population to be studied belongs to the millennial generation whose characteristics include proficiency with technology. The CAP students, with the exception of Beta who had assistance in establishing an IM account from a college staff member, did not report any significant difficulty in using the IM technology. Eta and

Alpha both indicated that using college computers was preferable to those available in their homes. In fact, Alpha emailed twice from work and advised that she had experienced difficulty attempting to load the GoogleTalk software from home. The responses provided by students did not appear to be measured or censored. Freeman, Blayney and Ginns (2006) suggest that certain social technologies create more interest in participation and more candid responses from college students. A natural rhythm occurred as students typed responses that allowed the researcher to distinguish between hesitation and an unintentional delay. The GoogleTalk technology also recorded when a student was typing or composing a response.

A few unique actions occurred which would have been less likely during a traditional in-person interview. Alpha engaged her parents in responding to at least one question. Eta had to stop the interview and resume it at a later time. There were a few unexplained breaks in responses from Zeta and Gamma, in one instance lasting 10 minutes and 9 minutes, respectively. The five students who participated in the follow-up interview appeared to have no discomfort with the in-person format. Their answers were in the same vein as the original responses provided during the IM interviews. One student installed GoogleTalk on her cell phone and used that device to participate in the interview. Using IM technology with these CAP students was an effective means for engaging this particular population of students in a discussion about their college experience and feelings about CAP (Hallett 2005).

### **Researcher Bias**

My interest in identifying and counteracting issues that create access and success barriers for students seeking postsecondary educational opportunities stems from a 15

year career as a student affairs professional. I have had frequent contact with students across a broad spectrum of learning from the high achieving to the at-risk. Understanding my biases as a student services professional was important to approaching this study because “qualitative research is fundamentally interpretive” (Creswell, 2003, p. 182). My paradigm affected the way I framed the research and analyzed the data. My administrative position at MSCC had the potential to restrict the flow of information between me and my research subjects who perceived me as an administrator with an undisclosed agenda. I disclosed my status as a first-generation, low-income college student during these interviews and felt that the student responses were open and candid. Ideally, this study provides a deeper understanding of whether there is a meaningful educational effect for first-generation, low-income college students participating in CAP, such as learning how to become academically proficient and socially connected. It is anticipated that the results of this research could also add to the growing body of research linking social integration and student persistence.

### **Discussion of Data Analysis**

Data for this case study were collected from a wide array of sources [key informant interviews, IM interviews, face-to-face interviews, meeting minutes, and documents about CAP] and gathered into a central repository for analysis and understanding. According to Patton (1987), “Interpretation involves attaching meaning and significance to the analysis, explaining descriptive patterns, and looking for relationships and linkages among descriptive dimensions” (p. 144). Transcripts were made for the interviews and the researcher notes taken during the in-person interviews were all assembled as a part of the data analysis process. As a part of the case record, the

institutional and CAP documents referenced in this study along with the written summaries about their contents were gathered in a centralized location for review.

Coding was used as a means to identify important patterns, compelling illustrations or trends in the information collected. According to Maxwell (2005), an effective categorizing strategy should assist in allowing data to be organized into broader categories or themes. In analyzing transcripts from the IM interviews and from the in-person, follow-up interviews certain themes emerged from the data. While conducting interviews certain responses begin to resonate with the literature and notes were made in instances when this occurred. The reason for requesting a follow-up interview with CAP students participating in the IM interviews was if they expressed a particularly compelling thought or idea. For instance, if a CAP student communicated a strong opinion, experience, or attitude concerning higher education, a notation was made to ask the student at the end of the IM interview to meet in-person for a more in-depth discussion. Marshall and Rossman (1999) suggest that effective data analysis follows a continuum of interpretation that starts with initial presuppositions such as research questions and continually evolves as data is collected, reviewed, organized and interpreted by the researcher.

The analysis of data can be a broad and varied process. Maxwell (2005) indicates that it is critical to distinguish the data by organizing it into appropriate categories. He identifies three basic categories: organizational, substantive and theoretical.

Organizational categories are defined as broad topics or themes that a researcher has likely already anticipated will emerge from a given topic. Theoretical themes are those categories or ideas that are grounded in existing or emerging theory or knowledge. And,

substantive categories can be developed through open coding or through descriptions provided by research participants.

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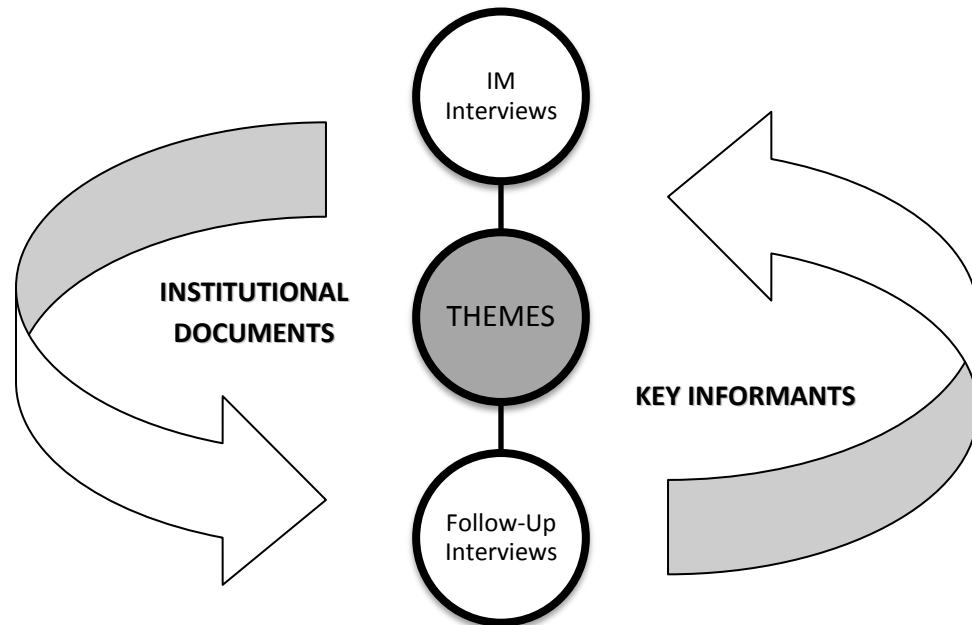


Figure 3. Data triangulation process.

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Data triangulation within qualitative research allows phenomena or constructs to be measured for convergence or non-convergence by offering more than one source of data to address the research problem (Bickman & Rog, 1998). One benefit of a case study is its intentional inclusion of several different forms of evidence related to the problem studied. “The use of multiple sources of evidence in case studies allows an investigator to address a broader range of historical, attitudinal, and behavioral issues” (Yin, 1994, p.92). The use of key informants, CAP materials, institutional research, and published articles about CAP, in conjunction with interviews with CAP students, provided a stronger basis for drawing conclusions about data trends and emerging themes.

## **Summary**

Qualitative research methods provided the best approach to understanding whether CAP at MSCC effectively creates access for students from low income families who are first-generation college students. Qualitative inquiry is often used to understand particular social situations or phenomena, such as factors affecting the academic persistence of certain student populations. The ideal place for studying human populations is in their natural environments where one is most likely to find persons engaging in their routine behaviors and patterns. More importantly, qualitative inquiry is emergent, so it adapts to changes within the research process that either emerge through a refocusing of researcher interest or a reinterpretation of participant experiences. “The utility of case study research to practitioners and policy makers is in its extension of experience” (Stake, 1994, p. 245). This research could contribute to a broader understanding of how higher education institutions can approach and develop interventions to increase access and persistence for low-income, first-generation college students. But factors such as race/ethnicity, gender, and socio-economic status as defined in the literature must be considered in any future studies as well (Perna, 2000).

## **Chapter IV**

### **FINDINGS**

The purpose of conducting this qualitative study was to determine whether a college access program mitigated the institutional and environmental barriers that have historically impeded the academic success of first-generation college students from low-income backgrounds. A case study approach was employed as the best means to explore this problem. Multiple sources of data were collected including interviews with first-generation, low-income students participating in the program. The data along with an analysis of the data, interpretations and consequent findings are offered in the following two categories of data presentation and themes in the data.

#### **Data Presentation**

After receiving authorization to conduct research from both the Middle State Community College (MSCC) and Oklahoma State University (OSU) IRB boards, the data collection began with interviews conducted with two key informants. These individuals had specific knowledge of the College Access Program (CAP) and the events leading to its creation. The President of MSCC was interviewed first because of his leadership role in developing the program. The Director of CAP was then interviewed to obtain an overview of the way the program functions. Following these interviews, several

institutional documents were collected and reviewed. Minutes from the CAP Taskforce meetings, copies of the CAP Program Agreement, marketing materials, a faculty newsletter, along with CAP based reports, were examined. Instant Messaging (IM) interviews were then conducted with CAP students, and follow-up, in-person interviews were then completed with members from that group.

### **Interviews with Key Informants**

Interviews with two key informants were conducted to frame the study. These individuals were chosen because of the pivotal roles they hold in relationship to the CAP program. According to Gilchrist and Williams (1999), key informants can educate the researcher about a phenomenon to be studied.” The first participant interviewed, the President of MSCC, was the architect of CAP. The second interviewee was the Director of CAP. Both persons provided important, but different, information about the program. Key informants were invited to choose the location to meet.

#### **President of MSCC.**

The MSCC President’s interview occurred in his office at his preference. This approach was to allow him to have a level of comfort and thus be more open and responsive during the interview. Located in a high rise building on one of the top floors, the President’s Office was a well appointed space with a cherry wood desk, credenza, small conference table and seating area. The interviewer allowed the President to determine where the two of them would sit during the interview. The President directed the interviewer to the sofa while he sat in an adjoining chair. After a review of the consent form and interview protocol, the interview proceeded.



The President explained the origins of CAP and his role in its creation. The program was modeled after one at another community college in a neighboring city. However, CAP more broadly expands the access for students. Several national programs including the Kalamazoo Promise in Michigan influenced the development of CAP. A small team of administrators from the College was assembled by the President to develop the parameters for the program with the stipulation that funding would be supplemented by federal financial aid, specifically Pell Grant monies. This type of gap funding approach would offset the resources needed to support the program.

The President also discussed external factors that influenced the creation of the program. He referenced the U.S. Department of Education Report (2006) and the data it reported regarding the job market and college degrees. The President also indicated that the state drop-out rate for high school students was reflective of national trends which show a significant decline. Endorsement for the project was received from the Board of Regents after analysis of the budgetary impact of implementation.

Eligibility criteria were also established for the program. In addition to the student population being defined as students graduating from high school, it was determined that students would need to reside in, and attend a high school in, Oil County. This requirement was added because of a unique funding source through an assessment collected from local property taxes that supplements the operating budget for MSCC. According to the President, "We saw it as a way to really acknowledge their support and give something back to the community." The grade point average was set at 2.0 which is the retention GPA. required to graduate from MSCC.

Prior to initiating the program the President and his leadership team met with superintendents of local school districts including the superintendent of the area technical institute. The response to the program was very positive, and the President indicated that some were incredulous that the opportunity would not only be put in place, but would be ongoing. He also experienced frequent feedback from the community during the first year of CAP, often being stopped by members of the public who wanted to share their positive opinions of the program.

The President addressed the role that community colleges have regarding access particularly for underserved populations, “If this were a university, you know there would be admissions requirements that would screen out a lot of students.” He stated that the number of students applying for the program had increased because of parents and students attracted to the affordability of a two-year education.

When asked about the goals of CAP, the President said, “One of the primary functions was to extend public education to grade 14 without the cost.” He referenced other programs like CAP such as Knoxville’s Promise in Tennessee as an example of growing public awareness about the need for addressing the high school dropout rate. A second intent of the CAP was to create a service ethic in the participants by requiring volunteer service as a condition of participation. The President indicated that both CAP students and the community have responded positively to this component of the program. Several partnerships have developed from this aspect of the program including one with the city government and local chamber of commerce. He also discussed the benefits that volunteerism has had on CAP students in terms of persistence and success.

The President explained the MSCC was a member of a national association of community colleges participating in an initiative called Achieving the Dream (AtD) which is sponsored by the Lumina Education Foundation. According to the President, “Achieving the Dream’s primary audience is low income students and students of color although the strategies and interventions that are developed as a result of AtD positively impact all students.” AtD member schools are provided with a mentor and a data coach to help them develop strategies and initiatives to support student success. CAP has been a major area of focus during this partnership. The program involves several mandatory elements for CAP students such as enrollment in a college orientation course and academic advisement. According to the President, the data show a significant improvement in persistence for students from the fall semester to the spring semester, and from the fall semester to the next fall semester when they complete a college strategies course.

In discussing the specific effect that CAP has had for first generation college students from low-income families, the President explained what he viewed as the importance of the program’s visibility within high schools. His belief was that the recruitment and communication efforts within the high schools have increased the awareness of college as an option to students and their families.

The President discussed a recent conversation with a high school principal at school with a high proportion of low-income students as evidence that the removal of cost as a barrier and the promotion of CAP have positively influenced access to college for this population of students. The President discussed the important role that faculty have in establishing relationships with students in CAP. He related, “Having that

connection, having someone that gives you the confidence you need to succeed and helps support you when you're struggling academically just encourages you.”

There were challenges identified by the President regarding the initial implementation of the program. He explained that the size, scope, and novelty of the program created some challenges with communication and adoption within the institution. One particular challenge related to the completion of the Free Application for Federal Student Aid. According to the President some students had difficulty obtaining tax information from their parents who either did not file returns or were suspicious of providing this information to the College. He also acknowledged that for some families, a general lack of understanding of college processes could also be a barrier to CAP participation.

The President expressed enthusiasm for the support that the program had received since its announcement. He gave the example of the CAP Textbook Trust, created during the first year of the program to provide free textbooks for students in the program. He indicated that a community member made an initial contribution that was then matched by other donors and a substantial textbook endowment was established. The President also discussed the support from a local chamber of commerce that approached him about helping support the program by creating awareness among employers about CAP.

At the conclusion of the interview the President expressed his support for the research being done of the program. He indicated the value he saw in using data from studies such as this to improve CAP.

### **Director of CAP.**

The interview with the Director of CAP (Mr. H.) occurred in his office which is also the official headquarters for CAP. A desk, bookcases, and a small round conference table are his office furnishings. When given the option of choosing seating, the director opted to remain seated at his desk in his rolling office chair while the interviewer took a seat at the small table. The Director also kept the door to his office open, leaving both the interviewer and the director in the line sight and hearing of the CAP administrative assistant. It was an interesting choice by the director to sit in that position, but it did not appear to inhibit his responses to any of the questions.

