

**An Examination of Commuter and Residential Student Time Allocation and
Relationship to Student Retention**

By

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SUMMARY

Over the past five decades, numerous theories about college student attrition have attempted to explain student departure. Conclusions drawn by the literature broadly acknowledge that students are less likely to depart if they are academically engaged and socially integrated with the campus. Further, students who reside in a campus residence hall are less likely to depart. The literature further informs us that the activities that residential students engage in while living on campus positively affect persistence, resulting in improved student retention in comparison with their commuter counterparts. Understanding how commuter students allocate their time as compared to residential students may reveal important differences.

At the institution where the study was conducted, residential students have generally persisted to the second year at a higher rate than commuter students. This study examined how these two groups allocate their time for academic and social engagements using data from the College Student Experiences Questionnaire, as well as from focus groups. This study found that time allocation behaviors between the two groups were significantly different. The study did not however, find a correlation between time allocation behaviors and first-to-second year persistence. The findings did reveal important questions for future research and implications for programs and policies that may help commuters more effectively allocate their time, with the longer term goal of improving commuter student retention.

1. Introduction

Each academic year, student affairs personnel professionals, and other university administrators, charged with the responsibility of retaining and graduating students, struggle to identify strategies to prevent student departure. The conditions that prompt students to depart prior to attaining their undergraduate degree cover a wide range of circumstances. The literature on student engagement, student departure, and attrition generally concludes that those students who participate in out-of-the-classroom academic and social activities are more likely to persist and graduate than students who choose not to engage in out-of-class activities (Study Group on the Conditions of Excellence in American Higher Education, 1984, p.19; Braxton, Sullivan & Johnston, 1997; Rendon, 1994; Tinto, 1975, 1997; Terenzini & Pascarella, 1977; Astin, 1984; Christie & Dinham, 1991). Similarly, the literature generally suggests that students who live on campus become more socially integrated with campus and, therefore, persist and graduate at a higher rate than their commuter counterparts (Astin, 1975; Stage, 1989; Kamens, 1977; Pascarella & Terenzini, 1991; Chickering, 1974; Skahill, 2002; Pascarella & Terenzini, 1984); Christie & Dinham, 1991; Galichi & McEwen, 1989; Herndon, 1984; Thompson, Samiratedu & Rafter, 1983; Levin & Clawes, 1982).

Although the research and literature on student departure is plentiful, the findings are obfuscated by student ethnic, racial, economic, social, and religious background. More evidently, academic preparedness prior to entering college, commitment to success, the ability to assimilate into the academic environment, and financial solvency are some of the factors that influence student departure.

While the theories on student departure have been tested on college campuses, no single response has been established to engage students and mitigate student departure. Learning

communities and commuter outreach programs are intended to create engagement to build affinity between the student and the institution. Initiatives encourage students to voluntarily engage in activities, but often students' success is predicated on their commitment to remain on campus. For the campus with a student population that is predominantly commuter, the time on campus factor is problematic. When students are on campus, how they allocate their time to different activities becomes critical. Whether involved in academic activities outside of the classroom or involved in social or cultural extracurricular activities, the time spent engaged on the campus is important to student persistence.

1.1 Background

As referred to earlier, conclusions drawn by the literature on student departure broadly acknowledge that students are less likely to depart if they are academically engaged and socially integrated with the campus. Further, students who reside in campus residence halls develop a greater sense of belonging and affinity with the campus and have less likelihood of student departure. In fact, as the literature informs us, it is residential students' activities while living on campus that affect persistence and cause them to depart from the institution less often than their commuter counterparts Astin (1973); Skahill (2002); Levin and Clowes (1982); Bowman and Partin (1993); Pascarella and Terenzini (1981, 1991); Schroder and Maple (1994); and Zheng, Saunders, Shelly, and Whalen (2002). Understanding how commuter students allocate their time, as compared to residential students, may reveal important differences. Are commuter students spending less time in the library, meeting with faculty, or participating in class academic projects than their residential student colleagues? Are residential students less burdened by commuting, family obligations, and work responsibilities, resulting in their being more involved in campus, academic, and social activities? This kind of research, which examines how

residential students allocate their time on campus versus how commuter students allocate their time on campus, is scarce. Review of the literature and research from various electronic databases, dissertation abstracts, and the ERIC (Education Resources Information Center) database yielded only a few studies linked to student allocation of time. Of the studies found none focused specifically on how commuter or residential students allocated their time. The studies looked at the relationship between the allocation of time to study and academic success. A study of time use and college outcomes by Stinebrickner & Stinebrickner, (2004) states that “Despite an increased awareness of the policy importance of understanding the determinants of educational outcomes, knowledge of the relationship between educational outcomes, and perhaps the most basic input in the educational process – student’s study time and effort – has remained virtually nonexistent” (p.34).

Time allocation might best be defined as how an individual parcels out the finite hours in a day to any number of activities, encounters, or tasks that an individual has both discretionary and nondiscretionary choices in which to engage. Time allocation provides for a “microscopically detailed behavioral record” that allows for the construction of higher order cultural units, social units, modes of production, and evolutionary stages (Gross, 1984). The concepts of social and cultural units, as well as the ideas of mode of production and developmental process, are important factors found in the theoretical constructs of student departure and transition to college literature. These concepts will be discussed in the time allocation section in the review of literature.

If there is a time allocation differential between residential and commuter students for engagement activities, identifying its nature and magnitude may serve as a basis for retention initiatives. Whether time allocation has an influence on intellectual accomplishment, persistence

in social or academic settings, and results in enhanced engagement through time management of these functions, is important for several reasons. First, when it is known how students allocate their time, efficient and inefficient behaviors can be identified. For students, this is important, since knowing which allocations of time will lead to efficient behaviors might yield enhanced academic and social success. Efficient behaviors can then be managed into productive time segments. Efficient behaviors for the present study are those which result in academic and social effort and engagement with faculty and peers. Second, the possibility exists that students are ignoring particular time allocations that can be directly linked to student success. Informing students of the importance of appropriate allocation of time may be an important student preparation activity to help with the transition to college. Knowing how residential and commuter students allocate their time may influence university administrators regarding the structuring of programs and policies that maximize the use of student time. Understanding how students allocate their time may enhance evaluation of programs intended to engage students academically and socially, and determine whether delivery times are perceived by students as convenient. Further, refining our understanding of the concept of student time allocation may reveal how time spent limits or accelerates assimilation into the institution academically and socially, which, in turn affect student departure.

This study examined how residential and commuter students allocated their time for academic and social engagements. Since graduation and first-year to second-year persistence rates differ between these two cohorts, one of the goals of the study was to find a relationship between time allocation behaviors of commuter and residential students and their first- to second-year persistence.

To understand the magnitude of the differences, institutional data were reviewed for four- and six-year graduation rates from 1999 to 2010. These data are reflected in Table 1. The four-year graduation rate of residential students during the period 1999 to 2010 averaged about 32% for residential students and 17.1% for commuter students, a difference of nearly 15%. The six-year graduation rate for the period 1999 to 2005 was 59.7% for residential students and 46.7% for commuter students; a difference of 13%. The results indicate a significant difference in graduation rates between the two cohorts. Although graduation rates between these cohorts was not a topic of this study, since the relationship between persistence and graduation is important, the graduation rates included here provides important background information.

Table 1
University Of Illinois at Chicago Four-Year and Six-Year Graduation, 1999-2005

	Fall 1999		Fall 2000		Fall 2001		Fall 2002	
	4 yr.	6 yr.	4 yr.	6 yr.	4 yr.	6 yr.	4 yr.	6 yr.
Residential	32.0%	59.5%	31.8%	61.8%	32.3%	60.1%	32.1%	55.9%
Commuter	15.5%	44.8%	17.8%	45.7%	18.9%	45.2%	16.4%	44.4%
All	19.7%	48.5%	20.9%	49.3%	22.1%	48.8%	20.3%	47.2%

	Fall 2003		Fall 2004		Fall 2005		Fall 1999 to Fall 2005 Averages	
	4 yr.	6 yr.	4 yr.	6 yr.	4 yr.	6 yr.	4 yr.	6 yr.
Residential	35.4%	62.3%	34.7%	59.9%	34.7%	58.6%	33.3%	59.7%
Commuter	18.1%	47.7%	20.0%	47.7%	21.7%	51.5%	18.3%	46.7%
All	23.8%	52.5%	25.1%	52.5%	26.7%	54.3%	22.7%	50.4%

Table 2 reflects student persistence from first- to second-year attendance. Persistence for this data set is defined as a student registered in the tenth day of the fall semester of study. The average persistence rate for residential students was 83.1%, while for commuter students it was 75.8%. The persistence rate difference of 7.3%, while better than graduation rate difference, is still noteworthy. The persistence and graduation data at the University of Illinois at Chicago

(UIC) and the differences between commuter and residential students is consistent with much of the literature and research on student departure. And while the persistence gap between these two cohorts seems to be closing, understanding what is causing the divide to close added another level of interest to this study.

Table 2
University Of Illinois at Chicago First Year Rate of Persistence, 1999-2010

	F99		F00		F01		F02	
Residential	665	85.4%	628	84.7%	651	84.9%	741	84.2%
Commuter	1951	74.5%	2215	75.9%	2041	76.2%	2274	75.0%
All	2616	77.3%	2843	77.9%	2692	78.3%	3015	77.2%
	F03		F04		F05		F06	
Residential	972	84.2%	939	80.5%	1061	79.8%	914	81.2%
Commuter	1970	73.8%	1777	75.7%	1715	78.5%	1937	76.7%
All	2942	77.2%	2716	77.4%	2776	79.0%	2852	78.1%
	F07		F08		F09		F10	
Residential	1553	77.8%	1394	81.4%	1418	82.3%	1455	79.7%
Commuter	1738	76.9%	1570	79.4%	1729	81.0%	1749	78.8%
All	3291	77.3%	2964	80.4%	3147	81.6%	3204	79.2%

Research Questions

The need to understand how commuter and residential students allocate their time leads to two important research questions.

1. Is there a statistically significant difference in time allocation activities between residential students at the University of Illinois at Chicago and their commuter counterparts?
- I. The segregation of time allocation as identified by Pace (1979) is part of the College Student Experiences Questionnaire and is related to academic activities that include:

- a. Faculty Interaction
- b. Student Time/Homework Preparation
- c. Class Time/Laboratory Time
- d. Class Peer Group Projects
- e. Library Use
- f. Computing/Educational Technology

II. The areas of time allocation that are related to social interaction and extracurricular activities include:

- a. Interacting with Friends
- b. Participation in Clubs
- c. Intramural/Sport Activities
- d. Fraternity and Sorority Membership

III. Areas of time allocation for off-campus activities/unrelated to academic pursuit or social activities include:

- a. Work Commitment
- b. Leisure Activity
- c. Family Obligation
- d. Volunteer Engagements
- e. Napping/Sleeping

2. Is it possible to correlate certain time allocations with one-year persistence?

1.2 Purpose of the study

The purpose of this research study was to examine the allocation of time by commuter and residential students and to attempt to determine whether there is a relationship between

reported time allocation behavior and one-year persistence rates. Knowing how students decided to allocate their time contributes to the body of knowledge about student engagement and student departure. “Despite the very extensive literature on dropout from higher education, much remains unknown about the nature of the dropout process. In large measure, the failure of past research to delineate more clearly the multiple characteristics of the drop out can be traced to two major shortcomings; namely, inadequate attention given to questions of definition and to the development of theoretical models that seek to explain, not simply to describe the processes that bring individuals to leave the institution of higher education” (Tinto, 1975, p. 89).

Understanding how students allocated their time, is one way to explain how students engage or fail to engage in social and academic integration. Tinto (1975) and Stage (1989b) maintain that “though integration or membership in the academic and social systems are distinct processes, they are mutually interdependent and reciprocal. The involvement of various actors in a wide variety of settings is key to the integration process.” For commuter and residential students, identifying which time allocation behaviors negatively affect student success may lead to an intervention model that will assist students in more effective time allocation. It may also inform us about residential student time allocations and how certain allocations affect student success or failure.

The study specifically:

1. Explores how residential and commuter students allocated their time prior to, during, and after class.
2. Examines the various academic and social opportunities in which students elected to allocate time while on campus.
3. Explores how time was allocated for off-campus activities.

4. Explores correlations between residential and commuter student time allocation and persistence.
5. Informs university administrators of the importance of time allocation and encourages development of academic and social integration activities for commuter students that are considerate of their use of time.

If the literature on student departure suggests a relationship between student success and student investments in academic and social endeavors, then knowing how students allocate time in these two scenarios may determine if there is a benchmark that can be established to assure student success. Identifying time allocation differences between residential and commuter students may inform the student departure literature about a basic input in educational process; the students' time.

1.3 Definitions of key terms and concepts

Attrition: is an organizational phenomenon that is concerned with a student's decision to leave college. Leaving may be based on any number of factors and may be either a voluntary or involuntary decision on the part of the student.

College Student Experiences Questionnaire (CSEQ): is a survey instrument designed to assess the quality of effort that students expend in using institutional resources and opportunities that are provided to assist them in their educational and extracurricular development.

Commuter Students: can be broadly defined as "all students who do not live in institution-owned housing" (Jacoby, 1989, p.1). Commuter students in the present study will include students that walk, drive or take mass transportation to campus. Commuters are considered to be all students who do not live in campus owned housing.

Departure: is defined for the present study as the withdrawal from the institution of higher education. The process of student departure is an individual phenomenon that may be influenced by a number of factors including, but not limited to, background characteristics, student commitment, financial concerns, encouragement from others to stay, environmental fit, place of residence, employment and family commitments.

Engagement: represents both the time and energy students invest in educationally purposeful activities and the effort institutions devote to using effective educational practices (Kuh, 2001). In this study engagement will include in and out of class activities as identified in the College Student Experiences Questionnaire.

Involvement: is the amount of physical and psychological energy devoted by a student. Involvement may be social or academic. An involved student is one who devotes considerable energy to academics, spends much time on campus, participates actively in student organizations and activities, and interacts often with faculty (Astin, 1984, p.292).

Persistence: is an individual phenomenon—a student persisting to a goal. The student's ultimate goal may (or may not) be graduation from college. Because individual students define their goals, a student may successfully persist without being retained to graduation. (Reason 2009). Persistence in this study is a student's decision to continue their educational program.

Quality of Effort: the amount, scope, intensity, and focus students put into taking advantage of opportunities afforded to them by the institution. What students gain from their college experience is largely established by the amount of effort they exert toward their education. (Pace, 1984).

Retention: is an organizational phenomenon-- colleges and universities *retain* students.

Institutional retention rates, the percentage of students in a specific cohort who are retained, are often presented as measures of institutional quality. (Reason 2009). Retention used in this study represents the success of an institution to keep students enrolled.

Residential Students: are those who live in institution-owned, on-campus student housing (Stewart and Rue; National Clearinghouse for Commuter Programs, 1983). For this study, surveys, focus groups and discussions about residential students will only consider students that reside or have resided in campus owned housing.

Social Integration: is a student's social involvement with his or her college peers and the faculty.

Social integration is obtained through informal peer group association, semi-formal extracurricular activities, and integration with faculty and administrative personnel within the college environments (Ishitani and DesJardins, 2002).

Time Allocation: is the commoditizing of time that is to be invested in academic engagement, social interactions, work, leisure, and rest (Gross, 1984, p.520).

2. REVIEW OF THE LITERATURE

In the effort to understand why commuter students experience significantly different rates of college success than residential students, important evidence suggests that differences in the activities to which these two groups allocate their time may provide part of the explanation. The preponderance of evidence is not, however, found in just one body of literature. There are eight literatures that discuss the factors influencing student persistence and attrition. A brief overview of each literature precedes a more complete review of each literature.

2.1 Overview. The studies, research, and theoretical perspectives that explain social integration and student departure decisions do not necessarily implicitly or explicitly focus on student time allocation in academic and social activities as the sole reason for a student's success or failure at his or her institution of choice. Rather, time allocated by students in academic and social activities is usually one of a number of variables that may explain the degree to which a student may or may not succeed. The relevance of the literature to the present study was decided based on whether there is an intersection of the research and theoretical frameworks with student activities and the effect participation has on student success.

The first body of literature is focused on the transition to college and is interested in the time period from when students leave high school to the point that they fully migrate to college and how they navigate myriad challenges during this period. How and why students decide to engage in academic and social activities is found in this literature. There are important time allocation decisions that are being made as students make choices about the activities in which they will engage.

While there is a large body of student departure literature with a number of theories and frameworks, there are three literatures that are the relevant to this study: Student Attrition,

Student Integration, and Student Involvement. The second literature, Student Attrition fosters the idea that attending college has many parallels to job satisfaction. Central to this literature is the argument that the student's encounters with the institution will determine whether he/she will persist or fail. The theory also posits that there must be a requisite amount of time allocated by the student to achieve a positive institutional encounter (Bean, 1980).

The third literature is Student Integration and has a focus on the influences that residential and commuter students experience during their college academic engagement. The influences are grounded in the students' social and personal history and how these influences are interwoven with institutional expectations and, further, how students can overcome contrary values and mores. Students shape their environment by choosing to pursue their own tasks and goals, while their environment shapes them through its norms, expectations, and opportunities (Brower, 1992).

Student Involvement, the fourth body of literature, focuses on the impact of student experiences on their development while in college. The idea is that by being involved, learning and development are enhanced (Astin, 1970). The literature argues that a relationship is developed between the student and institution and that there must be willingness by the student to invest effort in order to persist.

The fifth literature that is focused on residential students and the sixth literature looks at commuter students. These two literatures have the same general research theme that focuses on why commuters face more challenges than residential students and points to integration and attrition models to support research findings. The various theories of the relationship of the student to the institution and the forces that impact each of them because of place of residence is central to both literatures.

Quality of Effort literature is the seventh literature reviewed and is centered on the theory developed by Robert Pace (1984) that suggests that a student's college experience depends on participation in academic and social activities and the student's willingness to devote time to participate in these experiences. Since the present study determines that how students allocate their time for various academic and social activities plays a role in the student departure process, this literature is important.

The eighth and final literature is focused on Time Allocation and is generally found in economic and anthropologic research. It has a focus on student use of time to acquire knowledge, develop interpersonal relationships, and deal with competing priorities in academic and social integration. The literature is widely focused on a relationship to task performance and outcomes related to the task. Although the literature is very broad and diffuse, it is ample enough to present basic, descriptive patterns of time use and the relationship of time allocation and anticipated outcomes as a consequence of the time commitment.

The idea of time allocation behaviors of college students' does share some similarity to the idea of time-on-task that is generally associated with K-12 education. The idea of time-on-task endorsed by educator John Goodlad suggests that the availability of time becomes a basic framework for learning. "Time is virtually the most precious learning resource they (teachers) have at their disposal. . . differences in using time create inequities in opportunity to learn" (Goodlad, 1984, pp. 29-30).

The time-on-task discussion has a focus on in-class activities for students. The discussion of time allocation for the present study considers time on a broader spectrum of potential activities for college students outside the classroom. However, the same consequence is shared in either discussion; time correctly apportioned, used productively will increase the

likelihood that a desired outcome will be achieved. While the time-on-task literature is more narrowly applied to K-12 and was not reviewed for this study, many of underlying ideas have applicability.

2.2 Transition to college literature. The relevance of the literature on transition to college is in the discussion of how students navigate the newly acquired latitude to freely make choices while gaining entrance to a new environment and lifestyle. Transition to college forces students to make time allocation choices in a myriad of activities that will help assure that they “fit” into the institution. The transition to college process sorts out student status as a commuter student or residential student. It is a sorting process that may be linked to student success.

Each academic year, colleges and universities admit students into their institutional domain. With disparate, diverse, and complex backgrounds, students begin their academic journey with their chosen institution. Aside from knowing a student’s class rank, grade point average, and preadmission test scores, universities admit students into an academic and social environment that the institution assumes is neutral to a student’s life circumstance and capable of accounting for individual life circumstances.

Neutrality however, is not the experience; admitted students are branded as either residential or commuter. The brand a student receives carries unequal risks and rewards, often translated into either a paved or an unpaved and therefore perilous academic matriculation path. One of the challenges that commuter students face is finding a sense of belonging and, on a more basic level, simply “finding their niche on campus” (Orlando, 2000). The assimilation of students requires different forms of institutional action for residential and commuter students; student retention initiatives and activities must be timed for student needs (Tinto, 1982). For example, the initiatives must take into account student background characteristics or must be

sensitive to the racial or cultural demographic of the student population, as well as have awareness of students' place of residence. The transition to college is the first time away from home for many adolescents (Balk, 1995). The transition from high school to the college experience is viewed as becoming a member of a community. Van Gannep (1960) suggests the idea of the "rite of passage" as a process of full integration into the college community.

It could be argued that a student makes a similar change from primary grades to secondary grades. The trials and tribulations of "fitting in" the high school environment are well-documented. However, some differences are that the high school curriculum is structured with few choices. Students are given status that matters, depending on the year of study. Social activities are devised and supervised to encourage inclusion. Lunch and study halls are scheduled; missing class assignments result in consequences. Teachers meet with family members responsible for the well-being of students to discuss academic and social problems. Caring is intrinsic to the experience of students in the years from kindergarten to high school. Time allocation is prescribed, often including extracurricular and social functions. The biggest difference is that time allocation is a structured component of the K-12 experience and, while these students are afforded latitude in deciding how to spend free time, the parameters are limited.

The reality of college life is very different. Students at higher education institutions possess considerable freedom in their decisions on how to allocate time to different activities (Meng & Heyke, 2004). One's field of study is elective, and the number of courses one takes in a semester is driven by individual choice. Study habits, class attendance, and involvement in out-of-class academic and extracurricular activities are the student's responsibility. The allocation of time for involvement in academic and social activities and in establishing priorities

becomes the purview of the student. There are students with strong academic credentials who enter the mainstream higher education institutional environment and fail to persist. At the same time, there are students with a less than stellar academic history who enter the same mainstream higher education environment and succeed. The relationship between student and the institution is identified as the “institutional fit.” Tinto (1993) posited that all students experience some difficulty in making the transition to college, and it is the mechanisms of integration in which they engage that will help negotiate the transition, which affects social and academic success. Strong institutional fit may not guarantee that time allocation in activities will more likely occur; one might intuitively argue that the more welcomed a student feels in the institution, the more likely it is that the student will become more involved in activities supported on the campus.

Bean and Bradley (1986) define the institutional fit as the extent to which a student feels that he or she belongs at the institution. There is an institutional culture and climate into which a student enters; some students feel it embraces them, while others feel purposeful alienation. Whether it is an institution’s attempt to academically integrate students or engage them in extracurricular activities, how students perceive themselves as fitting in is an important component to building affinity. Pervin (1967) found, “It is the fit between characteristics of the individual and the environment that is important in satisfaction.” In a study intended to explore first- and second-semester persistence of first time freshmen at a public four-year institution, Elkins, Braxton, and James (1998) used four sets of variables: (1) student pre-entry characteristics; (2) initial institutional commitment; (3) separation; and, (4) first-to-second semester persistence. The pre-entry characteristics examined were aptitude, high school academic achievement, gender, parent income, race, and parent educational level. The study found that initial institutional commitment and four of the six student entry characteristics affect

a student's need to reject the attitudes and values of past communities in order to remain in the chosen college. The four-year entry-level characteristics that were statistically significant influences on first- to second-semester persistence were high school achievement and parental education that positively influence persistence, while being a woman or a white/Caucasian student increased an early departure from college.

Nafziger, Holland, and Gottfredson (1975) found that student-college congruency was positively related to student satisfaction. An interactional theory developed by Rootman (1972) argues that voluntary withdrawal is related functionally to the goodness of the "person role" fit between individual and the normative environment of the institution the student attends. These two studies suggest that as students transition into their new institution, pre-entry background characteristics and other variables will impact the success of the transition. These variables that represent various academic and social skills may be related to the amount of time, frequency, and success a student experiences when involved in allocating time to social and academic activities.

Tinto (1993) offers a view of institutional fit similar to Nafziger et al. He characterizes a student's participation with the institution as "congruence." He suggests that integration into the academic component of a college is directly linked to forms of departure arising from a substantial incongruence or mismatch between the skills and abilities of the individual and the level of demand based on that person by the academic system of the college. This may reflect failure in participation in social or academic activities.

The transition-to-college experience as discussed by Tinto (1993), Bean, and Bradley (1986), Pervin (1976), and others do not include benchmarks of time allocation necessary for successful integration to occur. It is unclear how much time must be committed for a student's transition to be declared a victory. Also, there is little clarity about racial and ethnic differences

of students and the amount of time that needs to be invested before academic and social transition might occur. Intuitively, one would agree that the effort a student exerts to fit into the academic institution is a key element of environmental fit. “If students get to benefit from what this college or university has to offer, they have to take the initiative” (Pace, 1984).

Tinto, in his 1987 book, *Leaving College: Rethinking the Causes and Cures of Student Attrition*, explains retention with a strong focus on the effects of transition to college, saying “In its full form, our model of student institutional departure sees the process of persistence as being marked over time by different stages in the passage of students from past forms of association, to new forms of membership in the social and intellectual life of the college. A sizable proportion of very early institutional departures mirror the inability of new students to make the adjustment to the new world of college” (p.126).

The transition to college literature reveals important information about how the experience of entering college may affect time allocation activities and the outcome from participation in various social and academic activities. There are three dominant ideas that can be taken from this literature. First, that the transition process defines the student place of residence; the place of residence for students has implications for the amount of time a student has available to allocate to various social and academic activities. Second, achieving “environmental fit” may influence the amount of time, energy, and quality of effort a student may allocate in academic and social activities. Third, student background variables play a role in the transition to college. These variables, which represent various academic and social skills, may be related to the amount of time, frequency, and success a student may experience when involved in allocating time to social and academic activities.

2.3 Student departure literature. Student departure literature examines completion probability, identifies characteristics of students who persist and succeed, and is interested in the influence that student place of residence has on student success. The departure of college students has been a persistent, long-standing problem for colleges and universities. Why students enroll at a higher education institution and then choose to withdraw has attracted the interest of scholars and practitioners for over seven decades (Braxton, 2000). The literature on college student departure affirms a long-standing interest in college student attrition (Christie and Dinham 1991). Updated in 2009, the Center for the Study of College Student Retention lists more than 1,450 retention references. The importance of the issue of student departure as a topic of interest and concern in higher education has resulted in an explosion of writing and research over the past three decades. *The Journal of College Student Retention: Research, Theory and Protocol* are intimately engaged with the topic. “Curious, however, is that despite the plethora of articles and books on the topic, the concept of retention and its appropriate measurement tools remain cloaked in a significant level of ambiguity” (Hagedorn, 2006, p. 8-9). From the research that has been done on student retention, it is known that persistence is the result of a complex set of interactions that occur over time (Woodard, et al. 2001).

Unlike the transition to college literature that has a focus on the brief but critical period when a student moves from high school to college, the student departure literature is more broadly focused on variables, personal circumstances of the student, place of residence, institutional commitment, and other influences that may affect student departure. Student departure literature is also focused on the variables that impact student success. The theoretical constructs that support the role that participation in social and academic activities plays in student success is found in this literature.

The literature on student departure is also interested in completion probability and identifies characteristics of students who achieve a high degree of persistence and attainment. The core of most research on student departure is rooted in academic and social attachment (Pascarella and Terenzini, 1991; Tinto, 1993). Institutional or social policy designed to decrease student departure or increase retention are generally focused on strengthening student attainment, for example, through improving student services or the quality of residential life (Scott, Bailey, and Kienzl, 2006). Current theories of retention consider this set of interactions from a variety of perspectives. Some emphasize the role the individual plays, while others emphasize the effect of the environment (Woodard, et al. 2001).

The largest portion of theory and research on student departure is principally based on students living in residence halls at four-year institutions. The research investigates the internal and external influences that college students sustain and that affect student persistence. Social development, out-of-classroom experiences, the level of interaction with faculty, engagement with student peers, students' institutional commitment to succeed, personal engagement skills, along with student satisfaction are all influences discussed in the three theoretical models of Astin (1973, 1977), Bean (1978), and Tinto (1975). These theories have faced scrutiny from a significant number of researchers. Subsequent studies on student withdrawal have validated, in varying degrees, the models and their assumptions. In spite of the challenges and reconstructions of the frameworks, these models are considered central ideas in student departure literature.

A student's decision to withdraw has myriad implications for not only the students, but for the institutions' public perceptions of quality, budget, and enrollment stability, and ability to plan and enhance academic and extracurricular activities. For policymakers and administrators, student departure is linked to institutional effectiveness, budget allocation, and program creation

to lower attrition. For faculty, understanding the factors that contribute to student departure will create teaching interventions and interactions that will yield positive impacts on students' decisions to depart. Students must also become informed and understand the factors and conditions that will impact their persistence as college students, and they must be given strategies to meet the challenges and create positive learning experiences that will maximize their potential for meeting their learning objectives. Assessment of institutional effectiveness is a necessary and important component of higher education (Kempner and Taylor, 1998).

According to the American College and Testing Program (2006), nearly 45% of students enrolled in two-year colleges depart during their first year and 25% of students depart four-year colleges and universities during their first year of study. While student departure continues to draw the attention of college and university administrators, and an industry has been created to focus on the problem and speak to retention, it is argued by some researchers that the post-secondary educational opportunity of attendance at a college or university is only suited for those who are academically prepared. "People enter institutions of higher education with a great variety of interests, skills, values, and a commitment to the goals of higher education and to the specific institution into which entry is gained. It is not elitist to recognize that not all those who enter are equally equipped, either in skills (academic, social, otherwise) and/or intellectual capacity to finish a given course of study" (Tinto, 1982, p. 696).

Student departure is an ongoing issue in higher education and is a problem that has remained constant through the years. "Coupled with the idea of intellectual capacity is the static movement of attrition. As a national phenomenon, attrition has been a surprisingly stable feature of the higher educational enterprise," (Tinto, 1982, p. 693). In spite of significant increases of racially and ethnically diverse students and massive changes in both the structure and

functioning of higher education in the United States, over a 100-year period, student withdrawal has remained relatively constant, (Tinto, 1982). This might suggest factors influencing student departure have kept pace with the changing student demographic.

It is unlikely that student departure levels will be reduced without some massive changes in both the structure and functioning of higher education in the United States (Tinto, 1982). The literature on student withdrawal identifies theoretical models that help explain why students leave college. Reviewing the literature on student departure theory for the present study is intended to establish the relationship of the theory to the student's allocation of time and the effort related to the allocation.

Student departure is a consequence of multiple factors. For some students, it is an economic issue while for other students it could be social or psychological.

The economic studies on student departure examine how financial aid impacts a college student's ability to continue or withdraw from the institution (St. John, Andrew, Oescher and Starkey, 1994); (Astin, 1975); (Terkla, 1985). The most recent research from the mid-1980s to the mid-1990s sought to explain the interaction of finances with other factors that influence college departure (Cabrera, Nora, and Casteneda, 1993; Stampen and Cabrera, 1986; St. John et al., 1996).

The economic models of student departure posit that there are tangible and intangible economic factors. Tangible elements include the student's actual ability to afford college: the amount of money saved for college, financial aid packaging, and the ability to identify other revenue salaries (Cabrera, Stampen and Hansen, 1990; Cabrera, Nora and Castañeda, 1992, 1993; St. John et al., 1994, 1996). The intangible factors are more psychological in nature and represent the calculations by which a student considers the value of attending college against its

costs. Students must believe the costs to attend college outweigh not attending (Cabrera et al., 1990; Cabrera et al., 1992; Cabrera, Nora and Castañeda, 1993).

DesJardins, Ahlburg, and McCall (1999) used an event history model to examine student departure. The empirical model used was a discrete time hazard model. Willett and Singer (1991) define hazard modeling as “the population hazard function describes the risk of an event’s occurrence in each time period, the probability that randomly selected population member will experience the event in the period given that the event has not already occurred” (p.954). Hazard time analysis is a statistical method, designed for studying occurrence and timing of longitudinal events. The exogenous and time-varying factors of the study were hypothesized to affect a student’s enrollment decision. The time-varying factors included college grade point average, whether the student is an athlete, loans, scholarships, grants, earnings, work study, and time on campus. The student may face a hazard function to any of these time varying factors that may lead to a consequence that influences persistence. The hazard function involves the occurrence and the timing of the event. For example, when a student receives financial aid or scholarship, or when the student engages in work study or employment on campus is related to a particular time is considered the hazard function. This approach allowed for the remedy of the analytic problems found when standard statistical procedures are used in longitudinal events like student departure.

This study confirmed most of the findings of earlier student departure literature. However, the study’s key explanatory variables had differential effects over time. There is unquestionable value in identifying the times at which students are most at risk of leaving college; this would allow intervention strategies to be developed to mitigate some instances of student departure. And, what is found in the study is an implied relationship between activities and student success.

While in the Student Departure Literature, there is found the recurring argument that academic and social integration are necessary for student success. What is most lacking in the literature is discussion about the type of resources and effort that must be committed to achieve student success; in other words, specifications of this integration. The present study may contribute to this missing information.

2.4 Student integration theory literature. Tinto's theory of student departure is one of the most influential in the Study of College Student Departure (Braxton, Sullivan, and Johnson, 1997). Vincent Tinto is most often cited in Student Departure Literature. "Tinto's model (especially the 1975 and 1987 versions) has certainly provided workable and testable foundation for analyzing the multiple factors involved with student departure, particularly employing quantitative methods" (Rendon, Jalomo, and Nora, 2002). The central premise to Tinto's (1975, 1987) theory is that high levels of integration into the academic life of an institution lead to a greater commitment to the institution. A greater commitment by the student results in the enhanced likelihood that the student will be retained. The Integration Model suggests the need for a match between the institutional, environmental, and student commitment. Although various theoretical perspectives – economic, organizational, psychological, and societal – have been advanced to account for the phenomena of college student departure (Tinto 1986, 1993), the phenomena enjoys near paradigmatic status, as indicated by more than four hundred citations and one hundred-seventy dissertations pertaining to this theory (Braxton, Sullivan, and Johnson, 1997).

The foundation of Tinto's work was a result of his collaboration with Cullen in 1973. Cullen's research reviewed and investigated longitudinal studies on student attrition. It was in this collaboration that Tinto developed a theoretical model of attrition (Tinto and Cullen, 1973).

In this model, Tinto suggests that students arrive at college with certain aspirations and expectations. The influence of a student's aspirations and expectations is linked to their integration with the institution which then has an effect on student outcomes. Tinto also suggests that there are specific factors that affect student attrition. Students, he asserts, have pre-entry attributes – initialized from family background, which they develop before their collegiate experience, from prior schooling. Other attributes Tinto includes in his theory that affect attrition include:

- Student Goals and Commitment – Student aspirations, institutional goals
- Institutional Experiences – Academics, faculty peer group, co-curricular
- Integration – Social, academic
- Student Goals – Commitment, internal/external
- Outcome – Departure decision – graduate

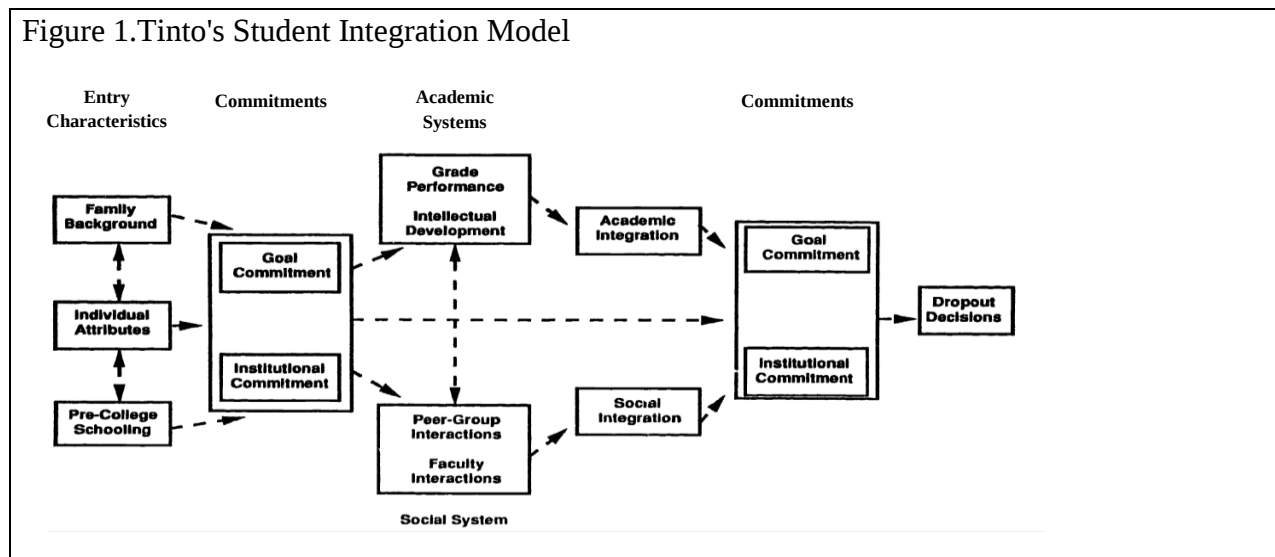
Tinto's Theoretical Model was also influenced by the theories of Van Gennep and Durkheim. According to Van Gennep (1960), integration into a new setting requires rituals and ceremonies, which are necessary for an individual to assimilate into the new setting. Van Gennep's theory provided Tinto with a foundation to apply his own theory to institutions of higher education. The "rites of passage," as expanded by Tinto to include higher education, provided examples of a student's need to work through the higher education system and achieve acclimation into the environmental setting. Failure to acclimate to the higher education setting continued to be the focus of Tinto's study identifying reasons for student departure. Tinto acknowledges that the successful "rite of passage" to the institution may support student success. Tinto fails however to identify or value the time allocation necessary for the "rite of passage" to

be successful and what impact the allocation of time for this integration activity might have on other student integration activities.

Tinto's Student Integration Model has served as the benchmark for comparison of other integration theories, as well as serving as the conceptual framework for a large number of studies. Baumgart and Johnstone (1977); Bean (1980); Pascarella and Terenzini (1979), and Pascarella and Terenzini (1991) have provided confirming research results supporting Tinto's model. Yet, there continue to be challenges to the model because it has yet to be tested and proven to be generalizable across all types of institutions. This is an especially poignant challenge for commuter institutions, which are already considered nontraditional. We might expect, for example, that the ways in which social and academic integration influence commitment and, thereby persistence, differ significantly at residential versus commuter institutions (Pascarella and Terenzini 1984); (Pascarella, Duby, and Iverson, 1983). However, Cabrera et al. (1992) note that when the underlying structural patterns among academic integration, social integration, and institutional and goal commitments of Tinto's model are subjected to empirical testing, results are characterized as mixed.