Mr. H., the program director for CAP, has administrative responsibility for CAP. His small office staff consists of a counselor and a program assistant. The director works collaboratively with other areas of the college such as Admissions and Enrollment, Academic Advisement, Financial Aid and Student Recruitment to manage the program. MSCC has several campus locations, therefore, the CAP Director works with several liaisons.

The Director discussed the influence of Title IV programs on the development of CAP. He indicated that the MSCC explored how to adapt some of the retention and persistence strategies used in conjunction with a Student Support Services federal grant into components of CAP. Mr. H. explained that mandatory academic advisement, required volunteer service, and a social interaction component were identified as important elements to include in the program, and that scalability was a factor regarding how to integrate elements of a smaller grant program into an initiative the size of CAP.

Mr. H identified the main goals of CAP. One was to remove the financial barriers limiting access to higher education opportunities. In addition to access, the Director discussed the importance of persistence and student success. “Not only do we really want to make sure our students are succeeding at a higher rate than a comparable cohort, so (sic) we’re really looking at our persistence, graduation, and transfer rates as being a benchmark of success for our students.” Mr. H indicated that data for these first three years of the program had shown an increase in academic performance and retention for CAP students in comparison to their counterparts not in the program.

The Director discussed the expanded relationships that MSCC developed with area universities as a result of the program. He identified several new transfer opportunities (e.g., graduation and transfer symposiums) that have been created to target students from CAP. According to Mr. H, several of the four-year institutions have developed scholarships to award exclusively to students in the program. He works closely with several higher education institutions who request demographic information about students in CAP including their majors and career interests.

According to the Director, in the second year of CAP, a requirement to take an orientation course called Strategies for Academic Success was added to the program. The three credit hour class was taught through the Communications division of the college. A second course, College Survival, was also added with students needing developmental coursework in Reading I or Writing I as the target population. The faculty for these classes worked together to develop a uniform curriculum with a consistent set of learning outcomes. The curriculum includes modules on goal setting, time management, academic advisement, and college level writing. A team of strategies instructors meets regularly

and works with the college research office to measure the effectiveness of the course including student success.

Mr. H has a previous professional background as a Title IV programs administrator, and he shared his belief that student information is a key to success for first-generation college students. One of these areas is funding for a higher education degree. The Director described the attitude from high school students who have attended presentations on CAP, “A lot of times when you do a presentation and you talk to first generation students, they do not even entertain the possibility of going to school because they’re only concerned with financial barriers.” Per Mr. H., the reaction to the college funding component of CAP has been highly positive and created the avenue to discuss higher education access. He also related that once concerns about financing a college education have been alleviated then the focus should be on providing students with a great deal of information about higher education with attendant reinforcement of those messages.

The Director cited feedback from high school counselors as evidence that CAP is attracting students with no previous demonstrated interest in higher education. “I think there is a big sociological effect taking place. I think it happens because there are people from their own families and their own high schools going to MSCC.” In describing the demographic of the program he noted that there are affluent students and students from low-income backgrounds participating in CAP. His sense is that it is creating a phenomenon with the level of interest in the program, and that it positively influences students’ attitudes about college.

The Director discussed the technical aspects of applying for CAP and the important relationship that high school counselors have played in sharing information about the program and helping students navigate the process. One critical piece of the program is the requirement that all students complete the FAFSA. MSCC gave presentations in the local high schools and provided workshops to assist with this federal financial aid application process. That said, Mr. H recounted that there was, and continues to be, a challenge with this requirement. He indicated that, “A real fear of low income and first generation students is if they are to put down exactly how much money they make they’re afraid that they may lose other types of social benefits.” To combat this, the Director and his staff work closely with the MSCC Financial Aid Office to educate students and families about how the FAFSA application process actually works. Mr. H related that initially inquiries about CAP did not come from the parents of student with low-income, first-generation backgrounds. In fact he noted, “There is certainly a big divide from those students who are first generation and those who have parents who have been through the process.” Recently he has seen an increase in calls from those parents which he attributes to the growth and knowledge about the program. Some of the contacts have been from parents of juniors and sophomores who indicate that they want to start the process as early as possible to help their students.

The Director discussed some of the challenges in implementing a program of the scale and scope of CAP. Because MSCC has several campus sites, one of the first obstacles was developing an effective means of communicating with multiple stakeholders. There was also discussion about the impact that a substantial increase in academic advising traffic would have on the staff resources in each campus Advisement



Office. Because CAP also requires that the students complete 40 hours of volunteer service each year, MSCC contracted with an external volunteer service agency to manage an operation that involves over 3000 students and 1000 plus community partners. The profile of CAP has increased as a result of the visibility of CAP students working with various civic and social organizations in the community. An increase in public awareness has led to a corresponding yearly increase in applications for the program.

### **Institutional Documents**

Several MSCC institutional documents were identified and collected for the purpose of supplementing information collected through the interview process and broadening the understanding of the college-related experiences of CAP students. Marshall and Rossman (1999) note, “As such, the review of documents is an unobtrusive method, rich in portraying the values and beliefs of participants in the setting. (p. 116)” By analyzing the content of documents related to CAP, information can be gleaned regarding which experiences are most meaningful for the CAP students and whether MSCC’s strategies in administering the program connect to those priorities.

#### **CAP taskforce minutes.**

A college-wide CAP Taskforce was established in May 2008 to address implementation challenges associated with the creation of a program of this scale. The composition of the taskforce was diverse involving representatives from multiple campuses. Their roles included student services staff involved with admissions, enrollment, and advisement, faculty, CAP office staff, financial aid, student affairs leadership, and business affairs representatives. The taskforce initially met every two weeks, then monthly, and now has moved to a quarterly meeting during the academic

year. In addition to published minutes from each task force meeting, other products of the group include progress reports, work plans, and checklists.

The charge of the CAP Taskforce was to “examine the current College Access Program for the purpose of developing recommendations that: ensure program continuity, adopt operational best practices, forecast institutional support needs, incorporate cross-college, consultative and collaborative perspectives, and assist in the identification of dynamic solutions.” A review of the initial work plan indicated that the team divided its work into three main categories: time sensitive initiatives, collaborative initiatives, and quick fix initiatives. Prior to creating a work plan another document dated June 2008 and titled, “CAP Discussion Points,” appears to outline some of the major elements of the program, the current manner in which these elements are executed and whether there are any gaps or challenges with certain practices. For example, it was recommended that retention data from the past year on CAP students be examined to determine whether advisement controls such as restricting hours of enrollment or prohibiting online and short-term course enrollments should be required for certain categories of CAP student.

According to the September 17, 2009, minutes of the CAP Taskforce the MSCC college president, a guest at the monthly meeting, provided an extensive overview of the scope and purpose of CAP. The President explained the impetus behind the creation of the program, identified national initiatives from foundations such as Gates and Lumina, and college access models such as the Kalamazoo Promise as influential in the development of CAP. He stated that, “The program is to provide universal access to grade 14 for students graduating from high school and living in Oil County.” The

President went on to explain that one target population for the program is Pell eligible students who did not have plans to attend college.

The minutes from the taskforce meetings appear to be focused on concrete operational issues related to the implementation and management of CAP, as well as on philosophical issues such as the level of developmental support that is appropriate for these students. For instance, at the March 12, 2009 meeting an advisement checklist and advising protocol were presented as the final product of a sub-committee responsible for creating consistencies in the advisement process for CAP students taking courses at the various MSCC campuses. Several of the meetings were also focused on evaluating the effectiveness of CAP required criteria such as the completion of the federal financial aid process or the best means of providing orientation sessions for CAP students.

#### **CAP program agreement.**

Students participating in CAP are required to sign a program agreement as a part of the application process. The CAP Program Agreement Form provides an overview of CAP and explains the steps that must be followed to apply for the program. There are two major phases with deadlines that the students must meet to be eligible for the program. The first phase has three components: complete an online MSCC application for admission, sign a CAP Program agreement, and complete a FAFSA application to apply for federal aid. The deadline for this part of the application process is in late April. The second phase to the application process, with a mid July deadline, has two requirements. A student must provide a final eight semester official high school transcript and must enroll in classes for the upcoming fall semester. According to CAP Taskforce notes, this

date was delayed several weeks in response to requests from local high schools to have more time to prepare final transcripts.

The CAP Program Agreement also outlines the academic criteria that must be maintained by students in the program. Graduating high school seniors must have a 2.0 GPA on a 4.0 un-weighted scale. Students must be Oil County residents and maintain that residency while in the program. A minimum of three credit hours must be taken each fall and spring semester to maintain program eligibility. Students may participate in the program for no more than three years and can earn a maximum of 63 credit hours. At least 70% of the hours in which a student enrolls must be completed with a passing grade. And, program benefits are pro-rated based upon the number of years that a student was an Oil County resident. For example, a student who attended high school in 11<sup>th</sup> and 12<sup>th</sup> grade as an Oil County resident is eligible for a 50% benefit whereas a student who attended from 9<sup>th</sup> through the 12<sup>th</sup> grade as a resident of Oil County would receive 100% of the program support.

The Agreement explains how certain federal aid such as a Pell Grant is used as a gap funding mechanism to cover a portion of the tuition and fees for CAP students. It emphasizes the responsibility of the student to complete a FAFSA each year. The volunteer service requirement of 40 hours per academic year is also outlined, and the student development components such as required academic advising, orientation sessions and other CAP activities are referenced. The signed Program Agreement is filed in the Enrollment Services Office at MSCC.

### **CAP marketing materials.**

The Marketing Department at MSCC has assisted in the development of materials to promote and inform the public about CAP. One particular item that is produced in mass volume each year is the CAP Quick Facts Card. This card is provided to high school counselors, used by MSCC recruiters, and made available to the college student services areas. The Quick Facts card contains abbreviated content from the Program Agreement Form. It places an emphasis of the two phases that must be completed to be admitted into the program. It also lists contact information for the CAP Office and directs students to the student portal and their college email accounts as a source for college communications.

### **MSCC faculty newsletter.**

According to Yin (1994) documentation such as articles and news clippings can be used to corroborate or contradict findings. Faculty at MSCC publish a newsletter typically consisting of commentary on their college's initiatives and policies. Since the creation of CAP in 2007 approximately six issues of the newsletter, published quarterly, have contained editorials on CAP. The March 2008 volume contained both a letter to the editor and an editorial. The letter was written by the student government president for one of the MSCC campuses voicing a general support for CAP, but expressing the concern that the program created a disparity between students. The student leader wrote, "I am personally concerned about the burgeoning gulf that has been created between students who pay for their tuition and CAP students." The editorial affirms the student's comments and the editor indicates that faculty along with students have concerns with the philosophy behind the program. According to the editor, "Some students complain to

faculty that that CAP is welfare or social program for people that don't often need it; and the majority of behavioral science research shows that when you give something to people for free, its results are much more negative consequences in the long run.”

One area of discussion found in the faculty articles on CAP was whether the program should be merit based or access based. The faculty editor argued that a free college tuition program would lower the motivation of students to academically perform. The March 2010 faculty newsletter edition noted, “Research in both disciplines (psychology and sociology) has consistently shown that what people get for 'free' tends to be devalued, to be taken for granted.” This perspective contrasts with the performance of the students interviewed for this study, especially the five CAP students who participated in the follow-up interview who have a cumulative 3.1 GPA. Gamma, Zeta and Alpha indicated that learning about CAP prompted them to take advantage of the opportunity to attend college for free. Gamma said, “I thought it was a really nice opportunity for those that really needed a head start in college...I also thought it was about time people with lower incomes finally got a chance to get an education.” If there is a motivation gap it is not reflected in the overall performance of students in CAP as compared to their peers who are direct from high school.

One year later, in the April 2009 issue of the faculty newsletter, the first of a series of editorials from a senior faculty member concerning CAP began to run. The general theme of the first article was that the costs for CAP have escalated. A line item increase in the general MSCC budget for scholarships is cited as the source for this claim. The writer suggests that the MSCC President's intention to continue to increase the

number of students participating in CAP could create a long term financial burden for the college.

This theme is continued in the September 2009 issue of the faculty newsletter. The writer questions the merit of supporting CAP when salaries and merit pay have been placed on hiatus due to a severe economic down turn affecting the state and appropriations to higher education. The article goes on to suggest that one solution to this problem is to redefine CAP. It is recommended that the size of the program be scaled back and that the basis for awarding students be academic merit. A sliding scale was provided to show the percentage of monies that would be awarded, and students below a 2.5 would no longer be eligible for the program. According to the writer, “A scholarship program is most appropriately defined and structured to reward the most deserving and hardest working students.”

The December 2009 issue contains the third step to improving CAP which is to define the goal and purpose of the program in an unambiguous manner. The article suggests that contradictory published information about CAP make its goals unclear. It provides a comparison between need based and merit based support for students and states that further research should be done to modify the current model. This issue also contains a short article by the same writer indicating the CAP has grown by another 12% in its third year. He also suggests that other college priorities such as enhancing course management software and providing raises for employees are sacrificed as a result of CAP funding.

The faculty newsletter was published twice within the month of March 2010. Issue 3 continued the fourth and final set of recommendations to improve CAP. The

article restated several of the premises from the previous issues. For instance, it cited the inequality created between students who are in CAP and those who are not. It also reiterated the philosophy that many faculty feel that, “the over-justification effect occurs when an external incentive such as money or prize decreases or undermines a person’s intrinsic motivation to perform a task.” The article concluded by offering the following ways in which to restructure CAP. CAP students should be charged a fee for taking classes, a rebate would be provided to those who attend classes, CAP would be open to all TCC students with awards based on a financial ability to pay, and CAP would become a true scholarship program as outlined in the article published in the September 2009 faculty newsletter.

The latest reference to CAP was found in Issue 4 of the March 2010 newsletter in an article titled, “Fooling Some of the People.” The writer, the same author for all of the previous issues with the exception of the letter to the editor from the student government leader, took issue with data published in the local newspaper and with institutional reports about CAP. He reported that the Institutional Research (IR) Office had recently denied a faculty member’s request to conduct personal research on the success of CAP. And, the editor concluded that the failure of the administration to allow access to certain reports about CAP is a violation of state law with regard to open records.

#### **MSCC institutional data.**

A comprehensive benchmark study of CAP was released by the IR Office at MSCC. Specifically, the student success of the first two student cohorts was evaluated. The fall 2007 cohort consisted of 1,357 students and the fall 2008 cohort consisted of 1,467 students. Of both cohorts, females constituted 54% and 58%, respectively, and



males constituted 42% and 46%, respectively. Students of color comprised approximately 30% of both CAP cohorts. The highest percentage for a minority study group were African American students at 12% for each cohort. Native Americans represented approximately 9% for each cohort year. The mean average age of both cohorts is 18.5 years.

To receive CAP funding, applicants had to submit a FAFSA to determine their eligibility for federal student aid. Of those who submitted the FAFSA, 23.3% to 25.8% were eligible for Pell Grant funding. This means that the Estimated Family Contribution or EFC was a level to make them eligible for non-repayable federal funds. The fall-to-fall retention for the 2007 cohort was 57%. When possible, comparisons were made between CAP students and non-CAP students with the same demographic such as direct from high school. One finding was that CAP students have a higher success rate with regard to remedial courses.

In 2008, CAP began to require student participants to complete a Strategies for Academic Success class within the first two semesters of college attendance. The success rates in Freshman Comp I and College Algebra were higher for students who took and passed a Strategies class than those who did not take the Strategies course. This trend held true for several other courses as well such as General Chemistry.

Another statistical distinction was the difference in persistence rates for CAP students and non-CAP students. The Fall-semester-to-Spring-semester persistence rate for CAP students in both cohorts was five percentage points higher than their comparison cohorts. According to the report, "...these two cohorts persisted from Fall-to-Fall at a rate of 57.1% and 60.8%, respectively, compared to a benchmark of 50%." All of these data

suggest that interventions specific to CAP such as required advisement, a required orientation, and required enrollment in a strategies course positively affect academic performance and persistence for students participating in the program.

### **Instant Messaging (IM) Interviews with CAP Students**

Interviews are an effective means for understanding the experiences of research subjects through structured or unstructured query. A protocol was developed to ask CAP students open ended questions about CAP and their college experience. According to Patton (1990), interviewing allows the researcher to gain meaningful data by determining perceptions about a subject, experience or problem. He also notes, “It is the responsibility of the evaluator to provide a framework within which people can respond comfortably, accurately and honestly to these kinds of questions (Patton, 1990, p. 279). The medium of instant messaging was chosen to conduct interviews to test the concept that direct from high school students who are active users of multiple types of social media such as texting, instant messaging and emailing, would be more responsive to this form of interview versus the traditional in-person format. Despite some challenges with setting up interview times the use of IM technology was a successful method of conducting the interview and collecting the data.

Ten first-generation, low-income CAP students were interviewed via IM. The average age of these students was 19 years (Table 2). Most of the students who agreed to participate were in their second year of the program. The following vignettes provide some general demographic information along with a summary of responses for each student.

Table 2

*CAP Participants: IM Interviews*

Student	Age	Race/Ethnicity	Years in CAP
Alpha	22 years old	African-American	3
Beta	19 years old	Latino	2
Gamma	19 years old	White	2
Delta	20 years old	Native American	2
Epsilon	19 years old	Asian-American	1
Zeta	19 years old	White	1
Eta	19 years old	African-American	1
Theta	19 years old	African-American	1
Iota	19 years old	Latino	1
Kappa	21 years old	Latino	3

**Alpha.**

Alpha, the first CAP student to be interviewed for this research project, is an African-American female who is 22 years old. She was recruited to participate through a third party and expressed early interest in being interviewed. Then a week elapsed without a response from the student. A follow-up email was sent to her and she immediately replied and apologized for not responding, citing work and school conflicts. A late evening time to meet online was then set. When Alpha was asked the initial question about her parents' level of education her reaction was surprising. She typed that

her parents' were present and she was going to ask them personally. When she returned to the chat, she provided a very detailed description of their higher education experiences.

Alpha indicated that both of her parents attended college but neither earned a degree. Her mother attended a historically black college. Her father completed course work at a research university which Alpha related was not something she knew. Alpha also reported that her parents regularly spoke of the importance of a college education and encouraged their children to attend college. Alpha indicated that she did not prepare academically to attend college and graduated from high school with a 2.1 GPA. Alpha stated that her counselor told her about the CAP.

She shared that she did not have any personal resources to attend college and had to rely on loans and CAP funding. Because she had very limited resources, the most helpful part of the CAP experience was the funding. One significant challenge for Alpha was the difficulty in securing textbooks for class. She explained that free textbooks were an initial component of CAP, but it became clear that the college would not supply books for all CAP students after the first year of the program. Securing reliable transportation to school was her main challenge the first year in the program. "The only difficulty I had at first was getting to school." Alpha reported she did not own a vehicle and currently takes the bus to campus. She plans to earn an Associate's in Journalism at MSCC and transfer to a larger research university. This semester she is completing an internship at a local news station in Oil County.

**Beta.**

Beta is a Latina student who was recruited by a third party to participate in the study. Nineteen years old and a sophomore, she immediately agreed and came to an off-

campus center to complete her interview. The administrator at that site assisted her with obtaining her GoogleTalk ID and she used the computer there to meet online in the late afternoon. Significant lags recurred in the response time to questions. As questions were posed, long periods of time would elapse before Beta responded. Then an IM pop-up would indicate that Beta was typing, but the responses received were very brief in relationship to the length of time spent responding.

Beta indicated that neither of her parents graduated from high school but that her parents encouraged her to pursue a college education. Her sister, a year older and already attending MSCC, helped Beta figure out the college entry process. Beta indicated that she did not decide to attend college until her senior year and did not take college prep courses while in high school. Beta learned about the TA program from a TCC recruiter who made a presentation to her senior English class.

Beta expressed concerns about the costs associated with attending college. “I just had no idea about anything really, so I was a bit worried I could get into debt or something.” She had some challenges with completing the application for federal financial aid which is required as a part of CAP admission. Her parents were not able to assist her with this effort even though their taxes were needed to complete the required forms. Beta’s sister recommended that she go to an MSCC outreach center for assistance with the financial aid process.

A college strategies course, required for all CAP students, was taken by Beta during her first semester. She found the course very helpful, particularly because of the information provided by her instructor about time management and note-taking skills. Studying and adequately preparing for classes has been the greatest challenge for Beta.

But she found her professors to be supportive and willing to provide her with help after classes.

Beta's initial educational goal was to be a kindergarten teacher, but she indicates she is now undecided about her major. Currently, she is focused on completing her general education requirements within the next few semesters. Beta plans to continue to explore degree options with a goal of completing an associate degree at MSCC.

**Gamma.**

Gamma was recruited at a CAP seminar following a brief announcement about the research study. She came to the recruitment table and asked whether she would be eligible because her parents attended some college in another country. Following discussion with Gamma about the definition of a first-generation college student and the purpose of this research she expressed an interest to participate. After reviewing the IM interview consent form, she signed it in person. Gamma, 19 years of age and Caucasian, appeared to have no major challenges in establishing a GoogleTalk account. In fact, Gamma responded to the follow-up email within a few hours and a time was quickly set for late afternoon to meet online.

Gamma indicated that her mother and father each took college coursework in a Caribbean country and her father attended a local technical school. They encouraged her to obtain a college degree. Gamma took the ACT her senior year but did not take college prep classes or make definitive plans concerning college attendance.

Gamma learned about CAP from an MSCC recruiter. She obtained additional information about the program at a college fair. She had no personal or family resources to attend college. Gamma felt that CAP staff and other college staff were responsive to

her needs as a student and indicated that all of the CAP sponsored events and activities she has participated in have been very beneficial. She stated, “There have been a lot of helpful people from the program.”

Gamma had no criticisms or complaints about the program and did not feel she could identify any specific difficulties with the way in which the program is run. Gamma plans to eventually earn a bachelor’s degree in Communications from a local research university. Her goal is to become a journalist. Gamma is currently focused on finishing her general education requirements at MSCC and then transferring.

**Delta.**

Delta, a 20 year-old Native American student, responded to electronic postings about the opportunity to participate in the study. Additional information was emailed to her including a research flyer to explain the project. She appeared to have no difficulties in navigating the IM process and established a GoogleTalk account within a day after agreeing to an interview.

Delta indicated that her mother and father each attended MSCC. She also reported that while she always planned to attend college her parents never specifically discussed the importance of a college education with her. “I don’t really remember any specific thing she (mother) said. I think it was more of me driving myself than anyone influencing me.” Because Delta planned to attend college she took several AP courses in high school. She also received information about colleges from her school counselor and learned about CAP from her counselor and from other students at her high school.

According to Delta, there were no personal or family resources available to pay for college but she did receive a scholarship from her Native American tribe. Delta

identified the mandatory orientation session at the beginning of her first semester as one of the most beneficial parts of being in CAP. She listed the mandatory College Strategies class as the least helpful part of the CAP program. Delta stated that high school AP courses prepared her for college-level academics. Her immediate academic plan is to transfer to a regional university in the spring of 2011 and major in English. As a career objective, Delta indicated that she wants to become a novelist. Her advice to other first generation college students is that they should take responsibility for themselves and not rely too much on family or friends.

**Epsilon.**

Epsilon is a 19 year-old Asian-American student who was recruited at a CAP seminar held in the auditorium at one of MSCC's campuses. She was given a general overview of the process and then provided her contact information. Epsilon created her GoogleTalk account the same day that she received the email requesting a time to set the IM interview. The first interview time had to be rescheduled and the second interview started late because the student was not online at the set time. About 40 minutes after the originally agreed about time, the interview took place.

Epsilon reported that both of her parents took college courses but did not earn degrees. She reported that her mother encouraged her to attend college and shared with her information about scholarships and the CAP program. She learned about the program from her high school counselor. Epsilon has no family or personal resources for college, so she is totally dependent on student financial aid and CAP funding. She identified the mandatory volunteer service hours as the most beneficial aspect of the CAP program because it gave her an opportunity to "give back." Ironically, she listed the required



number of volunteer service hours as the least beneficial component of CAP. Epsilon believed that she had too many life demands (e.g., work and family) to fulfill the service requirement.

Her major difficulty during the first year was paying for textbooks. Getting a bachelors degree is her main short-term academic goal, although she has not decided on a major. Epsilon's advice to other first generation students is to apply for every scholarship for which they are eligible and to work hard. Next semester she plans to finish her general education requirements and transfer to a regional university.

**Zeta.**

Zeta is a Caucasian student who is 19 years of age. She was recruited at a CAP seminar at an MSCC Campus. She and a small group of her friends visited for about 10 minutes after the CAP session to ask more detailed questions about the project. Zeta and the others agreed to participate and provided contact information. She was the only student from the group to follow through with the process and participate in an interview.

Zeta explained that her mother took courses at a technical college but did not earn a degree. This student indicated that her mother made it clear that earning a college degree is important. Zeta reported that she planned to attend college while she was in high school by attending fairs and signing up for a state program to assist low income families. Zeta heard about CAP while she was in high school and later as a student at Tulsa Technology Center.

Zeta had no personal or family resources to assist her in paying for college. She indicated that her mother is disabled and while in high school she worked a full-time job to provide support for the family. Zeta was excited to learn that tuition assistance was a

component of CAP and felt this was one of the most beneficial aspects of the program. She experienced the greatest challenge in fulfilling the volunteer service hour requirement associated with CAP citing specific difficulties in working with the outside agency that coordinates the process.

Some of the adjustment issues experienced by Zeta included learning to manage time effectively, to study, and to complete assignments. Adjusting to the rigor of college was also a challenge. "You aren't told what to read or study, so there would be topics on tests that I would not be familiar with. It takes time getting used to. It is definitely a change of pace from high school." Zeta plans to complete a certificate in Lab Technology and an associate's degree in Biotechnology.

**Eta.**

Eta is a 19-year old African-American student who was recruited in person as a part of planned campus visits. Eta had a very busy school schedule, and it was challenging to set a time to meet. It took approximately two weeks, numerous emails and phone calls before a time could be arranged to interview. The IM interview occurred over two sessions with the first interview time set up for noon. It started at 12:19 p.m. and at about 1:00 p.m., she indicated that she had to conclude the IM interview to go to work. She asked if we could finish the process when she got off work at 9:00 p.m. We resumed the interview at 9:47 p.m. Two follow-up questions were eliminated when Eta indicated that her father was directing her to end the interview so he could use his home computer.

Eta regarded her parents as very supportive of her plans to attend college. She stated, "My parents always told me and my brothers when we were growing up that not going to college wasn't an option." It was not until she got older that Eta appreciated the

importance of this encouragement from her parents. Her preparation to attend college included taking the ACT. According to Eta, she had to take the ACT numerous times to obtain a successful score.

Eta heard about CAP from her high school counselor. Although her tuition and fees are covered by the program, she needed to take a part-time job to pay for expenses not covered by CAP. Eta noted that the program has been helpful for her as a college student and that some students who are not in CAP have expressed envy about the opportunities provided by the program. She also indicated that she had planned to try to attend MSCC even without CAP because she knew it would be too expensive to attend a university.

**Theta.**

Theta is 19 years of age and an African-American student. She was recruited with the assistance of the director of a federal grant based program at MSCC. After exchanging several emails, Theta was able to participate in the research process. Although she agreed to participate in a follow-up interview to further explore the responses she provided about her CAP experience a date could never be set. Initially, Theta stated she would be available, but after a few email communicated ceased.

Theta stated that her father was not in the household, but that it was her understanding that he did not attend college. She reported that her mother attended classes at a two-year college while pregnant with her brother. Her mother encouraged her to go to college and complete a degree. Theta first learned about CAP from her mom who read about the program in the local newspaper. “My mother heard about CAP and signed me up pronto! And she always put into me that school is everything.” According to

Theta, she had an older brother who tried to participate in the program, but was not successful in getting accepted.

CAP and federal financial aid were the only resources available to Theta to fund college. She was concerned that attending college would put her into immediate debt and that she would be unable to pay the bill to attend MSCC. CAP alleviated those concerns for her. Once the issue of finances was addressed Theta contacted counselors at TCC to inquire about what steps should be taken to get ready for college, including asking about classes required for her major. She made practice schedules so she could figure out what type of schools supplies and books were needed for certain classes. Despite initial barriers such as learning to navigate the campus and understand her schedule, Theta has managed to be successful and plans to transfer to a four-year college to complete a degree in management.