Figure 1 illustrates Tinto's Student integration Model. The model's variables and their impact on the outcomes and consequences of certain student activities and background characteristics are shown in this diagram.

Figure 1. Tinto's Student Integration Model



There is a theoretical dilemma with Tinto's model. Sociologists contend that Durkheim's (1951, 1953) articulation of the theory of social integration is neither clear nor cohesive (Bollen and Hayle, 1990) and that, as a result, because of the lack of clarity of both Durkheim's and Spady's interpretation of these ideas, Tinto's theoretical constructs of social and academic integration are equally unclear and not cohesive.

Tinto's incorporation of Van Gennep's stage of separation is deemed important to the final stage of assimilation into a new community of life in a college. "In order to become fully incorporated in the life of the college, students have to physically, as well as socially disassociate themselves from the communities of the past (Tinto, 1993, p. 96). Perhaps interventions could be developed that address this. Further elucidating this separation as a critical factor, in updating his theoretical model, Tinto (1993) acknowledged that the nature of separation may vary for various ethnic and racial groups. However, what is more problematic is whether to even consider Tinto's theory for the majority of students in higher education commuter students. For example, for academically talented Latino students who attend college full time, maintaining family

relationships and support is among the most important aspect of transition that facilitates their adjustment to college (Hurtado, Carter, and Spuler, 1996), dispelling a notion of separateness at least in this group.

The nature of separation and its link to transition and integration into college continues to require research and additional clarity. The research does unequivocally inform researchers and practitioners about the importance of the transition stage into college. The literature on transition and the nature of transition embedded in Tinto's integration model argues, albeit subtly, those students in transition must allocate time to ensure that the transition occurs. The constructs of social integration are predicated on divesting time from one social application and reinvesting the time in another social application, college life. The effort and time that must be expended to transition into college remain unknown quantities. These elements are not discussed by Tinto.

In Tinto's Student Integration Model (Table 3), there are five variable concepts that require students to allocate some measure of time for the variable to have some impact on student success:

Institutional Commitment is a variable that may influence how much time a student must invest to achieve tasks because of how the internal support mechanisms are constructed. If students have access to programs and interventions established by the institution, which are intended to assure that students are supported and assisted with social or academic engagements, the time allocation commitment may be affected positively. This means that a student may need to allocate less time to reach a level of engagement that will support persistence. Lack of institutional commitment may have an equally negative effect on student time allocation. If students are not supported by the institution through programs and interventions, leaving students to their own devices to achieve social and academic integration may require a student to

allocate more time to these endeavors. Berger and Milem (1999) in a study on the role of student involvement noted that “the initial level of institutional commitment is a negative predictor for non-involvement, suggesting that students without a high level of institutional commitment are less likely to become involved and less likely to persist” (p. 659).

Academic and Social Integration is the process of becoming part of a community. It requires that an individual be involved in the necessary rituals of the group for which they seek social acceptance. The level of acceptance a student seeks may be related to the amount of time that has been decided on in order to allocate to the process of acceptance. The various communities, academic and social, all set their own informal standards for acceptance to be considered complete. It is up to the student to decide how to apportion time between academic and social activities. This is an important decision, which is without a specific standard.

Student Goal Commitment requires students to decide how important certain goals are ranked in importance to achieve first- to second-year persistence and graduation. If students are deeply committed to a goal, then there is an expectation that the students will allocate more time to achieve the goal. It might also be expected that students who allocate time on tasks not related to their goal, whether knowingly or through a misunderstanding about the need to commit time to the goal, are less likely to attain the goal.

Student Background will impact time allocation in various ways. Students less academically prepared will be required to spend more time engaged with coursework activities. Students who come from backgrounds with poor social integration skills will be challenged to allocate more time to social engagement activities. Berger and Milem (1999) found that students who were academically successful in high school and from families that had higher incomes were more likely to be involved with peers and become socially integrated. Their findings

support the idea that “students who successfully integrate into the academic and social subsystems of a college do so not at the expense of their home backgrounds, but because of them” (p. 661). There may be a relationship between student entry background characteristics and the amount of time allocated to successful integration.

The necessary time to adapt academic, social and familial based backgrounds is important in time allocation discussions. The relationship between background characteristics and time allocation behaviors to successfully adapt academically and socially is an important discussion that may be linked to student success.

Table 3
Student Integration Time Allocation Relationship

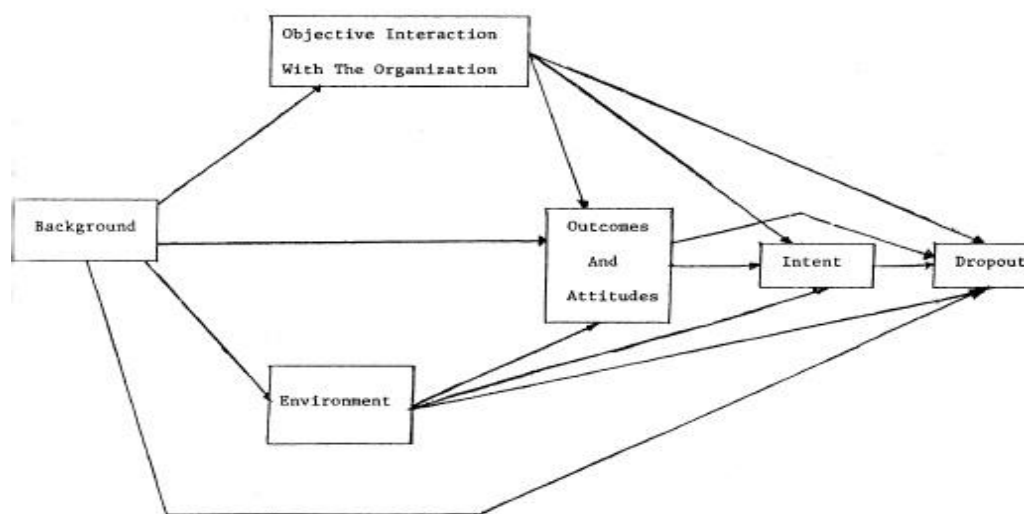
MODEL	VARIABLE	TIME ALLOCATION NECESSARY (Yes or No)	TIME ALLOCATION ASSUMPTIONS
STUDENT INTEGRATION THEORY (TINTO)	Institutional commitment	Yes	Commitment of the student to the institution may affect transition to the institution and environmental fit for the student; the time allocation decision is directly affected and may affect student motivation.
	Institutional experiences/ Academic and social system commitment (academics, faculty, peer groups, co- curricular)	Yes	Time spent with faculty, peer group, and on academic endeavors matters.
	Integration (Academic and Social)	Yes	To gain acceptance and integrate into the institution students must actively participate in activities that are both academic and non-academic.
	Student goals, aspirations and expectations (goal commitment)	Yes	Commitment to goals, aspirations, and expectations requires decisions about how much time needs to be allocated to achieve goals.
	Outcomes	No	The departure decision is made at this point. Time allocation does not matter. Rather, the outcome may have a relationship to behaviors which lead to certain outcomes.
	Student background	Yes	Student needs to spend more or less time compensating for a deficient or strong background variable.

2.5 Student attrition theory literature. Bean's (1978, 1982, 1983, 1985) Model of Student Attrition Theory constructs a different theoretical framework than Tinto. Bean based his theory on the causal models of organizational turnover discussed by Price (1977) and Price and Mueller (1981). Using worker turnover as a framework, Bean's (1978) model for student attrition paralleled the idea of worker attrition. For example, satisfaction with being a student is substituted for job satisfaction, a student's intent to leave college was paired with intent to stay on one's job, and grades were equated with receiving good pay. Bean suggested that student attrition was affected by five variables: (1) student background variables, (2) integration by students within the institution, (3) the influence of environmental variables, (4) the presence of the student's attitudinal variables, and (5) student intentions.

Bean structured his research to focus on student attrition and those factors influencing students who are failing to persist and reported on similarities between leaving the work world and leaving college. Bean's theory stresses the notion that students' beliefs, that subsequently shape their attitudes, are the predictor of their persistence. Also, students' beliefs are affected by the interaction between the students and different components of the institution similar to interaction between employees and corporations. Bean suggests that beliefs are presumed to be affected by a student's experiences with the different components of an institution. The Student Attrition Model also recognizes that factors external to the institution may have a significant influence on attitudes and decisions (Bean and Vesper, 1990). Bean's theory parallels the studies by Greenberg and Baron (1990) and Gunter and Furnham (1996), which argue that within organizations, individual intentions are shaped by group intentions. Since developing the Student Attrition Model, Bean and various colleagues have tested it in variations. Results have supported the organizational, environmental, and personal variables that influence student

attitude and intentions, including persisting or withdrawing from an institution. Figure 2 illustrates Bean's Student Attrition Model and the variables that may impact attrition.

Figure 2. Bean's Student Attrition Theory



As in Tinto's construct, Bean's theory lacks attention to how a student's time is factored into the five student attrition variables. The commitment of time and a student's effort to integrate into the academic and social community of the college environment is not considered by Bean.

In Table 4, Bean's student attrition variables are paired against the question of whether time allocation is required to make the influencing variables affect attrition. The rationale used in the time allocation application previously discussed in the Tinto Model may be applicable to the Bean Model. Specifically student background variables will have the same effect on time allocation commitments as noted in the Tinto discussion.

Integration by students within the institution requires similar time allocation considerations by the students as might be found in the academic and social integration variable discussed in Tinto's Model.

The influence of environmental variables will require students to make choices about how to allocate time. Influences and complications of pressures of the family and the social network into which the student must assimilate are time allocation challenges for students. There may be a relationship of time allocation between integration of students and the influence of environmental influence. The synergy may be that certain environmental influences experienced by the student will expedite or hinder integration within the institution.

A student's attitude about institutional policies, norms and values that shape an institution's climate and culture may have a relationship to a student's decision to allocate time to a certain event or action. It would seem unlikely for a student who has a negative attitude toward an institutional policy to allocate time to undertake a task that is required to be accomplished to become part of the institution, even if that means shunning involvement with students, faculty, or engaging in rites or ceremonies for initiation into the organization.

Student intentions may influence how a student allocates time. Intentions are indicators of how hard people are willing to try and how much effort they are willing to exert to perform a behavior (Ajzen, 1991). For each student, the amount of effort exhibited may be a reflection of the importance they place on becoming integrated and accepted into their institution. The application or failure to apply effort both requires a time allocation decision.

Table 4
Student Attrition Time Allocation Relationship

THEORETICAL MODEL	INFLUENCING VARIABLE	TIME ALLOCATION NECESSARY (Yes or No)	TIME ALLOCATION RELATIONAL ASSUMPTIONS
STUDENT ATTRITION MODEL (BEAN)	Student background	Yes	Student needs to spend more or less time compensating for a deficient or strong background variable.
	Integration by students within the institution	Yes	Students must actively participate in activities to integrate or gain acceptance by spending time.
	The influence of environmental variables	Yes	Includes a wide range of influences from commuting to family and social community issues which are all navigated by investment of time.
	The presence of the students' attitudinal variables	Yes	Attitude in various attributes may dictate the expenditure of time on tasks or interactions depending on whether a student has a neutral, negative or positive attitude.
	Student intentions	Yes	An intention is not affected directly by time allocation. However, student intentions could motivate or de-motivate a student to persist.

2.6 Student involvement theory literature. Astin (1970) presented an impact-process-output model of Student Involvement Theory. Astin's theory suggests that as students become

engaged with college; a relationship develops that requires a level of willingness to invest effort in order to persist. Astin's (1984) Student Involvement Model has garnered interest in student departure literature because it explains environmental influences on student development; it is capable of embracing principles from divergent sources; and, the theory can be used by researchers, as well as college administrators (Astin 1984). Astin (1999) argues that "student involvement refers to the quantity and quality of the physical and psychological energy that students invest in the college experience" (p. 528).

In the Student Involvement Theory, the student is the focus. Astin (1999) points out that the physical time that a student must invest in involvement is finite. "Thus educators are competing with other forces in the student's life for a share of that finite time and energy" (p. 523). Astin recognizes that time allocation is a matter of individual choice and how that choice is made has implications for student success.

Higher Education Policy Development emphasizes students' interaction and students' time and energy commitment to the learning process. The more time that is expended by students in academic pursuits, the more they will benefit (Astin, 1984; Kuh, 1981; Pace, 1979a; National Institute of Education (1984). There are five postulates of involvement, which Astin (1984) uses to illustrate why time and energy are important to learning.

1. Involvement is the investment of physical and psychological energy in various activities;
2. Involvement occurs along a continuum in that different students exhibit different degrees of involvement in a given activity or task with the same student manifesting different degrees of involvement in different activities at different times;

3. Involvement has both quantitative and qualitative features;
4. The amount of educational benefit associated with any activity is directly proportional to the quality and quantity of a student's investment of time and energy; and,
5. The effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement (p. 298).

As noted by Astin (1999), student time is a limited resource. Like all resources which are limited, time can be managed. The differences among college students in time allocation practices account for some of the differences in their academic and social integration success. The amount of energy, whether psychological or physical, that a student devotes to the academic experience is considered student involvement. Astin (1984) identified the differences that divide students into two categories: highly involved students and uninvolved students.

The involved student:

1. Devotes considerable energy to studying
2. Spends much time on campus
3. Participates actively in student organizations and extracurricular activities
4. Interacts frequently with faculty and other students

The uninvolved student:

1. Neglects studies
2. Spends little time on campus
3. Abstains from extracurricular activities
4. Has infrequent contact with faculty or other students (pp. 297-298).

According to Astin, the most valuable resource that a student possesses is not fiscal resources. The assumption that should be prevalent in the academic community is that it must compete with a share of students' time and energy. How institutional policy and practice approaches the way students should invest their time may affect the effort the students put into their academic experiences. Recreational facilities, student residences, fiscal resources and other environmental factors of the institution will also affect students' decisions on time allocation.

Astin's Student Involvement Theory, like the theories of Tinto and Bean, faces the challenge of students' ability and interest to allocate time for the variables to make an impact. Table 5 shows the behavioral mechanisms that may facilitate student development but also require time allocation.

Investment of physical and psychological energy in various student experiences is required for the involvement of students to be effective. The use of the term investment means that one must give of time to achieve either the physical or psychological outcome deserved. Time allocation is intimately involved with this variable.

That involvement occurs along a continuum, meaning that the level of a student's participation in an activity is variable. This variability is controlled by the amount of the time that is allocated to the activity.

Student learning and personal development are directly proportional to quality and quantity of student involvement. This variable directly relates to the time allocation commitment. This variable is similar to Pace's (1984) Quality of Effort Theory, which argues that a student gets from education that which is related to the effort engaged. This variable essentially suggests a relationship between time invested and the personal development and student learning return for the investment.

Policy and practice effectiveness is related to the ability to increase student involvement.

Institutional participation can have a direct effect on how a student allocates time. Removing barriers and creating an environment that is beneficial should afford students the capacity to allocate less time to navigate institutional policies and rules.

Table 5
Astin's Student Involvement Time Allocation Relationship

MODEL	VARIABLE	TIME ALLOCATION NECESSARY (Yes or No)	TIME ALLOCATION ASSUMPTIONS
STUDENT INVOLVEMENT THEORY (ASTIN)	Investment of physical and psychological energy in various student experiences	Yes	Student must devote specific time as an expression of energy or interest in a particular experience.
	Involvement occurs along a continuum	Yes	Degrees of involvement have a relationship to time.
	Involvement has both qualitative and quantitative features	No	These features are a measurement of task success.
	Student learning and personal development are directly proportional to quality and quantity of student involvement	Yes	The quality of involvement has a relationship to time allocation.
	Policy and practice effectiveness related to ability to increase student involvement	Yes	Increasing or decreasing involvement will affect time student allocates
	Outputs Departure/Persistence/Graduation	No	The departure decision made at this point. Time allocation does not matter. Rather, the outcome may have a relationship to behaviors which lead to certain outcomes.

2.7 Quality of effort theory literature. The Pace “Quality of Effort Theory” is a complimentary paradigm to Astin’s involvement theory. The notion of time allocation of college students is also central to Pace’s theory. Pace argues that what students gain from their college experience is largely established by the amount of effort they exert toward their education. Pascarella and Terenzini (1991) suggest that college has been associated with growth and development in academic and social outcomes. Pace’s theory adds the caveat that the growth and development is directly related to the amount of effort students invest.

The literature on student departure, supported by research, sustains the proposition that the level of student involvement is the most significant factor influencing college student success (Astin, 1984; Pace, 1984; Pascarella and Terenzini, 1991). Pace (1982) defined “Quality of Effort” as the investment of time and effort in a college student’s studies. The “Quality of Effort” theory has parallels to Davis and Murrell’s (1994) concepts of student responsibility to quality of effort, which says: “student responsibility means quality of effort and responsible student behavior is defined by the amount of time a student devotes to high quality encounters with faculty and peers in and out of class” (p.12). “A basic assumption of Pace’s work is that what a student gets out of college depends not only on what the college does, but also on the degree and quality of effort the student puts into college. In this view, it matters less where a student goes to college than what the student does once he or she gets there” (Tinto,1993, p.70).

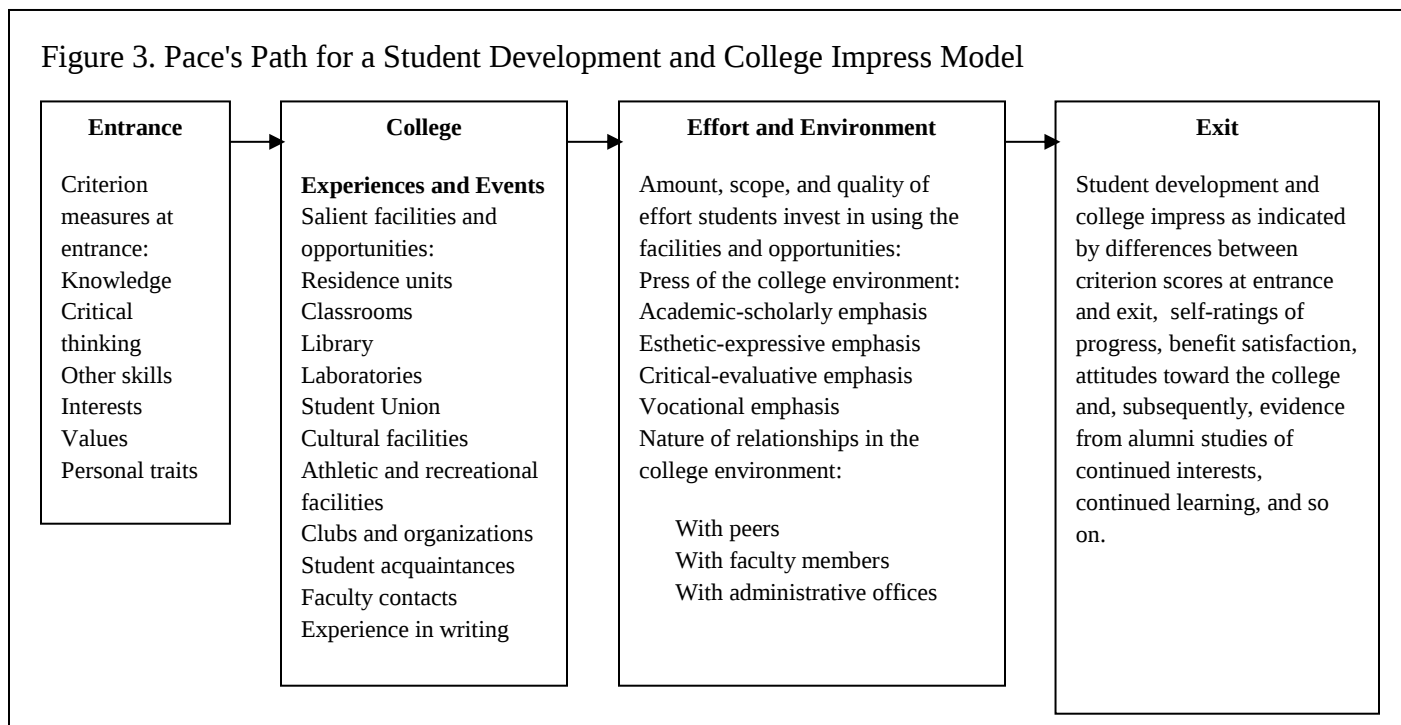
Pace’s “Quality of Effort Theory” might be best described as an important overlay in the student involvement theories of Astin (1984) and Tinto (1975, 1987). The word overlay in many ways characterizes the nature of the Pace theory, which acknowledges that while institutions provide opportunities for students to participate in academic and social integration activities, the decision whether or not to include themselves in the activities is the choice of the student. The

extent to which students are engaged in activities often associated with highly motivated students is central to Pace's (1980) study, which laid out his "Quality of Student Experience" scale. Student responses to Pace's questions identified the frequency that students engaged in various academic and social activities. In his study, Pace found that multiple correlations between background variables and four composite outcomes ranged from only 0.14 to 0.36. The multiple correlations between the quality of student effort scales and those outcomes were 0.62 to 0.68. Pace concluded that the quality of student effort is more closely related to outcomes than are student entry characteristics.

Pace's (1984) quality of effort theory is validated in a longitudinal survey that provides a rare examination of the importance of effort of the student and educational outcomes. In the study by Stinebrickner and Stinebrickner (2004), the researchers suggest that the endogeneity of the student decision requires that the results be viewed as descriptive in nature. The research demonstrated a strong causation between study time and educational outcomes. However, competing factors that intervene include a student's educational/earnings context, making it difficult to definitively know what types of students will study more. The study also suggests that the amount of time a student decides to invest in study tasks is a complex relationship between study time and grades, and the relationship between grades and future earnings.

Pace (1984) maintains that the fullness of the college experience depends on the participation in events and use of physical facilities of the college, as well as how the student seizes opportunities to participate in the academic and social life of the campus. He suggests the extent to which students invest high quality of effort is marked by the time and depth of commitment students give the college experience. Figure 3 illustrates Pace's Path.

Figure 3. Pace's Path for a Student Development and College Impress Model



Many of the variables within each of the path's categories are similar to those of Tinto, Bean, and Astin. Table 6 illustrates five intersects that are related to time allocation. As noted earlier, Pace's theory is implicitly related to the allocation of time by the student.

Table 6
Quality of Effort Time Allocation Relationship

MODEL	VARIABLE	TIME ALLOCATION NECESSARY (Yes or No)	TIME ALLOCATION ASSUMPTIONS
QUALITY OF STUDENT EFFORT (PACE)	Effort is a quality dimension focused on various college experiences	Yes	Effort has a direct relationship to time and while a direct relationship, there is also parsimony.
	Time is a frequency dimension	Yes	Time is used as a catalyst for effort. Time is central to the decision to expend effort to a task. This is the most direct variable to time allocation.
	Behavior setting place/physical environment	Yes	The nature and quality of the physical environment and the support it gives to the student may determine whether a student will allocate time to an activity.
	Student motivation	Yes	Time varies according to the motivation of students. Student motivation is the amount of effort a student is willing to exert on a certain task. The amount of effort a student commits requires a time allocation to fulfill the effort.
	Decision by student to participate in activities	Yes	Participation in social and academic activities requires an allocation of time. Decisions about the amount of time to be allocated are directed to student intentions.

Effort is a quality dimension focused on various college experiences. The idea of the variable is that what a student gets out of the college experience is related to the effort invested. The amount of effort and time necessary for students to achieve a satisfactory quality dimension will vary among students. The requirement of some level of time allocation is, however, necessary for any effort to occur.

The behavioral setting and the physical environment are various institutional forces that play into the student's experience. The academic, critical evaluative, vocational, and expressive emphasis, coupled with the nature of a student's relationship with faculty, peers, and administrative office, create environmental pathways that expedite or hinder student development. The pathway taken will influence the amount of time a student needs to allocate to successfully navigate through the influence of the environment. The quality of the physical setting, which gives the student a "sense of belonging" and which is designed to engage the student, will all have a relationship to time allocation.

Time is a frequency dimension and is an important element to student development. Time is an asset, which is dimensionally controlled and applied by a student as a response to engage academically and socially in the institution.

Student motivation, like Bean's variable student intentions is an indicator of how hard a student will work to achieve success. Time allocation has a place in the discussion of student motivation.

Decisions by the student to participate in activities are a consideration of time allocation. Whether or not a student participates in an activity is a decision point about time allocation. If the decision is made to allocate time, the amount of time allocated is related to the student's need and interest in participating in the activity.

2.8 Place of residence literature. The literature concerned with a student's place of residence may have a relationship to student time allocation, as ease of access to services and facilities diminishes as students move farther from campus. By understanding the implications that place of residence has in student success, and whether or not these factors influence time allocation, may have relevance to the present study.

The cause of student departure, as well as the factors which encourage intellectual and social integration into the life of the institution, come into play immediately upon the student's arrival. Whether a student lives in a university-supported residence hall or commutes to campus, these places of residence are also important in the student departure discussion.

2.9 Residential students. Higher education has been transforming itself since the 1880s. Once a loosely linked agglomeration of mostly private colleges with enrollment of less than 80,000 students, higher education has matured to an enormous, predominantly public institution enterprise, enrolling close to 2 million degree-seeking students. Place of residence has been part of the transformational process. As late as the 1950s, living on campus was one of the only options available if a student planned on attending college. Today, students are faced with myriad housing choices, including living at home, as they attend their college of choice.

There was a time not too long ago when the idea of the college campus as a community carried lots of romance about students and collegiate life (Chickering and Kyle, 1999). The notion of collegiate life was the student moving onto the campus far from the student's prior life and becoming part of an academic way of life. The view was a total immersion of the student was occurring in all things academic and extracurricular.

Three periods in higher education were significant in developing the residential life paradigm. The first, the post-Civil War era, resulted in significant growth and diversification of higher education. Schneider (1977) notes that there was a presupposition that college would provide housing for students. The notion of the college dormitory was, in large measure, *in loco parentis*. College students were housed as a tool for supervision and control.

The second occurred at the turn of the 20th Century when the University of Chicago, Princeton, and Harvard developed "house plans" that epitomized a philosophy that dormitory

living was integral to the education of students Arbuckle (1953); Delwart, and Hanson and Associates, (1980); Williamson and Biggs, (1975). The post-World War I period saw a more organized student personnel movement, with residence halls being regarded as sites for personal and social, as well as educational development (Williamson and Biggs, 1975).

The third development in creating the residential life paradigm, in the post-World War II era, occurred when the tens of thousands of veterans attending college under the GI Bill spurred major college and university building programs to increase dramatically the dormitory space available for the rapidly growing college population (Chickering, 1974). Today, the residential model of higher education has become “a tradition so fundamental, so all encompassing, that to call it merely a tradition is so to undervalue it. For what is involved is nothing less than a way of life, the collegiate way” (Rudolph 1962, p. 87). It is from the view of Rudolph that parents and students anticipating college life draw a sentimental image of moving on to the campus nestled in a wooded grove on the outskirts of a small town whose economy centers on the institution. Other stereotypical visions of the college campus are the large land grant public institutions, with a deep tradition of scholarship, sports, Greek life, and residence hall living.

While the physical environment and a tree laced walkways of the campus may affect student recruitment and help build an affinity between the student and institution, the place of residence of the student is very influential in student success. Numerous educational researchers have observed the influence of the freshman residential experience at four-year institutions and virtually all have reached the same conclusion: Students who live on or near campus during their first years are more likely to persist and to complete their baccalaureate degree than students who commute to camps (Pascarella and Terenzini, 1991). In fact, some researchers identified the link between this higher persistence and the greater opportunities to influence students.

Pike, Schroeder, and Berry (1997) suggest that “residence halls represent a potentially important venue for improving undergraduate education because... of students living in residence halls and the extended opportunities to influence those students” (p. 10). Chickering (1974) found that students living in residence halls reported higher gains in personal and social development. Pike et al., (1997) note that research evidence indicates that resident students have significantly higher faculty and peer interactions, as well as commitment to the institution and persistence, than commuter students. Pascarella and Terenzini (1991) indicate that there is a beneficial influence of living in student housing. The influence is not just a direct result of the place of residence, but there are also indirect interpersonal relationships fostered outside of the residence hall.

An increasing body of literature illustrates that students with diverse backgrounds, not fully prepared academically, are more likely to succeed if they live in a university residence hall. For example, academic and social gains achieved from living in residence halls have an effect for African-American students (Blimling, 1993) and (Flowers, 2004). Specifically, from Flowers (2004) “Study results indicated that African American students who live on campus reported significantly higher gains in personal and social development than African Americans who did not live on campus” (p.277).

2.10 Commuter students. Commuter students, those who do not live in institution-owned housing, account for 80% of the students in American colleges and universities. Jacoby, (1989); Horn, Peter, and Rooney (2002), suggest that of the 16 million students attending colleges and universities, approximately 16% live on campus. The number of students living on campus probably varies somewhat, but the data support a range of between 16% and 21%. Forty-five percent of all college students live off campus, not with a parent or parents, while 27% live

with a parent of parents (U.S. Department of Education, 1988, p.10). Research on college commuters has typically been conducted in the context of traditional university campuses with dormitory systems, in which comparisons are made between “students and commuter students,” as if commuter students were not students (Miller, 1986). Where commuter students live and why they live there vary greatly, but they have one experience in common: the University typically provides them with minimal service and attention (Wilson, 2003). Chickering (1974) suggests that the college careers of residential and commuter students have an unequal beginning, and the divide widens throughout the college experience. He argues that access, discovery, and encounter occur at a far less favorable rate for commuters than residents. Chickering posits that commuter students are significantly less likely than residential students to be involved in the cultural and intellectual life of the institution or to interact with the institution’s major agents. Chickering (1974) asserted that “When students are aggregated for all two and four colleges and universities, the residents are the “haves” and the commuters are the “have nots” in terms of college impact” (Copland-Wood, 1986).

Chickering’s (1974) view about commuters as “have nots” is articulated in his writing: “Whatever the institution, whatever the group, whatever the data, whatever the methods or analyses, the findings are the same. Students who live at home with their parents fall short of the kinds of learning and personal development typically desired by the institution they attend... students who live at home, in comparison with those that live in college dorms, are less likely involved in extracurricular activities and in social activities with other students. Their degree aspirations diminish, and they become less committed to a variety of long range goals; their satisfaction decreases, and they are less likely to return” (pp. 84-85).

One of the early studies on the effect of residential living was conducted by Alfert (1966) at the University of California at Berkeley. The study used a sample of 153 students and used two measures of student development. The samples' composition consisted of students at all levels of academic performance. The longitudinal study followed students throughout their academic careers and where they were living at the time of their departure from the institution. The results indicated that students living in rented space had the highest instances of departure. The group of students residing at home had the next highest departure outcomes. The group with the lowest departure was (that) of students living on campus in residence halls.

Astin (1973) in a broader study of whether residential students departed less frequently involved 213 institutions following a 1966 freshmen cohort to 1970; 25,455 students were involved in the study. Outcome measures were divided into four categories: Plans and Aspirations; Behaviors, Attitudes, and Values; Educational Progress and; Ratings of the college. The three places of residence were identified as and accounted for 95% of the students in the study: Living with parents; Dormitories, and Private Housing.

Study results showed that compared to students living at home, dormitory students were less likely to depart, likely to graduate in four years, and earn a higher grade point average. Other results found that dormitory students had higher institutional satisfaction, greater confidence, greater opportunity for interaction with faculty and staff, and had an increased perception of their own interpersonal competency.

Astin (1975) presented two additional findings of the longitudinal study of student departure. Living at home, the second largest place of residence for freshmen students had a significantly negative impact on student persistence. The study also showed that students, who

were participants in extracurricular activities or joined a social fraternity or sorority, were less likely to drop out.

Studies by Levin and Clowes (1982); Bowman and Partin (1993); Pascarella and Terenzini (1981, 1991); Schroder and Maple (1994); and Zheng, Saunders, Shelly, and Whalen (2002) generally indicate that students who live on campus experience many benefits over non-residential students. Residential students are more likely to persist and graduate and achieve gains in a sense of personal accomplishments and social skills and are more likely to be academically and socially engaged in campus activities than their commuter counterparts.

Commuting students make up the largest, most complex, and diverse group of students to ever attend higher education (Banning, 1986). Significantly, in this large population, Sloan and Wilmes (1989) found that residential students viewed the campus as a substitute for the home environment. This finding supports the general notion of the role that the college residence hall should play on the life of a college student. What was also learned from the study was that commuting students viewed the campus environment as “additive transition” to the home environment. The role of the campus environment for the commuter student is that it becomes the interface between home and school. It is another place for the student to navigate ones social and academic integration skills. It is a place to factor in as one navigates life and work tasks. The campus environment becomes the location of the student’s relationship with learning.

“Most administrators and faculty members earned their degrees at traditional residential institutions and tend to impose the values and goals of their own experiences on other educational environments. Administrators often inadvertently believe that commuter students can be served by the substitutions of parking lots for residence halls, while maintaining essentially the same curricular and programmatic formats” (Jacoby, 1989).

In the past twenty years, the proportion of undergraduates who commute to primarily residential institutions of higher education – like the proportions of other non-traditional students – has risen dramatically. As the commuter population increased, there have been increasing numbers of underserved groups facing the prospect of college enrollment. This shift, unfortunately, has not been accompanied by changes in institutional policies that are pertinent to commuters (Wittkopf, 1994). Not only have institutional policies not been modified to address commuters, but institutional retention initiatives have failed to also consider this student cohort.

The lack of programs and policies intended to engage commuter students is problematic because what students gain from their college experience depends a lot on how much time and effort students put into their studies and other purposeful activities (Pascarella and Terenzini, 1991). We call this concept student engagement, which includes activities that are traditionally associated with learning, such as reading and writing, preparing for class, and interacting with instructors about various matters (Kuh, 2001). The notion of engagement extends beyond academic endeavors and is linked to social activities, participation in clubs, intramural sports, volunteer activities, and student leadership pursuits. One of the few studies extended to examine the question of whether or not commuter students are engaged was conducted by Kuh, Gonyea, and Palmer (2001). Using data from the National Survey of Student Engagement (NSSE) from 105,000 first-year and senior students at 470 different four-year colleges and universities, Kuh et al. compared student engagement, satisfaction, and the progress commuters say they make with students who live on campus. Their findings revealed that commuter students were as engaged as their non-commuting counterparts on several activities that reflect key aspects of learning during college. Overall, however, their analysis supported the assumption that students who live on campus are more engaged overall, compared with students who commute.

Their findings also revealed that the farther away from campus, the less likely a student is to take advantage of the educational resources the institution provides. They concluded that proximity to campus makes a difference in a commuter student's level of engagement. The time commuters allocate to being on campus may serve as a predictor to the overall success that students will achieve. Time allocation however, is directly related to the types of programs and their availability for commuter students. Simply "being on campus" without some structured academic or social interactive engagement will likely have some impact on student success. Skahill (2002) in a study on the role of social support networks in college persistence among freshmen students noted that commuter students, when faced with difficulty, whether academic or social, found it simpler than their residential counterparts to just drop out. Their social network already in place helps support the decision. Residential students who have relocated to attend school find it less practical to drop out; this proximity forced students to work through their problems.

In *Involving Commuter Student in Learning: Moving from Rhetoric to Reality*, Jacoby (2000) attempts to demonstrate how and why educational institutions must take strategic actions to engage and involve commuter students in learning. "At issue is the need for institutions to adapt their policies and practices to meet the needs of commuter students rather than requiring commuter students to sink or survive based on their ability to conform to institutional norms" (p.81). Institutions must begin to focus on students who choose to live in places other than the campus residence halls.

Research on commuter students is limited and inadequate (Ortman, 1995). Early research was based on very little data, with very few sources cited. This inadequate research was then cited in later studies, perpetuating an already inadequate process (Jacoby, 1989). The research

does generally affirm that residential students persist and graduate at a higher rate than commuter students. What is definitively known is that the literature and research on student place of residence lacks discussion and correlation to the issue of time allocation behavior and how these allocations will affect social and academic success.

2.11 Time allocation literature. The research, and literature, that examines college student time allocation is rather limited. Why this is the case is difficult to explain, especially in view of the volumes of literature that support the importance of students spending their time engaging in academic and social activities in relation to student departure. Meng and Heyke (2004) suggest that student time allocation and Student Performance Literature is scarce, which serves as rationale for further empirical studies. Likewise, they assert that “what is omitted from the previous research is the impact the learning environment may have on student time allocation and the different productivities of student time allocated in different learning environments” (p.33). Pace (1984) suggests that all learning and development requires an investment of time and effort by the student. Time, he argues, is a frequency dimension. The time dimension is owned and operated solely at the discretion of the student.

Knowing how students allocate their time in academic or social activities is important. Knowing whether time allocation practices differ between commuter and residential students matters from a variety of perspectives, theories, and research in what Braxton (2000) calls the student departure puzzle. Others agree; “It can be argued that the fundamental scarce resource in the economy is the availability of human time and that the allocation to various activities will ultimately determine the relative prices of goods and services, the growth path of real output and the distribution of income” (Justers and Stafford, 1991. p. 471).

From the first days of the freshman year, the pressures to complete course assignments, attend classes, and participate in academic and extracurricular activities can become an overwhelming student experience. The students' feeling that there is not enough time to complete all their work becomes a dominant concern. Adding to this, poor time management behaviors, such as not allocating time properly, or last minute cramming for exams, have been frequently discussed as a source of stress and poor academic performance (Gall 1988; Longman and Atkins, 1988; Walter and Siebert, 1981). Except for Astin's acknowledgment of the value of time, the myriad of student departure theories ignore the role that time allocation plays on student commitment to goals, academic and extracurricular activities, student aspirations, and faculty and peer group interactions. The literature does support the thesis that intellectual achievement takes time and perseverance (Baron, 1988; Csikszentmihalyi, 1988; Gruber and Davis, 1988). If the literature supports the idea that intellectual achievement takes time, then the numerous factors affecting student departure should be affected by how students allocate time against those factors.

In the context of student departure, it seems responsible to suggest that if student social and academic integration is related to the amount of time a student will invest in these activities, then it is important to understand college students' time allocation. This is particularly valid in the context of Tinto's integration factor and institutional experiences. Stinebrickner and Stinebrickner (2007) suggest that despite the awareness and importance of understanding the determinants of educational outcomes, knowledge of the relationship between educational outcomes and students' study time and effort has remained virtually non-existent.

The notion of time allocation should not be compared with time management. In time management, practices include variables of self-monitoring, self-judgment, prioritizing tasks,

valuing tasks, and, in general, the efficacy of time management practices. Time allocation is the application of various tasks and behaviors an individual might engage in during a period of time. Time management identifies the needs and wants of an individual and ranks them in regard to their importance or priority. Time and resources are then allocated accordingly (Macon, T.H. Shahani, C., Dupbaye, R.L., Phillips, A.P. 1990). Simply put, time allocation occurs before time management; the allocation decision is what is managed.

Time allocation studies and techniques are well-rooted in social science disciplines, engineering, and management studies. Time allocation studies provide a tool with which numerous questions can be examined. It is the dissection of an individual's behaviors and actions, decisions, preferences, and attitudes. Any kind of behavior with an observable environmental effect can be observed using time allocation techniques, including speaking, working, repose, leisure, etc. (Gross, 1984). While most likely, but not always consciously, students allocate time as a resource, selecting various pursuits such as studying, going to class, commuting, working, resting, engaging in leisure activities, and a myriad of other choices. Gross (1984) suggests that no matter how a person conceptualizes these activities, Western industrial societies have commoditized time such that it can be "saved," "wasted," "bought," "sold," "divided," "shared," and "used up." This capitalist mode of time allocation has implications for students in western cultures, and in particular, the United States.

Stolzar (2006) did an economic analysis of time allocation and productivity among college students. His findings revealed a negative relationship between sleep and grade point average. Students with better grades slept less. His findings also showed that college women sleep less than men. While his study was comprehensive in understanding the relationship between academic success and sleep, Stolzar notes "This study leaves open the possibility for

other avenues of research pertaining to time allocation and productivity among college students” (p. 39).

In “Who Maximizes What? A Study in Student Time Allocation,” one of the few empirical studies of student time allocation, Schmidt (1983) examined the total time a student devoted to a course. The study evaluated the student time variable in a model with five measures - hours spent in: lectures, discussion sections, study outside of class, preparation for a mid-term examination, and preparation for a final examination.

Of the limited research that has dealt with time allocation, most studies have focused on the different types of instruction on perceived stress and behavior, rather than making time allocation the salient point. No literature on time allocation or time management has been identified that is intended to correlate to student engagement and integration theories of Astin, Tinto, or Bean.

2.12 The relationship of time allocation to the variables of the theoretical models.

The literature on place of residence, transition to college, and student departure points out that all require effort by students to successfully integrate both academically and socially into the institution’s environment. How students decide to allocate their time to successfully achieve the necessary involvement is a critical element to student success. The literature on time allocation, however, is very sparse and offers minimal research on the effect and consequences of time allocation decisions and student success. Identifying the intersection of time allocation and elements that affect student departure may reveal important relationships between theory and practice.

Tables 3, 4, 5, and 6 identify the variables of the theoretical models of Bean, Tinto, Astin, and Pace, which explain student departure, integration, involvement, and quality of effort,

respectively. The theoretical models offer many intersections at which students must make time allocation decisions. Those intersects are the variables of the models.

The tables also identify how a student's allocation of time may influence the variable. The amount of time allocated will vary between students. The allocation of time variance may be influenced by a student's pre-college background characteristics, the student's level or ability to use interpersonal skills or other skill sets that facilitate one's social and academic integration. The tables are a method of viewing the theoretical models through a lens that begins to operationalize the theoretical constructs. The tables may help inform the literature about which theoretical assumptions are related to time and may be controlled through time allocation.

2.13 Identifying the intersection of time allocation behaviors and departure variables. The literature on student departure generally concludes that there are variables that influence a student's decision to persist and graduate. The present study has identified a set of variables from Tinto's (1975) Student Integration Model, Bean's (1978) Student Attrition Theory, Astin's (1984) Integration Theory, and Pace's (1984) Quality of Effort Theory. Table 7 is a summary of the variables that are found in the theoretical models discussed in the review of literature.

Table 7.
Variables That Influence Time Allocation

Theorist	Variable
Tinto	Institutional Commitment
	Academic & Social Integration
	Student Goal Commitment
	Student Background
Bean	Integration by students within the institution
	Influence of environmental variables
	Presence of students' attitudinal variables
	Student intentions
Astin	Investment of physical and psychological energy
	Learning and development in proportion to quality and quantity of student involvement
	Policy/practice effectiveness in relation to increased student involvement
Pace	Effort as a quality dimension on various college experiences
	Behavioral setting and physical environment
	Time as a frequency dimension
	Student motivation
	Decisions by the student to participate in activities

2.14 Summary of the literature. The literature generally concludes that the success of college students is impacted by in-class and out-of class experiences. The effect is a

consequence of academic and social integration choices that are implicitly related to a student's familial, social, ethnic, and racial background. "Academic and social effort expended by the student are the principal determinants of the extent to which students themselves report that they grow and learn in college. Social effort is strongly influenced by academic effort, which suggests that for growth to occur, the work that is done in the classroom must find expression in other aspects of a student's life" (Davis and Murrell, 1994, p. 286).

The theories and literature on student departure suggest that the efforts of college are cumulative and mutually shaping. Kuh (1995) concludes "among the more powerful out-of class experiences are those that demand sustained effort and require that students interact with people from different groups and peers from different backgrounds" (p.145). Tinto (1993), after synthesizing much of the literature and research on student departure, concluded that the role of the institution and the social and academic integration of students were key factors of student success. In addition, he pointed out that the interaction between students' attributes, skills, and dispositions, and the institution's academic and social systems were key factors in the discussion of student departure. An institution's environment and the "fit "with the students' social, psychological, and economic needs has also been identified as a factor in student departure. Kamen's (1971) research argues that attrition can be explained by an institution's social character and size. "Other things being equal, the higher the degree of integration of the individual into college systems, the greater will be his commitment to the specific institution and to the goal of completion" (Tinto, 1975, p. 96).

Integration, whether academic or social, requires an investment of time. As Astin pointed out, student time is a valuable resource, and student success is related to the investment of time and effort by the student. Astin's developmental theory has many parallels to Pace's quality of

effort, the latter which essentially argues that what a student puts into an endeavor will have an outcome that represents the time invested in the endeavor. Pace (1979a, 1984) suggests that the most important factor affecting what students gain from college is the exertion of quality of effort in institutional integration activities.

The literature also indicates that the place of residence is the “single most consistent within college determinant of impact” (Pascarella and Terenzini, 1991, p.611), affecting the developmental and character impact of a student’s college experience. Pascarella, Duby, and Iverson (1983) support Chickering’s (as cited in Pascarella, et al., 1983) belief that commuter institutions offer fewer opportunities for academic integration (involvement with faculty and peer study) and also less opportunity to take advantage of institutional activities that enhance social integration.

Goldscheider and Goldscheider (1999) suggest that students who live away from home and (their) parents achieve higher levels of adult identity because of the experience gained with the challenges of adult life. “Presumably, such experiences allow individuals to gain the perspective needed to become better managers of their time and resources, which is important for academic success and for coping with the pressures of life” (Byrd, 2003, p.1). The suggestion of Byrd’s here is that the allocation of time might play a role in student and life success.

3. RESEARCH DESIGN AND METHODS

The intent of this case study of a single institution was to examine the relationship between allocation of time by commuter and residential students and student retention. The two research questions were focused on exploring the differences between commuter and residential students and were addressed using a quantitative and qualitative study approach.

3.1 Quantitative study design and methodology. The research design for the study included a quantitative portion that used a survey of a cross-section of students. The College Student Experiences Questionnaire that was administered in years 2004, 2006, 2008 and 2010 was used. The survey was utilized to determine how commuter students and residential students allocate their time on and off campus and whether the allocations have a correlation in first- to-second year persistence. The data for this study is secondary data.

3.2 College Student Experiences Questionnaire (CSEQ). The fourth edition of the College Student Experiences Questionnaire (CSEQ) was used for the present study. The fourth edition of the CSEQ is the most current edition of the questionnaire and was used for the administration of the survey in 2004, 2006, 2008 and 2010. The data used for this study is secondary data that was previously collected by the University of Illinois at Chicago for other institutional purposes. For the purpose of this study, the survey data was very well directed to the research questions posed.

In addition to possessing the characteristics suggested by Scott and Morrison (2006), Gonyea, Kish, Kuh, Muthiah, and Thomas (2003) note that “The CSEQ, as a survey instrument, has been recognized for years as a survey instrument with good psychometric properties, because it reliably measures educational practices that affect student outcomes” (Ewell and Jones, 1994,

1996; Pace, 1984, 1990) (p.15). As a tested and reliable quantitative instrument, it will provide the statistical data from which correlations between commuter and residential student time allocations and persistence and graduation will be evaluated, as is stated (Kuh, Vesper, Connally, and Pace, 1997, p. 1) “The CSEQ is based on a simple, but powerful premise related to student learning. This premise is that the more students put into using the resources and opportunities an institution provides for their learning and development, the more they benefit.”

According to Borden (2001) the CSEQ is one of just a few national assessment instruments that provides an inventory of learning processes that will include faculty interactions, writing experiences, and peer collaboration, as well as achieving progress toward desired outcomes, which include intellectual skills, competence in interpersonal skills, and personal values. The CSEQ was selected as the survey for this study because it is one of the few instruments that ask students not only in what activities they engage but also the frequency of the engagement.

The educational experience, according to Pace (1990), is one that includes both process and product. He asserts that often the educational process is evaluated in terms of what contributions it makes to the product and that some processes have the potential for greater learning. Coupled with this assumption and the views shared by Pace (1984) and Astin (1984), learning requires an investment of time and energy by the student. The CSEQ is a survey instrument that identifies how students avail themselves to process opportunities at their educational institutions.

The campus environment, with its potential to academically and socially engage students, plays a significant role in the educational process. Pace (1984) notes that “the most salient of

these events and experiences are clustered around a number of fairly common facilities - classrooms, libraries, laboratories, residence units, student unions, chapels, athletic spaces, galleries, theaters, auditoriums, and others. Each facility has a particular purpose and there are characteristic activities that occur in them” (pp. 7-8). Pace’s focus (1980) was broader than just environmental factors however. Student experiences and participation in campus organizations, integration with faculty, and interpersonal relations were all part of the intersect and focus of Pace. For the present study, the perspective of Baird (1990) is significant. “It is not the presence of facilities, funding and staff but the uses to which they are put that is critical” (p. 278).

3.3 Validity and reliability of the CSEQ. Content validity according to Sapsford (1999) at its minimum “means asking whether the questions ask what it was meant to record and does so with a fair degree of accuracy; every effort is made to minimize error (which can be conceptualized as ‘noise around a signal,’ concealing real differences or relationships in a cloud of imprecision or worse bias)”(p. 119). “Measurement validity is specifically concerned with whether operationalization and the scoring of cases adequately reflect the concept the researcher seeks to measure” (Adcock and Collier, 2001, p.529). Pace (1984) suggests that a good test is discriminating, valid, and reliable.

Brown’s (1985) review of the CSEQ in the *Ninth Mental Measurements Yearbook* indicates that it is valid and reports that “The factors are generally congruent with the theoretical constructs about student life and the pattern of responses lends support to the theoretical nature of quality of effort scales” (p. 366).

3.4 Self-reporting and reliability. Hu and Kuh (2001) state that “Generally, self-reported information is likely to be valid if five conditions are met: (1) if the information

requested is known to respondents, (2) the questions are phrased clearly and unambiguously (Laing, Swayer, and Noble, 1989), (3) the questions refer to recent activities (Converse and Presser, 1989), (4) the respondents think the questions merit a serious and thoughtful response (Pace, 1985), and (5) answering the questions does not threaten, embarrass or violate the privacy of the respondent or encourage the respondent to respond in socially desirable ways (Bradburn and Sudman, 1988). CSEQ items satisfy all these conditions.”

The use of self-reported data has some vulnerability. Miller and Winston (1990) note that self-reported data are subject to the recall and social desirability of the respondents. This leads the researcher to trust that the students engaged in the survey are recalling their behavior accurately and that they present their responses in a context that is not always socially favorable. Ouimet, Kuh, Small and Springer (2001) suggest that the threat to the validity and credibility of self-reporting can come as a result of a respondent’s inability to provide information that is accurate or in some cases not truthful. Pace (1984) states that “The accuracy of answers depend on the clarity of questions, on whether respondents have a good base of experience for answering the questions, on whether the form in which the answers are to be given is appropriate and on whether the respondents regard the questions themselves as meriting a serious and thoughtful response” (p.35). The CSEQ was designed to respond to these self-reporting challenges; the CSEQ scales are clear, well-defined, and have high validity (McCammon, 1989; Mitchell, 1983). In addition construct validity has been determined by Pike (1995).

3.5 Descriptive statistics. The present study examined how commuter students and residential students allocated their time engaging in a wide range of academic, social, and personal activities. Because the first research question was interested in determining time

allocation behaviors between two cohorts, descriptive statistics were used for the analysis. The basic feature of descriptive statistics is that of providing simple summaries about a research sample and its measures. The mean, mode, and standard deviation are summary data that are identified using descriptive statistics. Formulating a descriptive summary achieved two important outcomes. First, it identified central tendency, and second, it identified statistical variability. In the CSEQ Norms Fourth Edition, Gonyea et al., (2003) provide evidence that the scores on the CSEQ have good discrimination and variance. As the descriptive statistics are being analyzed, it is important to have good discrimination and variance because it demonstrates that questions were correctly structured to capture the variability of student behavior.

The descriptive statistics included student demographic characteristics and academic outcomes. The demographic characteristics included:

- Gender
- Race
- Age
- Enrollment Status
- Marital Status
- Living Arrangements
- Summary of Who Students Lived With When Enrolling
- Students' Access to a Computer
- Summary of Students' Grades
- Residential Students and Commuter Students
- Returned To UIC in the Fall Following Freshman Year

The CSEQ Thirteen Activity Scales examined are those that have the most influence on how students allocate their time and included:

- Library Experiences
- Computer and Information Technology
- Course Learning
- Writing Experiences
- Experiences with Faculty
- Art, Music, and Theater
- Campus Facilities
- Clubs and Organizations
- Personal Experiences
- Student Acquaintances
- Scientific and Quantitative Experiences
- Topics of Conversation
- Information in Conversations

The results of the Thirteen Activity Scales of the survey data collected from students taking the CSEQ in the spring of 2004, 2006, 2008, and 2010 were organized to descriptively demonstrate the mean, mode, and standard deviation.

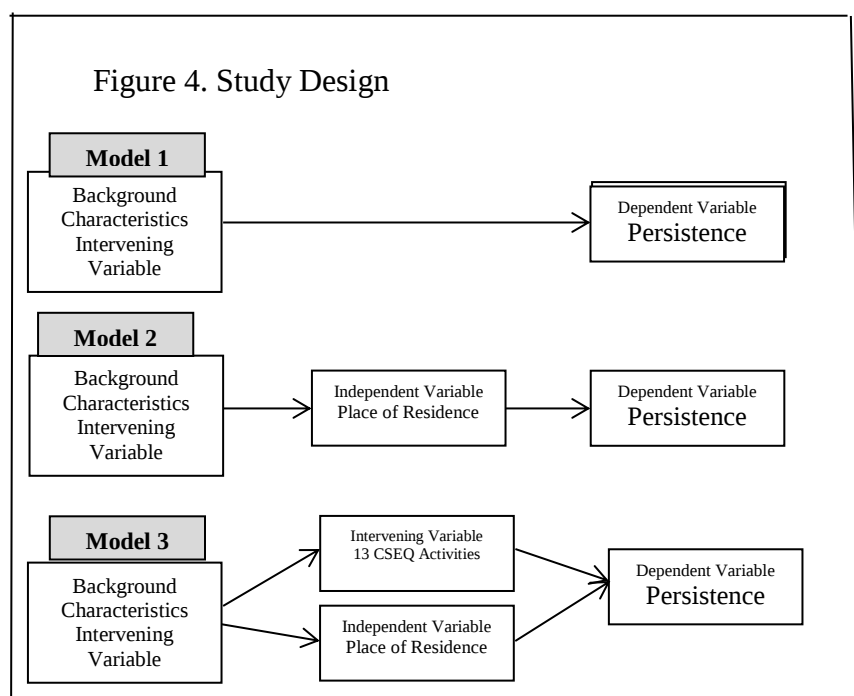
3.6 Test of difference. To determine whether there was a statistically significant difference in time allocation activities between commuter students and residential students, descriptive data, including frequency distributions for the categorical variables and descriptive statistics for the scaled variables, was computed. An independent samples t-test was applied for

each of the Thirteen Activity Scales to the two groups of students, commuter and residential, to determine whether significant differences exist.

3.7 Regression analysis. Because the second research question was interested in determining whether there was a correlation between time allocation behaviors, place of residence and the thirteen CSEQ activities, a regression methodology was used. Regression analysis is used for modeling and analysis of numerical data consisting of values of a dependent variable and one or more independent variables. In the regression equation, the dependent variable is modeled as a function of the independent variables. Regression can be used for predicting, hypothesis testing, and modeling causal relationships. Multiple Regressions assumes a linear relationship and allows a dependent variable to be predicted from a set of predictor or independent variables (Stevens, 1986).

Multiple regressions also allow the researcher to control a variable while observing the influence of other independent variables upon the dependent variable (DeMaris, 2004). In this study three models were used to study the variables impact on first-to second year persistence. The first model observed the influence of background characteristic, the second model added place of residence and the third model added the final intervening variable the thirteen CSEQ activity scales. Figure 4 illustrates the study design.

Figure 4. Study Design



3.8 Site location. The site at which the CSEQ was administered is a major, public research university, The University of Illinois at Chicago (UIC). UIC is located on the western edge of downtown Chicago. Total on-campus enrollment in the fall of 2011 was 28,091 students. Approximately 3,300 students live in University-owned housing.

3.9 Survey methodology The UIC subjects were two independent groups of undergraduate students who were administered the CSEQ in the spring of 2004, 2006, 2008 and 2010. The sample in 2004 was composed of 1200 randomly selected undergraduate degree seeking students. In 2006, 2008 and 2010 the sample was composed of 2,000 students. Students were randomly selected undergraduate degree seeking students who were enrolled for at least 12 credit hours during the spring term of the year the survey was administered. The sample was stratified by class level, one half of the surveys were advanced freshmen (completed at least 12

credit hours prior to the Spring term) and one half were seniors (completed at least 90 credit hours prior to Spring who were native to UIC (entered UIC as a freshman).

Invitations to participate in the on-line survey with a unique login ID were sent to students' UIC e-mail addresses under the return address of the Vice Chancellor of Student Affairs. Three follow-up reminder messages were sent to students who did not respond. Students who completed the survey were entered into a drawing for campus gift certificates.

In 2004 the overall response rate was 35 percent – 37 percent for freshmen. In 2006, the overall response rate was 21 percent – 22 percent for freshmen. In 2008, the overall response rate was 27 percent; 21 percent for freshmen. In 2010, the overall response rate was 30 percent; 29 percent for freshmen.

The CSEQ Thirteen Activity Scale questions were selected for this study because they asked how often a student has done or experienced a particular event during the school year. The survey response options include “Very Often,” “Often,” “Occasionally,” and “Never,” with a respective attributed score of four through one. Each CSEQ Thirteen Activity Scale includes between 5 and 11 activities that represent range of difficulty. “That is, some are relatively easy to accomplish and frequently enacted, and others are more difficult and less commonly enacted (Pace, 1984). Appendix A includes a copy of the questionnaire.

3.10 Qualitative design and methodology. Qualitative research concentrates on words and observations to express reality and attempts to describe people in natural situations. The central idea of the focus group is engaging participants using a method that envelops them. The focus group, as a qualitative method, evolved out of research methods designed by Paul Lazarfeld, Robert Merton, and colleagues, at the Bureau of Applied Social Research at Columbia

University to gauge audience responses to propaganda and radio broadcasts during World War II (Kidd and Parshall, 2000). Denzin and Lincoln (1994) state that “Merton et al. coined the term ‘focus group’ in 1956 to apply to a situation in which the interviewer asks group members very specific questions about a topic after considerable research has already been completed” (Lewis, 1995, 2000, p.2). An increased interest in and use of focus groups began in the mid-1980s. From the mid-1980s to the early 1990s, several texts and research articles were published, which focused on the development of standards for reporting focus group research, methodological research on focus groups, data analysis issues, and engagement with concerns of research participants (Morgan, 1996).

“Focus groups have become increasingly wide spread in education research, especially since they have the potential to ‘reach’ the research ‘parts’ that individual responses from questionnaire surveys, or one or two interviews cannot ‘reach’, and indeed, such responses may not be required for research purposes that preclude individualized attention to the minutia of deeply personal moments” (Scott and Morrison, 2006, p. 12). The focus group interview or discussion is a qualitative approach to learning about population subgroups, with respect to conscious, semi-conscious, and unconscious psychological and socio-cultural characteristics and processes (Basch, 1987). Agar and MacDonald (1995) and Reed and Payton (1997) have argued that focus group interviews are not adequate as a stand-alone method for social science. While they suggest that the focus groups need to be augmented by observation or other if not ethnographic method, the present study was used the focus group research method as a triangulation tool of the quantitative survey method.

In the present study, understanding how students allocate time was examined in the context of the activities in which they engage and their first- to second-year persistence. Understanding the experience of the subject is essential when studying humans because they act to interpret and give meaning to the events that shape their world. These interpretations influence subsequent behavior (Singleton, 1988). “An understanding of the phenomena from within as they are lived through by others, is the first step in a disciplined investigation of the human experience” (Morris, 1977 p. 120), and Merriam (1998) suggests that “the product of a qualitative study is richly descriptive (p.8) unlike the product of quantitative research, which is discussed in numerical values.”

The key element here is the involvement of people where their disclosures are encouraged in a nurturing environment (Lewis, 1995, 2000). Kitzinger (1994) highlights nine advantages of focus groups as a means to facilitate these disclosures:

1. Highlights informants’ attitudes, priorities, languages, and frames of reference;
2. Facilitates a wide range of communication;
3. Identifies group norms;
4. Gains insight into social processes;
5. Encourages conversation about embarrassing and sensitive subjects;
6. Explores differences in the group;
7. Uses conflict to clarify why people do what they do;
8. Explores arguments to see how participants change their minds; and,
9. Investigates the ways in which some forms of speech affect group participation.

3.11 Developing and conducting the UIC residential and commuter student time allocation focus groups. For the present study, the focus groups were developed using a protocol that:

- Defined the purpose of the focus group and established objectives;
- Designed the questions to be posed to the focus group;
- Developed a Moderators Guide to assure consistency of format between focus group participants;
- Developed a consent form and other required institutional review board (IRB) documents;
- Identified an interview location;
- Identified participants;
- Secured IRB approval for focus group;
- Recruited participants;
- Conducted two focus group sessions;
- Assured trustworthiness and;
- Analyzed data.

Defining the purpose of the focus groups and establishing objectives.

The purpose of the focus group was to obtain responses from UIC commuter and residential students to questions that will expand on the data collected from analysis of the CSEQ. The objective of the focus group is to gather opinions, beliefs, and attitudes about time allocation activities as they related to the findings from the CSEQ.

Designing the questions to be posed to the focus group.

In order to stimulate conversation, the questions were designed to be open-ended and move from general to specific. Questions were also designed to qualify the purpose of the study. Stewart, Shamdasani, and Rook (2007) point out that there are two types of questions that can be posed to focus groups, open-ended or close-ended. The closed-ended questions are more restrictive and tend to answer options of respondents. Open-ended questions tend to be broader in nature, offering respondents greater flexibility to provide information and discussion about the question posed. Geer (1988), in a study intended to understand what open-ended questions measure, investigated the respondents' barriers to answering questions. He found that articulation of response can be problematic. Articulation, when controlled for education, results in better educated persons being more likely to respond to open-ended questions. Rather Geer suggests that, "If there is a problem with open-ended questions, it might be inhibition. That is, the people who do not respond may not feel comfortable with the interview process and may be less willing to express their views."

The quantitative results for research question one provided the basis for the formation of the focus group questions. Since there are a rather large number of questions posed in the CSEQ, only those questions that indicate significant differences were formed into focus group questions. Questions were designed as open-ended.

In order to assure that focus groups' discussions would move along and garner responses that addressed the questions, a number of moderator probes were developed for each question (Appendix J). The questions were structured to engage students and challenge their assumptions.

The questions posed to commuter students.

1. Do you agree with the survey results that commuter students spend more time in the library than residential students? Could you tell us about your library experiences?

2. How much time in a day do you spend using a computer? What activities are being engaged in when you are on your computer? Do you have a laptop or do you use the UIC Computer Labs?

3. Explain your writing experiences. Can you tell us how much time you spend engaged in writing in a week? What do you spend most of your time working on when you write?

4. Explain your art, music, and theater experience. Can you tell us how much time you spend engaged in art, music, and/or theater experiences?

5. What campus facilities do you use? How often do you use the facilities? What do you do there? Is there any reason you don't use them more frequently?

6. Have you been involved in an on- or off-campus club or organization? If so, could you tell us a little bit about the activities in which you engage?

The questions posed to residential students.

1. Do you agree with the survey results that residential students spend less time in the library than commuter students? Could you tell us about your library experiences?

2. How much time in a day do you spend using a computer? What activities are being engaged in when you are on your computer? Do you have a laptop or do you use the UIC Computer Labs?

3. Explain your writing experiences. Can you tell us how much time you spend engaged in writing in a week? What do you spend most of your time working on when you write?

4. Explain your art, music, and theater experience. Can you tell us how much time you spend engaged in art, music, and/or theater experiences?

5. What campus facilities do you use? How often to you use the facilities? What do you do there? Is there any reason you don't use them more frequently?

6. Have you been involved in an on- or off-campus club or organization? If so, could you tell us a little bit about the activities in which you engage?

Identifying Focus Group Participants.

Focus Group participants were identified from UIC students who were in the third semester of continuous study. Ten students who commuted from their homes to attend UIC were considered for the commuter student focus groups. Ten students who lived in the University-owned residence halls for at least two semesters were considered for the resident student focus group.

Developing a Moderator's Guide to assure consistency of format between focus group participants.

The moderator's Guide (Appendix I) contains the protocols to assure that IRB requirements would be met, that participants understand the nature and purpose of the research project, that their participation is voluntary and they may terminate their participation at anytime. In addition, the Moderator's Guide structures questions for each of the two cohort groups and adds perspective to the way the research may impact students.

Identifying the interview location.

The location at which the interviews took place was at a site that UIC residential and commuter students found comfortable and was easily accessible; the interview room was in the

student center on the campus of the University of Illinois at Chicago. The UIC Student Centers are a well-recognized destination to UIC students. A conference room in the building was the actual interview site.

Developing a consent form and other required IRB documents.

The required IRB consent form (Appendix E) was prepared and submitted. The consent form (Appendix H) articulated the purpose of the focus group and the parameters of the student's participation in the process.

Securing IRB approval for the focus group.

IRB approval was secured (Appendix F) and the next step was engaged.

Recruiting focus group participants.

The creation of focus groups involved data gathering, data manipulation, and communication with student subjects. The student data were obtained from the UIC Data Warehouse and provided information on the fall 2009 freshman cohort still enrolled in the spring 2011 semester. UIC Campus Housing provided the fall 2009 Housing roster from their internal database. These data were manipulated to create two data sets, Residential Students (1,095 total) and Commuting Students (1,318 total) from fall 2009.

Using a listserv, each set of students was sent an e-mail requesting participation in the project from the principal investigator of the present study (Appendix K). The e-mail also informed the students that selected participants would receive 25 dollars in cash at the conclusion of the session. The e-mail requested a response via phone or e-mail. Within a day, over 80 students had responded. Student responses were tracked in order of receipt. In that order, students were then notified by e-mail that they had been selected as participants. It was

requested that they confirm availability via e-mail and verify their status as a former resident or commuter. In all but one case, students were chosen for each group in the order the response was received. In the only caveat, a student was selected out of order in an attempt to more appropriately represent the diversity of the student body.

Based on initial recruitment of 10 students per data set, the focus groups were organized via a final e-mail to the participants, confirming date, time, and location. Eight students from each focus group responded that they were available and would be at the prescribed interview site at the scheduled time. The 16 students were contacted by telephone the day before the sessions to remind them of the date, time, and location of the interviews.

The students randomly selected to participate in the focus groups represent a diverse population of students not unlike the student population on the UIC Campus. Table 8 summarizes the ethnicity of participants. Participants were assured anonymity; therefore each participant was assigned a pseudonym. The assigned pseudonym reflected the gender of the participant.

Table 8
Focus Group Demographics

Commuter Students			Residential Students		
(Pseudonym)			(Pseudonym)		
Carol	Black Non-Hispanic	F	Anna	Hispanic	F
Terri	Asian or Pacific Islander	F	Sam	Asian or Pacific Islander	M
Max	Asian or Pacific Islander	M	Gerri	White Non-Hispanic	F
Mary	White Non-Hispanic	F	Denise	Asian or Pacific Islander	F
Jerry	White Non-Hispanic	M	Fay	White Non-Hispanic	F
Meg	White Non-Hispanic	F	Gene	Asian or Pacific Islander	M
Lucy	White Non-Hispanic	F	Daniel	White Non-Hispanic	M
Jack	Black Non-Hispanic	M	Dawn	Black Non-Hispanic	F

Conducting the focus group sessions.

The focus group sessions were conducted in two 90-minute sessions; commuter students then residential students. Participants were reminded about the purpose of the study. They were also reminded that their participation was voluntary, and that responses would be confidential. Participants were provided with consent forms, which provided an overview of the study and the role they were playing in the study. The participants were asked to sign the consent waiver prior to participating in the focus group interviews. In order to stimulate discussion and stimulate each participant's thoughts and ideas prior to each question, each participant was given the question, in writing, and asked write out their response. The students were only given three minutes to

complete the answers. The sheets were collected and the discussion began. This procedure was repeated for each question. This exercise proved to be a very helpful method for students to think about the questions prior to engaging in a dialog.

Assuring trustworthiness

The basic question addressed by the notion of trustworthiness, according to Lincoln and Guba, is simple: “How can an inquirer persuade his or her audiences that the research findings of an inquiry are worth paying attention to?” (1985, p. 290). When judging qualitative work, Strauss and Corbin (1990) believe that the “usual canons of ‘good science’ ...require redefinition in order to fit the realities of qualitative research” (p. 250).

Guba (1981) proposes four criteria that he believes should be considered by qualitative researchers in pursuit of a trustworthy study; credibility in preference to internal validity; transferability in preference to external validity or generalisability; dependability in preference to reliability, and confirmability in preference to objectivity.

Credibility. Lincoln and Guba argue that ensuring credibility is one of most important factors in establishing trustworthiness (Lincoln and Guba, 1985). The adoption of well-established research methods, random sampling, triangulation, tactics to ensure honesty of the informants, and frequent debriefing of the researcher are several strategies suggested by Shenton (2004) that ensure credibility

The focus group was used as the method to add richness to the quantitative data. As Bender and Ewbank (1994) point out that, “Focus groups are widely used in the investigation of applied-research problems and are recognized as a distinct research method” (p.63).

A peer debriefer was engaged to further ensure objectivity and credibility of the focus group process. The peer debriefer was a neutral person who was used during the focus group sessions, during a post-session review, and during review of transcripts and coding in an effort to detect areas that might have been overlooked by the investigator. A note taker was also enlisted. The notes provided invaluable assistance during the coding process. The investigator met with the note taker and debriefer immediately after the focus groups and then several weeks later to discuss the sessions. The note taker also validated the findings by listening to the recordings and reading the transcripts alone before meeting with the investigator.

The selection of participants for the focus group as detailed earlier, was accomplished through solicitation that accepted respondents randomly. Except for one instance, as a measure to assure diverse representation of the focus group, the selection of participants was unencumbered.

Background, qualifications and experience of the investigator. According to Patton, (1990) the credibility of the researcher is especially important in qualitative research, as it is the person who is the major instrument of data collection and analysis. In the present study, the focus group moderator is the study's principal investigator, as well as an administrator at the institution. While not an experienced focus group moderator, the principal investigator is experienced in interview techniques and was aware of the need to remain neutral and maintain a bias-free climate during the focus group interviews. The principal investigator has worked with both residential and commuter students for over 25 years and has a history of, and has enacted a number of, initiatives intended to enhance student engagement with the campus.

Triangulation. While the focus groups for the present study were a triangulation measure intended to add an important humanistic view of the data, triangulating the focus group via data

sources adds credibility to study. This was accomplished in the coding process when the individual viewpoints and experiences of focus group members were verified against each other. This leads to a more complete view of attitudes and behaviors of a range of people. Van Maanen (1983) urges the exploitation of opportunities “to check out bits of information across informants.”

Transferability. In positivist work, generalizability is concerned with demonstrating that the results of the research can be applied to a broader population. Shenton (2004) points out that “Since the findings of a qualitative project are specific to a small number of particular environments and individuals, it is impossible to demonstrate that the findings and conclusions are applicable to other situations and populations.” Lincoln and Guba (1985) present a similar argument and suggest that it is inherent in the responsibility of the investigator to provide a strong contextual foundation of information of the fieldwork to allow the reader to make a meaningful transfer of the context of the research. To assure transferability of the present study, the focus group background information includes specific demographic information about the focus group’s informants, as well as all of the supporting information about the focus group procedures, forms, documents, and protocols.

Dependability. As pointed by Schwandt, (2007) dependability relates to the importance of the investigator being able to shift or change contexts and circumstances of the research. Dependability is analogous to reliability, that is, the consistency of observing the same finding under similar circumstances. Lincoln and Guba (1985) suggest that documentation reflects the research accurately with adequate documentation.

In the present study, the rigor of the focus group protocol, the fairly relatively dense description of the procedures used coupled with two peer reviewers assures a relatively dependable research procedure occurred.

Confirmability is analogous to objectivity; it is the extent to which a researcher is aware of or accounts for individual subjectivity or bias. Also, it refers to the extent that the findings can be confirmed or corroborated. Since there have been no focus groups identified that have specifically dealt with the questions posed, it is difficult to confirm the findings with other groups. The thick description of the results, again supported by a well-documented protocol, will enhance efforts by other researches to reach some level of confirmability to the present study.

Analyzing the data. At the conclusion of the two focus groups sessions, the interview tapes were transcribed and coded into relevant themes. Berkowitz (1997) suggests the use of six questions when coding and analyzing qualitative data:

1. What common themes emerge in responses about specific topics?
2. How do these patterns (or lack thereof) help to illuminate the broader central question(s)?
Are there deviations from these patterns? If so, are there any factors that might explain these deviations?
3. How are participants' environments or past experiences related to their behavior and attitudes?
4. What interesting stories emerge from the responses? How do they help illuminate the central questions?
5. Do any of these patterns suggest that additional data may be needed? Do any of the central questions need to be revised?

6. Are the patterns that emerge similar to the findings of other studies on the same topic? If not, what might explain these discrepancies?

At the end of the two focus group sessions, a debriefing meeting was held with the moderator, the note taker, and the peer reviewer. Discussion focused on emerging themes or patterns and review of responses.

The two audio-taped sessions were transcribed and read three times. The first reading was intended to reacquaint the moderator with the responses; notes were made on the transcript. The second review of the transcript was accompanied by listening to the tapes. This exercise was intended to begin to focus on themes and patterns that were embedded in the conversation. The final review of the transcripts involved coding of the information.

4. ANALYSIS OF THE DATA

4.1 Quantitative. The intent of this study was to examine the relationship between allocation of time by commuter and residential students as it relates to student retention. Therefore this study considered how commuter students and residential students allocated their time engaging in a wide range of academic, social, and personal activities. In addition, it examined these students' retention rates, while controlling for a variety of factors that are not limited to race, age, and college entry characteristics. The independent variable was student status as either commuter or residential. The intervening variables included time allocation activities, as measured by the CSEQ. The dependent variable included first-to-second year persistence.

The data collection tool used for this study was the fourth edition of the College Student Experiences Questionnaire (CSEQ). In addition to possessing the characteristics suggested by Scott and Morrison (2006); Gonyea, Kish, Kuh, Muthiah, and Thomas (2003) note that "The CSEQ, as a survey instrument, has been recognized for years as a survey instrument with good psychometric properties, because it reliably measures educational practices that affect student outcomes" (Ewell and Jones, 1994, 1996; Pace, 1984, 1990). As a tested and reliable quantitative instrument, it provided the statistical data from which correlations between residential and commuter student time allocations and persistence were evaluated. The CSEQ Thirteen Activity Scales served as intervening variables.

4.1.2 Organization of the data analysis. The student survey and demographic data were warehoused in an SPSS data file. Scoring of the 13 CSEQ scales was completed through the SPSS system by first coding each response on a four-point Likert scale, ranging from a value of

one (never) to a value of four (very often) and then averaging the items associated with a given scale to compute an overall scale score. Variables such as gender and race were dummy coded, and age was transformed into an ordinal variable. In addition, the independent variable and the dependent variable were dummy coded.

4.1.3 Descriptive statistics. This section of the chapter presents the descriptive data including frequency distributions for the categorical variables and descriptive statistics for the scaled variables. The student demographic characteristics and academic outcomes are presented first followed by the descriptive statistics for the 13 CSEQ scales.

Table 9 provides the gender composition of the students in this study. The results indicate that the majority of the students in this study were female (60.7%).

Table 9.
Gender Composition of Research Sample

Gender	Frequency	Percent
Unknown	35	4.3
Male	282	35.0
Female	489	60.7

The racial composition of the sample is summarized in Table 10. The results indicate that the most common race was Caucasian (37.0%) followed by Asian (22.7%), Hispanic (20.3%), and African American (10.2%). The remaining groups represented less than 5% of the sample.

Table 10.

Racial Composition of Research Sample

Race	Frequency	Percent
Unknown	37	4.6
Native American	3	0.4
Asian	183	22.7
African American	82	10.2
Caucasian	298	37.0
International	12	20.0

Student age upon entry into the university is summarized in Table 11. The results indicate that the vast majority of the students in this study were 19 years of age or younger when they entered UIC (92.8%). Therefore the vast majority of the students enrolled within one year after high school graduation.

Table 11.

Age Composition of Research Sample

Age	Frequency	Percent
Unknown	1	0.1
19 or younger	748	92.8
20-23	51	6.3
24-29	4	0.5
30-39	1	0.1
over 40	1	0.1

Similarly, the results in Table 12 indicate that the vast majority of the students were non-transfer students (98.9%), and therefore UIC was the first institution of higher education attended by almost all of the students.

Table 12.
Enrollment Status of Research Sample

Entry status	Frequency	Percent
Unknown	2	0.2
Transfer student	7	0.9
Non-transfer student	797	98.9

Table 13 summarizes the marital status of the students represented in this study. The results indicate that the vast majority of the students were not married when they enrolled (99.3%); only three students were married.

Table 13.
Marital Status of Research Sample

Marital status	Frequency	Percent
Unknown	3	0.4
Not married	800	99.3
Married	3	0.4

The current living arrangements of the students when enrolling are summarized in Table 14. The results indicate that students were about equally likely to live in a dorm or other housing (45.7%) as they were to live in a residence within driving distance (47.9%).