**Iota.**

Iota is a 19 year old Latina who was recruited through a third party to participate in the study. She did not respond to an initial email request to schedule an interview so a follow-up email was sent about a week later resulting in her agreeing to an interview.

According to Iota, her parents have no higher education experience. Both her mother and father immigrated to the United States in their early teens. Iota indicated that her father completed eighth grade and her mother did not complete high school. Attending college has had an influence on her family. Iota reported that her father is currently working on his GED and cited her college attendance as inspiration. Iota stated that she always planned to attend college and focused on her academics as a high school

student. “Throughout high school, I worked hard in school to have a good GPA.” She graduated with a 3.98 GPA.

Because of her family’s limited resources Iota knew that her parents would not be able to assist her with educational expenses in college. When she learned about CAP she met with one of her high school counselors to find out how to apply. Iota was determined to identify all of the options available to her to go to college. At MSCC she continues to work closely with academic advisors to choose classes and complete the prerequisites for her major. Iota intends to transfer to a university after one more year in CAP to complete a Nursing degree.

**Kappa.**

Kappa is a 21-year old, Latina student. She was the second student to express interest in participating in this study, but the last student to actually interview. The director of a federal grant program for low-income students at MSCC personally recruited the student. Several phone calls and emails were exchanged over the course of five weeks before the interview occurred.

The parents of Kappa have never attended a college or university. Her parents had very limited educational experiences. Kappa reflected, “If I remember correctly, my mom made it to the fifth grade and my dad to the third.” She felt unprepared to go to college and cited her lack of interest in preparing for college. Kappa did take the ACT and sent an application for admission to a university close to home. But she indicated that her desire to go to college was based on wanting to be with her friends who had plans to attend.

The costs associated with attending college were a major concern for Kappa. She was unsure as to how much a college education would be. Kappa stated that she would not have been able attend without CAP funding. She reported some difficulties in understanding how the financial aid process worked which resulted in some delays with regard to her federal aid. CAP provided her the structure and resources needed to be successful. Kappa has decided to complete her associate's degree at MSCC before transferring to a local private university to earn a four-year degree.

The IM interviews provided a rich set of data to explore the experiences of first-generation, low-income students in CAP. The most effective recruiting strategy for these participants was to make personal contact with them or to have a third party introduce the research project to them. Scheduling interview times presented some logistical challenges, given these students school, personal and work obligations. Once GoogleTalk accounts were established, students used the IM technology with minimal difficulty. Their responses were quit candid and detailed. Several of these students demonstrated a high level of engagement with the process. They provided responses that were further explored by follow-up, in-person interviews.

### **In-Person CAP Student Interviews**

The initial collection of data through IM interviews was expanded upon by identifying a core group of CAP students to complete a follow-up interview. Seven of the 10 students who participated in the IM interview process were asked to interview again, and 5 of them followed through with an in-person interview. Critical case sampling was the process used to select these students. The goal was to select students who best mirrored the first-generation, low-income college student construct and seemed capable

of providing thorough and candid feedback. The responses from these CAP students in their initial IM interview served as critical case examples. They confirmed information given by key informants about college access challenges such as lack of financial resources or knowledge of college processes (Patton, 1990).

Table 3

*CAP Student In-Person/Follow-up Interviews*

	High School GPA	Major	College GPA	2-yr Degree Plans	4-yr Degree Plans
Alpha	2.12	Journalism	2.81	Associates	Bachelors
Gamma	2.90	Journalism	2.75	Transfer	Bachelors
Epsilon	3.12	Liberal Arts	2.75	Transfer	Bachelors
Zeta	3.84	Biotechnology	3.31	Associates	No
Iota	3.91	Nursing	4.0	Transfer	Bachelors

The purpose of the second interview was to explore further information shared during the first interview. Different from the IM interview, the questions for the second interview were unstructured. Participants were provided transcripts of their first interviews and allowed time to review their responses. A second Consent to Participate Form was reviewed with the students, and a copy was provided that they could keep for their records. The CAP students were given the option of choosing the interview location. Most arranged to meet on the campus where they take classes. The office of the dean of an academic division was used in these instances. There was a seating area with two small love seats positioned in an L-shape with a small table between them. After seating the students in this area and closing the door to the outer office, the interview process began. One student requested that the interview take place in the campus office where she

worked. This area contained several work spaces with adjoining rooms. Because a few students were present in one room, the interview was shifted to the adjacent room which contained a small conference table. There was no door between the spaces, but the student seemed unconcerned about the others overhearing the exchange.

Alpha was chosen for a follow up interview because of her candor and several intriguing responses she shared. For instance, she was quite direct about her poor level of academic preparation in high school and lack of interest in college until the end of her senior year. Alpha also strongly expressed the opinion that CAP was responsible for changing her personal trajectory and her educational success. In the follow-up interview, she provided further detail about her lack of interest in college. “I got an application and it looked like a big pain to fill it out.” She recalled learning about CAP from her high school counselor and hurriedly turning in her materials, then learning at the Senior Awards Assembly she had been admitted into CAP. Alpha also shared how the program had transformed her as a student and that she has now been on the Dean’s Honor Roll which would have been unimaginable for her in the past. She stated, “It feels good not to be a slacker.”

Gamma spoke compellingly in the initial interview about her lack of interest in college. Her parents immigrated to the United States and often spoke with her about the importance of going to a college or a university. Gamma did not take school seriously and planned to get a job after graduation from high school. The in-person interview provided a format to further explore this lack of desire. Gamma explained that her peer group was not “future-oriented” and that her boyfriend did not value the idea of attending college. The latter circumstances led her to end the relationship after she started attending



MSCC. Gamma shared an interesting observation about students who are college ready and those who are not. She suggested that in high school, “The college process is intimidating and more geared toward those students who are prepared.” She also referred to the college support programs provided through CAP that were referenced at length by the CAP Director during the key informant interview. Gamma felt that one benefit of CAP was the advisement and support for students who need to learn what it takes to be successful in college, remarking in the follow-up interview, “I loved that they make you go to see the advisor and they can get you back on track. I like to see different advisors who each have their own way of helping me.” Gamma also mentioned the positive impact these required interactions had on her academic performance and personal confidence.

The MSCC College President who served as a key informant spoke specifically about the economic challenges that many families face regarding the ability to pay for a college education. He discussed the value of a program like CAP to make college a viable option for families with financial barriers. At the start of the IM interview Epsilon indicated that despite her parents’ support of higher education, she was acutely aware that they did not have the financial resources for her to attend college. To explore this issue further, a follow-up interview was set. Epsilon was adamant about how CAP made it possible for her to attend college. She explained that she knew that support from a grant would not pay her tuition. Even with CAP support, she continues to work a part-time job to pay for expenses and textbooks. Epsilon indicated that her success at MSCC with CAP had led her younger sister to consider college. “My sister seems worried about her grades, but I am pretty sure she will do the CAP program. My parents definitely want her to.”

Zeta offered some comments of interest during her IM interview that invited more study. She noted that an older sister had unsuccessfully attempted to take college classes that left her with a loan debt and no degree. In the follow-up interview, Zeta provided further explanation that her sister had struggled and then quit classes causing her to go into default with her educational loans. As a result, she had fears about her ability to be successful as well. "I know my Dad wanted me to go to school. Since they (sisters) didn't do well or make it through I wondered if I could. My sister couldn't keep up with the work." Zeta elaborated on her challenges with funding college which required her to work in high school and in college. She worked two part-time jobs in high school clocking approximately 50 hours a week while trying to maintain her grades. Zeta downsized to one job and reduced her hours to 35 per week. The experience of juggling work and school emerged a theme in the interviews.

Iota was the final student to participate in a follow-up in person interview. Like two of the other CAP students, Gamma had parents who were immigrants. Further, they did not have enough understanding about higher education to direct her through the college process. Iota provided greater detail about her family's background with regard to higher education. One older brother graduated from high school and the other did not. Her parents defined success as obtaining a high school diploma. In addition to providing more detailed information about her family support, Iota explained in more depth her experiences with CAP activities such as academic advisement. She stated, "The most helpful thing about CAP has been the required meetings with school advisors because they made me realize how classes would transfer and which classes were best to take at a time." After pointing this out on the transcript provided during the second interview, Iota

elaborated by explaining the value of the semester meetings with an advisor to make sure she was on track to complete her transfer coursework. These academic checklists are referenced by one of the key informants and discussed at length by the CAP Taskforce. According to Iota, “It would have left me with classes I didn’t need or that didn’t transfer. It would have stressed me out more. Instead I feel more confident about what I’m doing.”

### **Summary**

The follow-up interviews with these five students enriched the data collected during the IM interview process. Because these students reflected the population of students to be studied through this research effort, they provided an ideal critical case grouping to better understand the experiences of first-generation college students from low-income backgrounds. Their responses also paralleled information provided from key informants and through the institutional documents that were collected with regard to CAP.

### **Themes in the Data**

Some scholars note that research “should be guided by systematic considerations, such as existing theory and empirical research (Marshall & Rossman, 1999, p. 29).” There are myriad theories on retention and persistence for college students. Tinto, Chickering and Astin argued that student success is connected to two factors: social cohesion and social integration (Terenzani, 1987). Vincent Tinto maintained that student integration is a critical component of student success (Terenzani, 1987). His theory provided a descriptive context for the research methodology and served as the theoretical framework to analyze the data collected for this study.

The purpose of this study was to examine whether a college access program at a community college mitigated institutional and environmental barriers that have historically impeded the academic success of first-generation college students from low-income backgrounds. Vincent Tinto's (1993) oft utilized theory on student integration provided a framework for understanding the significance of themes that emerged from the data. According to Yin (1994), analyzing findings by relating them to the initial literature and research questions that were a part of the theoretical propositions is one logical way to approach a case study. The following key research questions helped to frame the data collection: (1) How do first-generation college students from low socioeconomic backgrounds describe their collegiate experience? (2) How does CAP influence low-socioeconomic-background-first-generation college students' understandings of the college experience? (3) How does the theoretical work of Tinto on student retention inform the explanation of those experiences? (4) What other realities are revealed in this study? The aspects of CAP, such as college access and student support, which integrate with Tinto were explored through four major research questions. The CAP student responses to those questions yielded some recurring ideas. "More than any other aspect of [the] design, [the] research questions will have an influence on, and should be responsive to, every other part of [the] study" (Maxwell, 2005, p. 65). The theoretical framework and methodology are key parts of this conceptual structure and should serve to help you answer the fundamental problem associated with your study. Maxwell (2005) argues that researchers frequently fail to provide detailed explanations of how the data analysis process works, but typically rely on generalized explanations of the technical process of analyzing data.

As data were collected from various sources for this research, notes and small memos were written whenever it seemed meaningful. For instance, a connection was made between the headlines of a faculty newsletter about CAP because of use of the term “access” (Bergerson, 2009; Brock, 2010; Perna, 2000) which was also present throughout the research collected for the literature review. A physical note was made and that particular paper was placed in a designated folder to be reviewed in more detail at a later time. As interview arrangements were made, notes about the scheduling experience were kept in a notebook. During the process to recruit CAP students for IM interviews, brief comments were written on a log beside potential students’ names regarding any observations or feedback for later use should the students follow through with interviews. All email correspondence with CAP students was electronically stored and printed later. These types of notations and prompts were used throughout the data collect process. Ultimately all forms of the data collected from this study were gathered into one collective location, typically being printed or copied when possible. The formal start to the analysis process began once transcripts for the IM interviews and in-person interviews had been created. These transcripts were accompanied by extensive researcher notes that were taken during the course of the interviews. The in-person interviews were digitally recorded and stored on a laptop. The technology used to tape the interviews made it fairly easy to play different parts of the recordings and this was done from time to time when certain ideas warranted further exploration.

### **Organizational Categories**

Certain core themes begin to emerge that seemed to inform the research problem and questions. Some of these concepts were anticipated given the topic, others were

Table 4

*Three Bins of Categorical Analysis, Four Research Questions and Multiple Themes*

Organizational (Expected)	Theoretical (Framework)	Substantive (Descriptive)
How do first-generation college students from low socioeconomic backgrounds describe their college experience?	How does the theoretical work of Tinto on student retention inform the explanation of those experiences?	How does CAP influence low-socioeconomic-background-first-generation college students' understandings of the college experience?
What other realities are revealed in this study?		
Motivation	Academic integration	Gratitude
Peer Relationships	Social integration	Pride/Belonging
Family Support	Access	Working Students
College Support	Success	New Identity
Working Students	Persistence	Juggling Expectations
Financial Support	College choice	Self-Determination
	Involvement	Performing
	Engagement	

Note. Categorizing strategy developed from Maxwell (2005).

illuminated through the theories identified in the literature, and lastly particular ideas materialized in the language and responses of the CAP students. Maxwell (2005) identifies these conceptual tools as organizational, theoretical and substantive categories

of analysis, respectively. For example, six particular themes were (a) *working* college students, (b) personal *motivation*, (c) the influence of *peer relationships*, (d) the role of *family support*, (e) *financial support* or resources, and (f) *relationships with college faculty and staff*. These themes were identified fairly early in the research proposal development process as topics that would likely be explored or surface when asking about a first-generation, low-income college student about their experience.

### **Working Students**

First generation college students from low-income families continue to experience challenges associated with having limited financial resources. All 10 of the CAP students originally interviewed indicated that they were working a job while attending college. What is noteworthy is that, on average, participants in this study worked more than 30 hours per week while in some cases taking a full-time course load. Many of these students started working in high school. In some instances, they worked to provide household support and also to meet their personal expenses. According to the President of MSCC, one intended goal of CAP is to increase the number of students applying for financial aid and to help families develop an awareness of the resources available to attend college.

The statements made by Zeta regarding working during high school were compelling. She lived in a single parent household with a disabled mother and worked two jobs while in high school. Zeta reported that she was working approximately 50 hours a week in two part-time jobs. After enrolling at MSCC, Zeta quit one job and now works approximately 30 hours a week. She reports that this is a more manageable amount of time, and that it has allowed her to focus more on studying and class preparation.

Iota shared a similar experience with regard to the need to work during high school. While she was not obligated to provide household support, there were no family resources to help with her needs. These first-generation CAP students from low-income backgrounds typically had the responsibility to work and financially support themselves. These students reported working schedules that ranged from 30 to 40 hours per week. These students' attitudes about working is particularly compelling in their expression of enthusiasm that going to college has allowed them to reduce their work hours to what the research would still regard as a high risk work schedule in terms of time for academic preparation.