Table 14.
Living Arrangements of Research Sample

Current living arrangements	Frequency	Percent
Unknown	4	0.5
Dorm, other housing	368	45.7
Residence in walking	44	5.5
Residence in driving	386	47.9
Fraternity/sorority	4	0.5

Table 15 summarizes the persons with whom the student lived at the time of enrollment. The results indicate that students were about equally likely to live with other students (44.4%) as they were to live with their parents (46.9%). However, some students either lived with other relatives (10.0%) or by themselves (5.0%).

Table 15.
Summary of Who Students Lived With When Enrolling

Live with whom	Frequency	Percent
Alone	40	5.0
Other students	358	44.4
Spouse or partner	11	1.4
Child	5	0.6
Parents	378	46.9
Other relatives	81	10.0
Non-student friends	16	2.0
Other	28	3.5

When completing the survey, students were also asked if they had access to a computer. An overwhelming majority of the students indicated that they did have access to a computer (98.6%), as indicated in Table 16.

Table 16.
Students' Access to a Computer

Access to computer	Frequency	Percent
Unknown	1	0.1
Yes	795	98.6
No	10	1.2

Students' grades are summarized in Table 17. The results indicate that students were most likely to have an average grade of A- or a B+ (30.5%) followed by a B (22.2%). Also, approximately half of the student population earned grades equivalent to a B+ or higher (51.1%). In addition, the average ACT score of the students entering UIC was 23.53, with a standard deviation of 3.52

Table 17.
Summary of Students' Grades

Grades at UIC	Frequency	Percent
C, C-, or lower	69	8.6
B-, C+	146	18.1
B	179	22.2
A-, B+	246	30.5
A	166	20.6

The descriptive data for the housing variable, which shows the number of resident students versus the number of commuter students, is provided in Table 18. The results indicate that a small majority of the students were commuters (54.6%).

Table 18.
Residential Students and Commuter Students

Live on campus	Frequency	Percent
Unknown	1	0.1
Yes	365	45.3
No	440	54.6

The descriptive statistics for the 13 CSEQ scales are presented next. The results in Table 19 indicate that, on average, students participated in activities such as clubs and organizations least often (1.64) and participated in course learning activities most often (2.98). Also, the mean ratings were not extremely low or extremely high for any of the scales. However, some individual students selected a response of “never” on one or more of the scales (with the exception of course learning), and some students selected a response of “very often” on one or more of the scales. Finally, given that the total number of students in the sample was 806, there was some missing data for each of the 13 scales. The scale with the most missing data was the topics of conversation scale, which yielded a 93.2% response rate.

Table 19.
Descriptive statistics for the 13 CSEQ scales

Scale	N	Minimum	Maximum	Mean	Std. deviation
Library experiences	781	1.00	4.00	1.97	0.64
Computer/IT	779	1.00	4.00	2.68	0.61
Course learning	766	1.55	4.00	2.98	0.54
Writing experiences	782	1.00	4.00	2.78	0.58
Experience with faculty	775	1.00	4.00	2.18	0.66
Art, music, theater	776	1.00	4.00	2.06	0.80
Campus facilities	776	1.00	4.00	2.30	0.66
Clubs/organizations	785	1.00	4.00	1.64	0.79
Personal experiences	780	1.00	4.00	2.47	0.70
Student acquaintances	772	1.00	4.00	2.69	0
Scientific/quantitative	762	1.00	4.00	2.45	0.81
Topics of conversations	751	1.00	4.00	2.56	0.70
Information in conversations	780	1.00	4.00	2.73	0.69

Table 20 shows the number and percentage of students who returned in the fall of their second year. The results indicate that the vast majority of the students were retained (84.0%) and therefore returned to UIC in the fall following their freshman year.

Table 20.
Returned To UIC in the Fall Following Freshman Year

Returned in fall	Frequency	Percent
Yes	677	84.0
No	129	16.0

The remainder of this chapter discusses the data analysis procedures used to address the research questions and provides the results of the data analyses in order to address the research questions, which are as follows:

1. Is there a statistically significant difference in time allocation activities between residential students at the University of Illinois at Chicago and their commuter counterparts?
2. If there is a significant difference in time allocation activities between residential students and commuter students at the University of Illinois at Chicago, is it possible to correlate certain time allocations with one-year persistence?

All of the student survey data were analyzed using SPSS (Version 17.0). The Thirteen Activity Scales from the CSEQ were constructed by taking the average of all of the items associated with a given scale. The internal reliability of the items was examined by computing a Cronbach's alpha. The results of the reliability analyses in Table 21 indicate that the internal reliability of the scales ranged from good to excellent (Ponterotto & Ruckdeschel, 2007).

Table 21.
Internal Reliability Coefficients for the Thirteen Activity Scales

Scale	No. of items	α
Library experiences	8	0.839
Computer/IT	9	0.794
Course learning	11	0.858
Writing experiences	7	0.789
Experience with faculty	10	0.893

Art, music, theater	7	0.878
Campus facilities	8	0.775
Clubs/organizations	5	0.866
Personal experiences	8	0.860
Student acquaintances	10	0.923
Scientific/quantitative experiences	10	0.923
Topics of conversations	10	0.904
Information in conversations	6	0.895

The first research question was addressed by conducting an independent samples *t*-test for each of the 13 activity scales where the two groups of students (residential and commuter) were compared in order to determine if significant differences exist. The independent samples *t*-test was used because two groups were compared based on a scaled dependent variable (Cronk, 2008). Statistical significance was determined by an alpha of .05. The purpose of this research question was to determine if residential students and commuter students differ in their time allocations.

The second research question was addressed through a series of multiple logistic regression equations. Multiple logistic regressions were chosen because multiple variables were used simultaneously to predict a dichotomous dependent variable (Mertler & Vannatta, 2005). The control variables included student gender, age, ACT score, and race. However, given the large number of variables included in the analyses, the small number of students in many of the race categories, and the multiple selections of race categories by some students, only one dummy variable for race was included in the analysis, which was the Caucasian dummy variable. The

intervening variables included the 13 CSEQ scales. The independent variable was student housing status (residential or commuter), and finally, the dependent variables included persistence from year one to year two (e.g., student returned in the fall). Again, statistical significance was determined by an alpha of .05.

4.1.4 Results. This section of the chapter specifically addresses each research question in sequential order. Therefore, the inferential statistical results are presented in this section of the chapter, which include the independent samples *t*-test results for research question one and the multiple logistic regression analysis results for research question two.

Research Question One

The goal associated with the first research question was to compare residential students to commuter students with regard to the 13 CSEQ activity scales to determine if the two groups differ relative to their time allocations. As part of the independent samples *t*-tests, group means were computed. The group means for each of the 13 CSEQ scales are provided in Table 22.

Table 22.
CSEQ Group Mean Comparisons: Residential vs. Commuter Students

Scale	Mean rating	
	Residential	Commuter
Library experiences	1.89	2.03
Computer/IT	2.76	2.61
Course learning	3.01	2.96
Writing experiences	2.83	2.74
Experience with faculty	2.20	2.16
Art, music, theater	2.13	2.01

Campus facilities	2.40	2.21
Clubs/organizations	1.78	1.53
Personal experiences	2.55	2.41
Student acquaintances	2.82	2.59
Scientific/quantitative	2.51	2.41
Topics of conversations	2.54	2.58
Information in conversations	2.76	2.70

The results in Table 22 indicate that residential students had higher mean scales scores with regard computer/IT experiences, course learning experiences, writing experiences, faculty experiences, art, music; and theater experiences, campus facilities, clubs or organizational activities, personal experiences, student acquaintances, scientific/quantitative experiences, and information in conversations. However, the commuter students had higher mean scale scores with regard to library experiences and topics of conversation.

In order to determine if these mean differences were statistically significant, the independent samples *t*-tests were conducted. The results in Table 23 indicate that the two groups of students were statistically significantly different on 8 out of the 13 scales. Significant differences were found relative to library experiences [$t(778) = -3.10, p = .002$]; computer/IT experiences [$t(776) = 3.51, p < .001$]; writing experiences [$t(779) = 2.25, p = .025$]; art, music and theater [$t(773) = 1.96, p = .050$]; campus facilities [$t(773) = 3.94, p < .001$]; clubs/organizations [$t(782) = 4.52, p < .001$]; personal experiences [$t(777) = 2.69, p = .007$]; and student acquaintances [$t(769) = 4.36, p < .001$]. These significant differences indicate that there is at least a 95% chance that a true difference exists between residential and commuter students in the

overall population and the null hypothesis is rejected in favor of the alternative hypothesis.

The two groups of students were found to support the null hypothesis (e.g., cannot be 95% confident that a true difference exists in the overall population) with regard to their course learning experiences [$t(763) = 1.33, p = .185$]; their experiences with faculty [$t(772) = 0.95, p = .340$]; scientific/quantitative experiences [$t(759) = 1.73, p = .083$]; topics of conversations [$t(748) = -0.88, p = .376$]; and information in conversations [$t(777) = 1.11, p = .269$].

The results for research question one indicate that commuter students spend more time in the library, spend less time with computers/IT, have fewer writing experiences, have fewer art; music; and theater experiences, spend less time using campus facilities, spend less time involved in clubs or organizations, have fewer personal experiences, and have fewer student acquaintances.

Table 23

Independent Samples T-Test Results for CSEQ Residential vs. Commuter Students

Scale	<i>t</i>	<i>df</i>	<i>p</i>	Std. error	95% CI	
					Lower	Upper
Library experiences	-3.10	778		0.05	-0.23	-0.05
Computer/IT	3.51	776	0.002	0.04	0.07	0.24
Course learning	1.33	763	< .001	0.04	-0.02	0.13
Writing experiences	2.25	779	0.025	0.04	0.01	0.18
Experience with faculty	0.95	772	0.340	0.05	-0.05	0.14
Art, music, theater	1.96	773	0.050	0.06	0.00	0.23
Campus facilities	3.94	773	< .001	0.05	0.09	0.28
Clubs/organizations	4.52	782	< .001	0.06	0.14	0.36
Personal experiences	2.69	777	0.007	0.05	0.04	0.23
Student acquaintances	4.36	769	< .001	0.05	0.13	0.33
Scientific/quantitative	1.73	759	0.083	0.06	-0.01	0.22
Topics of conversations	-0.88	748	0.376	0.05	-0.15	0.05
Information in conversations	1.11	777	0.269	0.05	-0.04	0.15

Research Question Two

The goal of research question two was to determine if residential and commuter students differ significantly with regard to their one year persistence after controlling for background characteristics and time allocations. Therefore residential or commuter status was the

independent variable, the demographic factors and the 13 scales served as intervening variables, and the dependent variable was first-to-second year persistence.

The first set of predictors (e.g., Model 1) included the background characteristics. The results for the first model indicate that the overall model was not statistically reliable in distinguishing between persistent and non-persistent students [-2 Log Likelihood = 646.894; $\chi^2(4) = 5.605, p = .231$]. The model correctly classified 84.7% of the cases.

The second model added the students' housing status (residential vs. commuter) to the model. The regression results for the second model indicate that the overall model was not statistically reliable in distinguishing between persistent and non-persistent students [-2 Log Likelihood = 642.823; $\chi^2(5) = 5.929, p = .313$]. The model correctly classified 84.8% of the cases. The results in Table 24 indicate that adding the housing variable did not improve the model's ability to predict persistence.

The third and final model added the intervening variables, which include the 13 CSEQ scales. The regression results for the third model indicate that the overall model was statistically reliable in distinguishing between persistent and non-persistent students [-2 Log Likelihood = 403.026; $\chi^2(18) = 35.677, p = .008$]. The model correctly classified 87.3% of the cases and accounted for 11.3% of the variability in persistence. The regression coefficients presented in Table 25 indicate that four of the individual predictors were significant, which include age ($B = -.901, p = .017$), course learning experiences ($B = .843, p = .016$); writing experiences ($B = -.736, p = .018$), and art, music and theater experiences ($B = .417, p = .042$). The odds ratios indicate that older students are less likely to persist (.406), more course learning experiences are associated with a greater likelihood of persistence (2.324), more writing experiences are

associated with a lower likelihood of persistence (.479), and more art; music; and theater experiences are associated with a greater likelihood of persistence (1.518). A discussion of these findings is found in Chapter Five, page 139.

Table 24
Logistic Regression Results Predicting Persistence

Variable	Equation 1 Demographic Characteristics		Equation 2 Housing Status added to the model		Equation 3 CSEQ Scales added to the model	
1. Gender	0.000	(0.215)	-0.005	(0.215)	0.151	(0.303)
2. Age	-0.576	(0.289)*	-0.571	(0.289)*	-0.901	(0.379)*
3. ACT	0.000	(0.031)	-0.001	(0.031)	0.002	(0.043)
4. Race	-0.281	(0.219)	-0.291	(0.222)	-0.483	(0.289)
5. Housing			0.064	(0.212)	-0.085	(0.291)
6. Library experiences					0.303	(0.248)
7. Computer/IT					-0.345	(0.266)
8. Course learning					0.843	(0.351)*
9. Writing experiences					-0.736	(0.311)*
10. Experience with faculty					0.415	(0.310)
11. Art, music, theater					0.417	(0.205)*
12. Campus facilities					-0.046	(0.291)
13. Clubs/organizations					0.371	(0.225)
14. Personal experiences					-0.184	(0.268)
15. Student acquaintances					-0.161	(0.255)
16. Scientific/quantitative					0.303	(0.204)
17. Topics of conversations					-0.433	(0.285)
18. Information in conversations					-0.017	(0.311)

R^2	0.0130	0.0140	0.1130
R^2 Change		0.0010	0.0990

Note. Unstandardized coefficients are given in parentheses. * $p < .05$

4.1.5 Summary of quantitative results. A summary of the descriptive data of participants in the 2004, 2006, 2008, and 2010 College Student Experiences Questionnaire revealed that:

- Of the participants, 61% were female and 35% male;
- 37.0% were Caucasian, 10.2% were African American, 22.7% were Asian, 20.3% were Hispanic, 0.4% were Native American, 3.3% were Other, 1.5% were International students, and 4.6% did not identify their ethnicity;
- 45% were residential students and 55% were commuter students;
- 99% were new non-transfer students;
- Gender *averaged* 56.3 female and 43.7% male;
- Racial mix of the students *averaged* 40.1% Caucasian, 10.6% African American, 23.7% Asian, 19.8% Hispanic, 1% Native American, and 4.4% Other;
- The housing status of new non-transfer students *averaged* 40.9% residential and 60.1% commuter;
- On *average*, 70.38% of freshmen were new non-transfer students;
- The *average* age of new non-transfer students is 18.1 years.

While the preceding UIC data regarding demographic statistics does not use data that were captured during equivalent time periods to CSEQ administration and it includes the years when the survey was not administered, the purpose of the comparison is to ensure that the relatively small sample, $n=806$ participants, reflects the overall larger campus population.

The goal associated with the first research question was to compare residential students to commuter students with regard to the 13 CSEQ activity scales to determine if the two groups differ relative to their time allocations. The results indicated that residential students had higher mean scales scores with regard to computer/IT experiences, course learning experiences, writing experiences, faculty experiences, art; music; and theater experiences, campus facilities; clubs; or organizational activities, personal experiences, student acquaintances, scientific/quantitative experiences, and information in conversations. The commuter students had higher mean scale scores with regard to library experiences and topics of conversation.

As part of the independent samples *t*-tests, group means were computed. The results indicate that the two groups of students were statistically significantly different on 8 out of the 13 scales (refer to Table 23 for a summary of findings). Significant differences were found relative to library experiences, computer/IT experiences, writing experiences, art; music; and theater, campus facilities, clubs/organizations, personal experiences, and student acquaintances. These significant differences indicate that there is at least a 95% chance that a true difference exists between residential and commuter students in the overall population. The two groups of students were found to be statistically equivalent (e.g., cannot be 95% confident that a true difference exists in the overall population) with regard to their course learning experiences, their experiences with faculty, their scientific/quantitative experiences, topics of conversations, and information in conversations. Is there a statistically significant difference in time allocation activities between residential students at the University of Illinois at Chicago and their commuter counterparts?

Table 25
Summary of Results for Research Question One

Library experiences	A significant mean difference was found between students who lived in residence halls and students who commuted.
Computer/IT	A significant mean difference was found between students who lived in residence halls and students who commuted.
Course learning	No significant difference.
Writing experiences	A significant mean difference was found between students who lived in residence halls and students who commuted.
Experience with faculty	No significant difference
Art; music; theater	A significant mean difference was found between students who lived in residence halls and students who commuted.
Campus facilities	A significant mean difference was found between students who lived in residence halls and students who commuted.
Clubs/organizations	A significant mean difference was found between students who lived in residence halls and students who commuted.
Personal experiences	A significant mean difference was found between students who lived in residence halls and students who commuted.
Student Acquaintances	A significant mean difference was found between students who lived in residence halls and students who commuted.
Scientific/quantitative	No significant difference.
Topics of conversation	No significant difference

Information in
conversations

No significant difference

Table 25 summarizes the analyses associated with the second question pertaining to persistence. If there is a significant difference in time allocation activities between residential and commuter students at the University of Illinois at Chicago, is it possible to correlate certain time allocations with one-year persistence?

When looking at the results from Model 1, age was the only significant predictor of persistence, with younger students being more likely to persist. The results from Model 2 indicate that when the housing variable was entered into the model (residential vs. commuter), age remained as the only significant predictor. Again, younger students were more likely to persist. Finally, the results from Model 3 indicate that age, course learning experiences, writing experiences and art; music; and theater experiences were significant predictors of persistence. Specifically, younger students were more likely to persist, more course learning experiences were associated with a greater likelihood to persist, more writing experiences were associated with a lower likelihood to persist, and more art; music; and theater experiences were associated with a greater likelihood to persist. These results will be discussed in 5.3.1 Discussion of the study survey results.

Table 26
Summary of Results for Research Question Two

Model 1 for Question 2 Regarding Persistence

Examines relationship between background characteristics and first-to-second year persistence.

Gender	No significant difference
Age	Younger students more likely to persist
ACT	No significant difference
Race	No significant difference

Model 2 for Question 2 Regarding Persistence

Examines relationship between background characteristics, housing status, and first-to second-year persistence.

Gender	No significant difference
Age	Younger students more likely to persist
ACT	No significant difference
Race	No significant difference
Housing	No significant difference

Model 3 For Question 2 Regarding Persistence

Examines relationship between background characteristics, Housing status, the Thirteen Activity CSEQ scales, and first-to-second year persistence

Gender	No Significant difference
Age	Younger Students more likely to persist
ACT	No Significant difference
Race	No Significant difference
Library Experiences	No Significant difference
Computer/IT	No Significant difference
Course Learning	More course learning associated with greater likelihood to persist
Writing experiences	More writing associated with lower likelihood to persist
Experience with faculty	No Significant difference
Art; music; and Theater	More art/music/theater associated with greater likelihood to persist
Campus facilities	No Significant difference
Clubs/organizations	No Significant difference
Personal experiences	No Significant difference

The study did not find a correlation between place of residence and first-to second-year nor was the study able to specifically identify why place of residence does not affect first- to second-year persistence at this institution. The study found that more writing experiences were associated with a lower likelihood to persist and that younger students engaged in course

learning and involved with music, art and theater experiences did persist at a higher rate. The study results will be discussed in 5.3.1, Discussion of the study survey results.

4.2 Qualitative study. In the present study, the results of the analysis of the dependent and independent variables was intended to serve as the platform for development of the focus group questions.

In Chapter 3, a set of possible focus group questions was discussed. The questions, repeated next, when compared against what was learned from the analysis of the data, are appropriately phrased.

A. Questions for Preliminary Residential Student Focus Group

1. How much time do you spend on academic activities outside of class?
2. How much time do you spend on social activities?
3. What do you spend most of your time doing when you are not in class?
4. What stops you from allocating time to participate in academic or social activities?
5. Have the activities you spend your time engaged in changed from when you first moved on campus?
6. How do you decide which activities to become involved with and when to end your involvement?

B. Preliminary Questions for Commuter Student Focus Group

1. How much time do you spend on academic activities outside of class?
2. How much time do you spend on social activities?
3. What do you spend most of your time doing when you are not in class?
4. What stops you from allocating time to participate in academic or social activities?
5. Have the activities you spend your time engaged in changed from when you first moved to campus?
6. How do you decide which activities to become involved with and when to end your involvement?

The results for research questions indicate that commuter students: 1) spend more time in the library; 2) spend less time using campus computers and information technology; 3) spend less time using campus facilities; 4) experience less involvement in clubs or organizations; 5) have fewer personal experiences; 6) have fewer student acquaintances; and 7) experience fewer scientific quantitative experiences than their residential counterparts. The focus questions were designed to add understanding to possible reasons for the differences and were the intended outcomes for the questions regarding commuter students.

The rationale for this study, as indicated in earlier chapters, was to:

1. Examine how commuter students and residential students allocate their time for academic and social engagements using data from the College Student Experiences Questionnaire, as well as focus groups.

2. Determine if the time allocation behaviors between the two groups are significantly different and the effect it has on persistence.

To achieve the second section of the study, two focus groups' discussions were conducted. The processes, protocols, and procedures used to develop and recruit the focus groups along with appropriate approval processes can be found in Chapter 3.

Results

Each focus group session was intended to generate a great deal of information that is organized by group, question, and themes. Themes are ideas or concepts mentioned repeatedly by the participants that capture the recurring essence of the data (Merriam 1998).

The summary or the results of the commuter and residential student focus groups were organized around each group's responses to the six questions. The questions were designed to solicit some very definitive responses, for example agree or disagree, as to how much time is spent on an activity or the types of activities in which students are engaged. Most of the questions however, were open-ended and lead to interesting discussions and useful insights. Various themes to each question were identified and are the focus of the summary of the results. Both focus group results are discussed individually, the results of each group are then compared and contrasted.

4.2.1 Residential student focus groups responses.

Question 1. The survey results informed us that residential students spend less time in the library than commuter students. The time spent in the library includes all types of activities, for example, studying, browsing for a book or other literature, writing a paper, looking up references for a paper, using the library database to find material for any number of reasons. Do you agree

with the survey results that residential students spend less time in the library than commuter students? Could you tell us about your library experiences?

Residential focus group participants all agreed that residential students spend less time in the library than commuters for many of the same reasons that commuters said caused them to use the library. “When I stayed on campus I never went to the library. But, I agree that commuter students do go to the library more because they probably have gaps between class time, whereas residential students can go back to their dorm.” (Dawn) The support amenities in the residence hall rooms seemed to help support study, keeping students in the residence halls, as pointed out by Fay and Gene; “I actually agree that commuters use it more because in the residence halls we have study lounges and we have computer labs. We have pretty much all the same resources, except for books at the library. I’m just too lazy to walk all the way to the library when I have everything I need.” (Fay) “I rarely go to the library because I personally like my single room where I can study fine and there are labs available and study lounges available. So, I don’t really find much reason to go the library unless I need to check out books or I need to do some group project or study with my friends together.” (Gene)

One interesting comment by Anna that was validated by most of the focus group participants was that after about 5:00 pm, when most of the commuter students leave campus, residential students migrate to the library. “I think it’s kind of mixed because during the day, there’s a lot more commuters and it’s a lot louder in the library. But, when you go there around 5 o’clock, when most of the classes have ended, it’s a lot more residential students, because it’s a lot quieter in the library. You don’t notice as many people at the computers; you’re just looking

at Facebook or online. I use the library every day in-between classes. I usually go there after work, and you notice a significant difference.”

The second part of the question regarding library use resulted in limited responses and the only theme that could be gleaned from participant comments focused on library use to meet for class group projects or to meet commuter friends. “I only go there when I have to do a group project; that’s the cool place to meet.” (Daniel) “I don’t really find much reason to go the library unless I need to check out books or I need to do some group project or study with my friends together.” (Gene) While the participants suggested that they might occasionally visit the library to study or do research for a project, there were few other reasons offered to visit the library. “Well, freshman year when I lived on campus I hardly ever went to the library, maybe one or two times during finals week.” (Sam)

Question 2. The survey results informed us that commuter students spend less time than residential students using computers/IT. Using a computer for email, as a tutorial for class work, to prepare a course paper, to search the web, for statistical calculations or in class as part of the group discussion are all considered in this question. How much time in a day do you spend using a computer? What activities are being engaged in when you are on your computer? Do you have a laptop or do you use the UIC Computer Labs?

The responses to these questions were structured the same as the responses of the Commuter Focus group participants. The students were asked to share how much time they used their computer and whether they brought their laptop computer to school or used the institutional computers in the labs. Like the other group, it was made clear to them that their time on the computer included both academic and non-academic uses. The responses ranged from three

hours to one respondent's (Fay) "all day." The participant later quantified the response to possible time of seven or eight hours. The time that each participant estimated using a computer and type of computer is noted in Table 27.

Table 27.
Summary of Daily Computer Use by Residential Student and Type of Computer

Residential Student	Estimated Time on Computer	Laptop or UIC Computer
Sam	Three Hours	Laptop
Anna	Three to Four Hours	Both
Dawn	Three to Four Hours	Laptop
Gene	Four Hours	Laptop
Daniel	Four or Five Hours	Laptop
Denise	Five Hours	Laptop
Gerri	Five Hours	Both
Fay	Seven or Eight Hours	Laptop

The group participants almost all agreed that residential students used their computers more than commuter students. Their perceptions were focused on commuters' inability to be on the computer because of time restrictions, as pointed out by Gerri, "Yeah, because if you think about it residential students are here. If you're living in the dorms you're with a bunch of other kids, so usually if you're all hanging out you're sitting around on your laptops doing whatever. But, commuters are traveling, so they don't have that time to sit around and do that." Denise

took the only neutral view suggesting that, “It really depends on the commuter because I know a lot of commuters who bring their laptops and they are doing the same things as us and they’re only losing like an hour or less of traveling time and then they might make it up somewhere else.”

The next part of the second question asked students how they used their computers, with three uses identified for this question. Three themes were identified by the focus group discussions for use of the computer: entertainment, communications, and academic use. Entertainment use included watching movies, listening to music, and playing games. Communicating via computer included email and participating in social networks. Academic use included course research, homework, papers, and PowerPoint. None of the group participants used their computer for only one purpose. Gene, for instance, said, “I’m faster at typing my notes than I am at writing them and then most my classes are big, so it’s like lecture-based. It kind of varies because I do a lot of activities, so depending on how much time I have, it’s usually just for like homework and then Facebook.” Another lists uses, “I use it for homework, for Facebook, I always look up YouTube videos as my TV.” (Fay) Anna’s comment (next) was pretty representative of the discussion about computer use, “I use my computer about three or four hours a day. I’m on the computer a lot for school work and then I have work from my job that I do on my computer and then I go on Facebook and Twitter.”

Question 3. The survey results indicated that writing experiences were more likely to be engaged in by residential students than commuter students. Possible writing experiences listed included writing a paper of 20 pages or more, using a dictionary or thesaurus to more clearly understand a word, revising a paper or composition two or more times before completing it,

asking other people to read something you wrote to see if they understood what you wrote, or asking a faculty or staff member to help you improve your writing. Explain your writing experiences. Can you tell us how much time you spend engaged in writing in a week? What do you spend most of your time working on when you write?

Students generally did not agree with the survey results that said that commuter students had fewer writing experience than residential students. As Sam points out; “I think it just depends on the person and stuff; it depends on what kind of classes you’re taking. It doesn’t really matter where you live because no matter where you are, you could be writing.”

The amount of time that group participants reported varied, with some students spending virtually no time writing in a week, to one student reporting that she spent 10 hours per week writing. Sam for example said; “As of now I hardly ever spend time writing.” This contrasts to Amber who said; “I had to write five compositions and then I have weekly blogs that I have to do and it’s all just peer-writing in Spanish. It’s a lot more difficult to write in a different language than to write in your own, so I get a lot of peer-review and a lot of help from my professors and I go to the writing center a lot. I’m also in art history, I had to write one big paper and a couple of smaller papers.”

There was general consensus that the specific course in which one was enrolled impacted the amount of writing one would need to do during a semester. “Yeah, just like what Denise and Sam said, I think it’s more like your discipline and not really where you’re living. For me I’m taking a history class and a psych class and an honors class, they require papers to write. For history, I write weekly response papers and for psych, I write three major papers and just one paper for my honors class. Last semester I didn’t really have to write papers, except for my

English class, which I had to write about five total. But, now I have to write one weekly and sometimes a few major ones for my other classes.” (Gene) Likewise Gerri pointed out; “ I’m a psychology major, so I have at least one paper every semester that is about ten pages or more and then I have about two or three that are five to seven; so I write about four major papers a semester and then ten written responses about an article. But, I agree that it doesn’t matter where you’re living, if you’re commuting or living here, it depends on your classes.” The one major theme that was identified was that writing experience are directly related to academic discipline and course selection.

The group participants who had some writing experiences related that they would do research first, generate several drafts and rewrites, and often just jot down ideas while planning out their papers. “I write rough and final drafts for my papers; sometimes I give them to someone else to look over. I summarize articles in my own words before using them as references.” (Gerri)

Question 4. Art, music, and theater were found more likely to be experienced by residential students than commuter students. With art, music, and theater, we are interested in knowing whether you went to a concert, the theater or similar event, played an instrument, whether you were involved in a craft project, spoke to someone about music, went to an art exhibit or dance show. Explain your art, music and theater experience. Can you tell us how much time you spend engaged in art, music and/or, theater experiences?

The focus group results were not consistent with the CSEQ results. Focus group members were divided on the accuracy of the survey results, and the discussion failed to reveal any validity to the survey results. The art, music, and theater experiences for the focus group

participants were not very strong. Three of the students said they had little or no experience with these experiences, as is noted by Gene and Dawn; “Personally I don’t really have any experience in those areas, I used to play the violin in my middle school days, which I was like pretty much forced to go. You know how like Asian parents --- play the piano and play the cello or something like that. I kind of don’t buy into that so I quit after two years and ever since then I don’t play instruments, nothing like that. But, occasionally I listen to Christian music or stuff like that. I listen to that quite often, but never been a huge part of my life.” (Gene) “I don’t really have too much experience. Last semester I took a music class and I hated it, he forced us to go to a show that we had to pay for.” (Dawn)

There were three students who did share music and art experiences and were fairly active in music and the arts as illustrated by Sam, “For me, music is a big part of my life. I listen to music when I wake up to before I go to sleep. I’ve been to a couple of concerts now that I’ve been living here, since it’s closer to all the big bands I’ve been listening to, their venues are in downtown Chicago, so it’s not that big of a deal to go and travel there. For art, I took a couple of computer art classes in high school, I’ve made a couple of animations and got some experience in Photoshop, so maybe like once or twice a week I mess around with it at home.” Anna also expressed her interest in music and the arts, “Well, personally I’ve been in theater since the fourth grade and I’ve been dancing since I was three and I took voice lessons my whole entire life, so, that’s always been really close to me. I’ve grown up going to shows, going to theater, going to the ballet, so I make an effort to do something at least once or twice a month.” Daniel, who related that he was a DJ for UIC Radio also showed active participation in the arts, particularly with music; “I have a lot of friends in bands and they practice on Tuesdays, no they

practice on Friday nights, it's really just me going all over the place and watch the band practice. I do that a lot; I actually go to a lot of the shows. I also listen to the radio pretty frequently in my room. I own a lot of concert tickets because of that. I saw a concert at the Chicago Theater in October like on the ground floor. I won tickets to last year so that was pretty cool too. I went to the art gallery and then I took theater class."

The discussion about whether residential students had more art, music, and theater experiences than commuter students drew a mixed reaction from participants. Two of the participants, Denise and Daniel, point out the time and distance dilemma for commuters from their own experiences; "Yeah, I've played violin since fourth grade. I was in the UIC orchestra last year; I would understand why commuters wouldn't do it because the practice is from 4 to 6, and it's twice a week and I even hated it and I live here. It's really tiring because it's only one credit hour, so, it feels like it's not worth it and then it's like the end of your day to have to go and play. It's not really fun." (Denise) "I play the saxophone, so if I was a commuter I probably would not want to do it because it's 3 to 5 Tuesdays and Thursdays. It's my only class on those days, so I can skip it and do this. But, I wouldn't want to come down just for that. I know a girl in band, she's a commuter and she's like, 'I don't want to stay here that late' - she says, I've just got to do it." (Gene)

Question 5. The survey results informed us that residential students used campus facilities more than commuter students. Campus facilities are the Student Centers, recreation facilities, cafeterias, lounges, tennis and basketball courts, and sport fields. What campus facilities do you use? How often to you use the facilities? What do you do there? Is there any reason you don't use them more frequently?

The residential students' focus group results were fairly consistent with CSEQ results. However, the adjacency of the facilities that residential students must use, for example, the dining facilities located outside of the residence halls, will by default, result in residential students reporting use of campus facilities.

The focus group participants reported using the facilities both “frequently” and “every day.” Outside of the dining facilities, the participants related frequent use of a wide variety of facilities. The recreation facilities were mentioned most frequently. “I use the recreation center like every other day. I also go to the cafe and the library, just about every day.” (Gene) “I use the recreation center as much as I can, like the other day. I go to the library sometimes. I actually use a lot of the facilities they have in the residence halls because I’m in charge of an organization—RHA Residence Hall Association—so we pretty much use everything that’s handed to us. So, I have to know pretty much everything that’s available to me.” (Fay) “I go work out sometimes with my friends if they go hang out with me, if I go. I go to the radio station once a week; I go bowling all the time now. I mean I go to the basketball games because I have to and also I go to cafeteria and then we walked back to the Student Centers. Sometimes they have an arts and crafts thing and we go to that, kind of weird when we’re leaving the basketball.” (Daniel)

Students are aware that they pay for the facilities in their fees, and several mentioned this in their comments. “I use the recreation center mostly every day. Every day I use the printing labs or the library. Just any time I come on campus I feel like all the facilities are just like right here. I guess UIC says that you’re paying this much money to go to school, you should take

advantage of all the facilities and I guess that's what everyone tries to do, anyone that lives on campus." (Sam)

The group participants were then asked if there are any reasons that they don't use the facilities more frequently. The responses varied; one student commented that she was too lazy, the facilities were too far from the residence hall; also working a job and being too focused on studies were offered up as reasons. Only Sam said; "During the school year I feel I make the most out of the facilities."

Question 6. The survey informed us that residential students spent more time involved in clubs and organizations than commuter students. Being involved in a club or organization involves attending meetings, possibly serving in a leadership role, being involved in student government, working with a faculty advisor for the organization in which you are involved or serving on some type of campus committee. Have you been involved in an on or off campus club or organization? If so, could you tell us a little bit about the activities in which you engage?

The focus group results were consistent with the survey results. All but one of the group participants reported involvement in at least one club or organization. The residential focus group participants generally believed that residential students are more likely to be involved in clubs or organizations just because of the time that many meetings are held. However, it was pointed out that it works both ways. Some clubs that have to accommodate the needs of a larger number of commuter student participants makes it difficult for residential student participation. Daniel shared this interesting dynamic; "I'm in a band, pep band and the radio that takes up a lot of my time. I'm technically in the Greek club because I'm a quarter Greek, but they're all commuters, so they always have meetings when I have class or band, so I don't go to that a lot."

Gerri's involvement is fairly representative of the experiences shared. "Yeah I'm active; I've been an Omega. I'm recruitment chair for that sorority, so we meet weekly in one of the conference rooms and we use the University of Illinois at Chicago campus facilities at least every week; that's where we do a lot of events and things like that." Involved students tended to favor one organization or club and be less active in others.

An interesting observation of the discussion was how several of the participants related their first-year experience of participation in a club or organization as asked, but then compared past participation to the current year. Sam and Anna both gave accounts of how their participation changed. "For me I was more involved in activities last year just because I lived in the residence hall, like, I joined the UIC pre-dental club because obviously I want to become a doctor and I'm also in ISA—Indian Student Association. Last year, I attended the meetings more frequently than I do now just because I would go to my dorm, to the meetings, which are held on campus. Now I go to my classes, go back, study, go to sleep. So I don't really have much time for meetings, but often I'll go if I have time." (Sam) "Last year I was involved in a lot more, I went to the Resident Assistant meetings, I was a floor leader and I was also a residence hall counselor. This year, I'm not as involved because I work a lot, I'm involved in a lot outside of school other than my work too, so that takes up the majority of my time and I'm studying all the time." (Anna)

Fay spoke about her participation in two very different organizations. "Like I said I am vice president of RHA (Resident Housing Association) and it is all residents because it's a residential organization. I'm also involved in the Polish American Student Association; we meet every two weeks because a lot of the students are commuters and they can't stay on campus very long or they have jobs and things like that. There's a lot more time conflict." Later in the

conversation, Fay discussed why she believes residential students have some participation advantages, “I feel like a lot of people that live down here know more about what’s going on with school because I know a lot of my commuter friends I tell them, ‘Are you going to this event; are you doing this?’ and they’re like, ‘Oh I never even heard of it.’ So, I just feel like the people who live in residence halls, they’re just more aware of everything that’s going on and everything you can join.”

4.2.2 Commuter student focus groups responses.

Question 1. From a survey of students who are commuters like you, we learned that commuter students spend more time in the library than residential students. The time you spend in the library includes all types of activities, for example, studying, browsing for a book or other literature, writing a paper, looking up references for a paper, using the library database to find material for any number of reasons. Do you agree with the survey results that commuter students spend more time in the library than residential students? Could you tell us about your library experiences?

The focus group responses were consistent with the CSEQ results. Except for one participant, all of the other focus group members agreed with the survey results. In addition to concurring with the survey results, the student responses were very similar to Mary’s remark, “I would assume that commuter students would go there [library] because where else would they go?” Carol followed up with her comment that agreed with Mary, “The student [commuter] has nowhere else to go.”

The library is a destination for students who believe they have no place else to go before or between classes. “I am always at the library as a commuter. I don’t have many other places to

go.” (Lucy) The students tended to view the library as an accepted and logical place to go to if one commutes and has time between classes.

While other facilities, for example the Student Centers with their lounges and dining facilities, were acknowledged as possible destinations, there seemed to be a consensus that the library was a regular harbor for commuter students. This idea was articulated by Meg, “Residential students have computers, books and other things in their room. It would be like studying in your room at home. Comfy chairs and TV included. Commuter students do not carry these on their backs to and from home. However, comfy chairs and computers are provided in the library. Also, in between classes there is no other place for a commuter to go.”

While the library was acknowledged by the focus group participants as an accepted gathering place for commuter students, the participants, responding to the second part of the question, also recognized the library as a destination with a wide range of academic and non-academic opportunities to engage. These included doing homework or schoolwork, napping, and sleeping. The library as a destination for academic purposes was validated by Jack who commented, “Yes, the library is pretty much the primary place to study,” as well as Mary who remarked, “Yeah, same here, I only go to the library for research or computer use.”