### **Motivation**

Another common theme that emerged in talking with these CAP students was their belief that personal motivation was a major factor in making decisions about college. Alpha described herself as unmotivated through most of high school. She related that she did not focus on attending college until her senior year. Prior to this she planned to graduate from high school, marry her boyfriend and find a job. Alpha described herself as lazy. She indicated that there were some classes that she would work hard in such as English where she was more interested in the subject. Her grades improved within the last few months of her senior year. As a result, Alpha was able to graduate with a grade point average that was just above a 2.0. At MSCC she struggled with a few courses, particularly College Algebra, which she had to retake. Alpha found her niche and academic success taking English compositions classes which led her to declare a major in journalism. She noted it the key to her success was to, "Study more, work harder, care more and not be a slacker."



Gamma was not interested in high school or college. She contemplated dropping out during the eighth grade. Her parents continued to push her to stay in school so she did. They also wanted her to attend a community college because they believed it would be the best setting for her to be successful. Her desire to stay in school began to change when she got involved in activities such as the choir. Gamma also discovered an affinity for subjects such as English. These experiences helped to change her mindset regarding higher education. Initially, getting into a local technical college became the focus of her efforts.

In contrast to the lack of interest expressed by Alpha and Gamma, Zeta was extremely motivated with regard to high school, and in terms of her determination to attend a college or university. She sought out opportunities to fund a higher education degree such as grants available through the state and of CAP. Zeta had challenges such as tardiness created by her efforts to juggle two part-time jobs and high school responsibilities. Data collected by the IR Office at MSCC show that the retention rate for CAP students is higher than that of students from the same demographic who are not in the program. The personal motivation of these CAP students could be a possible factor in increasing their persistence from semester to semester.

### **Peer Relationships.**

Gamma stated, "My friends were not very future-oriented, just kind of running around." She further explained that she was the only person in her six-member peer group from high school that went to college. This lack of peer support can be a barrier to access and success for some first-generation, low-income college students (Hsiao, 1992). According to Gamma, her decision to attend college was a stressor in her relationship

with her now boyfriend who felt that she was choosing school over him. He specifically advised her not to pursue a college degree, but to instead finish high school and look for a job. Gamma lamented the loss of connection with her high school friends. But she noted that she had become reacquainted with a friend from childhood who is currently attending a private university near MSCC. Gamma related that two categories of students exist in high school, those that are prepared for higher education and those that are not. She felt that the system is geared toward the prepared student, and without adequate support it is easy to become intimidated by the processes involved in attending college or university.

By the 10<sup>th</sup> grade Iota knew that she wanted to go to college. None of her friends seemed particularly interested in attending. Most of them did not attend college although there were some who took a few classes. Iota said, “We don’t see each other much or even at all.” She further explained that they no longer had the same things in common. Iota felt that her focus was now on school and accomplishing certain goals that her friends from high school who did not go on to college could not relate to. For Zeta, the experience with peers was just the opposite. While in high school she took technical classes along with high school course work. Zeta found that students in her technical classes were fairly motivated and were actively making plans to attend college once they graduated from high school. She described herself as surrounded by students who valued going to college. Like Gamma, her boyfriend did not go to college. He also did not finish high school. According to Zeta, “My boyfriend just got his GED. He doesn’t value college, and does not want to go.” Despite this lack of personal interest in higher education, Zeta is able to share her fears and concerns about being successful in college

with her boyfriend. She seeks him out for support, “All the time I think, I’m not going to be good enough! I think about what I have to get done, and I talk to my boyfriend.”

Alpha described herself as an unmotivated high school student with no plans to attend a higher education institution until the last part of her senior year. She indicated that her friends shared the same attitudes with regard to college. Alpha and her friends did not talk about preparing for college. Alpha noted, “There is tension because some (friends) don’t understand why you’re in school. You become too smart for those people, and you have to change the people you surround yourself with.” She has experienced positive family support indicating that her parents are now really proud of her because of the changes she had made since becoming a college student. Alpha planned to marry her high school boyfriend when she graduated from high school and look for a job. She lost touch with many of her friends once she started attending college. Alpha felt that their interests had become very different and there was less in common to maintain relationships. One particular experience moment stood out for her. Alpha recalled seeing a former friend pushing a baby stroller past her campus. In recalling their brief conversation Alpha reflected that her friend had a life that she had once planned for herself, but that now held no interest for her. The connections she was making with other college students had significantly changed her circle of friends and acquaintances. Some of the first-generation, low-income college students in this study lost certain relationships while other maintained relationships.

Gamma shared, “Most of my friends from high school are either not ever going to college or went the first semester and then dropped out.” She lost touch with many of them. Gamma said that there are two categories of student, prepared and not prepared for

college. She described the college process in high school as intimidating and geared toward those students who are prepared. Peer groups can influence in both positive and negative ways for first-generation, low-income college students (Orbe, 2004; Thayer, 2000). In some instances, their perceived lack of support is a detriment to success, but ironically these attitudes of disinterest can also serve as a motivating factor for some students to succeed despite the lack of support.

### **Family Support**

Family support to attend college or a university was varied, and not always adequate. Despite no experience or limited experience in a higher education environment CAP students shared that their parents wanted them to go college. However, beyond expressing support their parents did not always know how to help them accomplish that goal. CAP Taskforce minutes indicate that MSCC created several initiatives to help educate families and students about college processes. Several workshops were offered at MSCC and in the community to explain the application process for federal financial aid. There were also CAP 101 sessions open to both students and their parents to provide information about the program and the college admissions process. In some instances, the CAP student became the member of the family who was knowledgeable about college and the resource to help inform siblings and even parents about higher education processes. Iota felt that her parents were most concerned about her success in high school and did not talk with her about college. She stated, “Personally they would be happy if I graduated from high school. I have two older brothers and one didn’t graduate and the other just graduated.” While Zeta’s mother did not have specific guidance about the college process, she did encourage her to take advantage of high school sponsored

activities such as an SAT summer camp to prepare for college. Her older sister tried unsuccessfully to take some accounting classes at the college level. Zeta learned enough from her college experiences to help her older sister pay off a loan that was in default and attempt to attend college again. Iota has a sister in high school who regularly asks for her advice and not their parents about college. Alpha explained that every year she helps her parents with completing the federal financial aid application. “It’s like a foreign language to them. When I read them what the FAFSA says they either do not understand, or they just want to hand me their tax info and have a counselor do it at my school.”

Many CAP students revealed that a sense of support from their families influenced their decision to attend college. Epsilon indicated that conversations with her parents created the impression that college was important—and that it was imperative that she pursue a degree. Her parents also provided her with information about scholarships and the CAP program at MSCC. Zeta reported that because her mother took some college classes, it became clear from their conversations that college attendance was not optional. Alpha described how her parents told her and her siblings about the important role a college education plays in determining a person’s quality of life and career opportunities. Gamma revealed that a conversation with her father about college influenced her decision to attend MSCC. She noted that her father—who had taken college courses—recommended that she attend a community college because of its reputation for providing a nurturing and supportive academic environment. Iota stated that her parents did not understand that a college degree was a real option for her, but that she has an older brother who has attended college. His attendance convinced her that a college education was a possibility. Theta was unequivocal in her belief that her mother

supported her goal of attending goal. “She always put into me, that school is everything.” This motivated Theta to seek out her high school counselor to work with her on college readiness.

Family support for CAP students varied depending upon factors such as family size and parent educational level. Epsilon was encouraged by her family to attend college despite their lack of knowledge about how to navigate the system. While her parents could not always address questions about college it was made clear to her that they expected her to attend college. Epsilon said, “They didn’t want me to stop just at high school or go get a full-time job. They wanted me to go to college.”

### **Financial Support**

Securing the financial resources to attend is a challenge for many high school students and their families. Every student believed that CAP’s financial support was critical to their ability to attend college. Kappa replied simply, “The College Access Program was the only reason I was able to attend college.” This sentiment was echoed by Iota who did not know how she would finance a college education. Iota said, “Before I heard about CAP, I wanted to go to college, but I didn’t know how to pay for it. I had heard that college was expensive.” She was excited to know that the federal financial aid process which was a component of CAP enrollment would be a resource to address her funding concerns. However, Iota indicated that the act of applying for federal aid became a stressful when she had to continually prompt her parents to provide their tax information. Institutional funding for CAP was discussed in length through a series of editorials written in the MSCC faculty newsletter. The faculty editors debated the value of dedicating a certain percentage of the college budget to CAP. The importance of CAP

funding from one participant's perspective was unequivocal. Zeta remarked, "Honestly, knowing that free college is not only for the extremely rich or talented people helps me appreciate being there a bit more." According to Gamma, "Before CAP, there was nothing. As in, there was no college fund for me or anything; we would have to pay for it as we went. It was a kind of scary thought, which was partly the reason why I almost didn't go to college." To illustrate the importance of the financial support provided by CAP, the MSCC College President shared an anecdote during his interview that aligns with Gamma's comments. "I was having lunch with a few people in a restaurant and after lunch the waitress going out the door came up to me and she said, 'Are you the President of MSCC?' and I said yes and she gave me a hug and said you have given our family the greatest gift of hope for our daughter who is in the 9<sup>th</sup> grade."

Alpha does not receive financial support directly from her parents. She is able to live at home which helps to reduce her expenses. Alpha had no means to pay for college until she learned about CAP. She credits the program with allowing her to go to college. Her parents had their own financial challenges, and given her lack of interest or academic preparation for college until her senior year, she had an understandable reluctance to fund a higher education degree. She recently had a financial crisis created by a delay in receiving her funds for school and her parents loaned her \$500 so she could continue to stay enrolled for the semester. Alpha believes that her successful track record for the past several years affected the willingness of her mother and father to lend her the money.

A state grant and CAP were the resources for Epsilon to pay for college. Because her parents were unable to provide her with money for her college, Epsilon would have had to rely on student loans to pay for school without the CAP funding. She shared, "I

don't know what we'd do without CAP." Epsilon is working a part-time job while attending to class to pay off debts. Because of CAP and her job she is able to enroll in a full class load each semester. Epsilon explained, "I am taking 15 credit hours per semester. I probably would have reduced the amount of hours I take so things like textbook costs would be reduced." Zeta was very concerned that the state grant she received would not be enough to cover all of her college expenses. She saw CAP as an insurance policy to pay for anything that the other grant did not. "I did not want to get stuck with a nasty loan I would be paying off for years." Zeta held two jobs while in high school to help her family. "My father helped me to get a part-time job where he worked. I was working two jobs just to get by on top of bills." Gamma shared that she, like her friends, had no money in the bank for college and no sense of how to access resources until she learned about CAP. Epsilon discussed how CAP had allowed her to reduce the number of hours she worked a week while taking classes. "I don't know what I'd do without CAP," said Epsilon. Working to pay for school was also critical for Zeta. She stated, "I was working two jobs just to get by on top of bills. I got plenty of government help though. The Pell grant helped pay for books, food stamps were a huge help."

Some students cited the size of their families as a source of financial strain regarding college support. Eta said that, "...College is expensive. Without CAP I don't think I could afford college. My parents are hardworking people...they have three kids to support and they have bills to pay. So college for three kids is expensive." She also works a part-time job to help alleviate some of the costs associated with attending MSCC. Theta is from a single parent household. She indicated that resources were limited in her family. According to Theta, "We didn't really have any resources available...My mother worked,



but it wasn't enough to save money for my college fund." When her mother learned about CAP from a local newspaper she encouraged Theta to start the application process so she did not miss this opportunity to participate, as Theta's brother had a year earlier. The MSCC College President stated, "One of the hopes we had with this program is that we were to attract historically underserved populations, low income students. We've seen some increase there I think we need to continue to work to reach out to those groups with CAP." His response underscores the connection between financial means and college access and the reality of a 30 hour plus work schedule of CAP students like Iota and Zeta.

### **College Faculty and Staff Support**

Certain CAP students indicated that their relationship with faculty members influenced their ability to adjust to college. Epsilon reported that some of her instructors helped her choose a major and select the appropriate classes. This student also reported that a professor's feedback on an essay prompted feelings of insecurity about the ability to do college-level coursework. Alpha formed a strong relationship with her Comp I and Comp II professor, and because of that relationship she decided to major in journalism. Gamma stated that her Strategies for Academic Success instructor helped her develop note-taking and study skills. "Orientation class taught me important things like study techniques, how to keep up with schedules. I feel that I am a good college student," Epsilon stated.

Many of the CAP students also reported that staff connected to the program and other college staff have provided valuable help by advising them on the courses to take and by helping them fulfill requirements for the program and for their degree plans. For instance, many of the students mentioned the assistance and information they received

from staff at the orientation session and other CAP programming. Gamma indicated that it was encouraging to discover staff that are primarily focused on helping students in the program. Similarly, Iota mentioned that the mandatory meetings with CAP staff were critical because they helped her learn about the process of transferring classes to other colleges and universities. Zeta said, “I went to see my counselor a lot in high school and I carried on the habit with my college advisors.” Iota shared, “... first-generation college students should follow the same advice I give my sister. This is that you really should speak with an advisor or counselor and stick to it, creating those habits.”

CAP Taskforce minutes and project documents reflect a focused effort to ensure that CAP students obtain college readiness and college success information. For instance, the CAP Quick Facts Card and CAP Program Agreement have undergone at least three major revisions in an effort to ensure that information about the program is communicated effectively to students. Students have been surveyed about their CAP entrance experiences to determine where improvements to giving them college support are possible. A sub-committee was developed from the taskforce to develop a set of uniform protocols for CAP student advisement sessions. CAP students like Epsilon, Gamma, and Iota cited these advisement checklists and sessions with their academic advisors as important parts of their success.