However, the library was also viewed as a place where students can sleep or take a nap. What was interesting was that students very often rolled their academic use comments with their sleeping or napping experiences. “Not only do I take naps but I also do homework.” (Meg) “There is a higher chance that you can just find some privacy to sort of be by yourself to take nap, to write a paper or whatever...” (Lucy) One participant, Jerry said, “I probably sleep at the library more than I do in my own bed.”

The one participant who disagreed was Max who said, “I have the direct opposite experience; I barely go to the library. I only went there during like finals weeks because I played Rugby for USC freshman year, so I had practice down on south field. So, after class I would go to practice and I would rush to the train and then go home. I think there are a lot of commuter students who do the same thing. I think there are a lot of commuter students in the library but I think there are as many students who live on campus in the library.”

Overall, there seemed to be a consensus that the library acted as a safe haven for students to spend their time engaging in a wide range of between-class activities that include studying, napping, and doing homework or simply killing time in an environment they considered more private than the Student Centers or other campus lounge space.

Question 2. The survey results informed us that commuter students spend less time than residential students using computers/IT. Using a computer for email, as a tutorial for class work, to prepare a course paper, to search the web, for statistical calculations, or in class as part of the group discussion are all considered in this question. Do you agree with the survey results? How much time in a day do you spend using a computer? What activities are being engaged in when you are on your computer? Do you have a laptop or do you use the UIC Computer Labs?

Group participants were split three ways about whether commuter students use their computers more than residential students, leading to the conclusion that the focus group results are inconsistent with the survey results. Three members of the group believed that commuters used computers more; three students felt that computer use was the same whether you are a commuter or resident, and two students agreed with the survey results and felt commuters do, in fact, use computers less than residential students.

Disagreeing with the survey results Meg said, “I would think we sometimes use it more, because on the commute if you’re on the train...there you can read your notes, but after class you’re probably tired, so the last thing you want to do is read your notes on the train. You want to sleep or entertain yourself in a different way and if you have a computer you can watch a movie or play a game or something.” Jack agreed with Meg but for a different reason. “I would think that commuter students would use their computers more. They use it more, but for homework, stuff like that.” Disagreement with the survey results also included comments indicating that computer use was probably equal. Jerry said, “Yeah, I don’t know, I think it’s fair to say like commuters will use them more, but at the same time it’s hard because if we’re including laptops in with it, then the residential people can be on their laptops whenever they want, all day here, use the labs as well. I think it’s... I don’t know, it’s hard to say.”

The two group members who agreed with the survey (that commuters have less use of computers) suggested that there is little time between classes, and commuting time interferes with computer use. “I would understand how commuters use it less because they’re on the commute.” (Jack) A similar comment from Max indicated that he did very little computing while on campus, “I never use the labs here unless to print things out. When I do bring my computer, it’s just to work on a paper while I’m in training or something like that, because I don’t have a lot of time between classes.”

Students were next asked to share how much time they used their computers and whether they brought their laptop computer to school or used the institutional computers in the labs. This question was constructed in an effort to test the computer use assumptions that the students made during their discussion of whether or not commuter students used computers less than their

residential colleagues. It was made clear to them that their time on the computer meant both academic and non-academic use. The responses ranged from two to seven hours per day with one respondent's (Carol) "A lot of time" later being acknowledged to anywhere between 12 and 15 hours per day.

The time that each participant estimated using a computer and the type of computer are noted in Table 28. The students had a difficult time constructing how much time they really spend on the computer.

Table 28.
*Summary of Daily Computer Use by
Commuter Student and Type of Computer*

Residential Student	Estimated Time on Computer	Laptop or UIC Computer
Jack	Two Hours	UIC Computer
Jerry	Two Hours	Both
Meg	Several Hours	Both
Terri	Three to Four Hours	Laptop
Mary	Two to Seven Hours	Both
Lucy	Six to Seven Hours	Both
Carol	Twelve Hours	Both
Max	Depends?	Both

The third component of the second question asked students how they used their computers. There were three uses that were identified for this question: entertainment,

communications, and academic use. Entertainment includes watching movies, listening to music, and playing games. Communicating via computer includes email and participating in social networks. Academic use includes course research, homework, papers, and PowerPoint. The use of PowerPoint suggests that the students are preparing for a presentation related to their school work. None of the group participants used their computer for only one purpose. For example Meg said, “I watch movies, write papers, listen to music, do research, go over lecture notes and email.” Likewise, we see multiple uses from Carol, “I’m either on Facebook, Twitter, doing homework or texting someone about homework.”

Question 3. According to the survey results, writing experiences were less likely to be experienced by commuter students than residential students. Writing experiences include writing a paper of 20 pages or more, using a dictionary or thesaurus, to more clearly understand a word, revising a paper or composition two or more times before completing it, asking other people to read what was written to see if they understood what you wrote or asking a faculty or staff member to help you improve your writing. Explain your writing experiences. Can you tell us how much time you spend engaged in writing in a week? What do you spend most of your time working on when you write?

The amount of time that students reported writing varied, with some students spending virtually no time writing in a week to others spending nearly 20 hours per week writing. Students generally did not agree with the survey results that said that commuter students had fewer writing experience than residential students. The students that had more writing experiences appeared very focused and expressed strong feelings about the importance of writing. “Since I commute I don’t really have much of a social life at UIC, I make it my primary

purpose to just excel academically and because of that if I'm writing a paper I'll make sure I get an A on that paper. I will do whatever it takes, because I know that I'm coming to UIC purposely just to get high grades. If it takes me forever to write a paper, sometimes it takes me five hours in one day just brainstorming ideas really getting a good outline, and then I'll do it. So I actually disagree with the statement, I think that commuter students spend more time engaging in writing and I know that I definitely want to get my paper peer-checked by five different people, I want to correct it, I spend most of my time just perfecting my paper because I want to get that A and I don't want to feel that all my time commuting all the stress of it was a waste."

(Lucy)

Some of the focus group students noted that the academic discipline of the student was related to the amount of writing that the student is required to engage in during a semester. They pointed out that science and engineering students are required to write less often than history or English majors. Responses included "I think how much students write is more focused on major, I mean what your major requires you to write." (Jerry) Carol noted; "Well I'm a business major, so I don't write a lot of papers, unless it's for a general education class. The one paper I had was for marketing and that was the longest paper I've written and the other papers, like they said were in 160 and 161." The one major theme that was evident was that writing experiences are directly related to academic discipline and course selection.

Students given writing assignments indicated that they wrote anywhere from a few papers a semester to eleven papers for the semester. In every case, students took writing very seriously and were very passionate about their writing. "I'm definitely deeply engaged in my writing and I'm a history major so I'm always writing papers for class and research papers and I

can easily just spend twenty hours a week just working on one paper and I also work at the Writing Center. I'm real involved with trying to make my papers as good as possible." (Max)

Question 4. The survey results indicated that art, music, and theater were found to be more likely experienced with residential students than commuter students. With art, music, and theater, we are interested in knowing whether students went to a concert, the theater, or a similar event—whether they played an instrument, were involved in a craft project, spoke to someone about music or went to an art exhibit or dance show. Explain your art, music, and theater experience. Can you tell us how much time you spend engaged in art, music, and/or theater experiences?

The focus group participants disagreed with the survey results. The students felt that commuters spent at least the same amount of time as residents engaged in art, music, and theater experiences, as suggested by two of the participants, Meg and Mary "I thought that maybe commuter students have even more to deal with more music because we have to listen to it walking, on the train, like everywhere." (Meg) "I believe it's actually the same for both because we all have our passions and we don't always find the time to do whatever we have the desire for." (Mary)

The music experiences were relatively rich for the focus group participants as noted by Max, "I spend a lot of time with music, whether it's going and collecting old vinyl LPs or, since I've been in college, I've played in bands, I've played around the city every now and again. I go out to concerts whenever I get a chance. I go to different art showings that my friends put on."

Listening or playing music was the consistent activity engaged in by all group participants; every student related their interest and enjoyment in music. "I do listen to a lot of

music, whether I'm on my way here, I'm in the car listening to music, or I have my iPod walking to class, basically every time there's no noise, I have to listen to music." (Carol) On the other hand, the group members related very few experiences with the theater and art.

With the exception of only one student, time engaged in art, theater, but mostly music activities, on a daily basis, ranged from one to two hours per day. One student reported six hours of these activities daily. Four of the students play musical instruments and two regularly give music lessons. "I teach violin, piano, and voice, so I listen to music all the time because I have to make sure the pieces are prepared and everything for my students." (Meg)

Question 5. The survey results informed us that residential students used campus facilities more than commuter students. Campus facilities are the Student Centers, recreation facilities, cafeterias, lounges, tennis and basketball courts as well as the sport fields. What campus facilities do you use? How often to you use the facilities? What do you do there? Is there any reason you don't use them more frequently?

There was agreement with the survey results. The general consensus of group participants was that commuters do use the facilities less than residential students. "I think commuter students' use the facilities less than residential students because I don't use the facilities here that much. I use the gym once and awhile, but I prefer to go to the gym by my house because it's closer and I don't need to bring all my equipment here, whereas, if I go to the one by my house I can just pick up my things at my house and leave it there." (Jerry)

Students cited time as the greatest inhibitor to not using the facilities more frequently. They also recognized that they are paying for the facilities and therefore, should utilize them more fully. This was pointed out by Terri, "But, I'm not going to waste any time while I'm on

campus going to the gym here, even though I really think it's so nice and you know they have a wonderful pool and everything. I wish I could use it, and yeah, I'm paying for it. It stinks that I can't. I don't have time to go to it even though I really do wish I could. I wish I could go bowling.” Jack, like Terri had the same view about time and use of facilities, “When I was a commuting in freshman year I didn't have the time to, I would go to my classes and go to practice and go home.”

According to focus group responses, they generally use campus facilities one to three times per week. Use was limited to the recreation facilities with six of the eight students reporting that that was their facility of choice for workouts and exercising. “I use it a lot, and I feel like if I'm paying for it I've got to use it, it's just going to be sitting there and that's a waste of money going down the drain. I might as well use the facilities while it's there.” (Carol) When students are not using the recreation facilities, they find their own spaces outside of the student centers. This was illustrated in the earlier focus group question regarding commuter students' use of the library as a place to go between classes. “The only facility I use is SLC—the Science Learning Center because I'm just always there studying. I never use the gym or the pool, I've seen it and it's really nice. I love how beautiful it is, but first of all I have no time, because as soon as I'm done with my classes, I just want to get home.” (Lucy)

The survey results indicate that residential students spend more time involved in clubs and organizations than commuter students. Being involved in a club or organization involves attending meetings, possibly serving in a leadership role, being involved in student government, working with a faculty advisor for the organization in which you are involved, or serving on

some type of campus committee. Have you been involved in an on or off campus club or organization? If so, could you tell us a little bit about the activities in which you engage?

Focus group participants were in agreement with the survey results. Student responses were focused on their inability to participate in clubs and activities because of time constraints as noted by Lucy; “Yes, it just takes up so much of my time; I couldn't imagine trying to be part of another club even though I do love being engaged with different clubs, like I said I was so active in high school. But it's just I don't have the time here, as a commuter I don't really know people.” Because many meetings occur later in the day, students pointed out that staying on campus to participate in a meeting or function is inconvenient. “I have absolutely no social life here. I try to meet friends when I join a club that I do find interesting. Since we all commute and go to a meeting and then go home, it doesn't take long for me to not meet friends and then I don't find it interesting. Also, clubs meet on days where I'm either working or I'm too busy or I can't spend that much time at school. There's just no way for me to actually join any of these organizations.” (Max)

There were two students who took the position that if you are committed to something and really want to participate, you can find the time to fit it into your schedule. “I don't think it's that much of a problem. If you don't believe it, if it doesn't really matter to you that much, if you don't want to spend time on it you don't go but, if you really want to do it then you make time to do it.” (Jack) Likewise, Terri spoke about her involvement in both academic and social organizations as a commuter validating Jack's comments. “I'm very involved in clubs social and academic clubs, I played on the UIC rugby team. I'm in several clubs engineering counsels and the biomedical engineering club. I feel that if I wanted to participate I could find the time.”

There is a caution to consider when weighing the comments of participants. There were students who seemed to feel there just was not enough time to engage in an organization, and there were other students who expressed concern about the worth of staying on campus for organization activities. “I don't think the club is worth all the time required to be member.”(Jerry) He was the only participant who felt it an unproductive time allocation activity.

The single theme regarding the involvement in clubs and organizations was that the decision to participate is predicated on whether you believe it is worth the allocation of time and whether the organization meets at relatively convenient times.

4.3 Summary of the focus group results. This section is a summary of the findings of the focus groups and compares and contrasts the responses of the focus groups to the College Student Experiences Questionnaire (CSEQ) results. The objective of the focus group was to gather opinions, beliefs, and attitudes about time allocation activities as they relate to the findings from the CSEQ. This section is organized following the six questions posed to the two focus groups along with the six sets of data from the CSEQ that informed the development of the questions.

Question One: Library Time. The CSEQ results for research question one indicates that commuter students spend more time in the library. Listening to the focus group responses resulted in an important distinction between respondents. The commuter student participants were relating their views based on personal experiences. Residential students were sharing their views based on their intuition and beliefs.

The focus group discussions from both groups supported the survey finding, but also important was the finding that the library acted as a safe haven for students to spend their time engaging in a wide range of between class activities that includes studying, napping, and doing homework or simply spending time in an environment that they considered private. The library was a common destination for academic purposes by both groups. However the library was also viewed, by the commuter students, as a place where students can sleep or take a nap. What was notable was that commuter students very often conflated their academic use comments with their sleeping or napping experiences.

Overall, the student centers or other campus lounge spaces were not viewed as a destination for before or in-between class time for commuters. What was most revealing from the group discussion was the importance of the library as a destination and the congruency of beliefs between groups as to the reason commuters use the facility. We are able to draw a conclusion from the focus group conversations that commuter students self-selected the library as a destination for before and between-class activities. The library does not promote itself for this purpose, yet students have shaped their environment to use it for their purpose.

Question Two: Computer Time. The survey results of the second question showed that commuter students spend less time with computers/IT. The commuter focus group was divided three ways on the issue of whether commuter students spend less time with computers. Three students felt that they had more time, three students believed it was about the same as residential students, and the last group of two students believed that the data were correct and commuting students spend less time using computer than residential students. Residential students believed that the survey results were accurate.

Like question one, commuters related their perspectives based on personal experiences, while residential students based their responses on intuition and speculation. There were a few exceptions, however, who believed that computer use was equal between groups.

Computer use was equally diverse among both groups and consisted of the same uses including entertainment, communications, and academic use. In each of the three categories, students used their computers for the same reasons. The amount of time that students engaged in any one of these categories was related to their class schedules and personal commitments.

As was mentioned in Chapter Three, prior to beginning focus group discussion, each participant was given the questions to be posed, in writing, and asked to briefly write out their response. The students were given three minutes to complete each answers. Even though the focus group statements about computer use were somewhat consistent with survey results, participant's written responses were inconsistent with the survey results and sometimes even contradictory to what focus group participants said about their own computer use leading to the overall conclusion that the focus group results are inconsistent with the CSEQ results. Notably, the commuter students adapted their computer time and use patterns to their living, work, and travel plans.

Question Three: Writing Experiences. The third question of the focus group discussion centered on the CSEQ results that showed that commuter students have fewer writing experiences than residential students.

Both focus groups agreed that the results of the survey are not accurate on this question. The discussions actually found that the commuter focus group participants spent more time engaged in writing experiences than the residential focus group students. Except for one student

who said she writes in a personal journal, none of the students engaged in writing as an extracurricular activity. In fact, several students in both groups reported that they engage in little or no writing during the semester.

The most relevant factor or influence to a student's writing experiences seemed to be the academic discipline and course selection. Students in both groups discussed their own experiences and were less inclined to speculate about their counterparts' writing experiences. Students taking math, science, and engineering courses reported few, if any writing experiences. Students in history, English, and psychology reported varying degrees of writing. This finding applies to both focus groups. Both groups came to similar conclusions about their relationship of writing experiences to academic discipline and course selection

Question Four: Art Music Theater Experience. The fourth question focused on the art, music and theater experiences of students. The focus group results for this question were inconsistent with CSEQ results. The CSEQ results indicated that commuter students had fewer of these experiences than residential students. The commuter focus group reported very active involvement in music activities, including a wide array of engagements from teaching music to playing in bands and orchestras. The residential students also reported a fairly active involvement with music but not quite as strong as the commuter students. The residential students did report slightly more involvement in other cultural activities like art and theater, but the involvement was not overwhelming. Music, whether playing; teaching; or listening, was an equally important experience for participants in both focus groups.

In both groups there was a divide about whether commuters engaged less in art, music, and theater activities. The discussion did not reveal any particular reason why this might be the

case. Rather, there were just a few comments about proximity to downtown for the residential students and availability to more cultural activities. But both groups did talk about adapting their musical involvement to fit their campus schedules, as well as emphasizing the importance that the musical experience has on their lives. Participation with music dominated the discussion with both groups; overall commuter and residential students reported infrequent participation in other cultural activities.

Question Five: Use of Campus Facilities. The CSEQ results for the fifth question revealed that commuter students spend less time using campus facilities. Both focus groups agreed that commuter students were less likely to use campus facilities, and both cited time as the major inhibitor for not using the facilities more frequently. The recreational facilities were used most frequently by both groups. While there was only an informal polling of the amount of time students used the recreation facilities, it appears that there is similar use by both cohorts. The commuter students did acknowledge an occasional use of the student union building—the UIC Student Center—mostly for dining or meeting other students.

When queried about why students do not take advantage of the facilities being offered, commuter students cited time constraints as the primary reason. Even though it does appear that residential students use the facilities considerably more than commuters, they cited distance to walk to facilities, laziness, and not enough time because of school work as impediments to using the facilities more frequently. Also, it is important to note that proximity could play a role in the results. Residential facilities in two campus locations are attached to the student union, which is where students take their meals. By default, residential students must use the facilities for dining, which expose them to other opportunities for activities and programs in the building.

Noteworthy is the observation that commuter students use the campus library as a destination. So if one is to factor in the use of the library as a campus facility, the usage outcomes could be fairly similar between groups—focus group results that are somewhat consistent with CSEQ results. When adding the library into the discussion about facility use, however, there may be little difference between groups. Also, time was clearly identified by commuters as the main reason they did not frequent campus facilities more regularly.

Question Six: Organization Participation. The sixth and final discussion question focused on the CSEQ results that showed that commuter students spend less time involved in clubs or organizations. There was a general consensus by both groups that residential students do, in fact, become more involved in clubs and organizations. However, there were enough examples of participation anomalies that an argument could be made, as one student pointed out, that if students really wants to participate, they will find a way. Also, there were a few examples of clubs that had a membership of more commuters than residential students, leading a residential student to complain that the times that they met were too inconvenient. Clearly though, the issue of allocating time to participate was the major theme that students repeatedly mentioned.

One of the more revealing comments came from a former residential focus group participant, now a commuter student, who said that while he was a residential student he definitely participated in more clubs and organizations. The focus group results are somewhat consistent with CSEQ results. Clearly the allocation of time to participate is a critical element of participation, and commuter students do face the dilemma of deciding whether or not to use on-campus time to participate in a club or organization. Participating in an organization is a task that seems to be the first activity sacrificed when time the student is facing time constraints.

5. DISCUSSION, RECOMMENDATIONS, AND CONCLUSION

This study investigated time allocation behaviors of commuter and residential students. The study also investigated whether there was a correlation can be identified between time allocation behaviors and first to second year persistence. The focus of this chapter is to summarize the study and discuss the results and findings presented in Chapter Four. The implications for theory, practitioners and future research will also be presented.

5.1 Focus of the study. This study investigated how residential and commuter students at a large urban, public institution allocate their time on and off campus, and whether the time allocation behaviors of these two cohorts can be correlated to first-to-second year persistence. The two research questions of the study are:

1. Is there a statistically significant difference in time allocation activities between residential students at the University of Illinois at Chicago and their commuter counterparts?
2. If there is a significant difference in time allocation activities between residential students and commuter students at the University of Illinois at Chicago is it possible to correlate certain types of time allocation activities with one-year persistence?

5.2 Summary of the study. This study was informed by multiple bodies of the literature and theoretical models including those focused on student departure, student attrition, student integration, a student's place of residence, the quality of effort of students and time allocation of students. As discussed in Chapter Two, Tinto's (1975, 1987) student integration theoretical framework, Bean's (1978, 1982, 1983, 1985) student attrition theoretical framework and Astin's (1970) student involvement theoretical framework taken together, generally concluded that those students who participate in out-of-the-classroom academic and social activities are more likely to

persist and graduate than students who choose not to engage in out-of-class activities. Further these models suggested that the interaction between students' attributes, skills, and dispositions, along with the institution's academic and social systems, are key factors in the discussion of student persistence. Whether integration is academic or social, each requires an investment of time.

Since the introduction of these theoretical models, researchers have been refocusing, extending, critiquing, and refining the empirical base supporting these influential theories. Higher education research on student success must focus on refining the theoretical representations of the processes students follow in their persistence decisions. The literature and theories provide broad ideas about the influences of student integration, involvement and attrition but many steps from theory to practical use are missing. This study has tried to connect the premises of the theoretical models to what might be learned about time allocation behaviors and living arrangements of students and the correlation to first-to-second year persistence. One notable aspect of this study was to understand in what activities commuter and residential students engaged as an integrative mechanism and commitment to their college experience.

The research and theoretical framework of Pace (1984) maintains that the fullness of the college experience depends on participation in events and use of physical facilities of the college, as well as how the students seize opportunities to participate in the academic and social life of the campus. He suggests that the extent to which students invest a high quality of effort is marked by the time and depth of commitment that students give their college experience. The theory of Pace moves us to a clearer understanding of what is necessary for a student to succeed; an investment of time and effort. However, this theoretical framework does not inform us about

how much time and effort a student should invest and what activities are more likely to result in a student's persistence. While Pace's theoretical framework advances a more specific and practical idea about student persistence, there is a lack of connection between Pace's theory and how institutional policy makers can specifically shape a student's journey through the institution. One of the tasks of this study was to examine the commitment of time a student invested in a particular activity; not necessarily in terms minutes or hours, but rather understanding which activities received priority over others.

The literature addressing a student's place of residence suggests that residential students persist and graduate at a higher rate than commuter students. Pascarella and Terenzini (1991) suggest that a student's place of residence is the "single most consistent within college determinant of impact, affecting the developmental and character impact of a student's college experience" (p.661). Goldscheider and Goldscheider (1999) suggest that students who live away from home and (their) parents achieve higher levels of adult identity because of the experience gained with the challenges of adult life. The literature focusing on a student's place of residence provides explanations about why residential students persist and graduate at higher rates than commuter students, but the literature fails to address the specific engagements of residential students that create success. The literature also fails to identify how and why some commuter students succeed in spite of the distractions faced by all commuter students and why some residential students fail to achieve success in spite of the protective effect of campus housing.

The final body of literature that was reviewed focused on time allocation. Meng and Heyke (2004) suggest that student time allocation and student performance literature is scarce, which serves as the rationale for further empirical studies. Likewise, they assert "what is omitted

from the previous research is the impact the learning environment may have on student time allocation and the different productivities of student time allocated in different learning environments” (p.33). Student time is a valuable resource, and student success is related to the investment of time and effort by the student. All of the theoretical models have a component that requires students to make a decision about engaging in an academic or social activity that will require a commitment of time. Clearly missing, however, are research and theoretical models that address student time allocation behaviors that may lead to improved student persistence. This study helps address our understanding of the value and the importance of time allocation and the relation it has to student persistence.

5.3 Discussion of the study results. The research questions for this study were investigated using both a quantitative and qualitative approach. Using a qualitative study design, in an addition to the quantitative survey added richness to the results. The following two subsections discuss the study results.

5.3.1 Discussion of the study survey results. The goal associated with the first research question was to compare residential students to commuter students with regard to the 13 CSEQ activity scales, to determine if the two groups differ relative to their time allocations. The results for research question one indicate that commuter students spend more time in the library, spend less time with computers/IT, have fewer writing experiences, have fewer art, music; and theater experiences, spend less time using campus facilities, spend less time involved in clubs or organizations, have fewer personal experiences, and have fewer student acquaintances.

The data from the first question’s results inform the finding that the two student cohorts allocate time differently for the same activities. This result might suggest that there are common

factors in each cohort that influence how these two groups of students allocate their time. Whether commuters have less time to participate in certain activities because of family obligations, economic stress, commuting time or any number of factors is unclear from the data. Similarly, there may be factors common to residential students that make their allocation of time similar. For example, the proximity of campus facilities and activities to residence halls makes participation convenient and requires remarkably little effort by the residential student to allocate time to attend or participate.

With the exception of the time in the library, the study revealed that in all other categories commuters allocated less time to the activity. The first reaction to the results in the analysis of the data is to assume that the time allocation behaviors of the residential students lead to richer and more productive experiences than for the commuter students because they are committing more time to the activities. Kuh (2001) suggests that time a commuter allocates to being on campus may serve as a predictor to the overall success the student will achieve. The transition to college, quality of effort, and persistence literature argue that student success is related to time spent in and out of class experiences. The findings of the survey suggest that these differences might lead to persistence differences between commuter students and residential students.

The second research question's goal was to examine time allocation behaviors to determine if there is a relationship between the behaviors of residential and commuter students and persistence. As discussed in Chapter 4, even though the results of the first question determined that commuter students and residential students did allocate their time differently, the study did not find a correlation between place of residence and first-to second-year persistence

nor was the study able to identify specifically why place of residence does not affect first- to-second year persistence at this institution. The study did, however, find more writing experiences are associated with a lower likelihood of persistence and that younger students and students engaged in course learning and involved with music, art and theater experiences persisted at a higher rate. While the three CSEQ findings do not answer the second question's research goal, three of the results are consistent with the literature and are worth a brief discussion.

The finding that more writing experiences are associated with a lower likelihood of persistence is counterintuitive. It may be necessary to review the background characteristics of the students who had more writing experiences but failed to persist. ACT scores, whether the students are first generation college students, their grade point averages as incoming college freshmen, socioeconomic status, previous writing experiences and academic discipline may have been factors in the students' failure to persist.

The finding that younger students persisted at a higher rate is consistent with much of the literature and studies on retention of younger versus nontraditional students. The literature generally concludes that nontraditional students face barriers that may affect persistence. Family commitments, job responsibilities, lack of academic preparedness, lack of institutional commitment to support nontraditional students and failure to academically integrate are most cited reasons for the nontraditional student to fail to persist.

The finding that students engaged in course learning persisted at a higher rate was not unexpected. If a student is engaged academically, it is not unreasonable to conclude that they will likely persist from the first-to-second year at a rate higher than students not as engaged.

The finding that students involved in music, art, and theater experiences persisted at a higher rate may partially be explained by what is known in the numerous studies on cognitive learning, many very recent, that show connections between music learning or musical experiences and fundamental cognitive capability called spatial reasoning. "Music listening, learning to play piano and keyboards, and learning piano and voice all contribute to spatial reasoning...In the vast literature on spatial reasoning, (about 3,000 studies in some bibliographies) it is clear that mathematical skills as well as language facility benefit directly from spatial reasoning" (Catterall, 1997). While it is not possible to draw a firm conclusion about this finding without further research, the results may suggest that connections between musical, art or theatrical experiences enhance cognitive capability, which in turn, positively affects academic focus and achievement and in the instance of this study, first-to-second year persistence.

As was noted, this study did not find a correlation between a student's place of residence and first-to second-year persistence. This finding contradicts the literature that suggests residential students persist at a higher rate than commuter students. In an effort to find an explanation for this contradictory result the persistence data from the University of Illinois at Chicago's Office of Institutional Research was reviewed. First-to-second year retention of residential students during the ten year period 2000 to 2010 averaged 82%; from 2000 to 2010 retention decreased 5%. For the same ten year period commuter student first-to- second year retention averaged 77%; from 2000 to 2010 retention increased 2.9%. Consequently, throughout the ten year period, the retention gap between the two cohorts narrowed.

The retention differences in the institutional data are consistent with the literature and inconsistent with the results of this study. The study's finding of non-significance for a student's place of residence impacting first-to-second year persistence is similar to the contradictory results of a study by Inman and Pascarella (1989). That study examined the impact of college residence on the development of critical thinking. The study's results found that residence during college did not significantly contribute to the explained variance in end-of-freshman-year critical thinking. The finding was inconsistent with prior research and literature. One explanation of the inconsistency offered by the researchers was that student population of the study institutions was predominately commuter. The study surmised that "These institutions are more likely to design their institutional academic and social support programs to the demographic of their particular population" (p. 564). For the present study, the same effect may be occurring. The closing gap of first-to-second year persistence of commuter students and residential students may be attributed to an increasing institutional commitment to commuters.

The result that suggests that the persistence rate for residential students and commuter students is the same at this institution can be viewed through different lenses. For the academic and student affairs professionals concerned with retention, it may suggest that efforts to assist students persist from the first-to-second year are having a positive effect. For example, the faculty is designing academic activities and study sessions that are thoughtful of the living arrangement of all students. Other possibilities are that certain classes are being scheduled at times that make them more convenient for commuters or academic support on campus has advanced and improved to quality levels delivered to residential students. For residence life

professionals the results may be viewed differently. For them, the results of the study might suggest that campus housing is failing to have the same positive academic effect on its' students.

While it is not possible to draw a firm conclusion about this finding without further research, the results may suggest, similar to the Inman and Pascarella study, connections between institutional support for commuter students is a factor in the non-significance result. Increasing persistence for commuter students is a positive outcome but more is learned, it is not possible to determine this result of non-significance is positive or negative for the study institution without further study.

5.3.2 Discussion of the study focus group results. The focus group portion of the study more closely examined the differences in the time allocation behaviors of each student cohort. The focus group results found that there are some differences in the way commuter students allocate their time, as compared to their residential student colleagues. But the differences were not just tied to whether a student lived on campus or commuted. The focus group participants discussed factors that were related to personal interests and experiences, individual views, their social background, and academic discipline.

It was found that commuter and residential students were involved in time allocations that seemed to be aligned to daily life tasks. The students of both groups expressed decision making that responded to their life situation and academic activities. Their time allocation behavior seemed to be imbedded in their daily life tasks and was prevalent in how the tasks were scheduled. Little (1983) identifies life tasks as “those that represent the goals, aspirations and expectations that are ‘on line’ for the individual; those that are actively used by the student when

facing day-to-day situations.” The complexity of each student’s life tasks are reflected in the time allocation decisions and patterns and may very well influence their transition to college.

A summary of the focus group results revealed the following:

- Time allocation behaviors of both commuter and residential students were not just trying to subscribe to the goals or values of the institution. Rather, they were developing behavioral patterns that satisfied their own values and interests while attempting to conform to institutional values. Their allocation of time for their academic pursuits, social interactions, identity development, and well-being seemed to play a role in their integration into the institution.
- A subtle, recurring theme from the commuter student participants was identified; commuter students are nomadic with no real affinity to a particular location or place on campus. Commuter student comments about “no place to go” before, between, and after classes, coupled with comments about commuting time infringing on their ability to participate in out of class activities, could be construed as a perceived barrier to the integration process.
- When tasks involved academic endeavors like course learning, experience with faculty, quantitative/scientific experiences, there were few differences between commuter and residential students. Even though the survey results reported that writing experiences between commuter students and residential students were significantly different, the focus group revealed a different result: that commuter and residential students actually had relatively identical writing experiences. As was discussed in Chapter 4, students reported that writing experiences were related to a student’s academic program and

course selection and were not related to whether a student was a commuter or lived in a residence hall.

- Academic or in-class experiences between residential and commuter students showed no differences. The significant differences between the groups were for the out-of-class experiences. This is important and relevant for this study because it suggests that students may not feel that they are disadvantaged in class as a result of their place of residence. The differences occur once they leave the classroom.

This study had two research questions that queried time allocation behaviors of commuter and residential students and whether the behaviors had an impact on persistence. Although differences between the two cohorts were identified in the survey portion of the study, and it was determined that persistence was not related to the time allocation behaviors between groups, the focus group portion of the study revealed important information about student feelings and perceptions and about how and why students allocate their time. This result led to a variety of possibilities for thinking about the importance of student time allocation behavior.

Time allocation behaviors can be followed and measured on many levels through a student's associations and encounters on campus. Student engagement in extracurricular activities, encounters with faculty, and on and off campus groups and activities may be helpful determining whether students are on the appropriate trajectory to success.

5.4 Contributions to the literature and further research. While there is an abundant body of literature that has a focus on the factors and conditions that affect a student's ability to persist, as was pointed out earlier, the literature fails to fully discuss or identify many of the intervening factors that are imbedded in the various theoretical frameworks. This study

contributes to the literature by investigating time allocation behaviors of residential and commuter students. It makes us think about the theoretical models of Tinto, Astin, Pace and others in a more dynamic way. This study suggests that time allocation may be an element to consider in the student success matrix. This study also identified a number of opportunities for future research to broaden our understanding of time allocation behaviors of students and the effect it has on persistence. The discussion will explore the following future research opportunities identified as an outcome of this study:

- Developing an understanding of how the differences in time allocation between residential and commuter students may be explained;
- Identifying whether time allocation behavior in the application of academic and social tasks may be a factor to consider in the academic and social integration process;
- Investigating whether adding student time allocation behavior to the theoretical models of persistence may lead to a more specific route to student persistence;
- Identifying whether allocating time in certain academic and nonacademic activities will enhance a students' chance of success;
- Developing a time allocation model for commuter students that replicates the time allocation behaviors of residential students; and
- Conducting additional research in college student time allocation decisions to understand how students make life-forming choices that may influence their environment and adjustment processes during college integration.

The study's purpose was to examine some of the intervening variables of the theoretical models to understand their effect on student persistence. The results of the study, especially in

time allocation differences between commuter and residential students, varied significantly enough to question whether more research should be undertaken to understand how these differences are explained.

Tinto's persistence research argues that the initial goals of the students and institutional commitments are the key influences to a students' integration into the academic and social life of the campus. Tinto's model posits the relationship to which students agree with the prescribed goals, values, and ideals of the university and establishing the student's niche. Establishing the "niche" for students, as suggested by Tinto, is a far more elaborate process that involves dozens of complicated choices pressed against limited time. There are many academic, extracurricular and life tasks that help and hinder the integration process, but Tinto's theory never addresses the influence that these tasks have on his integration theory. This study presents the possibility that time allocation behavior in the application of these tasks may be a factor to consider in the academic and social integration process.

Whether we look at Tinto's model focused on integration, Bean's model focused on student attrition, or Astin's involvement model, the literature does not mention how a student's time allocation behaviors might be an integral part of student success or failure. This study found differences in student time allocation behaviors. The CSEQ results noted in Chapter 4, indicated that residential students allocated their time differently than commuter students with regard to use of the library, computer/IT experiences, course learning experiences, writing experiences, art; music; and theater experiences, use of campus facilities, participation in clubs and organizational activities.

This study suggests that there may be importance and value in gaining a deeper understanding of a student's time allocation behaviors and student persistence. Adding the discussion about student time allocation behavior to current models of student persistence may serve to provide information about a more specific route to help students successfully navigate the transition to college, leading to improved first-to-second year persistence.

This study revealed student participation in activities and use of facilities is not guided by the institution and is left as a decision of the student. Advising students of the time allocation activities that are likely to result in enhanced academic or social results may be a valuable piece missing in the persistence conversation. If students are more likely to succeed if they exert time and effort in institutional activities, being able to inform them of the most beneficial activities in which to allocate time would provide them with more assurance of engaging in the correct activities to enhance their chance of success.

The literature generally informs us that the place of a residence has an impact on student success. The literature explains that residential students persist and graduate at a higher rate than commuter students. This study examined commuter student and residential student time allocation behaviors and found differences in the two cohorts. Some of the explanation for this outcome might be found in the effect that living in the residence hall has on students' ability to effectuate academic, extracurricular and life tasks. It might be suggested that time allocation activities are more simplified for residential students and that there is an advantage to living in a residence hall.

This study resulted in the development of an idea that could lead to future research. If residential students persist and graduate at a rates higher than commuter students, then

understanding how residential students allocate their time is valuable. From this understanding, a time allocation model for commuter students may be developed that replicates the time allocation behaviors of residential students.

Regardless of a student's living arrangement, there are critical time allocation choices that are made on a daily basis that allow students to live through the experience of going to college, developing socially; emotionally; spiritually; and academically. The theoretical constructs of student persistence or student success of Bean, Tinto, and Astin lack specific guidance to higher education professionals and college students on what it will take to succeed academically and socially in college. What will it take to integrate into the institution? What activities, what specific tasks, must be engaged to make the transition to college success? The theoretical models also fail to explain why some commuter students will persist and excel academically while well prepared residential students fail to persist.

There is a large literature on the influence of institutional characteristics on student persistence. In contrast, relatively little research focuses on student time allocation and its effects on persistence. As pointed out earlier, Meng and Heyke (2004) suggest that student time allocation literature is scarce, leading to the need for further studies. The few time allocation studies that have been done look at time allocation and the impact it has academic course performance. Additional research in college student time allocation decisions will broaden our understanding of how and why students make a life-forming choice that may influence their environment and adjustment processes as they integrate into college. Better understanding of college student time allocation decision making would not only help improve the retention of the students at their university, but also there would be more tools to educate students on the impact that their living

environment, and the time allocation decisions they make, have on their adjustment to college life. This study confirmed that there are differences in how commuter and residential students allocate their time. More research is needed to understand how these differences may affect persistence and even graduation.

5.5 Limitations. This study has certain limitations. Time allocation literature is extremely scarce. Finding additional literature to validate or to explore other perspectives of this study is difficult. The current body of literature on time allocation acknowledges the scarce number of studies available.

This study was conducted at a large urban, public institution. According to the UIC Office of Institutional Research, 60% of first time, first year students, and 81% of the undergraduate population commute to campus. UIC is considered one of the most diverse colleges, ranked 8th nationally by US News and World Report. No single ethnic or racial student cohort is a majority population of the campus community. In effect, this is a case study of specific phenomena in a single campus, and generalizations from this case cannot be made. The results are discussed in the context of this student demographic. Replication of the study, to achieve similar results, might be difficult at an institution that is not represented by the same demographic profile of students.

This study was also limited in the data that have been collected. The quantitative portion of the study was conducted using responses from 806 students. The qualitative, focus group portion of the student had 20 participants. Another constraint of the study was that it was limited to one institution. By conducting the study at multiple institutions, the reliability of the study would be strengthened.

This study used CSEQ data collected from the administration of the survey in 2004, 2006, 2008, and 2010. However, the focus group data was collected was from just two focus group sessions in 2010. Conducting focus groups each time the CSEQ is administered would add valuable additional information to the quantitative results. To strengthen the results, having multiple researchers interpret the focus group results would have been preferable.