### **Theoretical Categories**

The literature reviewed for this study was drawn from the higher education lexicon on subjects such as access, success, persistence, and integration. Vincent Tinto (1993), a prominent educational theorist provided a conceptual framework that assisted in defining the culture and particular stakeholders within higher education. The experiences

of the first-generation, low-income college students whose participation in CAP was studied as a part of this research process personify many of the experiences described in the literature on postsecondary access and student success. Some of the data collected and analyzed through the research process was theoretical in nature and reflective of researcher's knowledge of prior theories and concepts that have been associated with students from a particular demographic (Maxwell, 2005). While the students in the study are not likely to use language such as academic integration, the connection can be made to Tinto's Theory of Student Integration when students such as Alpha, Epsilon and Zeta discuss the support they have received from the faculty at MSCC. Zeta stated, "Some instructors I have had encourage their students and make the work not so complicated." She went on to indicate that several faculty members have been "friendly" to her outside of the classroom engaging her in conversation at the campus fitness center. Epsilon described the faculty at her campus as "awesome" and identified her college strategies instructor as "really helpful." These students express very positive thoughts concerning their interactions with college faculty. An MSCC institutional report showed a difference in GPA for these groups with CAP students performing at a higher rate.

### **Substantive Categories**

According to Stake (1995), data analysis has no official beginning or ending, but should represent the efforts of the researcher to take apart our observations and impressions to find meaning. Identifying trends in the data that are theoretical or organizational is a fairly transparent process. The former has been described, vetted and published for consumption and the latter is predicated on logical ideas or topics that surface when talking about particular phenomena. Identifying substantive categories of

data is more challenging as a researcher to translate, “categories taken from participants’ own words and concepts” (Maxwell, 2005, p. 97).

After sitting with the multiple sources of data and allowing some time for reflection, language to define the ideas, thoughts and attitudes of the students in this study begin to take shape. As several of the students in this study expressed their thankfulness for CAP, the theme of *gratitude* surfaced as a term to capture both the verbally stated words of thanks and the non-verbally expressed idea of thanks as noted in the demeanor of Eta. She related her thankfulness for CAP and described it as an opportunity that many people envy. Zeta was very grateful to learn about CAP. She shared, “I was somewhat tentative about it. I was thinking, who gives out free college?” The concept of *pride and belonging* was also conveyed by students in this study. For example, Gamma discussed with satisfaction the intentional choices that she made to separate herself from old friends to become a college student. Alpha expressed a similar concept of re-inventing herself or creating a *new identity*. She stated in several instances during her interview that she was no longer a slacker and was now doing the unexpected things that surprised her parents such as being listed on the Honor Roll. Another substantive concept to emerge was that of self-determination. This particular concept could connect to the other two areas of categorical analysis as motivation (organizational concept) and even persistence (theoretical) might also be associated with the attitudes of students like Zeta and Iota. Both expressed personal drive to succeed whether they received family support. In fact, neither appeared daunted by the fact that they both had siblings who either failed to complete high school or dropped out of college. The use of substantive categories is an important tool to use for research. This type of category can serve as a means for

grouping participant feedback that might not fit into the other two categories, but should not be abandoned (Maxwell, 2005). For instance, Alpha talked about her relationship with a sibling and her parents' differing attitudes about higher education as it related to the two of them. There is no specific organizational or theoretical category to directly connect with this initial information. Alpha shared, "She [sister] has always been an athlete. She plays volleyball and people wanted her to come to their college." Alpha's descriptive explanation of her sister's involvement in organized athletics juxtaposes with comments Alpha later made about how surprised and proud she was to learn she had been accepted into CAP at her senior awards assembly. In both illustrations, Alpha is expressing her beliefs about the pride in belonging or being accepted into a group.

### **Summary**

"Data analysis is the process of bringing order, structure, and interpretation to the mass of collected data" (Marshall & Rossman, 1999, p. 150). A variety of data was collected as a part of the research process from participant interviews to institutional documents. And an innovative method of collective data through instant messaging interviews yielded quality results. Coding was utilized to classify pertinent information in the data and triangulate the findings (see Table 4). The result was the identification of six major themes (i.e., working students, motivation, peer relationships, family support, financial support, and faculty and staff relationships) which were then grouped into three main categories: motivation, financial resources, and peer, family and college support. These master themes linked to outcomes such the importance of social bonds found in Vincent Tinto's (1993) theory on social integration.

## **Chapter V**

### **SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS**

Access to higher education opportunities and subsequent success in college continue to be a challenge for persons from first-generation, low-income backgrounds (Engle, Bermeo, & O'Brien, 2006). The literature identifies numerous impediments to access and success for these students including economic, cultural, and educational barriers (Hsiao, 1992; Perna, 2005; Thayer, 2000). For example, students whose parents did not attend college may lack the cultural capital to assist with navigating higher education processes to gain admission or to ensure that they are prepared for the academic rigor and performance expectations (Engle & O'Brien, 2007). To address these complex issues effectively, higher education institutions should implement programs that are innovative and responsive to the needs of first-generation, low-income students. CAP is a program at Middle State Community College (MSCC) in Oil County that provides free college tuition and fees along with required student support services such as academic advisement to direct-from-high-school graduates. The MSCC President engineered the creation of the program with the primary goals of increasing the high school graduation rate, increasing the college graduation rate, and increasing higher education access for low-income families.

This research attempted to understand whether a unique college access program at a community college mitigated institutional and environmental barriers that have historically impeded the academic success of first-generation college students from low-income backgrounds. Four research questions were employed to establish “Conceptual bridges from what is already known, cognitive structures to guide data gathering, and outlines for presenting interpretations to others” (Stake, 1995, p. 15). The following research questions were utilized to that end:

1. How do first-generation college students from low socioeconomic backgrounds describe their collegiate experience?
2. How does CAP influence low-income-background-first-generation-college-students’ understandings of the college experience?
3. How does the theoretical work of Tinto on student retention inform the explanation of those experiences?
4. What other realities are revealed in this study?

There is a breadth of literature that relates to first-generation, low-income college students with regard to access, persistence and success within higher education. For instance, while there has been a significant increase in college access for all student populations, students from traditionally underrepresented groups have a higher risk of not completing their college education (Brock, 2010). Choy (2001) notes the connection between remedial coursework and low rates of completion and persistence for these students. Tinto (1993) identified academic and social integration as critical components in lessening the likelihood of departure for college students by connecting them to college community. Student Integration Theory (Tinto, 2005b) served as a theoretical

framework to ground understandings within this study. Institutional culture, including the role of faculty, the transmission of norms and rules, and the structural inequalities was also explored through the literature to understand how the inability to manage expectations and systems can hinder student success (Engle, Bermeo, & O'Brien, 2006; Tierney, 2008).

This research effort utilized a case study approach. "As a research endeavor, the case study contributes uniquely to our knowledge of individual, organizational, social and political" (Yin, 1994, p. 2). Interviews with first-generation, low-income students participating in the College Access Program (CAP) were chosen as the key means of data collection. "These human affairs should be reported and interpreted through the eyes of specific interviewees, and well informed respondents can provide important insights into a situation" (Yin, 1994, p.85). A non-traditional approach to the interviews was introduced because the population to be studied was considered technologically proficient with instant messaging (IM). The researcher used IM technology to conduct interviews with 10 students (McKendrick, 2009). Follow-up, in-person interviews with five CAP students were conducted to confirm and further explore information gathered in the initial interviews. These five students fit the profile of a critical case sample which could enrich the understanding of the experiences of these students. Data collected from other sources, such as the key informant interviews with the MSCC President and CAP Director, helped to provide context for the program from individuals with insider knowledge. According to Patton (1990), "Key informants can provide particularly useful information about what is happening in subgroups to which the observer does not and cannot have direct access" (p. 264). Institutional documents related to CAP included minutes from a planning



taskforce, a faculty newsletter, reports from the Institutional Research Office, and marketing materials promoting CAP were also gathered as a means of collecting multiple source evidence. These were then used as a mechanism for triangulating the ideas, patterns, and themes that emerged in the student interviews.

### **Summary of Findings**

The findings that emerged from this study were initially grouped into three main categories of analysis: organizational, theoretical, and substantive (Maxwell, 2005). Core themes were then associated with those categories. Tierney (2008) notes, “Researchers have been able to discover that certain characteristics in a student’s background help or hinder one’s persistence in college” (p. 67). The student experiences expressed in these varied themes can be better understood through the theoretical work of Vincent Tinto. As CAP students described their college experiences, they were passionate in their descriptions of barriers that they believe prevent or limit the access of low-income, first-generation college students to higher education. Tierney (2008) summarizes the two connecting premises within Vincent Tinto’s Student Integration Theory: “(1) what are those bonding mechanisms that integrate students into the life of the institution, and (2) how might postsecondary institutions and students be theoretically conceived?” (p. 68).

The College Access Program at MSCC in Oil County moderated certain cultural-social barriers to success for first-generation, low-income students. This is evidenced in the major findings of this research which can be grouped into three master findings of self-determination, pride and belonging, and working students. Each of these factors contributed to the success of low-income, first-generation college students in CAP. Self-determination, initially categorized in the data as motivation enabled some of these

students to manifest the will to attend college and build a positive future. Feelings of pride and belonging affected the desire of several of these students to remain in college and not be dismayed by difficulty adjusting or succeeding, no matter the level of support from family or friends. Because of their competing roles as working students, financial support from CAP and federal aid were essential to each student's ability to attend and remain in college.

The reviewed literature also helped to provide a context for further probing the research questions, understanding the research problem, and thus aiding in the identification of the core findings. Factors such as the effects of college readiness, social capital, academic culture, and access barriers on first-generation, low-income college students were reinforced by the findings in this study. Denzin and Lincoln (1994) discussed the need for a structured and pragmatic approach to managing information and analyzing data. They recommended the use of an ongoing data reduction process during planning, study design, collection, and interpretation processes. Various means of coding, mapping and recording data were used in this study. Data gathered from students were supplemented with multiple sources and analyzed for patterns, relationships, clusters, and theme. The intent of this process was to develop explanations and explore their ties to "predicted patterns of events" (Denzin & Lincoln, 1994, p. 434; Yin, 1989). The role of technology as a tool for inquiry was also examined through the research as it was employed as a primary data collection method.

These three findings are explored in further detail. Motivation was a repetitive theme in many variations in the data. From a substantive perspective this was manifested in the theme of self-determination voiced clearly by several of the students. Alpha, an

African-American female who was a part of the inaugural cohort of CAP, believed that personal motivation and preparation could be an impediment or an advantage for a first-generation college student. In relating their own attitudes about college, Alpha and Gamma felt that lack of motivation or preparation and the resulting poor academic performance were two of the greatest hindrances to college opportunity. Yet both students seized the opportunity to earn a college. Theta also placed a high value the role of student choice is making decisions the right decisions about college preparation, indicating as well that personal decisions and motivations were key to collegiate success. Despite the lack of preparedness to attend college these students expressed strong desires that led to them to enter college through CAP and maintain their college enrollment. Even the argument by some MSCC faculty that a free college tuition program would adversely affect academic performance has been negated by the determination of these students to succeed. According to an MSCC report, these students have higher persistence and retention rates as compared to their cohorts.

Tinto (1993) theorizes that persistence is positively affected for students who can academically and socially integrate themselves into the college experience. CAP students reported a level of personal interest or motivation to attend college while in high school. In spite of a lack of knowledge about college processes from their family or a lack of support from friends, these CAP students learned college processes and expressed a determination to succeed. Whether this choice occurred in their junior and senior years of high school as was the case for Alpha, Beta and Zeta, or they had planned to go to school from the beginning like Iota, Epsilon, Delta and Eta, once committed these students have successfully maintained their college enrollment.

A second category or finding was feelings of pride or belonging. CAP students shared their experiences with their families, friends, and MSCC faculty and staff regarding the level of support or connection they experienced. Zeta felt that insights from one of her friends, a high school counselor, and a college recruiter were important keys to success for her as a first-generation college student from a low income background as they assured her that she belonged in college. The interactions that Zeta and Iota had with advisors and CAP staff during advisement and orientation activities contributed to their sense of connection and pride about their membership in the program. This pride or sense of belonging gave these CAP students the confidence to navigate the system.

As CAP students develop a sense of pride or belonging they identify a period of disassociation with certain peers that occurs when they make the decision to attend college and their friends make other plans. Alpha concluded that students must be prepared to deal with a lack of support and find their own ways to connect despite any tension experienced. Gamma remarked on the irony of now belonging to the prepared-for-college category of student. CAP students reported positive experiences and a sense of support from both faculty and staff at MSCC. Several CAP students like Epsilon indicated that their connection with the faculty member who taught their college strategies course was an important part of their integration into the college experience by giving them the skills and confidence to be good college students. These feelings of support and belonging particularly through interactions with college staff and faculty are a vital component to the successful transition into college for these first-generation, low-income CAP students. This belonging and pride resulted in a level of performing that was evident in the higher GPA of these students as compared to their counterparts.

“Integration is about students forming relationships with peers, faculty, and staff and is about the sense of belonging that students develop. It is also a measure of student knowledge of campus cultural norms” (Wolf-Wendel, Ward & Kinzie, 2009, p. 416).

The third important finding related to working students as a master theme used to categorize both the concerns that CAP students expressed about funding a college education and their need to work to pay for school and personal expenses. Socioeconomic backgrounds impose financial realities on first-generation college students in manner that was echoed in the literature and in the findings for this study. These students describes the challenges associated with juggling expectations such as working to support households, pay for school and while attempting to meet college responsibilities. Iota discussed how stressful it was to not be able to rely on your parents for financial resources. She indicated that she has worked since high school and saved money in anticipation of meeting college expenses such as paying for textbooks. Several of the students shared that they had no savings, understanding of how to access financial resources, and needed to maintain their employment to support themselves while in college. The challenges that many families and students encounter in paying for a college education was an element that factored into the creation of CAP. The substantive theme of working students and the juggling of expectations was an important aspect of the experience of the CAP students interviewed.

Tinto’s theory on student integration also underscores the importance of financial support for working students. CAP students clearly valued the financial funding component of the program. Zeta, Beta, Epsilon and Theta sought out resources for college such as scholarships and state grants. “Research indicates that low- and moderate-

income students who are attending community colleges and would be eligible for need-based federal financial aid are the least likely to file the Free Application for Federal Student Aid, when compared to their peers at other types of institutions” (CollegeBoard Advocacy & Policy Center, 2010, p. 2). Completing an application for federal aid is not optional for enrollment and continued participation in CAP. According to Engstrom and Tinto (2008), complex forces put students from low-income backgrounds at a greater risk for not persisting at the college level.