5.6 Implications for policy and practice. Case study methodologist Robert Stack reminds us that while case study methodology does not generate generalizations, it does provoke interactive insights. From this study emerged several potential insights and implications for institutional policy and practice concerning student time allocation. These policy and practice implications have applicability in the development of orientation programs, learning communities, student programming activities, and myriad academic and extracurricular activities focused on student success.

Creating new paradigms for thinking about the time allocation differences will have an impact on academic and student affairs professionals—on how they support student success and how they engage in research regarding this topic. According to William Zeller, the first-year student living environment will influence their overall college experience (as cited in Upcraft et al., 2005). Academic and student affairs professionals might begin to think more broadly about the living environment and consider how students modulate and allocate their time to adjust to their living environment. The living environment extends beyond the residence hall and includes all places commuter students live during their college years. The students' living environments affect not only their social adjustment but also their academic adjustment. Informing students about the importance of their place of residence might help students with the transitional process,

because they are aware of the effects of their living environment. Academic and student affairs professionals may want to consider how students are making life tasks decisions since life task decisions may be guided by time allocation decisions, and play a critical role in a student's ability to cope with their living environment.

Student development policy makers and practitioners might consider embracing a student's time allocation behaviors as a tool to assist them in their work with students. Whether the student development professional practices under a Psychosocial, Cognitive-Structural, Person-Environment, Humanistic Existential or the Student Development Process Models, knowing how students allocate their time in a day has applicability to each model. The time allocation behavior may, over time, lead to predicative outcomes that will serve as warning signs that continued use of a particular time will have a negative influence to a successful academic or social outcome. Likewise, encouraging students to reallocate time to engage in particular activities may increase students' chances of achieving success.

1. *Consider time allocation challenges during the transition to college.* Institutional policies and practices might consider accommodating time allocation awareness as a measure to successful transition to college. Student development specialists, student program and activities practitioners, and academic practitioners involved in student success, are encouraged to take a leadership role in developing mechanisms that identify commuter and residential students' time allocation behavior and factor that information into policy and practice structures as students transition to college life.

For example, orientation programs may want to acknowledge that commuter students will face challenges quite different than those facing residential students as they transition into the

institution. Another example might be the introduction of a one hour per week course with mechanisms that are intended to help students integrate into the institution. These mechanisms represent positive time allocation practices.

Recognizing the diversity of backgrounds and communities from which students come and recognizing that the task is to create environments that help students transition into the institution, all programs might consider a recommendation that students be evaluated in order to identify their place of residence and how they have allocated their time to address life tasks. It might be helpful if practitioners develop a mindset that more carefully considers the life stories of students before developing programs intended to engage and assist their integration into the institution. "One size does not fit all" when it comes to students, and realistic programs must be designed with flexibility and understanding of the students' challenge to fit into their environment. Instituting a variety of practices and programs that are built on focus group research will add relevance and strength to programs focused on the practitioner's students.

The assimilation of students requires different forms of institutional action for residential and commuter students; student retention initiatives and activities must be timed for student needs (Tinto, 1982). While orientation programs, financial aid availability, academic advising, and the physical environment are all vitally beneficial to student success, policymakers and practitioners might want to remember that a key element of the transition to college process is that students are allocating time as they are developing behavioral patterns that satisfy their own values and interests while attempting to conform to institutional values. As such, policies and practices may be directed at linking with resources that will help them understand how time allocation behaviors will foster student success. Policymakers and practitioners might consider

that for most new students, the entry into college presents the first time that time allocation choices are entirely their responsibility. Policy makers and practitioners at all levels may want to recognize the time allocation differences between commuter students and residential students as academic and social programs are being considered and developed.

2. *Create innovative policies and programs that reach out to students.* Establish support systems to overcome the challenges faced in sustaining effective time allocation behaviors, especially for commuter students. Proactive programs will seek out students rather than students seeking institutional help too late or not at all.

All students but especially commuter students must sometimes overcome a large array of internal and external challenges to transform themselves into successful college students.

Chickering (1974) asserted that “When students are aggregated for all two and four colleges and universities, the residents are the “haves” and the commuters are the “have nots” in terms of college impact” (Copland-Wood, 1986). Providing programs, activities and support to remove the “have not” status should be a priority of each college and university.

The literature informs us that residential students persist and graduate at a higher rate than commuter students. If some of the time allocation behaviors of residential students could be replicated for commuters, it may be possible to increase commuter student persistence and success. One of the key advantages for residential students is that they have a place on campus that serves as a focal point for living, engaging in extracurricular activities and social interactions. This advantage allows student and academic professional to know where their target populations can be found and facilitates programming for residential students.

The commuter student is nomadic and is difficult to locate when on campus except when they are in class. As the focus group discussion revealed, commuter students feel that they must fend for themselves when identifying space to spend their time before, between and after class. There is no organized dialog with students about where they can spend their “down time;” students are left on their own. This leads to an equally challenging problem for student affairs and academic professionals intent on engaging commuter students; how can the commuter students be located?

The creation of commuter suites offers an innovative and commuter-centered idea for engaging commuter students. The commuter suite would replicate the residential suite. Commuter students might be assigned suitemates, for example, based on geography, academic discipline or common interests. A commuter suite would be assigned to 6 to 10 students for the academic year. Commuter assistants would be hired to serve in the same role as the resident assistant. By having commuter students spend time before, in-between, and after classes together, practitioners might more easily identify students within the commuter students interested in various academic and social programming. It would provide the opportunity to tie the social life of commuters to academic life activities.

The advantages of having direct access to commuters would replicate the direct access intuitions have to residential students. The advantages to building a strong commuter suite program could result in consequential strides to achieving similar persistent and graduations outcomes for commuter students.

3. *Devise a communication plan to engage students.* Frequent and thoughtful

communication with all students is vital for all policy makers and practitioners engaged

with students. Developing proactive communication methods will help students navigated time allocation challenges as well as countless other issues that affect student persistence.

“Communication apprehension (McCroskey, 1970; 1977; 1982; 1984) has clear implications for both academic and interpersonal success in university student communication apprehension has been found to be related to overall grade point average, standardized achievement scores, and grades earned in small classes in junior high and college (Bashore, 1971; Hurt, Preiss, & Davis, 1976; and Scott, Yeats, and Wheelless, 1975). The interpersonal effects of communication apprehension generally indicate (see Daly & Stafford, 1984 and Richmond, 1984 for reviews) high communication apprehension people experience emotional distress during or anticipating communication, prefer to avoid communication, and are perceived by others and themselves as less competent, skilled, and successful” (McCroskey, Booth-Butterfield, and Payne 1989).

The commuter student is transient and challenged with time allocation decisions that affect life tasks. The residential student is equally challenged dealing with time allocation tasks that affect social integration in his or her new living environment, as well as decisions that will impact life tasks. By communicating with them regularly, there is a chance that they can be encouraged to allocate some of their time in activities focused on social and academic endeavors. The use of social media affords student affairs professionals a much greater opportunity than ever of engaging commuter students in events and activities. There is an opportunity to influence how they spend their discretionary time. Communication might best be constructed in ways that are useful in helping students manage life tasks. Communications may be designed as a mechanism that helps students face the demands made upon them in various life situations,

such as making friends, dealing with school or work; financial problems; and illness.

Communicating an understanding of these life tasks in subtle ways will help make communications more meaningful to the target audience.

For commuter and residential students in need of academic or personal support but suffering from communication apprehension the likelihood that they will not initiate assistance is highly probable. However, the protective environment of a residential community will enhance the chances that the student in need of help will be recognized. Unfortunately, for the commuter student, the chance of an unsolicited assistance is less likely.

Regular and frequent and thoughtful communications may help break down barriers for students with communication apprehension. For all other students the communication might be viewed as the institutions commitment to their success.

4. *Funding is not an essential element to placing time allocation consideration on the institutional agenda.* Policies and programs that consider time allocation differences of commuter students and residential students do not necessarily require funding, and while helpful is not the key to success.

As policies and programs are developed to enhance persistence and graduation through enhanced awareness of time allocation differences between commuter students and residential students, funding to support various initiatives is helpful but not necessary. What is crucial is the need to strategically plan programs to reflect the differences of each student cohort, an institutional commitment to reshape programs to reflect varying time allocation behaviors of students, and development of assessment tools to assure that policies are

attaining the desired outcomes. A key role institutional leaders is the provision of both financial and nonfinancial resources.

5. *Continuous evaluation of policies and practices particularly from the perspective of time allocation is important.* Plan to evaluate the impact of engagement efforts early and often.

Using both formative and summative evaluation information about time allocation behaviors of students may lead to continuous improvement in the implementation of initiatives, and ultimately to greater student success. Measurement tools such as the College Student Experiences Questionnaire (CSEQ) and The National Student Survey are excellent and well-tested tools to measure student experiences. As this study demonstrated however, Student Affairs practitioners may be more fully informed about student challenges, perceptions, attitudes, and views through the use of interviews and focus groups. While caution should be expressed to assure that students do not experience evaluation burnout, the richness of evaluation tools beyond surveys will help build meaningful programs, outreach efforts, and interventions and assistance to students.

5.7 Conclusion. This study attempted to understand whether there are differences between commuter student and residential student time allocation behaviors and the effect that these behaviors might have on persistence. Review of past research has not yielded a study that resembles the approach taken by the present study. The perspective that time allocation behaviors might play a role in student success has only been tangentially discussed by student affairs professionals conducting research in higher education. The results, especially those from the focus groups, spawned the idea that it might be beneficial to have a more thorough

understanding of time allocation behaviors of students and the relationship between time allocation and student success.

Certainly it is acknowledged that student development professionals know that how students spend their time will be a factor in whether or not they succeed as college students. However, if through future research, we can identify all of the healthy time allocation behaviors that lead to student success, we may be giving these professionals more than just diagnostic tools; they will have a guideline for success.

Students enter college with background characteristics that inform us of their potential for successful matriculation through college. There are students who enter into their college years with a focus and drive that will lead them to college success. Nonetheless, these students are entering an unknown realm where they will be forced to make time allocation decisions that they have never faced. Helping them sort out what time allocation behaviors will yield the best results for their particular situation may assist their assimilation to college. If we can better understand time allocation behaviors and how they can impact students this information may become an additional tool for academic and student affairs professionals to assist students.

An outcome of this study was a heightening of awareness that no single or group of constructs has been developed to articulate best practices for student time allocation. Simply increasing or decreasing time allocation to a task can have unintended negative consequences. What is essential to know is whether the task is worth allocating time to in the first place. Each student's likes, experiences, background, and situations are unique. What truly matters is that academic and student affairs professionals continue to develop successful interconnections

between time allocation behaviors, life, academic, and extracurricular tasks that will result in student success.

References

- Adcock, R and Collier, D. (2001) Measurement validity: A shared standard for qualitative and quantitative research. *American Political Science Review*, 95(3), 529-546.
- Agar, M. and MacDonald, J. (1995). Focus groups and ethnography. *Human Organization*, 54, 78 – 86.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decisions*, 50, 179-211.
- Alfert, E. (1966). Housing selection, need satisfaction, and dropping out of college. *Psychological Reports*, 19, 183-186.
- Arbuckle, D.S. (1953). *Student Personnel Service in Higher Education*. New York: McGraw Hill
- Astin, A. W. (1970). The methodology of research on college impact (part 1). *Sociology of Education*, 43(3), 223-254.
- Astin, A. W. (1973). The impact of dormitory living on students. *Educational Record*, 54, 204-210.
- Astin, A. W. (1975). *Preventing students from dropping out*. San Francisco, CA: Jossey-Bass.
- Astin, A.W. (1977). *Four critical years*. San Francisco, CA: Jossey-Bass.
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25(4), 297-308.
- Astin, A.W. (1999). Student Involvement: A Developmental Theory for Higher Education. *Journal of College Student Development*, 40, 5, 518-529.
- Baird, L. (1990). The undergraduate experience: commonalities and differences among colleges. *Research in Higher Education*, 31(3), 271-278.

- Balk, D. E. (1995). *Adolescent development: early through late adolescence*. New York: Brooks Cole.
- Banning, J. H. and Hughes, B.M. (1986). Designing the campus environment with commuter students. *National Association of Student Personnel Administration Journal*, 24(1), 8.
- Baron, R.A. (1988). Negative effects of destructive criticism: Impact on conflict, self-efficacy and task performance. *Journal of Applied Psychology*, 73(2), 199-207.
- Basch, C.E. (1987). Focus group interview: An underutilized research technique for improving theory and practice in health education. *Health Education Quarterly*, 14(4), 411- 448.
- Bashore, D. (1971). *Relationships among speech anxiety, training anxiety, IQ, and high school achievement*. Unpublished Master's Thesis, Illinois State University.
- Baumgart, N., Johnstone, J. (1977). Attrition at an Australian university: A case study. *Journal of Higher Education*, 48(5), 553-570.
- Bean, J. (1978). *Dropouts and turnover: The synthesis of a causal model of student attrition*. (Unpublished doctoral dissertation). University of Iowa, Iowa City, IA.
- Bean, J. (1980). Dropouts and turnover: The synthesis and test of a causal model of student attrition. *Research in Higher Education*, 12 (2), 155-187.
- Bean, J. (1982). Student attrition, retentions, and confidence: Interaction effects in a path model. *Research in Higher Education*, 17(4), 30.
- Bean, J. (1983). The application of model of turnover in work organizations to the student attrition process. *Review of Higher Education*, 6(2), 20.
- Bean, J. (1985). Interaction effects based on class level in an exploratory model of college dropout syndrome. *American Education Research Journal*, 22(1), 30.

- Bean, J. P. and Vesper, N. (1990). *Quantitative approaches to grounding theory in data; Using LISREL to develop a local model and theory of student attrition*. Paper presented at the Annual Meeting of the American Educational Research Association, Boston, MA.
- Bean, J. P. and Bradley, R.K. (1986). Untangling the Satisfaction-Performance Relationship for College Students. *The Journal of Higher Education*, 57(4).
- Bender, Deborah E. and Ewbank, Douglas. (1994) The focus group as a tool for health research: Issues in design and analysis. *Health Transition Review*, (4)1.
- Berger, J.B. and Milem, J.F. (1999). The role of student involvement and perceptions of integration in a causal model of student persistence. *Research in Higher Education*, 40(6), p. 641.
- Berkowitz, S. (1997). User-friendly handbook for mixed method evaluations. In J. Frechtling, L. Sharp, and Westat (Eds.), *Analyzing qualitative data*. Retrieved June 21, 2006 from National Science Foundation, Directorate of Education and Human Resources Web site: http://www.ehr.nsf.gov/EHR/REC/pubs/NSF97-153/CHAP_4.HTM.
- Blimling, G.S. (1993). The influence of college residence halls on students. In J.C. Smart (ed.) *Higher Education: Handbook of Theory and Research*, Vol 9, (pp. 248-307). New York: Agathon Press.
- Bollen, K.A. and Hayle, R.H. (1990). Perceived cohesion: A conceptual and empirical examination. *Social Forces*, 69, 497-504.
- Borden, V. (2001) Measuring quality: Choosing among surveys and other assessment of college quality. In R. Gonyea et al. (Eds.), *College student experience questionnaire: Norms for the fourth edition*. Washington DC: American Council on Education.

- Bowman, R.L. and Partin, K.E. (1993). The relationship between living in residence halls and academic achievement. *College Student Affairs Journal*, 13, 71-78.
- Bradburn, N.M., & Sudman, S. (1988). *Polls and surveys: Understanding what they tell us*. San Francisco, CA: Jossey-Bass.
- Braxton, J. M., Sullivan, A.V., and Johnston, R.M. (1997). Appraising Tinto's theory of college student departure. In J.C. Smart (ed.) *Higher Education: Handbook of Theory and Research*, 12, 107-164.
- Braxton, J.M. (2000). *Reworking the student departure puzzle*. Nashville, TN: Vanderbilt University Press.
- Brower, A.M. (1992). The second “half” of student integration: The effects of life task predominance on student persistence. *Journal of Higher Education*, 63(4), 441-462.
- Brown, R. (1985). Review of college student experiences. In J.V., Mitchell. (ed), *The ninth mental measurements yearbook*. Lincoln, NE: The Buros Institute of Mental Measurements.
- Byrd, M. (2003). The relationship between the living arrangements of university students and their identity development. *Adolescence*, 38(150), 267-278.
- Cabrera, A.E., Stampen, J.O. and Hansen, W.C. (1990). Exploring the effects of ability to pay on persistence in college. *Review of Higher Education*, 13(3), 303-336.
- Cabrera, A.E., Nora, A. and Castañeda, M.B. (1992). The role of finances in the persistence process: A structural model. *Research in Higher Education*, 33(5), 571-593.
- Cabrera, A., Castaneda, M., Nora, A., Hengstler, D. (1992). The convergence between two theories of college persistence. *Journal of Higher Education*, 63(2).

- Catterall, J.S. (1997). Involvement in the Arts and Success in Secondary School. *Americans for the Arts Monographs*, 1(9).
- Converse, J.M., & Presser, S. (1989). *Survey questions: Handcrafting the standardized questionnaire*. Newbury Park, CA: Sage Publications.
- Cabrera, A.E., Nora, A. and Casteneda, M.B. (1993). College persistence: Structural equations modeling test on integrated model(s) of student retention. *Journal of Higher Education*, 64(2), 123-139.
- Chickering, A. W. (1974). *Commuting versus resident students: Overcoming educational inequalities of living off campus*. San Francisco, CA: Jossey-Bass.
- Chickering, A. W. and Kytle, J. (1999). The collegiate ideal in the twenty-first century. In J.D. Toma and A. J. Kezar (Eds.) *New Direction for Higher Education*, 199(105), 109-120.
- Christie, N. G., Dinham, S.M. (1991). Institutional and external influences on social integration in the freshman year. *Journal of Higher Education*, 62, 412-436.
- Copland-Wood, B. (1986). Older commuter students and the collegiate experience: Involved or detached? *The Journal of Continuing Higher Education*, 34, 27-31.
- Cronk, B. C. (2008). *How to use SPSS: A step-by-step guide to analysis and interpretation* (5th ed.). Glendale, CA: Pyrczak Publishing.
- Csikszentmihalyi, M. and Csikszentmihalyi, I.S. (Eds.). (1988). *Optimal experience: psychological studies of flow in consciousness*. New York: University of Cambridge Press.

- Daly, J. A. and Stafford, L.(1984). Correlates and consequences of social-communicative anxiety. In J. Daly & J. McCroskey (Eds. J, *Avoiding Communication*, (pp. 125-144). Beverly Hills, CA: Sage.
- Davis, T. M., & Murrell, P. H. (1994). *Turning teaching into learning: The role of student responsibility in the collegiate experience* (ASHE-ERIC Higher Education Report No. 8). Washington, DC: The George Washington University, School of Education and Human Development.
- DeMaris, A. (2004). *Regression and social data: Modeling continuous and limited response variables*. New Jersey: John Wiley and Sons, Inc.
- Denzin, N. K., & Lincoln, Y. S. (1994). Introduction: Entering the field of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 1-17). Thousand Oaks, CA: Sage Publications.
- DesJardins, S.L., Ahlburg, D.A., McCall, B.P. (1999). An event history model of student departure. *Economics of Education Review*, 18, 375-390.
- Delwart, U., Hanson, G. and Associates (1980). *Student services: A handbook for the Profession*. San Francisco: Jossey-Bass.
- DeRemer, M, A., (2002) The Adult Student Attrition Process (ASADP) Model, Dissertation, The University of Texas at Austin
- Durkheim, E. (1951). *Suicide: A study in sociology*. New York: Simon and Schuster.
- Durkheim, E. (1953). *Sociology and philosophy*. Glencoe, IL: Free Press.

- Elkins, A., Braxton, J. and James, G.W. (1998). *Tinto's separation stage and its influence on first-semester college student persistence*. Paper presented at the 1998 AIR Annual Forum, Minneapolis, MN.
- Ewell, P.T., and Jones, D.P. (1994). Data, indicators and the national center for higher education management systems. *New Directions for Institutional Research*, 82. (p.15)
- Ewell, P.T., and Jones, D.P. (1996). *Indicators of "good practice" in undergraduate education: A handbook for development and implementation*. Boulder, Co: National Center for Higher Education Management Systems.
- Flowers, L. A. (2004). Affects of living on campus on African American students' educational gains in college. *NASPA*, 41(2), 277-293.
- Galichi, S. J., McEwen, M.K. (1989). The relationship of residence to retention of black and white undergraduate students at a predominantly white university. *Journal of College Student Development*, 30, 389-394.
- Gall, M. D. (1988). *Making the grade*. Rocklin, CA: Prima.
- Geer, John G. (1988). What do open-ended questions measure? *Public Opinion Quarterly* 52: 365-371.
- Goldscheider, R. and Goldscheider, C. (1999). *The changing transition to adulthood: Leaving and returning home*. Thousand Oaks, CA: Sage Publications.
- Gonyea, R. M., Kish, K. A., Kuh, G. D., Muthiah, R. N., & Thomas, A.D. (2003). *College student experiences questionnaire: Norms for the fourth edition*. Bloomington, IN: Indiana University Center for Postsecondary Research, Policy, and Planning.

- Goodlad, J. I. (1984). *A Place Called School. Prospects for the Future*. New York: McGraw-Hill pp. 29-30
- Gross, D. R. (1984). Time allocation: A tool for the study of cultural behavior. *Annual Review Anthropology*, 13, 40.
- Gruber, H.E. and Davis, S.M. (1988). Inching our way up Mount Olympus: The evolving systems approach to creative thinking. In R.J. Sternberg (Ed.), *The Nature of Creativity*. Cambridge: Cambridge University Press.
- Guba, E.G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Technology Research and Development*. Volume 29, (2), 75-91.
- Gunter, B. and Furnham, A. (1996). Biographical and climate predictors of job satisfaction and pride on organization. *Journal of Psychology*, 130(2), 193-208.
- Hagedorn, L. S. (2006). *How to define retention: A new look at an old problem: Transfer and retention of urban community college students*. Los Angeles, CA: Transfer and Retention of Urban Community College Students Project.
- Herndon, S. (1984). Recent finding concerning the relative importance of housing to student retention. *Journal of College and University Student Housing*, 14, 27-31.
- Horn, L., Peter, K., and Rooney, K. (2002). Profiles of undergraduates in United States post-secondary institutions, 1999-2000. *Education Statistics Quarterly*, 4(3), 78-86.
- Hurt, H. T., Preiss, R., & Davis, B. (1976, May). *The effects of communication apprehension of middle school children on sociometric choice, affective, and cognitive learning*. Paper presented at the annual convention of the International Communication Association, Portland.

- Hurtado, S., Carter, D., and Spuler, A. (1996). Latino student transition to college: Assessing difficulties and factors in successful college adjustment. *Research in Higher Education*, 37(2), 135-157.
- Inman, P., and Pascarella, E. (1998). The impact of college residence on the development of critical thinking skills in college freshmen. *Journal of College Student Development*, 39(6), 557-567.
- Ishitani, T. DesJardins., S. (2002). A longitudinal investigation of dropout from college in the United States. *College Student Retention*, 4(2), 29.
- Jacoby, B. (1989). The student as commuter: Developing a comprehensive institutional response. (Report No. ISBN-0-9623882-6-2). Washington, D.C.: George Washington University. Retrieved from ERIC database. (ED319297)
- Justers, T. And Stafford, F.P. (1991). The allocation of time: Empirical findings, behavioral models, and problems of measurement. *Journal of Economic Literature*, 29(2), 471-522.
- Kamens, D. (1971). The college "character" and college size: Effects on occupational choice and college attrition. *Sociology of Education*, 44(3), 270-296.
- Kamens, D. H. (1977). Legitimizing myths and educational organizations: The relationship between organizational ideology and formal structure. *American Sociological Review*, 42, 208-219.
- Kempner, K., and C. Taylor (1998). An alternative assessment to higher education outcomes: Differentiating by institutional type. *The Journal of Higher Education*, 36(3), 301-321.
- Kidd, P.S. and Parshall, M.B. (2000). Getting the focus and the group: Enhancing analytical rigor in focus group research. *Qualitative Health Research*, 10(3), 293-308.

- Kitzinger, J. (1994). The methodology of focus groups: The importance of interaction between research participants. *Sociology of Health and Illness*, 16(1), 103 -121.
- Kuh, G. D. (1981). *Indices of quality in the undergraduate experience*. Washington, D.C.: American Association for Higher Education. Retrieved from ERIC database. (ED213340)
- Kuh, G. D. (1995). *The other curriculum: Out-of class experiences associated with student learning and personal development*. *Journal of Higher Education*, 66(2), 123-155.
- Kuh, G. Vesper, N., Connally, M., and Pace, C. (1997). *College student experiences questionnaire: Revised norms for the third edition*. Bloomington, IN: Center for Post-secondary Research and Planning, Indiana University.
- Kuh, G. D. (2001). Assessing what really matters to student learning: Inside the national survey of student engagement. *Changed*, 33(3), 19.
- Kuh, G. D., & Hu, S. (2001). The relationships between computer and information technology use, selected learning and personal development outcomes, and other college experiences. *Journal of College Student Development*, 42, 217-232.
- Kuh, G. D., Gonyea, R.M. and Palmer, M. (2001). The disengaged commuter student: Fact or fiction? *Commuter Perspectives*, 27(1), 2-5.
- Laing, J., Swayer, R, & Noble, J. (1989). Accuracy of self-reported activities and accomplishments of college-bound seniors. *Journal of College Student Development*, 29, 362-368.
- Levin, B. H., Clawes, D.A. (1982). The effect of residence hall living at college on attainment of the baccalaureate degree. *Journal of College Student Personnel*, 23, 99-104.

- Lewis, M. (1995, 2000). Focus Group Interviews in Qualitative Research. A Review of the Literature. Creative Commons Attribution – non-Commercial. Nodervis 2.1, Australia License. www.fhs.usyd.edu.au/arow/arer/002.htm.
- Lincoln, Y.S., and Guba, E.G. (1985). *Naturalistic inquiry*, Beverly Hills, CA: Sage Publications.
- Little, B. (1983). Personal projects and analysis: A rationale and method for investigation. *Environment and Behavior*, 15, 273-309.
- Longman, D. G. and Atkinson, R. H. (1988). *College learning and study skills*. St. Paul, MN: West.
- Macon, T. H., Shakani, C., Dubaye, R.L., Phillips, A.P. (1990). College students' time management: correlations with academic performance and stress. *Journal of Educational Psychology*, 82, 760-768.
- McCammon, S. (1989). Review of College Student Experiences Questionnaire. In J.C. Conoley & J. J. Kramer (Eds.), *The tenth mental measurements yearbook* (pp. 199-201). Lincoln, NE: University of Nebraska, Buros Institute of Mental Measurements
- McCroskey, J. C. (1970). Measure of communication-bound anxiety. *Speech Monographs*, 37-269-277.
- McCroskey, J. C. (1977). Oral communication apprehension: Summary of recent theory and research. *Human Communication Research*, 4, 78-96.
- McCroskey, J. C. (1982). Oral communication apprehension: A reconceptualization. In M. Burgoon (Ed.), *Communication Yearbook*, 6, (pp. 136-170). Beverly Hills, CA: Sage.

- McCroskey, J. C. (1984). The communication apprehension perspective. In J. A. Daly & J. C. McCroskey (Eds.), *Avoiding Communication*, (pp. 13-38). Beverly Hills, CA: Sage.
- McCroskey, J.C. Booth-Butterfield, S, and Paynes, K. (1989) The Impact of Communication Apprehension on College Student Retention and Success. *Communication Quarterly*, 37(2), 100-107.
- Meng, C. and Heyke, H. (2004). Student Time Allocation and the Learning Environment. Research Center for Education and Labor Market, University of Massachusetts.
- Merriam, S. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey Bass.
- Mertler, C.A. & Vannatta, R.A. (2005). *Advanced and multivariate statistical methods: Practical application and interpretation (3rd edition)*. Glendale, CA: Pyrczak.
- Miller, T. E. (1986). Commuter Issues at Small Institutions. *National Association of Student Personnel Administration Journal*, 24(5).
- Miller, T.K. and Winston, R.B. (1990). *Administration and leadership in student affairs: Actualizing student development in higher education (2nd ed.)*. San Francisco, CA: Jossey-Bass.
- Mitchell, J. V., Jr. (1983). *Tests in print III: An index to tests, test reviews, and literature on specific tests*. Lincoln, NE: University of Nebraska, Buros Institute of Mental Measurements
- Morgan, D. L. (1996). Focus groups. *Annual Review of Sociology*, 22, 129 – 152.
- Morris, M. (1977). *An excursion into creative sociology*. New York, NY: Columbia Press.

- Nafziger, D., Holland, J., and Gottfredson, G. (1975). Student college congruency as a predictor of satisfaction. *Journal of Counseling Psychology*, 22, 132-139.
- National Institute of Education U.S. (1984). Study Group on the Conditions of Excellence in American Higher Education. U.S. Dept. of Education, Superintendent of Documents: Government Printing Office.
- Orlando, C. E. (2000). The collegium: community as a gathering place. *New Directions for Higher Education*, 2000(109), 33-41.
- Ortman, J. (1995). *Commuter students in colleges and universities*. *ERIC Digest*. Retrieved from ERIC database. (ED 398779)
- Ouimet, J., Kuh, G., Smallwood, R., and Springer, R. (2001, June 23). *National survey of student engagement*. Paper presented at the American Association of Higher Education Association Forum. Denver, CO.
- Pace, C. R. (1979). *Measuring outcomes of college: Fifty years of findings and recommendations for the future*. San Francisco, CA: Jossey-Bass.
- Pace, C.R. (1980). Measuring the quality of student effort. *Current Issues in Higher Education*, 2, 10-16.
- Pace, C. R. (1982, May 25). *Achievement and the quality of student effort*. Paper presented at a Meeting of the National Commission on Excellence in Education, Washington, D.C. Retrieved from ERIC database. (ED227101)
- Pace, C.R. (1984). *Measuring the Quality of College Student Experiences. An Account of the Development and Use of the College Student Experiences Questionnaire*. Los Angeles,

CA: Higher Education Research Institute, Graduate School of Education, University of California

Pace, C. R. (1985). *The credibility of student self-reports*. Los Angeles, CA: University of California, Los Angeles, Center for the Study of Evaluation, Graduate School of Education.

Pace, C.R. (1990). *The undergraduate: A report of their activities and progress in college in the 1980's*. Los Angeles, CA: University of California Center for the Study of Evaluation.

Pascarella, E. T., Duby, P., Iverson, B. K. (1983). A test and reconceptualization of a theoretical model of college withdrawal in a commuter institution setting. *Sociology of Education*, 56(2), 88-100.

Pascarella, E., Terenzini, P. (1979). Interaction effects in Spady and Tinto's conceptual models of college attrition. *Sociology of Education*, 52(4), 197-210.

Pascarella, E.T. and Terenzini, P.T. (1981). Residence Arrangement, Student/Faculty Relationships, and Freshman-year Educational Outcomes. *Journal of College Student Personnel*, 22, 147-156.

Pascarella, E. T. and Terenzini, P. (1984). Reassessing the effects of living on campus versus commuting to college: A causal modeling approach. *Review of Higher Education*, 7(247-260).

Pascarella, E. T. and Terenzini, P. (1991). *How college affects students: Findings and insights from twenty years of research*. San Francisco, CA: Jossey-Bass.

Patton, M.Q. (1990) *Qualitative evaluation and research methods* (2nd ed). Newbury Park, CA: Sage Publications.

- Pervin, L. A. (1967). Satisfaction and perceived self environment similarity: A semantic differential study of student-college interaction. *Journal of Personality*, 35(4), 623-624.
- Pervin, L. A. (1976). A free-response description approach to the analysis of person situation interaction. *Journal of Personality and Social Psychology*, 34(3), 465-474.
- Pike, G.R. (1995). The relationship between self-reports of college experiences and achievement test scores. *Research in Higher Education*, 34, 23-40.
- Pike, G.R., /Schroeder, C.C., and Berry, T.R. (1997). Enhancing the educational impact of residence halls: The relationship between residential learning communities and first-year college experiences and persistence. *Journal of College Student Development*, 38 (6).
- Ponterotto, J., & Ruckdeschel, D. (2007). An overview of coefficient alpha and a reliability matrix for estimating adequacy of internal consistency coefficients with psychological research measures. *Perceptual and Motor Skills*, 105, 997-1014.
- Price, J. L. (1977). *The study of turnover*. Ames, IA: Iowa State University Press.
- Price, J.L. and Mueller, C.W. (1981). A causal model of turnover for nurses. *Academy of Management Journal*, 24(3), 543-565.
- Reason, R.D. (2009). An examination of persistence research through the lens of a comprehensive conceptual framework. *Journal of College Student Development* , 50, (6), 659-682.
- Reed, J., and Payton, V.R., (1997). Focus groups: Issues of analysis and interpretation. *Journal of Advanced Nursing*, 26(4), 765–771.
- Rendon, L. (1994). Validating culturally diverse students: Toward a new model of learning and student development. *Innovative Higher Education*, 19(1), 33-51.

- Rendon, L.I., Jalomo, R.E., and Nora, A. (2002). Theoretical considerations in the study of minority student retention in higher education. In J.M. Braxton (Ed.), *Reworking the Student Departure Puzzle* (pp. 126-156). Nashville, TN: Vanderbilt University Press
- Rootman, I. (1972). Voluntary withdrawal for a total adult Socialization organization: A model. *Social Education*, 45, 258-270.
- Rudolph, F. (1962). *The American college and university*. New York: Knopf.
- Sapsford, R. (1999). *Survey research*. London: Sage Publications.
- Schwandt, Thomas, A. (2007). Judging interpretations: But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. *New Directions for Evaluation*, 114, 11-25.
- Shenton, Andrew, K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), 63–75.
- St. John, E.P. (1994). Prices, productivity and investment: Assessing financial strategies in higher education (Report No. ISBN 1-878380-59-1). Washington, D.C.: George Washington University, ASHE-ERIC Higher Education Reports. (ED382093).
- St. John, E.P., Paulsen, M.B., and Starkey, J.B. (1996). The nexus between college and persistence. *Research in Higher Education*, 37(2), 175-220.
- Schmidt, R. (1983). Who maximizes what? A study in student time allocation. *The American Economic Review*, 73(2), 23-28.
- Schneider, L. D. (1977). Housing. In William T. Packwood (Ed.), *College student personnel services*, (pp. 125-145). Springfield, IL: Charles C. Thomas.

- Schroeder, C.C. and Maple P. (1994). Residence halls and the college experience: Past and present. In C.C. Schroeder, P. Maple and Associates (Eds.), *Realizing the Educational Potential of Residence Halls* (pp. 107-132). San Francisco, CA: Jossey-Bass.
- Scott, D. and Morrison, M. (2006). *Key ideas in educational research*. London Continuum International Publishing Group.
- Scott, M.D., Yates, M., & Wheelless, L.R. (1975). *An exploratory investigation of the relationships of three types of communication apprehension to student attitudes, levels of satisfaction, and achievement*. Paper presented at the convention of the Speech Communication Association, Houston.
- Skahill, M. P. (2002). The role of social support network in college persistence among freshmen students. *College Student Retention*, 4(1), 14.
- Sloan, D. and Wilmes, M.B. (1989). Advising adults from the commuter perspective. *National Academic Advising Journal*, 9(2), 67-75.
- Stage, F. (1989). Motivation, academic, and social integration and the early dropout. *American Educational Research Journal*, 26, 385-402.
- Stampen, J.O and Cabrera, A.E. (1986). Exploring the effects of student aid on attrition. *Journal of Student Financial Aid*, 16, 28-37.
- Stevens, J. (1986). *Applied multivariate statistics for the social sciences*. Hillsdale, N.J.: Lawrence Erlbaum Associates, Publishers.
- Stewart, D., Shamdasani, P., Rook, D. (2007). *Focus groups theory and practice* (2nd ed.). Applied social research methods series, 20. London: Sage Publications.

- Stewart, S. and Rue, P. (1983). Commuter Students: Definition and Distribution in Commuter Students: Enhancing their Educational Experiences. *New Directions for Student Services*, 1983(24), 3-8.
- Stinebrickner, R. and Stinebrickner, T.R. (2004). Time-use and college outcomes. *Journal of Economics*. 121, 243-269.
- Stinebrickner, R. and Stinebrickner, T.R. (2007). The causal effect of studying on academic performance. National Bureau Of Economic Research, Working Paper 13341. Cambridge, MA
- Stolzar, M. 2006. *Paying for sleep: An economic analysis of time allocation and productivity among college students*. (Master's Thesis). Department of economics, Stanford University, Stanford, CA.
- Strauss, A. and Corbin J., (1990) *A Basics of Qualitative Research Theory Methods*. Beverly Hills, CA.: Sage
- Study Group on the Conditions of Excellence in American Higher Education. (1984, October). Involvement in learning: Realizing the potential of American higher education. Washington, D.C.: National Institute of Education.
- Terenzini, P. T., Pascarella, E.T. (1977). Voluntary freshman attrition and patterns of social and academic integration in a university: A test of a conceptual model. *Research in Higher Education*, 6, 25-43.
- Terkla, D.G. (1985). Does financial aid enhance undergraduate persistence? *Journal of Student Financial Aid*, 15(3), 11-18.

- Thompson, J., Samiratedu, V., Rafter, J. (1983). The effects of on-campus residence on first-time college students. *NASPA Journal*, 31, 41-47.
- Tinto, V., Cullen, J. (1973). *Dropout in higher education: A review and theoretical synthesis of recent research*. New York, NY: Columbia University, N.Y. Teachers College. Retrieved from ERIC database. (ED078802)
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89-125.
- Tinto, V. (1982). The limits of theory and practice in student attrition. *Journal of Higher Education*, 53(6), 687-700.
- Tinto, V. (1986). Theories of college student departure revisited. In J.C. Smart (Ed.), *Higher education: Handbook of theory and research*, Vol. 2, (pp. 359-384). New York: Agathon Press.
- Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago, IL: University of Chicago Press.
- Tinto, V. (1988). Stages of student departure: Reflections on the longitudinal character of student living. *Journal of Higher Education*, 59(4), 438-455.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago, IL: University of Chicago Press.
- Tinto, V. (1997). Classrooms as communities: Exploring the educational character of student persistence. *Journal of Higher Education*, 68(6), 599-623.
- Upcraft, M.L., Gardner, J.N., & Barefoot, B.O. (Eds.) (2005). *Challenge and support: Creating climates for first-year student success*. San Francisco: Jossey-Bass Publishers.