Data collected through the research process revealed the following core substantive findings related to the success of first-generation, low-income in CAP: 1) as working students most of the CAP students had to balance college with continued financial responsibilities which indicates that working remains core to their identities even as they navigate the new culture of higher education; 2) self-determination or personal motivation was a major factor in deciding to attend college—and in their ability to adjust successfully to the college experience; and 3) a sense of pride or belonging created the levels of personal and college support necessary for these students to be able to academically and socially integrate themselves within the college environment and achieve student success.

## **Conclusions**

This research has proven that the College Access Program (CAP) at MSCC has negated many of the conditions that have historically impeded opportunities for success for the first-generation, low-income college students in this study. Further, programs like CAP can expand access to higher education and enhance the probability of academic success for first-generation, low-income college students. Specific findings emerged from

the data that demonstrate the validity of CAP by categorically answering the research questions constructed to guide this process.

An overarching research question was how do first-generation college students from low socioeconomic backgrounds describe their college experience? The findings suggest that these students regard the college experience as a matter of possessing or acquiring the will to succeed. The CAP students who were interviewed expressed a level of determination to succeed that in some cases contradicted their perceived abilities. Several of the CAP students described a social construct consisting of two categories of students, those prepared for college and those not prepared for college. The power in this response is that the students do not cite stratification or inherent structural inequities in the education or economic systems as barriers to college access, but liken their ability to succeed to having the appropriate attitude or mind set. This leads to the conclusion that the self-determination or personal motivation of a first-generation, low-income college student can help him or her to overcome higher education barriers such as a lack of family support or knowledge of college processes. Despite a wealth of literature that suggests many first-generation, low-income students are unprepared to meet the rigor of college (Engle & O'Brien, 2007; Filkins & Doyle, 2002; & Pascarella & Terenzini, 1991), these CAP students possessed a level of confidence and self-determination to prevail in the college experience implying that this skill is critical to cultivate.

Another grounding research question was how does CAP influence low-income-background-first-generation-college-students' understandings of the college experience? CAP students perceived themselves as making a choice to become a part of the new group by shedding one identity to take on another. They took on this new role of CAP

student with a strong sense of pride and adopted the perspective that were disassociating from a former different group to join another. Although several of the students described a level of alienation created by the transition the overwhelming sentiment was one of positivity in making this change. CAP was viewed as the vehicle through which these students could become members of a sought after status of college student. Another conclusion from the research is that first-generation, low-income college students will discard any status that impedes their access to higher education if a means such as CAP is available to them.

This research also asked and answered the question of what other realities are revealed in this study. One of the expected trends in the data related to financial resources. Not surprisingly, first-generation, low-income college students in CAP faced challenges with regard to funding a higher education. According to the CollegeBoard Advocacy & Policy Center (2010), “Students do not receive consistent, early and accurate information about what it means to go to college, in addition to information about financial aid prior to attending college (p.3).” However, another component of this financial resources issue that was more surprising to this researcher was how many of these CAP students must also work jobs to support themselves and sometimes their households while in college. The need to work was mentioned in the literature, but not present in any of the other data sources such as key informant interviews or institutional documents. The lack of discussion or reference to working students could mean that college faculty, staff and administrators are unaware of the degree to which this issue might affect student success. Thus policies and practices affecting these working students could possibly be flawed or ineffective. According to Engle (2007), “The extent to which



first-generation students must work while attending college is inextricably related to finances and financial aid (p.35)”. It can be concluded that many first-generation, low-income college students are grappling with the responsibilities of college student and the obligations of working adult, and that higher education institutions need to better understand their realities.

This study was bound by a particular conceptual framework, thus the research question of how does the theoretical work of Tinto (1993) on student retention inform the explanation of those experiences was also addressed. The study corroborated research and theories on the role of family, peer, and college support to ensuring student success in higher education. As Thayer (2000) noted, families of first-generation college students are not likely to have knowledge about what is required to be successful in college. CAP students created these understandings for themselves recognizing that even when parents encouraged them to attend college they could provide no specific directions on how to accomplish that goal. Paradoxically, these CAP students became the college experts for their families helping siblings and sometimes parents to navigate the collegiate process. CAP requirements such as a mandatory orientation course, required advisement and CAP information seminars were positively regarded by the students. Their participation in these activities was also identified by the key informants and through institutional documents as critical to their educational success. MSCC institutional studies show that in general CAP students are experiencing a higher level of persistence and academic performance when compared to their peers. The connection to Tinto’s (1993) Theory on Student Integration is evident in the conclusions found from this research. CAP students’ level of self-determination, sense of pride and belonging, and access to financial

resources associated with CAP participation contributed to their sense of academic and social integration. The result is the retention and continued academic success of these first-generation, low-income college students.

## **Recommendations**

The findings of this study serve as the basis for offering several recommendations. They are grouped into three basic categories: future research, theory and practice. These recommendations can provide higher education stakeholders with opportunities to improve practice, change policy and facilitate student success.

### **Future research.**

There are numerous ways in which this study could be expanded or explored more thoroughly. Although CAP was designed for a community college setting, how might CAP be replicated in a four-year higher education setting? Eight of the 10 CAP students interviewed for this study made it clear that they plan to transfer or complete their associate degrees and then transfer to a university.

Despite efforts to recruit male students none followed through with participating in this study. Given the data about high school drop-out rates for males, particularly minorities, future studies could examine why these populations have lower rates of participation in CAP or similar types of access programs.

Additional research might explore how higher-education institutions, particularly community colleges, have used research on student retention to develop learning communities and financial support to help ensure the success of under-represented populations. As this researcher found, socioeconomic status is a major factor influencing both student access and achievement. Continued research could explore the relationship

between socioeconomic status and degree completion. As Tinto (2005b) notes “Though access to higher education has increased and gaps in access between groups decreased, rates of college completion generally and gaps in completion between high-income and low-income students have not followed suit” (p.3).

This study could be modified to include interviews with other educational stakeholders such as college faculty, academic advisors, CAP counselors, and other college staff involved in managing CAP to understand more fully what role their perceptions and support for the program have in student retention. Some of the data collected through institutional documents suggested, for at least one contingent of the academic community, the merits and outcomes from CAP are in doubt. Collecting primary source data from these college groups might broaden our understanding of effects of a program like CAP on the college community.

### **Theory.**

Tinto (1993) theorizes that academic and social integration are central to student success and retention. CAP was designed to provide access to college as well as offer academic and support services to ensure student success. The findings of this study affirm the continued legitimacy of Student Integration Theory, particularly when viewed as a means for designing interventions to remedy some of the challenges faced by first-generation, low-income college students. Higher education access and success issues are complex and require a nuanced understanding of the issues and opportunities associated with serving a diverse student constituency. This study validates the importance of the CAP program at MSCC by solidly grounding it in Tinto’s evolving theories on student integration, persistence and success. One powerful aspect of the research was the

realization that in many ways the first-generation, low-income CAP students underwent a transformative identity process. As these students entered college, engaged in campus life, and participated in CAP programs they willingly took on new personas. Tinto's theoretical lens of student integration does not adequately account for transformational changes in student identity.

There are other theoretical lenses that could be employed to further explore the experiences of first-generation, low-income college students and issues of access and success. For example, Bourdieu's (1993) theories on human capital could serve as a conceptual framework to design a study to explore the phenomena of academic success for this population of students. Or given the diverse composition of the students in CAP, a more particular lens such as a feminist epistemology (Alcoff & Potter, 1993) or critical race theory (Delgado & Stefancic, 2001) could be applied.

### **Practice.**

There are important implications for practice for higher education professionals as a result of this study. Higher education institutions, particularly community colleges should leverage opportunities to provide innovative and relevant programs such as CAP. Community colleges with their open admissions policies and proximity to underserved communities have the philosophical and organizational ability to be responsive to the particular concerns of first-generation college students from low-income families. For example, the College Board Advocacy & Policy Center (2010) suggests that community colleges place more emphasis on educating students about the federal financial aid process so disadvantaged students can access the array of grants and loans available for college. CAP requires that students complete a Free Application for Federal Student Aid

as a condition of program participation. This has increased the number of students accessing aid and created more awareness of the financial resources available such as Pell Grants. College and universities should continue to seek out partnerships with the K-12 educational system through dual or concurrent enrollment or college readiness initiatives. Student involvement with CAP has illustrated the importance of educational cohorts in creating a sense of belonging and connection for students.

Another implication of the study relates to the value of using technological tools to communicate and engage particular populations of college students. The use of IM technology to interview students appeared to be an effective means of data collection. IM and other forms of social media could serve as an inexpensive, efficient and accessible tool of acquiring regular feedback and information from student constituents.

Congruent with the literature, one insight gained from this research is that parents' lack of higher education experience can influence the attitudes that their children have about college attendance. The siblings of several CAP students were not attending college despite being aware of opportunities to do so. One recommendation for higher education institutions, particularly community colleges, is to develop programming directed at parents. For example, offering free non-credit courses would create the opportunity to have parents on a college campus where they could familiarize themselves with the college environment. This proximity would help them to become stronger advocates of a college education by providing them with the knowledge and confidence to communicate the importance to their families.

## **Final Thoughts**

Higher education administrators must guard against the pitfalls of assumption and disengagement with regard to the student experience. There is a vocational tendency, particularly among student services professionals, to advocate complex solutions to universal problems. In focusing on the difficult case, we miss the obvious and often simple opportunities within our immediate scope of authority. Colleges and universities who are hedging about the importance or value of targeted access programs should be propelled into action by Gamma's compelling thoughts on the matter. "Before CAP, there was nothing. As in, there was no college fund or anything. It was a kind of scary thought, which was partly the reason why I almost didn't go to college." Gamma was unequivocal in her belief that CAP was the primary reason that she, as a first-generation, low-income student was able to attend and be successful in college. And while students benefit as individuals from the program, the community collectively reaps the benefits that are gained from an educated populace.

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APPENDIX A



(918) 595-7000

CONFERENCE CENTER  
6111 East Skelly Drive  
Tulsa, OK 74135-6198

METRO CAMPUS  
909 South Boston Ave.  
Tulsa, OK 74119-2095

NORTHEAST CAMPUS  
5727 East Apache  
Tulsa, OK 74115-3151

SOUTHEAST CAMPUS  
10300 East 81st Street  
Tulsa, OK 74133-4513

WEST CAMPUS  
7505 West 41st Street  
Tulsa, OK 74107-8633

June 14, 2010

Dear Jan,

The Tulsa Community College IRB has reviewed your proposal through expedited review and approves your project *The Meaning of College Access and Persistence for Low-income, First Generation College Students*, pending approval by the Oklahoma State University IRB. Once received, please forward a copy of your Institution's IRB approval to me as well as your updated proposal, and I will add them to your file.

Please remember that a final report of research results must be submitted to the Tulsa Community College Office of Institutional Research within 12 months of conclusion of the study. If you have not concluded the research within a year of the initial IRB approval, a request for extension must be made in writing.

Thank you and good luck with your research.

A handwritten signature in black ink, appearing to read 'C Hébert'.

Dr. Connie Hébert  
TCC IRB Chair  
918-595-7242  
chebert@tulsacc.edu

## APPENDIX B

### Oklahoma State University Institutional Review Board

Date: Monday, August 30, 2010  
IRB Application No ED1098  
Proposal Title: The Meaning of College Access and Persistence for Low-Income, First Generation College Students

Reviewed and Exempt  
Processed as:

**Status Recommended by Reviewer(s): Approved Protocol Expires: 8/29/2011**

Principal Investigator(s):

Jan Clayton	Ken Stern
13761 E. 51st St. Apt 5103	311 Willard
Tulsa, OK 74134	Stillwater, OK 74078

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The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 219 Cordell North (phone: 405-744-5700, beth.mcternan@okstate.edu).

Sincerely,



Shelia Kennison, Chair  
Institutional Review Board

## APPENDIX C

### **Consent to Participate in a Research Study: Instant Message Interview**

Title of the Study: *The Meaning of College Access and Persistence for Low-income, First Generation College Students*

Principal Investigator: Jan Clayton, Oklahoma State University doctoral student

1. **Purpose of the Study-** *The purpose of this study is to research the experiences of first-generation college students from low-income families who are participating in a new college access program (Tulsa Achieves). Your perspective is critical to understanding the institutional and environmental barriers you face and whether the TA Program has helped you to meet your educational goals.*
2. **Procedures-** Participants will be asked to do the following:
  - Read this informed consent agreement
  - Send an email from your college email address to indicate agreement with these terms including authorizing temporary access to educational information per FERPA guidelines.
  - Sign up for a free Gmail Address and GoogleTalk Account
  - Coordinate a time to meet interviewer online for IM Interview
  - Interview using the instant messaging feature with GoogleTalk (@60 minutes in length)
  - Choose between one (1) hour of community service for TA Program or a \$5.00 Wal-Mart gift card
  - Provide a mailing address to receive \$5.00 Wal-Mart Card
  - If selected, participate in a taped follow-up in person interview (@90 minutes in length)
  - Students who agree to second interview will have a total three chances in I-Pod drawing
  - Winner of I-Pod is notified after data collection for study has been completed
3. **Study Risks-** The risks associated with this research project are minimal. There are some questions that ask about family financial status. Should any line of questioning be uncomfortable you are not required to respond or you can indicate that you prefer not to respond.
4. **Study Benefits-** This study can potentially provide Tulsa Community College with critical information about the needs of first generation college students from low-income families. This research could help the College to improve services, programs and opportunities for these and other students.
5. **Confidentiality-** Once your personal identification information is used to confirm that you meet the criteria for the study and you are authorized to provide electronic consent, you will be given a pseudonym. Information concerning your identity will be kept in a locked file cabinet in the home of the researcher. Your GoogleTalk responses will be password protected and only you and the interviewer will have

access to the archived IM interview. If you participate in a taped interview the tapes will be destroyed once the interview has been transcribed. The transcripts will be stored in an electronic format on a secure lap top used only by the researcher. Two back-up copies of the data will be stored on portable jump drives. The interview transcripts, the GoogleTalk IM archives and back-up drives will be kept for at least two years and then be shredded and deleted, respectively. The data will remain under the direct control of the researcher so there is minimal risk of other persons accessing personal information. The data will be written up collectively and individual responses will be reported under a pseudonym.

6. **Personal Compensation-** All students who participate in the IM interview will receive a \$5.00 Wal-Mart gift card or have the option of receiving one (1) hour of community service credit for the Tulsa Achieves Program. All eligible students who sign up and who complete the IM interview will be entered into a drawing for an I-Pod Player. Students who agree to participate in a follow-up interview will have a total of three (3) chances to win the I-Pod.

Contact Information:

**Researcher**

Jan Clayton  
Doctoral Student  
Oklahoma State University  
[janlclayton@yahoo.com](mailto:janlclayton@yahoo.com)  
(918) 230-1258

**Faculty Advisor**

Dr. Ken Stern  
Dissertation Advisor  
304 Willard Hall  
Oklahoma State University  
[k.stern@okstate.edu](mailto:k.stern@okstate.edu)  
(405) 747-0915

If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-3377 or [irb@okstate.edu](mailto:irb@okstate.edu).

Participant Rights:

Your participation in this study is voluntary. You may discontinue your participation at any point. As a participant you may also ask questions about this research project at any time during the process. The researcher reserves the right to terminate a subject's involvement if the person is unwilling to participate in required elements of the research or provides false information to researcher.

- I agree to allow the interviewer to verify my current enrollment, grade point average, EFC (Estimated Family Contribution) and available demographic to determine if I fit the population to be studied, including signing a one-time FERPA release if necessary.
- I agree to participate in an instant message interview
- If requested, I agree to participate in a follow-up in-person interview

Signatures:

**By emailing Jan Clayton from my official college email the following statement I am agreeing to fully participate in this research project:**

(Type or paste the following statements in the email)

**“I agree to participate in Jan Clayton’s research study on students in the Tulsa Achieves Program. I have read and fully understand this consent form and have a copy for my records. I submit this email freely and voluntarily.”**

**“I also authorize Jan Clayton (OSU doctoral student) to access to my student records to verify my eligibility as a part of my participation in her research project. This permission is granted on a temporary basis and expires December 31, 2010.”**

## APPENDIX D

### Consent to Participate in a Research Study: Key Informant Interview

Title of the Study: *The Meaning of College Access and Persistence for Low-income, First Generation College Students*

Principal Investigator: Jan Clayton, Master of Art

7. **Purpose of the Study-** *The purpose of this study is to research the experiences of first-generation college students from low-income families who are participating in a new college access program (Tulsa Achieves). Your perspective is critical to understanding the institutional and environmental barriers you face and whether the TA Program has helped you to meet your educational goals.*
8. **Procedures-** Participants will be asked to do the following:  
The in-person interviews with key informants will last no more than two hours.
  - Read this informed consent agreement
  - Coordinate a time to meet interviewer at administrative offices site
  - Allow the researcher to tape record your in-person interview
  - Participate in an interview that will last no more than 2 hours
9. **Study Risks-** The risks associated with this research project are minimal. There are some questions that ask about family financial status. Should any line of questioning be uncomfortable you are not required to respond or you can indicate that you prefer not to respond.
10. **Study Benefits-** This study can potentially provide Tulsa Community College with critical information about the needs of first generation college students from low-income families. This research could help the College to improve services, programs and opportunities for these and other students.
11. **Confidentiality-** Once your personal identification information is used to confirm that you meet the criteria for the study and you are authorized to provide electronic consent, you will be given a pseudonym. Information concerning your identity will be kept in a locked file cabinet in the home of the researcher. If you participate in a taped interview the tapes will be destroyed once the interview has been transcribed. The transcripts will be stored in an electronic format on a secure lap top used only by the researcher. Two back-up copies of the data will be stored on portable jump drives. The interview transcripts, the GoogleTalk IM archives and back-up drives will be kept for at least two years and then be shredded and deleted, respectively. The data will remain under the direct control of the researcher so there is minimal risk of other persons accessing personal information. The data will be written up collectively and individual responses will be reported under a pseudonym.
12. **Personal Compensation-** There is no personal compensation for the key informants as both are administrators working for the College.



Contact Information:

**Researcher**

Jan Clayton  
Doctoral Student  
Oklahoma State University  
[janlclayton@yahoo.com](mailto:janlclayton@yahoo.com)  
(918) 230-1258

**Faculty Advisor**

Dr. Ken Stern  
Dissertation Advisor  
304 Willard Hall  
Oklahoma State University  
[k.stern@okstate.edu](mailto:k.stern@okstate.edu)  
(405) 747-0915

If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-3377 or [irb@okstate.edu](mailto:irb@okstate.edu).

Participant Rights:

Your participation in this study is voluntary. You may discontinue your participation at any point. As a participant you may also ask questions about this research project at any time during the process. The researcher reserves the right to terminate a subject's involvement if the person is unwilling to participate in required elements of the research or provides false information to researcher.

Signatures:

I have read and fully understand the consent form. I sign it freely and voluntarily. A copy of this form has been given to me.

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

I certify that I have personally explained this document before requesting that the participant sign it.

\_\_\_\_\_  
Signature of Researcher

\_\_\_\_\_  
Date

## APPENDIX E

### **Consent to Participate in a Research Study: In Person Follow-up Interview**

Title of the Study: *The Meaning of College Access and Persistence for Low-income, First Generation College Students*

Principal Investigator: Jan Clayton, Oklahoma State University doctoral student

**13. Purpose of the Study-** *The purpose of this study is to research the experiences of first-generation college students from low-income families who are participating in a new college access program (Tulsa Achieves). Your perspective is critical to understanding the institutional and environmental barriers you face and whether the TA Program has helped you to meet your educational goals.*

**14. Procedures-** Participants will be asked to do the following:

- Read this informed consent agreement
- Coordinate a time and campus location to meet interviewer
- Allow the researcher to tape record your in-person interview
- Participate in an interview with open ended questions (@60 minutes to 2 hours in length)
- Choose between two (2) hours of community service for TA Program or a \$10.00 Wal-Mart gift card
- Provide a mailing address to receive \$10.00 Wal-Mart Card
- Students who agree to second interview will have a total three chances in I-Pod drawing
- Winner of I-Pod Nano is notified after data collection for study has been completed

**15. Study Risks-** The risks associated with this research project are minimal. There are some questions that ask about family financial status. Should any line of questioning be uncomfortable you are not required to respond or you can indicate that you prefer not to respond.

**16. Study Benefits-** This study can potentially provide Tulsa Community College with critical information about the needs of first generation college students from low-income families. This research could help the College to improve services, programs and opportunities for these and other students.

**17. Confidentiality-** Once your personal identification information is used to confirm that you meet the criteria for the study and you are authorized to provide electronic consent, you will be given a pseudonym. Information concerning your identity will be kept in a locked file cabinet in the home of the researcher. If you participate in a taped interview the tapes will be destroyed once the interview has been transcribed. The transcripts will be stored in an electronic format on a secure lap top used only by the researcher. Two back-up copies of the data will be stored on portable jump drives. The interview transcripts, the GoogleTalk IM archives and back-up drives will be kept for at least two years and then be shredded and deleted,

respectively. The data will remain under the direct control of the researcher so there is minimal risk of other persons accessing personal information. The data will be written up collectively and individual responses will be reported under a pseudonym.

18. **Personal Compensation-** All students who participate in the in-person follow-up interview will receive a \$10.00 Wal-Mart gift card or have the option of receiving two (2) hours of community service credit for the Tulsa Achieves Program. Students who agree to participate in a follow-up interview will have a total of three (3) chances to win the I-Pod.

Contact Information:

**Researcher**

Jan Clayton  
Doctoral Student  
Oklahoma State University  
[janlclayton@yahoo.com](mailto:janlclayton@yahoo.com)  
(918) 230-1258

**Faculty Advisor**

Dr. Ken Stern  
Dissertation Advisor  
304 Willard Hall  
Oklahoma State University  
[k.stern@okstate.edu](mailto:k.stern@okstate.edu)  
(405) 747-0915

If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-3377 or [irb@okstate.edu](mailto:irb@okstate.edu).

Participant Rights:

Your participation in this study is voluntary. You may discontinue your participation at any point. As a participant you may also ask questions about this research project at any time during the process. The researcher reserves the right to terminate a subject's involvement if the person is unwilling to participate in required elements of the research or provides false information to researcher.

Signatures:

I have read and fully understand the consent form. I sign it freely and voluntarily. A copy of this form has been given to me.

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

I certify that I have personally explained this document before requesting that the participant sign it.

\_\_\_\_\_  
Signature of Researcher

\_\_\_\_\_  
Date

## APPENDIX F

### **Interview Questions** **Instant Messaging Interview**

Script: Thank you for agreeing to participate in this study. If you are comfortable with your navigational ability on Google Talk we will proceed with the interview. I will ask you a series of questions and allow you response time. This process should take no more than one hour. If any question seems unclear please feel free to ask me to explain. I may also ask you to further explain your responses. Let's begin.

1. Describe the educational background of your parents. What if any collegiate experiences have they had?
2. What type of preparations if any did you make to attend college?
3. How did you hear about the Tulsa Achieves Program?
4. What type of personal financial resources or family financial resources was available to you to attend college?
5. Describe the TA experience that you believe has been most helpful to you as a college student.
6. Describe the TA experience that you believe has been the least helpful to you as a college student.
7. What if any difficulties did you experience during your first year as a college student?
8. What are your academic and career plans?
9. What advice would you give to a first generation college student from a low-income family regarding being successful in college?
10. What are your academic plans for the next semester? For the next year?

Thank you for your time today. Please advise me as to whether you would like to receive one (1) hour of community service credit for the TA Program or provide me with the address where you would like to have your \$5.00 gift card mailed. You will also receive an email from me notifying you whether you have won the I-pod Nano once the drawing has been held. GoogleTalk allows me to store our IM conversation in a password secure personal account. I will import this information into a database in order to create transcripts for review and analysis. The IM archive and electronic materials will be kept for no more than two years in a secure area and destroyed after that time.

## APPENDIX G

### **Interview Questions Key Informant Interviews**

Script: Thank you for agreeing to participate in this study. You have been identified as a key informant with important information concerning the College Access Program (CAP). If you are ready I would like to turn on the recorder. I will ask you a series of open ended questions. This process should take no more than one hour. If any question seems unclear please feel free to ask me to explain. I may also ask you to further explain your responses. Let's begin.

1. Describe your role in relationship to the College Access Program?
2. What factors influenced or lead to the creation of the CAP?
3. What are the primary goals of the program?
4. What was the intention behind developing certain features of the program such as mandatory advisement and a required College Strategies course?
5. In what ways does the Program address the needs of first generation college students from low-income families?

Thank you for your time today. This interview will transcribed and imported into an electronic database in order to create transcripts for review and analysis. The tapes will be destroyed once the transcripts have been created. And the transcribed data will be kept for no more than two years in a secure area and then destroyed.

## APPENDIX H

### **Interview Questions In-Person Follow-up Interviews from IM Pool**

Script: Thank you for your continued participation in this study. You were asked to participate in a follow-up interview so that more thorough information could be requested of you. If you are ready I would like to turn on the recorder. I will ask you a series of open ended questions. This process should take no more than 90 minutes. If any question seems unclear please feel free to ask me to explain. I may also ask you to further explain your responses. Let's begin.

1. Describe your role in relationship to the College Access Program?

Thank you for your time today. This interview will transcribed and imported into an electronic database in order to create transcripts for review and analysis. The tapes will be destroyed once the transcripts have been created. And the transcribed data will be kept for no more than two years in a secure area and then destroyed.

VITA

Jan L. Smith

Candidate for the Degree of

Doctor of Education

Dissertation: THE MEANING OF COLLEGE ACCESS AND PERSISTENCE FOR  
LOW-INCOME, FIRST-GENERATION COLLEGE STUDENTS

Major Field: Educational Leadership-Higher Education Administration

Biographical:

Education:

Doctor of Education in Higher Education Administration (May 2011)  
Oklahoma State University, Stillwater, Oklahoma

Master of Art in American Studies (May 1996)  
Northeastern State University, Tahlequah, Oklahoma/United States

Bachelor of Art in Political Science with a Sociology Emphasis (May 1994)  
Northeastern State University, Tahlequah, Oklahoma/United States

Experience:

Associate Vice President for Student Affairs-Tulsa Community College

Acting Associate Vice President for Student Affairs-Tulsa Community College

Dean of Student Services-Tulsa Community College, Northeast Campus

Director of Student Development-Rogers State University

Assistant to the Dean of Student Affairs- Northeastern State University

Professional Memberships:

Association for Student Conduct Administration- ASCA

American Association of Collegiate Registrars/Admissions Officers- AACRAO

National Association of Student Personnel Administrators- NASPA

Name: Jan L. Smith

Date of Degree: May 2011

Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Title of Study: THE MEANING OF COLLEGE ACCESS AND PERSISTENCE FOR  
LOW-INCOME, FIRST-GENERATION COLLEGE STUDENTS

Pages in Study: 136

Candidate for the Degree of Doctor of Education

Major Field: Higher Education Administration

Scope and Method of Study: Higher education access and success for first-generation college students from low-income backgrounds is a critical issue for colleges and universities. First-generation, low-income college students face certain challenges related to financial resources, academic preparation, personal support, and knowledge of college processes. The purpose of this study was to examine whether a college access program at a community college mitigated institutional and environmental barriers that have historically impeded the academic success of first-generation college students from low-income backgrounds. The College Access Program (CAP) at Middle State Community College provides a free college education to all high school seniors who graduate with a 2.0 grade point average or higher and reside within a specific county. Using a case study methodology, 10 first-generation, low-income students participating in CAP were interviewed using Instant Messaging technology. Five of those students then participated in a follow-up, in-person interview. Vincent Tinto's (1993) Student Integration Theory was used as a conceptual framework and the four research questions were used to guide the study: (a) How do first-generation college students from low socioeconomic backgrounds describe their collegiate experience?; (b) How does CAP influence low-income-background-first-generation college students' understandings of the college experience?; (c) How does the theoretical work of Tinto on student retention inform the explanation of those experiences?; and (d) What other realities are revealed in this study? Additional methods of data collection included interviews with two key informants and a review of pertinent institutional documents such as program reports and assessment data.

Findings and Conclusions: Certain cultural-social barriers to success for first-generation, low-income college students were moderated through their participation in CAP. Based on organizational, theoretical, and substantive categories of analysis, three main findings emerged about these students. Self-determination was a major influence in choosing to attend college and in the ability to adjust. A sense of pride and belonging contributed to successful college integration. Working students continue to need to balance their work responsibilities with school. Higher education institutions must identify practices and develop programs like CAP to support these students, particularly at community colleges where these students enter in higher numbers.

ADVISER'S APPROVAL: Dr. Ken Stern

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