- Van Maanen J. Ed. (1983) *Qualitative Methodology*, Sage Publications, Beverly Hills, CA.
- Van Gennep, A. (1960). *The rites of passage*. Chicago, IL: University of Chicago Press.
- Walter, T. and Siebert, A. (1981). *Student success: How to do better in College and Still Have Time For Your Friends*. New York: Holt Rinehart and Winston.
- Willet, J. & Singer, J. D. (1991). From where to when: new methods for studying student dropout and teacher attrition. *Review of Educational Research*, 61 (4), 407-450.
- Williamson, E. G. and Biggs, D. A. (1975). *Student personnel work: A program of developmental relationships*. New York: John Wiley & Sons.
- Wilson, A. H. (2003). Serving the quiet majority: The Drexel commuter program. *About Campus*, 8(4), 23-25.
- Wittkopf, B. (1994). Accommodating commuter students- The majority! *Research Strategies*, 12(1), 2-3.
- Woodard Jr., D. B., Mallory S.L., and DeLuca, A.M. (2001). Retention and institutional effort: A self study framework. *National Association of Student Personnel Administration Journal*, 39(1), 1.
- Zheng, L.J., Saunders, K.P., Shelley, M.C. II and Wallen, D.F. (2002). Predictors of academic success for freshman residence hall students. *Journal of College Student Development*. 43(2) 267-283.

APPENDICES

Appendix A College Student Experience Questionnaire



College Student Experiences Questionnaire

This questionnaire asks about how you spend your time at college--with faculty and friends and in classes, social and cultural activities, extracurricular activities, employment, and use of campus facilities such as the library and student center. The usefulness of this or any other survey depends on the thoughtful responses of those who are asked to complete it. Your participation is very important and greatly appreciated.

The information obtained from you and other students at many different colleges and universities will help administrators, faculty members, student leaders, and others to improve the conditions that contribute to your learning and development and to the quality of the experience of those who will come after you.

At first glance, you may think it will take a long time to complete this questionnaire, but it can be answered in about 30 minutes or less. And you will learn some valuable things about yourself, as your answers provide a kind of self-portrait of what you have been doing and how you are benefitting from your college experience.

You do not have to write your name on the questionnaire. But as you will see on the next page we would like to know some things about you so that we can learn how college experiences vary, depending on students' age, sex, year in college, major field, where they live, whether they have a job, and so forth. To know where the reports come from, a number on the back page identifies your institution.

Your questionnaire will be read by an electronic scanning device, so be careful in marking your responses. **Please use only a #2 black lead pencil.** Do not write or make any marks on the questionnaire outside the spaces provided for your answers. Erase cleanly any responses you want to change. **It is very important to answer all questions;** if you are uncertain about what a question means, use your best judgment.

Thank you for your cooperation and participation!

This questionnaire is available from the Indiana University Center for Postsecondary Research and Planning, School of Education, 201 North Rose Avenue, Bloomington, IN 47405-1006. It is for use by individuals and institutions interested in documenting, understanding, and improving the student experience.

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BACKGROUND INFORMATION

DIRECTIONS: Indicate your response by filling in the appropriate oval next to the correct answer.

Age

- ☐ 19 or younger ☐ 30 - 39
☐ 20 - 23 ☐ 40 - 55
☐ 24 - 29 ☐ Over 55

Sex

- ☐ male ☐ female

What is your marital status?

- ☐ not married ☐ separated
☐ married ☐ widowed
☐ divorced

What is your classification in college?

- ☐ freshman/first-year ☐ senior
☐ sophomore ☐ graduate student
☐ junior ☐ unclassified

Did you begin college here or did you transfer here from another institution?

- ☐ started here
☐ transferred from another institution

Where do you now live during the school year?

- ☐ dormitory or other campus housing
☐ residence (house, apartment, etc.) within walking distance of the institution
☐ residence (house, apartment, etc.) within driving distance
☐ fraternity or sorority house

With whom do you live during the school year? (Fill in all that apply)

- ☐ no one, I live alone
☐ one or more other students
☐ my spouse or partner
☐ my child or children
☐ my parents
☐ other relatives
☐ friends who are not students at the institution
☐ I'm attending
☐ other people: who?

Do you have access to a computer where you live or work, or nearby that you can use for your school work?

- ☐ yes
☐ no

What have most of your grades been up to now at this institution?

- ☐ A ☐ B-, C+
☐ A-, B+ ☐ C, C-, or lower
☐ B

Which of these fields best describes your major, or your anticipated major? You may indicate more than one if applicable.

- ☐ Agriculture
☐ Biological/life sciences (biology, biochemistry, botany, zoology, etc.)
☐ Business (accounting, business administration, marketing, management, etc.)
☐ Communication (speech, journalism, television/radio, etc.)
☐ Computer and information sciences
☐ Education
☐ Engineering
☐ Ethnic, cultural studies, and area studies
☐ Foreign languages and literature (French, Spanish, etc.)
☐ Health-related fields (nursing, physical therapy, health technology, etc.)
☐ History
☐ Humanities (English, literature, philosophy, religion, etc.)
☐ Liberal/general studies
☐ Mathematics
☐ Multi/interdisciplinary studies (international relations, ecology, environmental studies, etc.)
☐ Parks, recreation, leisure studies, sports management
☐ Physical sciences (physics, chemistry, astronomy, earth science, etc.)
☐ Pre-professional (pre-dental, pre-medical, pre-veterinary)
☐ Public administration (city management, law enforcement, etc.)
☐ Social sciences (anthropology, economics, political science, psychology, sociology, etc.)
☐ Visual and performing arts (art, music, theater, etc.)
☐ Undecided
☐ Other: What?

Did either of your parents graduate from college?

- ☐ no ☐ yes, mother only
☐ yes, both parents ☐ don't know
☐ yes, father only

Do you expect to enroll for an advanced degree when, or if, you complete your undergraduate degree?

- ☐ yes ☐ no

How many credit hours are you taking this term?

- ☐ 6 or fewer ☐ 15 - 16
☐ 7 - 11 ☐ 17 or more
☐ 12 - 14

During the time school is in session, about how many hours a week do you usually spend outside of class on activities related to your academic program, such as studying, writing, reading, lab work, rehearsing, etc.?

- ☐ 5 or fewer hours a week ☐ 21 - 25 hours a week
☐ 6 - 10 hours a week ☐ 26 - 30 hours a week
☐ 11 - 15 hours a week ☐ more than 30 hours a week
☐ 16 - 20 hours a week

During the time school is in session, about how many hours a week do you usually spend working on a job for pay? To provide information about your work experiences on and off campus, fill in one oval in each column.

	ON-CAMPUS	OFF-CAMPUS
None; I don't have a job	☐	☐
1 - 10 hours a week	☐	☐
11 - 20 hours	☐	☐
21 - 30 hours	☐	☐
31 - 40 hours	☐	☐
More than 40 hours	☐	☐

If you have a job, how does it affect your school work?

- ☐ I don't have a job
- ☐ My job does not interfere with my school work
- ☐ My job takes some time from my school work
- ☐ My job takes a lot of time from my school work

How do you meet your college expenses? Fill in the response that best approximates the amount of support from each of the various sources.

	None	Very Little	Less Than Half	About Half	More Than Half	All or Nearly All
Self (job, savings, etc.)	☐	☐	☐	☐	☐	☐
Parents	☐	☐	☐	☐	☐	☐
Spouse or partner	☐	☐	☐	☐	☐	☐
Employer support	☐	☐	☐	☐	☐	☐
Scholarships and grants	☐	☐	☐	☐	☐	☐
Loans	☐	☐	☐	☐	☐	☐
Other sources	☐	☐	☐	☐	☐	☐

What is your racial or ethnic identification? (Fill in all that apply)

- ☐ American Indian or other Native American
- ☐ Asian or Pacific Islander
- ☐ Black or African American
- ☐ Caucasian (other than Hispanic)
- ☐ Mexican-American
- ☐ Puerto Rican
- ☐ Other Hispanic
- ☐ Other: What? _____

COLLEGE ACTIVITIES

DIRECTIONS: In your experience at this institution during the current school year, about how often have you done each of the following? Indicate your response by filling in one of the ovals to the right of each statement.

	Very Often	Often	Occasionally	Never
Library				
Used the library as a quiet place to read or study materials you brought with you.	☐	☐	☐	☐
Found something interesting while browsing in the library.	☐	☐	☐	☐
Asked a librarian or staff member for help in finding information on some topic.	☐	☐	☐	☐
Read assigned materials other than textbooks in the library (reserve readings, etc.).	☐	☐	☐	☐
Used an index or database (computer, card catalog, etc.) to find material on some topic.	☐	☐	☐	☐
Developed a bibliography or reference list for a term paper or other report.	☐	☐	☐	☐
Gone back to read a basic reference or document that other authors referred to.	☐	☐	☐	☐
Made a judgment about the quality of information obtained from the library, World Wide Web, or other sources.	☐	☐	☐	☐

	Very Often	Often	Occasionally	Never
Computer and Information Technology				
Used a computer or word processor to prepare reports or papers.	☐	☐	☐	☐
Used e-mail to communicate with an instructor or other students.	☐	☐	☐	☐
Used a computer tutorial to learn material for a course or developmental/remedial program.	☐	☐	☐	☐
Participated in class discussions using an electronic medium (e-mail, list-serve, chat group, etc.).	☐	☐	☐	☐
Searched the World Wide Web or Internet for information related to a course.	☐	☐	☐	☐
Used a computer to retrieve materials from a library <u>not</u> at this institution.	☐	☐	☐	☐
Used a computer to produce visual displays of information (charts, graphs, spreadsheets, etc.).	☐	☐	☐	☐
Used a computer to analyze data (statistics, forecasting, etc.).	☐	☐	☐	☐
Developed a Web page or multimedia presentation.	☐	☐	☐	☐

DIRECTIONS: In your experience at this institution during the current school year, about how often have you done each of the following? Indicate your response by filling in one of the ovals to the right of each statement.

	Very Often	Often	Occasionally	Never
Course Learning				
Completed the assigned readings for class.	☐	☐	☐	☐
Took detailed notes during class.	☐	☐	☐	☐
Contributed to class discussions.	☐	☐	☐	☐
Developed a role play, case study, or simulation for a class.	☐	☐	☐	☐
Tried to see how different facts and ideas fit together.	☐	☐	☐	☐
Summarized major points and information from your class notes or readings.	☐	☐	☐	☐
Worked on a class assignment, project, or presentation with other students.	☐	☐	☐	☐
Applied material learned in a class to other areas (your job or internship, other courses, relationships with friends, family, co-workers, etc.).	☐	☐	☐	☐
Used information or experience from other areas of your life (job, internship, interactions with others) in class discussions or assignments.	☐	☐	☐	☐
Tried to explain material from a course to someone else (another student, friend, co-worker, family member).	☐	☐	☐	☐
Worked on a paper or project where you had to integrate ideas from various sources.	☐	☐	☐	☐
Writing Experiences				
Used a dictionary or thesaurus to look up the proper meaning of words.	☐	☐	☐	☐
Thought about grammar, sentence structure, word choice, and sequence of ideas or points as you were writing.	☐	☐	☐	☐
Asked other people to read something you wrote to see if it was clear to them.	☐	☐	☐	☐
Referred to a book or manual about writing style, grammar, etc.	☐	☐	☐	☐
Revised a paper or composition two or more times before you were satisfied with it.	☐	☐	☐	☐
Asked an instructor or staff member for advice and help to improve your writing.	☐	☐	☐	☐
Prepared a major written report for a class (20 pages or more).	☐	☐	☐	☐

	Very Often	Often	Occasionally	Never
Experiences with Faculty				
Talked with your instructor about information related to a course you were taking (grades, make-up work, assignments, etc.).	☐	☐	☐	☐
Discussed your academic program or course selection with a faculty member.	☐	☐	☐	☐
Discussed ideas for a term paper or other class project with a faculty member.	☐	☐	☐	☐
Discussed your career plans and ambitions with a faculty member.	☐	☐	☐	☐
Worked harder as a result of feedback from an instructor.	☐	☐	☐	☐
Socialized with a faculty member outside of class (had a snack or soft drink, etc.).	☐	☐	☐	☐
Participated with other students in a discussion with one or more faculty members outside of class.	☐	☐	☐	☐
Asked your instructor for comments and criticisms about your academic performance.	☐	☐	☐	☐
Worked harder than you thought you could to meet an instructor's expectations and standards.	☐	☐	☐	☐
Worked with a faculty member on a research project.	☐	☐	☐	☐
Art, Music, Theater				
Talked about art (painting, sculpture, artists, etc.) or the theater (plays, musicals, dance, etc.) with other students, friends, or family members.	☐	☐	☐	☐
Went to an art exhibit/gallery or a play, dance, or other theater performance, on or off the campus.	☐	☐	☐	☐
Participated in some art activity (painting, pottery, weaving, drawing, etc.) or theater event, or worked on some theatrical production (acted, danced, worked on scenery, etc.), on or off the campus.	☐	☐	☐	☐
Talked about music or musicians (classical, popular, etc.) with other students, friends, or family members.	☐	☐	☐	☐
Attended a concert or other music event, on or off the campus.	☐	☐	☐	☐
Participated in some music activity (orchestra, chorus, dance, etc.) on or off the campus.	☐	☐	☐	☐
Read or discussed the opinions of art, music, or drama critics.	☐	☐	☐	☐

DIRECTIONS: In your experience at this institution during the current school year, about how often have you done each of the following? Indicate your response by filling in one of the ovals to the right of each statement.

	Very Often	Often	Occasionally	Never
Campus Facilities				
Used a campus lounge to relax or study by yourself.	☐	☐	☐	☐
Met other students at some campus location (campus center, etc.) for a discussion.	☐	☐	☐	☐
Attended a cultural or social event in the campus center or other campus location.	☐	☐	☐	☐
Went to a lecture or panel discussion.	☐	☐	☐	☐
Used a campus learning lab or center to improve study or academic skills (reading, writing, etc.)	☐	☐	☐	☐
Used campus recreational facilities (pool, fitness equipment, courts, etc.).	☐	☐	☐	☐
Played a team sport (intramural, club, intercollegiate).	☐	☐	☐	☐
Followed a regular schedule of exercise or practice for some recreational sporting activity.	☐	☐	☐	☐
Clubs and Organizations				
Attended a meeting of a campus club, organization, or student government group.	☐	☐	☐	☐
Worked on a campus committee, student organization, or project (publications, student government, special event, etc.).	☐	☐	☐	☐
Worked on an off-campus committee, organization, or project (civic group, church group, community event, etc.).	☐	☐	☐	☐
Met with a faculty member or staff advisor to discuss the activities of a group or organization.	☐	☐	☐	☐
Managed or provided leadership for a club or organization, on or off the campus.	☐	☐	☐	☐
Personal Experiences				
Told a friend or family member why you reacted to another person the way you did.	☐	☐	☐	☐
Discussed with another student, friend, or family member why some people get along smoothly, and others do not.	☐	☐	☐	☐
Asked a friend for help with a personal problem.	☐	☐	☐	☐
Read articles or books about personal growth, self-improvement, or social development.	☐	☐	☐	☐
Identified with a character in a book, movie, or television show and wondered what you might have done under similar circumstances.	☐	☐	☐	☐
Taken a test to measure your abilities, interests, or attitudes.	☐	☐	☐	☐
Asked a friend to tell you what he or she really thought about you.	☐	☐	☐	☐
Talked with a faculty member, counselor or other staff member about personal concerns.	☐	☐	☐	☐

	Very Often	Often	Occasionally	Never
Student Acquaintances				
Became acquainted with students whose interests were different from yours.	☐	☐	☐	☐
Became acquainted with students whose family background (economic, social) was different from yours.	☐	☐	☐	☐
Became acquainted with students whose age was different from yours.	☐	☐	☐	☐
Became acquainted with students whose race or ethnic background was different from yours.	☐	☐	☐	☐
Became acquainted with students from another country.	☐	☐	☐	☐
Had serious discussions with students whose philosophy of life or personal values were very different from yours.	☐	☐	☐	☐
Had serious discussions with students whose political opinions were very different from yours.	☐	☐	☐	☐
Had serious discussions with students whose religious beliefs were very different from yours.	☐	☐	☐	☐
Had serious discussions with students whose race or ethnic background was different from yours.	☐	☐	☐	☐
Had serious discussions with students from a country different from yours.	☐	☐	☐	☐
Scientific and Quantitative Experiences				
Memorized formulas, definitions, technical terms and concepts.	☐	☐	☐	☐
Used mathematical terms to express a set of relationships.	☐	☐	☐	☐
Explained your understanding of some scientific or mathematical theory, principle or concept to someone else (classmate, co-worker, etc.)	☐	☐	☐	☐
Read articles about scientific or mathematical theories or concepts in addition to those assigned for a class.	☐	☐	☐	☐
Completed an experiment or project using scientific methods.	☐	☐	☐	☐
Practiced to improve your skill in using a piece of laboratory equipment.	☐	☐	☐	☐
Showed someone else how to use a piece of scientific equipment.	☐	☐	☐	☐
Explained an experimental procedure to someone else.	☐	☐	☐	☐
Compared the scientific method with other methods for gaining knowledge and understanding.	☐	☐	☐	☐
Explained to another person the scientific basis for concerns about scientific or environmental issues (pollution, recycling, alternative sources of energy, acid rain) or similar aspects of the world around you.	☐	☐	☐	☐

CONVERSATIONS

DIRECTIONS: In conversations with others (students, family members, co-workers, etc.) outside the classroom during this school year, about how often have you talked about each of the following?

Topics of Conversation	Very Often	Often	Occasionally	Never
Current events in the news.	☐	☐	☐	☐
Social issues such as peace, justice, human rights, equality, race relations.	☐	☐	☐	☐
Different lifestyles, customs, and religions.	☐	☐	☐	☐
The ideas and views of other people such as writers, philosophers, historians.	☐	☐	☐	☐
The arts (painting, poetry, dance, theatrical productions, symphony, movies, etc.).	☐	☐	☐	☐
Science (theories, experiments, methods, etc.).	☐	☐	☐	☐
Computers and other technologies.	☐	☐	☐	☐
Social and ethical issues related to science and technology such as energy, pollution, chemicals, genetics, military use.	☐	☐	☐	☐
The economy (employment, wealth, poverty, debt, trade, etc.).	☐	☐	☐	☐
International relations (human rights, free trade, military activities, political differences, etc.).	☐	☐	☐	☐

Information in Conversations	Very Often	Often	Occasionally	Never
Referred to knowledge you acquired in your reading or classes.	☐	☐	☐	☐
Explored different ways of thinking about the topic.	☐	☐	☐	☐
Referred to something one of your instructors said about the topic.	☐	☐	☐	☐
Subsequently read something that was related to the topic.	☐	☐	☐	☐
Changed your opinion as a result of the knowledge or arguments presented by others.	☐	☐	☐	☐
Persuaded others to change their minds as a result of the knowledge or arguments you cited.	☐	☐	☐	☐

READING/WRITING

During this current school year, about how many books have you read? Fill in one response for each item listed below.	None	Fewer than 5	Between 5 and 10	Between 10 and 20	More than 20
Textbooks or assigned books	☐	☐	☐	☐	☐
Assigned packs of course readings	☐	☐	☐	☐	☐
Non-assigned books	☐	☐	☐	☐	☐

During this current school year, about how many exams, papers, or reports have you written? Fill in one response for each item listed below.	None	Fewer than 5	Between 5 and 10	Between 10 and 20	More than 20
Essay exams for your courses	☐	☐	☐	☐	☐
Term papers or other written reports	☐	☐	☐	☐	☐

OPINIONS ABOUT YOUR COLLEGE OR UNIVERSITY

How well do you like college?

- ☐ I am enthusiastic about it.
☐ I like it.
☐ I am more or less neutral about it.
☐ I don't like it.

If you could start over again, would you go to the same institution you are now attending?

- ☐ Yes, definitely
☐ Probably yes
☐ Probably no
☐ No, definitely

THE COLLEGE ENVIRONMENT

Colleges and universities differ from one another in the extent to which they emphasize or focus on various aspects of students' development. Thinking of your experience at this institution, to what extent do you feel that each of the following is emphasized? The responses are numbered from 7 to 1, with the highest and lowest points illustrated. Fill in the oval with the number that best represents your impression on each of the following seven-point rating scales.

Emphasis on developing academic, scholarly, and intellectual qualities

Strong Emphasis 7 6 5 4 3 2 1 Weak Emphasis

Emphasis on developing aesthetic, expressive, and creative qualities

Strong Emphasis 7 6 5 4 3 2 1 Weak Emphasis

Emphasis on developing critical, evaluative, and analytical qualities

Strong Emphasis 7 6 5 4 3 2 1 Weak Emphasis

Emphasis on developing an understanding and appreciation of human diversity

Strong Emphasis 7 6 5 4 3 2 1 Weak Emphasis

Emphasis on developing information literacy skills (using computers, other information resources)

Strong Emphasis 7 6 5 4 3 2 1 Weak Emphasis

Emphasis on developing vocational and occupational competence

Strong Emphasis 7 6 5 4 3 2 1 Weak Emphasis

Emphasis on the personal relevance and practical value of your courses

Strong Emphasis 7 6 5 4 3 2 1 Weak Emphasis

The next three ratings refer to relations with people at this college. Again, thinking of your own experience, please rate the quality of these relationships on each of the following seven-point rating scales.

Relationships with other students

Friendly, Supportive, Sense of belonging 7 6 5 4 3 2 1 Competitive, Uninvolved, Sense of alienation

Relationships with administrative personnel and offices

Helpful, Considerate, Flexible 7 6 5 4 3 2 1 Rigid, Impersonal, Bound by regulations

Relationships with faculty members

Approachable, Helpful, Understanding, Encouraging 7 6 5 4 3 2 1 Remote, Discouraging, Unsympathetic

Go to next page

ESTIMATE OF GAINS

DIRECTIONS: In thinking about your college or university experience up to now, to what extent do you feel you have gained or made progress in the following areas? Indicate your response by filling in one of the ovals to the right of each statement.

	Very Little	Some	Quite a Bit	Very Much
Acquiring knowledge and skills applicable to a specific job or type of work (vocational preparation).	☐	☐	☐	☐
Acquiring background and specialization for further education in a professional, scientific, or scholarly field.	☐	☐	☐	☐
Gaining a broad general education about different fields of knowledge.	☐	☐	☐	☐
Gaining a range of information that may be relevant to a career.	☐	☐	☐	☐
Developing an understanding and enjoyment of art, music, and drama.	☐	☐	☐	☐
Broadening your acquaintance with and enjoyment of literature.	☐	☐	☐	☐
Seeing the importance of history for understanding the present as well as the past.	☐	☐	☐	☐
Gaining knowledge about other parts of the world and other people (Asia, Africa, South America, etc.).	☐	☐	☐	☐
Writing clearly and effectively.	☐	☐	☐	☐
Presenting ideas and information effectively when speaking to others.	☐	☐	☐	☐
Using computers and other information technologies.	☐	☐	☐	☐
Becoming aware of different philosophies, cultures, and ways of life.	☐	☐	☐	☐
Developing your own values and ethical standards.	☐	☐	☐	☐

	Very Little	Some	Quite a Bit	Very Much
Understanding yourself, your abilities, interests, and personality.	☐	☐	☐	☐
Developing the ability to get along with different kinds of people.	☐	☐	☐	☐
Developing the ability to function as a member of a team.	☐	☐	☐	☐
Developing good health habits and physical fitness.	☐	☐	☐	☐
Understanding the nature of science and experimentation.	☐	☐	☐	☐
Understanding new developments in science and technology.	☐	☐	☐	☐
Becoming aware of the consequences (benefits, hazards, dangers) of new applications of science and technology.	☐	☐	☐	☐
Thinking analytically and logically.	☐	☐	☐	☐
Analyzing quantitative problems (understanding probabilities, proportions, etc.).	☐	☐	☐	☐
Putting ideas together, seeing relationships, similarities, and differences between ideas.	☐	☐	☐	☐
Learning on your own, pursuing ideas, and finding information you need.	☐	☐	☐	☐
Learning to adapt to change (new technologies, different jobs or personal circumstances, etc.).	☐	☐	☐	☐

ADDITIONAL QUESTIONS

- | | | |
|--|---|---|
| 1. ☐ A ☐ B ☐ C ☐ D ☐ E | 8. ☐ A ☐ B ☐ C ☐ D ☐ E | 15. ☐ A ☐ B ☐ C ☐ D ☐ E |
| 2. ☐ A ☐ B ☐ C ☐ D ☐ E | 9. ☐ A ☐ B ☐ C ☐ D ☐ E | 16. ☐ A ☐ B ☐ C ☐ D ☐ E |
| 3. ☐ A ☐ B ☐ C ☐ D ☐ E | 10. ☐ A ☐ B ☐ C ☐ D ☐ E | 17. ☐ A ☐ B ☐ C ☐ D ☐ E |
| 4. ☐ A ☐ B ☐ C ☐ D ☐ E | 11. ☐ A ☐ B ☐ C ☐ D ☐ E | 18. ☐ A ☐ B ☐ C ☐ D ☐ E |
| 5. ☐ A ☐ B ☐ C ☐ D ☐ E | 12. ☐ A ☐ B ☐ C ☐ D ☐ E | 19. ☐ A ☐ B ☐ C ☐ D ☐ E |
| 6. ☐ A ☐ B ☐ C ☐ D ☐ E | 13. ☐ A ☐ B ☐ C ☐ D ☐ E | 20. ☐ A ☐ B ☐ C ☐ D ☐ E |
| 7. ☐ A ☐ B ☐ C ☐ D ☐ E | 14. ☐ A ☐ B ☐ C ☐ D ☐ E | |

OTHER ID#
If Requested

1	2	3	4	5	6	7	8	9	0
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9

THANK YOU FOR YOUR PARTICIPATION!

PLEASE DO NOT WRITE IN THIS AREA

Appendix B

IRB 2003-0802 Protocol-Quantitative

Background

Through the 1980s, much of the college impact literature was guided by the assumption that student demographics were the most important determinants of college success. However, CSEQ results, along with other studies and literature reviews (Astin, 1993; Pascarella & Terenzini, 1991; Terenzini, Pascarella, & Blimling, 1996; Tinto, 1993), have consistently challenged this assumption and extended the college impact discussion into student experience and engagement. The conclusion that student engagement affects college outcomes prompted the National Center for Education Statistics (NCES, 1991) to recommend that colleges assess student behaviors and experiences in addition to direct learning outcomes.

Aims/Objectives

The CSEQ is a national assessment instrument that inventories both the processes of learning (e.g., interactions with faculty, collaboration with peers, and writing experiences) and progress toward desired outcomes of college (e.g., changes in intellectual skills, interpersonal competence, and personal values). The instrument includes approximately 150 items to develop a comprehensive inventory of student experience. There are 13 'institutional questions' that will be included in the survey. The CSEQ is a survey instrument that assesses the quality of effort students expend in using the resources and services provided by the university for their learning and development. Quality of effort is key dimension for understanding student satisfaction, persistence, and the effects of attending college. The CSEQ has been administered at over 600 postsecondary institutions across the country.

Procedures

The CSEQ was administered at UIC during the spring 2004 under IRB protocol #2003-0802. This request is for the continued analysis data collected during the spring 2004 administration. [AU: This paragraph is bold-face. Wish to change?]

Potential Risks

The potential risks are minimal because data are analyzed by group variables, not individual students. In addition, the survey does not contain information that is potentially harmful to students.

Student participation in the survey was voluntary. This was indicated in the recruitment letter. It will continue to contribute to campus assessments of climate and the learning environment.

Recruitment and Consent

The sample of students recruited met certain criteria: All were at least 18 years of age; the sample selection was random within defined strata to reflect UIC undergraduate student characteristics by enrollment class (advanced freshmen or seniors). The recruitment letters and reminders were sent to students via campus e-mail addresses. The letters indicated the purpose of the survey and that student participation is voluntary.

The initial sample was 1,200 UIC students. The sample was prepared based on the following criteria:

- at least 18 years of age.
- degree-seeking undergraduates who are either advanced freshmen (students who have earned at least 12 and no more than 29 credit hours by end of the fall 2003 term) or senior standing (at least 89 credit hours completed by end of fall 2003 term).

The Norms Report on the 2004 administration of the CSEQ at UIC is found in Appendix A. This is a complete reporting on the CSEQ administration. This request is to continue analysis of this administration of the CSEQ 2004 data.

Appendix C

Claim of Exemption Application-Quantitative

UIC UNIVERSITY OF ILLINOIS AT CHICAGO FORM – Claim of Exemption Application Version 5.0 4/25/09	Office for the Protection of Research Subjects (OPRS) Institutional Review Board FWA# 00000083 203 AOB (MC 672) 1737 West Polk Street Chicago, IL 60612-7227 Phone: 312 996-1711 Fax: 312 413-2929 www.research.uic.edu/protocolreview/irb
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To Be Completed By the Investigator	For OPRS Use Only
Date Application Completed: February 8, 2010	UIC Protocol #:
Application Document Version #:1	Assigned IRB:

I. Research Title: An Examination of Commuter Student and Resident Student Time Allocation and the Relationship to Student Retention

II. Contact Information

Who should be the primary person contacted by OPRS if further information about this protocol is needed? This person may be someone other than the PI or other individuals listed as key research personnel (i.e., Administrative Coordinator).

Do you wish to grant this individual RiSCWeb access to this research protocol?

☒ Yes ☐ No

Name (Last, First) Landek, Michael		Title Doctoral Student/ Associate Vice Chancellor for Student Affairs
E-mail Address mlandek@uic.edu		Date 01/28/10
Phone Number 312-413-59202	Fax Number 312-413-5915	

III. Personnel

A. Principal Investigator

Name (Last, First) Landek, Michael	Degree(s) B.A. (1977) Governors State University M.Ed (1994) UIC	University Status/Title Doctoral Student/ Associate Vice Chancellor for Student Affairs
Department Campus Auxilairy Services		College Education
Mailing Address 1200 West Harrison Suite 2560 Chicago, IL 60607		E-mail Address mlandek@uic.edu

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Phone Number 312-413-5902	Fax Number 312-413-5915	M/C 046
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B. Faculty Sponsor – required when PI is a student, fellow or resident

Name (Last, First) Tozer, Steven	Degree(s) PhD	University Status/Title Professor
Department Educational Policy Studies	College Education	
Mailing Address 1040 West Harrison St., EPASW, Suite 1048, Chicago, IL 60607	E-mail Address stozer@uic.edu	
Phone Number 312-413-7782	Fax Number 312-996-8134	M/C MC 147

C. LIST ALL ADDITIONAL KEY RESEARCH PERSONNEL ON APPENDIX P and SUBMIT WITH THIS APPLICATION PACKET.**IV. Research Funding****Is this research funded?**☒ No. Go to Section V.☐ Yes or pending. Complete the rest of this Section (below).

Check all of the appropriate boxes for funding sources (including pending sources) for this research.

☐ Extramural☐ Federal, Agency Name:☐ Foundation, Name:☐ State - Agency Name:☐ Industry-Sponsored - Name:Is industry-sponsored study investigator initiated? ☐ No ☐ Yes☐ Other - Name:☐ Intramural: ☐ Campus Research Board (CRB) ☐ Departmental ☐ Other - Name:

Funding Identification: For each funding source, provide the following information. Use **Appendix Z** if this study is supported by more than one funding source. **Note:** Any subsequent change in funder or funding status requires an IRB amendment.

1. Proposal Approval Form (PAF) Number:

2. Name of the Principal Investigator (PI) on the grant/contract/sub-contract:

Is the PI of the grant affiliated with UIC? ☐ No ☐ Yes

If NO,

- Identify the non-UIC grantee institution:
- Explain the relationship between the grantee and UIC:

3. **Funding Agency Grant Account Number:**

(For federally funded research, provide the federal grant/contract number assigned by the funding agency to allow OPRS to accurately complete the certification of federal funding document.)

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OPRS will provide the certification with the approval letter.)

4. Date grant/contract award notification was received by UIC:
☐ N/A: Grant/contract still pending

5. Grant/contract or research title:

PLEASE ATTACH A COPY OF THE GRANT, CONTRACT, and/or SUB-CONTRACT TO THIS APPLICATION.

V. Conflict of Interest (COI) Disclosure

All investigators must disclose all real, apparent, or potential financial conflicts of interest to the IRB. **Investigator** is defined as any person responsible for the design, conduct, or reporting of the research. This includes, but is not limited to, the principal investigator, co-investigators, and other key research personnel. **Family members** include spouse and children. **Significant** means financial interests in business enterprises or entities that (when aggregated for the individual, spouse, and children) exceed \$10,000 or represent more than 5% ownership regardless of dollar value. The \$10,000 threshold also applies to salary, royalties, and other payments aggregated for the individual, spouse and children expected over the next 12 months.

For more information, including examples and definitions, see the *Investigator Conflict of Interest Disclosure Policy for Human Subjects* at <http://tiger.uic.edu/depts/ovcr/research/protocolreview/irb/policies/0269.pdf>

A. Disclosure

#1 only applies if there is a research sponsor

1. Are any investigators, or family members thereof (spouse, children), major officers of, hold a managerial role in, or otherwise have a significant financial relationship with the **research sponsor** or any subcontract recipient (subcontractee)?
 Yes ☐ No ☐

#2 only applies if there is a sponsor or subcontractee

2. Do any investigators, or family members thereof, have a significant consulting relationship with this **sponsor or any subcontractee**?
 Yes ☐ No ☐
3. Do any investigators, or family members thereof, have any other relationships, commitments (including assignments of Intellectual Property Rights), activities (including uncompensated activities) or financial/fiduciary interests that present potential or apparent conflicts of interest or commitment with this study, or are there any other potential conflicts of interest with the study?
 Yes ☐ No ☒
4. Does an [institutional conflict of interest](#) exist with this study?
 Yes ☐ No ☒

B. Management

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If **YES** has been checked for any of the above questions, **attach a COI Statement of Explanation And Management (SEAM)** that describes the conflict and presents a plan for managing the conflict in order to minimize the effect on the design, conduct, or reporting of the research and/or the integrity of the human subject protection program. The COI-SEAM and guidance on how to write the COI-SEAM are available under the "Managing Conflicts" section of the COI website at www.research.uic.edu/conflict. Final IRB approval of the research cannot be provided until a management plan is in place.

UIC and JB VAMC personnel: For additional assistance contact the COI Office at (312) 996-4070 or email coi@uic.edu.

VI. Performance Sites

Definition of a Performance Site: A performance site is a location at which the research is conducted, data is gathered from subjects and/or records, and/or subjects are consented into the research. Sites are performance sites whether the research activities there are funded or not funded.

A. Performance Site Identification:

1. Will UIC be a performance site?
☐ No ☒ Yes
 Must be **YES** unless the research is conducted only at the Jesse Brown Veterans Administration Medical Center [JBVAMC]
2. Will JBVAMC be a performance site?
☒ No ☐ Yes

B. Non-UIC Performance Sites:

1. Are there non-UIC performance sites?
☒ No ☐ Yes (After completing this application, complete Appendix K and submit with this application packet)
2. Are there international performance sites?
☒ No ☐ Yes (After completing this application, complete Appendix I and submit with this application packet)

VII. Exemption Category Claimed

A. Eligibility for Exemption:

1. Will this research involve prisoners as subjects?
☒ No ☐ Yes **If YES, STOP.**
 Research involving prisoners is not eligible for exemption. Please complete and submit an Initial IRB Review application.
2. Will this research be FDA-regulated?
☒ No
☐ Yes, but is eligible for Exemption Category 6 (below)
☐ Yes and is **NOT** eligible for Exemption Category 6 (below) - **If YES, STOP.** FDA-regulated research is only eligible for exemption under Category 6. Please complete and submit an Initial IRB Review application.

B. Eligibility as Minimal Risk Research: Will this research be minimal risk?

Minimal risk means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or

during the performance of routine physical or psychological examinations or tests.

☐ No ☒ Yes

If NO, STOP. Research that is greater than minimal risks is not eligible for exemption.

Please complete and submit an Initial IRB Review application.

C. Exemption Categories:

Please identify the exemption category or categories that apply to your research. If your research does **NOT** fit within any of the categories below, then please **STOP** and complete and submit an Initial IRB Review application.

☐ **Category 1 – Check the statements below which apply to this research:**

- ☒ Research conducted in established or commonly accepted educational settings
- ☐ Research involves normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods

If you have checked **BOTH** of the above statements, **apply the facts of the protocol to the category requirements to provide justification and verification; if the category still applies, check the box for Category 1:**

☒ **Category 2 – Check the statements below which apply to this research:**

- ☒ Research does **NOT** involve children as subjects when procedures include interviews, surveys, or observations of public behavior and the investigators participate in the activities being observed.
- ☒ Research involves the use of educational tests (cognitive, diagnostic, aptitude, achievement) **AND/OR** survey procedures **AND/OR** interview procedures **AND/OR** observations of public behavior (If this statement has been checked, please submit surveys, questionnaires, interview or focus group scripts, observation plans, etc. that will be used in the research)
- ☒ Subjects could **NOT** be identified directly or indirectly through their responses, demographics, or codes linked to identifiers **OR** subjects could be identified directly or indirectly through their responses, demographics, or codes linked to identifiers **AND** any disclosure of their responses outside the research could **not** reasonably place them at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, reputation, or insurability.

If you have checked **ALL** three of the above statements, **apply the facts of the protocol to the category requirements to provide justification and verification; if the category still applies, check the box for Category 2:**

This research project is using survey data from the College Student Experience Questionnaire (CSEQ). No children are used in the survey. The study uses UIC students.

The research involves using secondary data from the CSEQ. The CSEQ survey has been used for many years at universities and colleges across the country and is well recognized as a survey document with good psychometric properties. The fourth edition of the CSEQ survey to be used in this study is attached.

Subjects, advance freshmen students at UIC, cannot be directly or indirectly identified through their responses. Subjects can be directly linked to their responses through codes linked to institutional data. The primary investigator for this project will NOT have the ability to link subjects to institutional data. This data link can

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only be done by the principle investigator of the CSEQ which was administered in years 2004, 2006 and 2008.

Any disclosure of the subjects responses outside the research could not reasonably place them at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, reputation or insurability.

☐ **Category 3 – Check the statements below which apply to this research:**

- ☐ Research is **NOT** exempt under Category 2 above.
- ☒ Research involves the use of educational tests (cognitive, diagnostic, aptitude, achievement) **AND/OR** survey procedures **AND/OR** interview procedures **AND/OR** observations of public behavior (If this statement has been checked, **please submit surveys, questionnaires, interview or focus group scripts, observation plans, etc. that will be used in the research.**
- ☐ Subjects are elected or appointed public officials or candidates for public office **OR** federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.

If you have checked **ALL** three of the above statements, **apply the facts of the protocol to the category requirements to provide justification and verification; if the category still applies, check the box for Category 3:**

☐ **Category 4 – Check the statements below which apply to this research:**

- ☒ Research involves the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens.
- ☒ All material used to conduct the research exists at the time of IRB submission and no on-going **OR** prospective collection of material will occur.
- ☐ Sources of the data and/or material are publicly available **OR** information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.
- ☐ For non-VA Research, If the research involves the review of medical records, **NO** identifiers, including most of the 18 HIPAA elements (dates of service and geographic codes less specific than street address are allowable), or codes derived from parts of those elements, will be recorded for research purposes **OR** a waiver of HIPAA authorization to review (i.e., access) protected health information (PHI) is requested and justified. If this statement has been checked, **please submit data collection/extraction sheets and/or a list of variables or data elements that will be collected. Please note that the above approach to retention of identifiers under exemption category 4 is not appropriate for VA Research use.**
- ☐ For VA Research, the investigator must not retain any of the 18 identifiers defined by the HIPAA Privacy Rule, and the investigator must not have access to any code by which the information may be linked to individuals.
 - **When the investigator will review PHI for the research, a waiver of authorization is required.**

If you have checked **ALL** four of the above statements, **apply the facts of the protocol to the category requirements to provide justification and verification; if the category still applies, check the box for Category 4:**

☐ **Category 5 – Check the statements below which apply to this research:**

- ☒ The project is a research or demonstration project.
- ☒ The project is conducted by or subject to the approval of department or agency heads.
- ☐ The project is designed to study, evaluate, or otherwise examine: (i) Public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible

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changes in or alternatives to those programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or services under those programs.

- ☐ The program(s) under study must deliver a public benefit (e.g., financial or medical benefits as provided under the Social Security Act) or service (e.g. social, supportive, or nutritional services as provided under the Older Americans Act).
- ☐ The project is conducted pursuant to specific federal statutory authority.
- ☐ The project has no statutory requirements for IRB review.
- ☒ The project does not involve significant physical invasions or intrusions upon the privacy interests of subjects.
- ☐ The project has an authorization or concurrence from the funding agency (**Please attach a copy of the authorization or concurrence**).

If you have checked **ALL** eight of the above statements, **apply the facts of the protocol to the category requirements to provide justification and verification; if the category still applies, check the box for Category 5:**

☐ **Category 6 – Check the statements below which apply to this research:**

- ☐ Research involves taste and food quality evaluation or is a consumer acceptance study.
- ☐ Wholesome foods without additives are consumed **OR** a food is consumed that contains a food ingredient at or below the level and for a use found to be safe **OR** a food is consumed that contains an agricultural chemical or environmental contaminant at or below the level found to be safe by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture.

If you have checked **BOTH** of the above statements, **apply the facts of the protocol to the category requirements to provide justification and verification; if the category still applies, check the box for Category 6:**

VIII. Protocol Information (Attach copy of protocol)

A. PLEASE ATTACH A COPY OF THE PROJECT or PROTOCOL

Please submit all surveys, questionnaires, interview or focus group scripts, observation plans, etc. that will be used in the research.

B. Subjects (as applicable)

1. Number of subjects (and/or the number of cases, records, or specimens): **640**
2. Age range of subjects: **18-25** years
3. Indicate the vulnerable populations, if any, participating in the research:

☐ JBVAMC Veterans	☒ UIC Students
☐ Minors (less than 18 years of age)	☐ UIC Employees
☐ Pregnant Women	☐ Decisionally Impaired Subjects
☐ Fetuses/Fetal Tissue	☐ Economically or Educationally Disadvantaged Subjects

C. Recruitment

Will subjects be directly recruited for the research?

- ☒ No: go to Section D (Use of Existing Materials) below
- ☐ Yes: please describe how the potential subjects will be identified or recruited, how and where initial contact with the subjects will be made, and by whom.

UIC Claim of Exemption Application Version 5.0**D. Use of Existing Materials**

1. Will existing data, documents, records, or biological samples be used?

☒ Yes: please complete the rest of this Section
☐ No: go to Section E (Confidentiality) below

2. What is the source of the existing materials? **The 2004, 2006 and 2008 College Experience Student Questionnaire (CSEQ) which was administered through the Office of the Vice Chancellor for Student Affairs will be used. The CSEQ in 2004 was administered under IRB 2003-0802 under the Principle Investigator leadership of Pat Inman. Michael Landek was later added as Key Research Personnel/Co-Investigator. In year 2006 the CSEQ was administered under IRB 2005-0847 and later amended to include year 2008. In 2006 and 2008 Pat Inman served as the Principle Investigator. Pat Inman is currently seeking IRB approval to add Michael Landek as Key Research Personnel/Co-Investigator IRB (Claim of Exemption to reactivate administrations) for on-going analysis (no new recruitment)**

Appendix P to include Landek on reactivation.

If source was a previous IRB protocol, please provide the title, investigator and IRB number of earlier protocol.

3. If the source of the existing materials is outside of your normal scope of access or you are outside the Covered Entity, **please attach a copy of the letter of support, IRB approval or limited data use agreement authorizing access/transfer of the materials.**
4. Indicate the dates when the existing materials were originally collected from subjects:
Beginning date: **February 2004** through End date: **March 2008**
5. Indicate how the existing materials will be identified, tagged, and/or coded when they are made available to you and your key research personnel:
- ☐ Direct identifiers (e.g., participant name, initials, social security number, medical record number, etc)
- ☒ Indirect identifiers (e.g., assigned code which can be used by investigator or source to identify individual)
- ☐ No identifiers (neither researcher nor the source can identify the individual from the information provided)
6. If the direct or indirect identifiers box is checked above (#5), and the research involves existing biological specimens, will all identifiers be removed and destroyed by you and your key research personnel after receiving the sample?
- ☐ Yes ☒ Not applicable ☐ No **If NO, STOP.** Research does not qualify for exemption; please complete and submit an Initial Review application.
7. If the direct or indirect identifiers box is checked above (#5), and the research involves existing data, documents, or records, will any identifiers, direct or indirect, be recorded in your research records, spreadsheets, or databases?
- Please attach a copy of the data collection/extraction sheets and/or a list of variables or data elements to be gathered.**
- ☒ No ☐ Not applicable ☐ Yes **If YES, STOP.** Research does not qualify for exemption; please complete and submit an Initial Review application.

E. Privacy and Confidentiality

1. Will any data or information be collected by audio taping or videotaping subjects?

☒ No ☐ Yes

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If **YES**, describe how participants will be identified in the taped materials.

2. Will any data or information be collected from JBVAMC Veterans by audio taping or videotaping?
☒ No ☐ Yes – If **YES**, please complete and submit VA Form 10-3203, Consent for the Use of Pictures and/or Voice.
3. Will data or information be recorded in such a manner that subjects can be identified directly or through indirect identifiers (responses, demographics, codes) linked to the subjects?
☒ No ☒ Yes
 If **YES**, describe how confidentiality of data will be maintained (i.e., how will data be recorded, stored and secured? who will have access to data? where and for how long the data will be maintained?).

F. Informed Consent Process and Documents

1. Will the research involve interventions, interactions or other contact with the participants?
☒ No ☐ Yes If **YES**, please describe how the voluntary consent of the participants will be obtained and **attach a copy of an appropriate informed consent document** (e.g., information sheet, oral informed consent script, survey cover letter or a letter to subjects).
2. If you plan to allow students or trainees under the principal investigators' supervision to recruit or obtain consent from subjects (particularly from patients, students being taught by key research personnel, employees being supervised by key research personnel, or subjects from other vulnerable groups) what safeguards will be put into place to ensure that the subjects do not feel pressured or coerced?
3. Will recruitment materials be used?
☒ No ☐ Yes – If **YES**, check materials to be used below and **attach a copy of each to this application**:

☐ Advertisement	☐ Flyer	☐ Telephone Script
☐ Letter	☐ Information Sheet	☒ Other email

IX. Request for Waiver of HIPAA Authorization

Complete this section only if you are submitting a claim for exemption under **Category 4** and the research involves the retrospective analysis of medical records.

- A. Describe the protected health information (PHI) for which use, access, or disclosure is necessary. Include a list of the PHI and the sources for the PHI. This list should include PHI needed for identifying and retrieving the records.
HIPAA identifiers include, but are not limited to, the following:
 - 1) names
 - 2) geographic subdivisions as specific as street address
 - 3) birth date and date of death
 - 4) telephone numbers
 - 5) fax numbers
 - 6) vehicle identifiers and serial numbers, including license plate number

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- 7) electronic mail addresses
- 8) device identifiers and serial numbers
- 9) social security numbers
- 10) web Universal Resource Locators (URLs)
- 11) medical record numbers
- 12) Internet Protocol (IP) address numbers
- 13) health plan beneficiary numbers
- 14) biometric identifiers, including finger and voice prints
- 15) account numbers
- 16) full face photographic images and any comparable images
- 17) certificate/license numbers OR
- 18) any other unique identifying number, characteristic, or code.

- B.** Describe the plan to protect identifiers from improper use and disclosure (i.e., what measures will be used to protect identifiers during the retrieving, viewing and extracting of data from the medical records) and indicate if any identifiers will be retained with the research materials.
- C. Describe the plan to destroy the identifiers at the earliest opportunity consistent with the conduct of the research. If such a plan is not in place, please provide a health or research justification for retaining the identifiers or explain whether such retention is required by law.**
- D.** Explain why the research could not be conducted without access to and use of PHI.
- E.** Explain why the research would be so difficult as to be nearly impossible to conduct without an alteration or waiver of HIPAA.
- F.** The PHI being requested is the minimum information necessary to accomplish the objectives of the proposed research
- ☐ Yes ☐ No **If NO, STOP.** Research is not eligible for exemption; please complete and submit an Initial Review application.
- G.** I certify that the information obtained as part of this research (including PHI) will not be reused or disclosed to any other person or entity other than those identified on this form, except as required by law. Reuse of this information for other purposes or disclosure of the information to other individuals or entities will not occur without first seeking approval by the UIC IRB
- ☐ Yes ☐ No **If NO, STOP.** Research is not eligible for exemption; please complete and submit an Initial Review application.

PRINCIPAL INVESTIGATOR ASSURANCE

I certify that the information provided in this application is complete and correct. I understand that as Principal Investigator, I am ultimately responsible for the protection of the rights and welfare of human subjects and the ethical performance of the research. I agree to comply with all applicable UIC policies and procedures, and applicable federal, state and local laws. I also agree to the following:

- The research will only be performed by qualified personnel as specified in the approved research application and/or protocol,
- No changes will be made to the research protocol (except when necessary to eliminate apparent immediate hazards to the subject), or the consent process (if one is required) without prior approval by the UIC IRB or designated IRB,
- Legally effective informed consent/assent will be obtained from all human subjects, unless this requirement is waived by the UIC IRB, using only the recruitment materials and informed consent/assent documents that have been approved by the UIC IRB. The potential benefits of participation will not be overstated and reasonably anticipated risks will not be minimized. Subjects will be asked open-ended questions to try and ensure adequate comprehension of the information so as to allow for truly informed consent to participate.
- Unanticipated problems involving risks to subjects or others (including adverse events), other reportable events, and subject complaints will be reported to the UIC IRB in a timely manner.

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I certify that I have completed the required educational program on ethical principles and regulatory requirements in Human Subject Protections. I further certify that the proposed research is not currently underway and will not begin until IRB approval has been obtained.

Principal Investigator Signature _____ DATE _____

Name printed: _____

FACULTY SPONSOR* ASSURANCE

**The faculty sponsor must be a member of the UIC faculty. The faculty member is considered the responsible party for legal and ethical performance of the project.*

By my signature as sponsor on this application, I certify that the student, fellow, or resident is knowledgeable about the regulations and policies governing research with human subjects and has sufficient training and experience to conduct this particular study in accord with the approved protocol.

In addition,

- I agree to meet with the investigator on a regular basis to monitor study progress,
- Should problems arise during the course of the study, I agree to be available, personally, to supervise the investigator in solving them,
- I will ensure that the Principal Investigator promptly reports unanticipated problems involving risks to subjects or others (including adverse events), other reportable events, and subject complaints to the UIC IRB in a timely manner,
- If I will be unavailable, as when on sabbatical leave or vacation, I will arrange for an alternate faculty sponsor to assume responsibility during my absence and I will advise the UIC IRB by letter of such arrangements, and
- I insure that the investigator has completed the required educational program on ethical principles and regulatory requirements and will complete all required continuing education.
- I further certify that the proposed research is not currently underway and will not begin until approval has been obtained from all the appropriate committees.
- I will ensure that the Principal Investigator submits a Final Report upon completion of the research. In the event that the Principal Investigator is unable to do so, I accept the ultimate responsibility for submission of the Final Report closing the research study.

Faculty Sponsor Signature _____ Date _____

Name printed: _____

DEPARTMENT HEAD* SIGNATURE

**If the Department Head is the Principal Investigator or any of the Co-Investigators, the Department Head's superior (for example: Dean), must sign in place of the Department Head.*

As department head (or signatory official), I acknowledge that this research is in keeping with the standards set by our department and I insure that the Principal Investigator has met all departmental requirements for review and approval of this research.

By my signature as department head (or signatory official) on this research application, I certify that the Principal Investigator has the training and expertise to conduct research at UIC and that the research meets the standards of the specific discipline, as well as the standards and guidelines of any relevant professional organizations, societies, or licensing bodies.

Department Head Signature _____ Date _____

Name printed: _____

Your research may be conducted at UIC and with existing de-identified data only.

The specific exemption category under 45 CFR 46.101(b) is:

(4) Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

You are reminded that investigators whose research involving human subjects is determined to be exempt from the federal regulations for the protection of human subjects still have responsibilities for the ethical conduct of the research under state law and UIC policy. Please be aware of the following UIC policies and responsibilities for investigators:

1. Amendments You are responsible for reporting any amendments to your research protocol that may affect the determination of the exemption and may result in your research no longer being eligible for the exemption that has been granted.
2. Record Keeping You are responsible for maintaining a copy all research related records in a secure location in the event future verification is necessary, at a minimum these documents include: the research protocol, the claim of exemption application, all questionnaires, survey instruments, interview questions and/or data collection instruments associated with this research protocol, recruiting or advertising materials, any consent forms or information sheets given to subjects, or any other pertinent documents.
3. Final Report When you have completed work on your research protocol, you should submit a final report to the Office for Protection of Research Subjects (OPRS).

Please be sure to:

→ Use your research protocol number (listed above) on any documents or correspondence with

the IRB concerning your research protocol.

We wish you the best as you conduct your research. If you have any questions or need further help, please contact me at (312) 355-2908 or the OPRS office at (312) 996-1711. Please send any correspondence about this protocol to OPRS at 203 AOB, M/C 672.

Sincerely,

Charles W. Hoehne, CIP

Assistant Director, IRB # 2

Office for the Protection of Research Subjects

Enclosure(s): None

cc: Mark Smylie, Educational Policy Studies, M/C 147

Steven Tozer, Educational Policy Studies, M/C 147

Appendix E

Claim of Exemption Application-Qualitative Study

UIC UNIVERSITY OF ILLINOIS AT CHICAGO FORM – Claim of Exemption Application Version 5.0 4/25/09	Office for the Protection of Research Subjects (OPRS) Institutional Review Board FWA# 00000083 203 AOB (MC 672) 1737 West Polk Street Chicago, IL 60612-7227 Phone: 312 996-1711 Fax: 312 413-2929 www.research.uic.edu/protocolreview/irb
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<i>To Be Completed By the Investigator</i>	<i>For OPRS Use Only</i>
Date Application Completed: July 16, 2010	UIC Protocol #:
Application Document Version #: 1	Assigned IRB:

I. Research Title: An Examination of Commuter and Residential Time Allocation and the Relationship to Student Retention

II. Contact Information

Who should be the primary person contacted by OPRS if further information about this protocol is needed? This person may be someone other than the PI or other individuals listed as key research personnel (i.e., Administrative Coordinator).

Do you wish to grant this individual RiSCWeb access to this research protocol?

☒ Yes ☐ No

Name (Last, First) Landek, Michael E-mail Address mlandek@uic.edu Phone Number 312-413-5902	Title Associate Vice Chancellor for Student Affairs/Doctoral Student Date July 16, 2010 Fax Number 312-413-5916
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III. Personnel

A. Principal Investigator

Name (Last, First) Landek, Michael	Degree(s) M.A.	University Status/Title Associate Vice Chancellor for Student Affairs/Doctoral Student
Department Campus Auxilairy Services		College Office of the Vice Chancellor for Student Affairs
Mailing Address 2560 SSB		E-mail Address Mlandek@uic.edu
Phone Number 312-413-5902	Fax Number 312-413-5916	M/C 046

B. Faculty Sponsor – required when PI is a student, fellow or resident

Name (Last, First) Steven Tozer	Degree(s) PhD	University Status/Title Professor
Department Educational Policy Studies		College Education
Mailing Address 1048 EPASW		E-mail Address stozer@uic.edu
Phone Number 312-413-7782	Fax Number 312-996-8134	M/C 147

C. LIST ALL ADDITIONAL KEY RESEARCH PERSONNEL ON APPENDIX P and SUBMIT WITH THIS APPLICATION PACKET.

IV. Research Funding**Is this research funded?**☒ No. Go to Section IV.☐ Yes or pending. Complete the rest of this Section (below).

Check all of the appropriate boxes for funding sources (including pending sources) for this research.

☐ Extramural☐ Federal, Agency Name:☐ Foundation, Name:☐ State - Agency Name:☐ Industry-Sponsored - Name:Is industry-sponsored study investigator initiated? ☐ No ☐ Yes☐ Other - Name:☐ Intramural: ☐ Campus Research Board (CRB) ☐ Departmental ☐ Other - Name:

Funding Identification: For each funding source, provide the following information. Use Appendix Z if this study is supported by more than one funding source. Note: Any subsequent change in funder or funding status requires an IRB amendment.
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☐ Section Not Applicable, there is no grant award; skip to

1. Proposal Approval Form (PAF) Number:

2. Name of the Principal Investigator (PI) on the grant/contract/sub-contract:

Is the PI of the grant affiliated with UIC? ☐ No ☐ Yes

If NO,

- Identify the non-UIC grantee institution:
- Explain the relationship between the grantee and UIC:

3. **Funding Agency Grant Account Number:**

(For federally funded research, provide the federal grant/contract number assigned by the funding agency to allow OPRS to accurately complete the certification of federal funding document. OPRS will provide the certification with the approval letter.)

4. Date grant/contract award notification was received by UIC:

☐ N/A: Grant/contract still pending

5. Grant/contract or research title:

PLEASE ATTACH A COPY OF THE GRANT, CONTRACT, and/or SUB-CONTRACT TO THIS APPLICATION.

V. Conflict of Interest (COI) Disclosure

All investigators must disclose all real, apparent, or potential financial conflicts of interest to the IRB. **Investigator** is defined as any person responsible for the design, conduct, or reporting of the research. This includes, but is not limited to, the principal investigator, faculty sponsor, co-investigators, and other key research personnel. **Family members** include spouse and children.

Significant financial interest means anything of monetary value held by the investigator, his/her spouse, or children exceeding an aggregated threshold of \$10,000 in the next 12 months or 5% ownership regardless of value. Categories of financial interest include but are not limited to:

- A. Salary or other payments for services (e.g., consulting fees, honoraria)
- B. Equity interests (e.g., stocks, stock options, other ownership interests)
- C. Intellectual property rights (e.g., patents, trademarks, copyrights, licensing agreements, and royalties from such rights)
- D. Any other relationships that might present a financial conflict of interest, such as fiduciary interests (paid or unpaid positions as director, officer, or other management role in a for-profit or not-for-profit entity sponsoring or related to the research) or interests in which compensation or the value of equity or property rights might be affected by the outcome of the research.

For more information, see the **Investigator Conflict of Interest Disclosure Policy for Human Subjects** at <http://tiger.uic.edu/depts/ovcr/research/protocolreview/irb/policies/index.shtml>.

A. Disclosure

1. Do any investigators, or family members thereof (spouse, children), serve as major officers of, hold a managerial role in, or otherwise have a significant financial relationship (including consulting) with the research sponsor or any subcontract recipient?

No ☒ Yes ☐ (If yes, SEAM is required. See Section B below.)

2. Do any investigators, or family members thereof, have any other relationships, commitments (including assignments of Intellectual Property Rights), activities (including uncompensated activities) or financial/fiduciary interests that present potential or apparent conflicts of interest or commitment with this study, or are there any other potential conflicts of interest with the study?

No ☒ Yes ☐ (If yes, SEAM is required. See Section B below.)

3. Does an institutional conflict of interest exist with this study?

No ☒ Yes ☐ (If yes, SEAM is required. See Section B below.)

B. Management

If **YES** has been checked for any of the above questions, **attach a COI Statement of Explanation And Management (SEAM)** that describes the conflict and presents a plan for managing the conflict in order to minimize the effect on the design, conduct, or reporting of the research and/or the integrity of the human subject protection program. The COI-SEAM and guidance on how to write the COI-SEAM are available under the "Managing Conflicts" section of the COI website at www.research.uic.edu/conflict. Final IRB approval of the research cannot be provided until a management plan is in place.

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UIC and JB VAMC personnel: For additional assistance contact the COI Office at (312) 996-4070 or email coi@uic.edu.

VI. Performance Sites

Definition of a Performance Site: A performance site is a location at which the research is conducted, data is gathered from subjects and/or records, and/or subjects are consented into the research. Sites are performance sites whether the research activities there are funded or not funded.

A. Performance Site Identification:

1. Will UIC be a performance site?
☐ No ☒ Yes
 Must be **YES** unless the research is conducted only at the Jesse Brown Veterans Administration Medical Center [JBVAMC]
2. Will JBVAMC be a performance site?
☒ No ☐ Yes

B. Non-UIC Performance Sites:

1. Are there non-UIC performance sites?
☒ No ☐ Yes (After completing this application, complete Appendix K and submit with this application packet)
2. Are there international performance sites?
☒ No ☐ Yes (After completing this application, complete Appendix I and submit with this application packet)

VII. Exemption Category Claimed

A. Eligibility for Exemption:

1. Will this research involve prisoners as subjects?
☒ No ☐ Yes **If YES, STOP.**
 Research involving prisoners is not eligible for exemption. Please complete and submit an Initial IRB Review application.
2. Will this research be FDA-regulated?
☒ No
☐ Yes, but is eligible for Exemption Category 6 (below)
☐ Yes and is **NOT** eligible for Exemption Category 6 (below) - **If YES, STOP.** FDA-regulated research is only eligible for exemption under Category 6. Please complete and submit an Initial IRB Review application.

B. Eligibility as Minimal Risk Research: Will this research be minimal risk?

Minimal risk means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.

☐ No ☒ Yes

If NO, STOP. Research that is greater than minimal risks is not eligible for exemption. Please complete and submit an Initial IRB Review application.

C. Exemption Categories:

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Please identify the exemption category or categories that apply to your research. If your research does **NOT** fit within any of the categories below, then please **STOP** and complete and submit an Initial IRB Review application.

☐ **Category 1 – Check the statements below which apply to this research:**

- ☒ Research conducted in established or commonly accepted educational settings
- ☐ Research involves normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods

If you have checked **BOTH** of the above statements, **apply the facts of the protocol to the category requirements to provide justification and verification; if the category still applies, check the box for Category 1:**

☒ **Category 2 – Check the statements below which apply to this research:**

- ☒ Research does **NOT** involve children as subjects when procedures include interviews, surveys, or observations of public behavior and the investigators participate in the activities being observed.
- ☒ Research involves the use of educational tests (cognitive, diagnostic, aptitude, achievement) **AND/OR** survey procedures **AND/OR** interview procedures **AND/OR** observations of public behavior (If this statement has been checked, please submit surveys, questionnaires, interview or focus group scripts, observation plans, etc. that will be used in the research)
- ☒ Subjects could **NOT** be identified directly or indirectly through their responses, demographics, or codes linked to identifiers **OR** subjects could be identified directly or indirectly through their responses, demographics, or codes linked to identifiers **AND** any disclosure of their responses outside the research could **not** reasonably place them at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, reputation, or insurability.

If you have checked **ALL** three of the above statements, **apply the facts of the protocol to the category requirements to provide justification and verification; if the category still applies, check the box for Category 2**

☐ **Category 3 – Check the statements below which apply to this research:**

- ☐ Research is **NOT** exempt under Category 2 above.
- ☒ Research involves the use of educational tests (cognitive, diagnostic, aptitude, achievement) **AND/OR** survey procedures **AND/OR** interview procedures **AND/OR** observations of public behavior (If this statement has been checked, **please submit surveys, questionnaires, interview or focus group scripts, observation plans, etc. that will be used in the research.**
- ☐ Subjects are elected or appointed public officials or candidates for public office **OR** federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.

If you have checked **ALL** three of the above statements, **apply the facts of the protocol to the category requirements to provide justification and verification; if the category still applies, check the box for Category 3:**

☐ **Category 4 – Check the statements below which apply to this research:**

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- ☐ Research involves the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens.
- ☐ All material used to conduct the research exists at the time of IRB submission and no on-going **OR** prospective collection of material will occur.
- ☐ Sources of the data and/or material are publicly available **OR** information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.
- ☐ For non-VA Research, If the research involves the review of medical records, **NO** identifiers, including most of the 18 HIPAA elements (dates of service and geographic codes less specific than street address are allowable), or codes derived from parts of those elements, will be recorded for research purposes **OR** a waiver of HIPAA authorization to review (i.e., access) protected health information (PHI) is requested and justified. If this statement has been checked, **please submit data collection/extraction sheets and/or a list of variables or data elements that will be collected. Please note that the above approach to retention of identifiers under exemption category 4 is not appropriate for VA Research use.**
- ☐ For VA Research, the investigator must not retain any of the 18 identifiers defined by the HIPAA Privacy Rule, and the investigator must not have access to any code by which the information may be linked to individuals.
 - **When the investigator will review PHI for the research, a waiver of authorization is required.**

If you have checked **ALL** four of the above statements, **apply the facts of the protocol to the category requirements to provide justification and verification; if the category still applies, check the box for Category 4:**

☐ **Category 5 – Check the statements below which apply to this research:**

- ☒ The project is a research or demonstration project.
- ☒ The project is conducted by or subject to the approval of department or agency heads.
- ☐ The project is designed to study, evaluate, or otherwise examine: (i) Public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in or alternatives to those programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or services under those programs.
- ☐ The program(s) under study must deliver a public benefit (e.g., financial or medical benefits as provided under the Social Security Act) or service (e.g. social, supportive, or nutritional services as provided under the Older Americans Act).
- ☐ The project is conducted pursuant to specific federal statutory authority.
- ☐ The project has no statutory requirements for IRB review.
- ☒ The project does not involve significant physical invasions or intrusions upon the privacy interests of subjects.
- ☐ The project has an authorization or concurrence from the funding agency (**Please attach a copy of the authorization or concurrence**).

If you have checked **ALL** eight of the above statements, **apply the facts of the protocol to the category requirements to provide justification and verification; if the category still applies, check the box for Category 5:**

☐ **Category 6 – Check the statements below which apply to this research:**

- ☐ Research involves taste and food quality evaluation or is a consumer acceptance study.

- ☐ Wholesome foods without additives are consumed **OR** a food is consumed that contains a food ingredient at or below the level and for a use found to be safe **OR** a food is consumed that contains an agricultural chemical or environmental contaminant at or below the level found to be safe by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture.

If you have checked **BOTH** of the above statements, **apply the facts of the protocol to the category requirements to provide justification and verification; if the category still applies, check the box for Category 6:**

VIII. Protocol Information (Attach copy of protocol)

A. PLEASE ATTACH A COPY OF THE PROJECT or PROTOCOL

Please submit all surveys, questionnaires, interview or focus group scripts, observation plans, etc. that will be used in the research.

B. Subjects (as applicable)

- Number of subjects (and/or the number of cases, records, or specimens): **20**
- Age range of subjects: **18-22** years
- Indicate the vulnerable populations, if any, participating in the research:

☐ JBVAMC Veterans	☒ UIC Students
☐ Minors (less than 18 years of age)	☐ UIC Employees
☐ Pregnant Women	☐ Decisionally Impaired Subjects
☐ Fetuses/Fetal Tissue	☐ Economically or Educationally Disadvantaged Subjects

C. Recruitment

Will subjects be directly recruited for the research?

- ☐ No: go to Section D (Use of Existing Materials) below
- ☒ Yes: please describe how the potential subjects will be identified or recruited, how and where initial contact with the subjects will be made, and by whom. **Students who are beginning their second year of study at UIC and who either commuted to school in the previous academic year or who spent at least their first semester in UIC Campus Housing will be identified as subjects to be contacted. All contacts will be done via email by Kim Savage of Campus Auxiliary Services.**

D. Use of Existing Materials

- Will existing data, documents, records, or biological samples be used?

☐ Yes: please complete the rest of this Section

☒ No: go to Section E (Confidentiality) below
- What is the source of the existing materials?

If source was a previous IRB protocol, please provide the title, investigator and IRB number of earlier protocol.
- If the source of the existing materials is outside of your normal scope of access or you are outside the Covered Entity, **please attach a copy of the letter of support, IRB approval or limited data use agreement authorizing access/transfer of the materials.**
- Indicate the dates when the existing materials were originally collected from subjects:

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Beginning date: _____ through End date: _____

5. Indicate how the existing materials will be identified, tagged, and/or coded when they are made available to you and your key research personnel:
 - ☐ Direct identifiers (e.g., participant name, initials, social security number, medical record number, etc)
 - ☐ Indirect identifiers (e.g., assigned code which can be used by investigator or source to identify individual)
 - ☐ No identifiers (neither researcher nor the source can identify the individual from the information provided)
6. If the direct or indirect identifiers box is checked above (#5), and the research involves existing biological specimens, will all identifiers be removed and destroyed by you and your key research personnel after receiving the sample?
 - ☐ Yes ☐ Not applicable ☐ No **If NO, STOP.** Research does not qualify for exemption; please complete and submit an Initial Review application.
7. If the direct or indirect identifiers box is checked above (#5), and the research involves existing data, documents, or records, will any identifiers, direct or indirect, be recorded in your research records, spreadsheets, or databases?

Please attach a copy of the data collection/extraction sheets and/or a list of variables or data elements to be gathered.

 - ☐ No ☐ Not applicable ☐ Yes **If YES, STOP.** Research does not qualify for exemption; please complete and submit an Initial Review application.

E. Privacy and Confidentiality

1. Will any data or information be collected by audio taping or videotaping subjects?
 - ☐ No ☒ Yes
 - If YES, describe how participants will be identified in the taped materials. Only by use of first names.**
2. Will any data or information be collected from JBVAMC Veterans by audio taping or videotaping?
 - ☒ No ☐ Yes – **If YES, please complete and submit VA Form 10-3203, Consent for the Use of Pictures and/or Voice.**
3. Will data or information be recorded in such a manner that subjects can be identified directly or through indirect identifiers (responses, demographics, codes) linked to the subjects?
 - ☒ No ☐ Yes
 - If YES, describe how confidentiality of data will be maintained (i.e., how will data be recorded, stored and secured? who will have access to data? where and for how long the data will be maintained?).**

F. Informed Consent Process and Documents

1. Will the research involve interventions, interactions or other contact with the participants?
 - ☐ No ☒ Yes **If YES, please describe how the voluntary consent of the participants will be obtained and attach a copy of an appropriate informed consent document (e.g., information sheet, oral informed consent script, survey cover letter or a letter to subjects). Consent to Participate Information and Consent Form.**
2. If you plan to allow students or trainees under the principal investigators' supervision to recruit or obtain consent from subjects (particularly from patients, students being taught by key research personnel, employees being supervised by key research personnel, or subjects

from other vulnerable groups) what safeguards will be put into place to ensure that the subjects do not feel pressured or coerced? **N/A**

3. Will recruitment materials be used?

☐ No ☒ Yes – **If YES**, check materials to be used below and **attach a copy of each to this application**:

- | | | |
|--|--|---|
| ☐ Advertisement | ☐ Flyer | ☐ Telephone Script |
| ☐ Letter | ☐ Information Sheet | ☐ Other |

IX. Request for Waiver of HIPAA Authorization

Complete this section only if you are submitting a claim for exemption under **Category 4** and the research involves the retrospective analysis of medical records.

- A. Describe the protected health information (PHI) for which use, access, or disclosure is necessary. Include a list of the PHI and the sources for the PHI. This list should include PHI needed for identifying and retrieving the records.
HIPAA identifiers include, but are not limited to, the following:
- 1) names
 - 2) geographic subdivisions as specific as street address
 - 3) birth date and date of death
 - 4) telephone numbers
 - 5) fax numbers
 - 6) vehicle identifiers and serial numbers, including license plate number
 - 7) electronic mail addresses
 - 8) device identifiers and serial numbers
 - 9) social security numbers
 - 10) web Universal Resource Locators (URLs)
 - 11) medical record numbers
 - 12) Internet Protocol (IP) address numbers
 - 13) health plan beneficiary numbers
 - 14) biometric identifiers, including finger and voice prints
 - 15) account numbers
 - 16) full face photographic images and any comparable images
 - 17) certificate/license numbers OR
 - 18) any other unique identifying number, characteristic, or code.
- B. Describe the plan to protect identifiers from improper use and disclosure (i.e., what measures will be used to protect identifiers during the retrieving, viewing and extracting of data from the medical records) and indicate if any identifiers will be retained with the research materials.
- C. Describe the plan to destroy the identifiers at the earliest opportunity consistent with the conduct of the research. If such a plan is not in place, please provide a health or research justification for retaining the identifiers or explain whether such retention is required by law.
- D. Explain why the research could not be conducted without access to and use of PHI.

- E.** Explain why the research would be so difficult as to be nearly impossible to conduct without an alteration or waiver of HIPAA.
- F.** The PHI being requested is the minimum information necessary to accomplish the objectives of the proposed research
- ☐ Yes ☐ No **If NO, STOP.** Research is not eligible for exemption; please complete and submit an Initial Review application.
- G.** I certify that the information obtained as part of this research (including PHI) will not be reused or disclosed to any other person or entity other than those identified on this form, except as required by law. Reuse of this information for other purposes or disclosure of the information to other individuals or entities will not occur without first seeking approval by the UIC IRB
- ☐ Yes ☐ No **If NO, STOP.** Research is not eligible for exemption; please complete and submit an Initial Review application.

PRINCIPAL INVESTIGATOR ASSURANCE

I certify that the information provided in this application is complete and correct. I understand that as Principal Investigator, I am ultimately responsible for the protection of the rights and welfare of human subjects and the ethical performance of the research. I agree to comply with all applicable UIC policies and procedures, and applicable federal, state and local laws. I also agree to the following:

- The research will only be performed by qualified personnel as specified in the approved research application and/or protocol,
- No changes will be made to the research protocol (except when necessary to eliminate apparent immediate hazards to the subject), or the consent process (if one is required) without prior approval by the UIC IRB or designated IRB,
- Legally effective informed consent/assent will be obtained from all human subjects, unless this requirement is waived by the UIC IRB, using only the recruitment materials and informed consent/assent documents that have been approved by the UIC IRB. The potential benefits of participation will not be overstated and reasonably anticipated risks will not be minimized. Subjects will be asked open-ended questions to try and ensure adequate comprehension of the information so as to allow for truly informed consent to participate.
- Unanticipated problems involving risks to subjects or others (including adverse events), other reportable events, and subject complaints will be reported to the UIC IRB in a timely manner.

I certify that I have completed the required educational program on ethical principles and regulatory requirements in Human Subject Protections. I further certify that the proposed research is not currently underway and will not begin until IRB approval has been obtained.

Principal Investigator Signature _____ DATE _____

Name printed: _____

FACULTY SPONSOR* ASSURANCE

**The faculty sponsor must be a member of the UIC faculty. The faculty member is considered the responsible party for legal and ethical performance of the project.*

By my signature as sponsor on this application, I certify that the student, fellow, or resident is knowledgeable about the regulations and policies governing research with human subjects and has sufficient training and experience to conduct this particular study in accord with the approved protocol.

In addition,

- I agree to meet with the investigator on a regular basis to monitor study progress,
- Should problems arise during the course of the study, I agree to be available, personally, to supervise the investigator in solving them,
- I will ensure that the Principal Investigator promptly reports unanticipated problems involving risks to subjects or others (including adverse events), other reportable events, and subject complaints to the UIC IRB in a timely manner,
- If I will be unavailable, as when on sabbatical leave or vacation, I will arrange for an alternate faculty sponsor to assume responsibility during my absence and I will advise the UIC IRB by letter of such arrangements, and
- I insure that the investigator has completed the required educational program on ethical principles and regulatory requirements and will complete all required continuing education.
- I further certify that the proposed research is not currently underway and will not begin until approval has been obtained from all the appropriate committees.
- I will ensure that the Principal Investigator submits a Final Report upon completion of the research. In the event that the Principal Investigator is unable to do so, I accept the ultimate responsibility for submission of the Final Report closing the research study.

Faculty Sponsor Signature _____ Date _____

Name printed: _____

DEPARTMENT HEAD* SIGNATURE

**If the Department Head is the Principal Investigator or any of the Co-Investigators, the Department Head's superior (for example: Dean), must sign in place of the Department Head.*

As department head (or signatory official), I acknowledge that this research is in keeping with the standards set by our department and I insure that the Principal Investigator has met all departmental requirements for review and approval of this research.

By my signature as department head (or signatory official) on this research application, I certify that the Principal Investigator has the training and expertise to conduct research at UIC and that the research meets the standards of the specific discipline, as well as the standards and guidelines of any relevant professional organizations, societies, or licensing bodies.

Department Head Signature _____ Date _____

Name printed: _____

Exemption Granted-Qualitative Study

Phone: (312) 413-5902 / Fax: (312) 413-5915

Exemption Period: March 27, 2011 – March 27, 2014

Sponsor(s): None

Performance Site(s): UIC

Subject Population: Adult (18+ Years) students only

Number of Subjects: 25

The specific exemption category under 45 CFR 46.101(b) is:

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Current Investigator Training Periods:

- 1) Michael Lndek: June 6, 2009 – June 7, 2011
- 2) Steven Tozer: October 18, 2010 – October 18, 2012

You are reminded that investigators whose research involving human subjects is determined to be exempt from the federal regulations for the protection of human subjects still have responsibilities for the ethical conduct of the research under state law and UIC policy. Please be aware of the following UIC policies and responsibilities for investigators:

4. Amendments You are responsible for reporting any amendments to your research protocol that may affect the determination of the exemption and may result in your research no longer being eligible for the exemption that has been granted.
5. Record Keeping You are responsible for maintaining a copy all research related records in a secure location in the event future verification is necessary, at a minimum these

documents include: the research protocol, the claim of exemption application, all questionnaires, survey instruments, interview questions and/or data collection instruments associated with this research protocol, recruiting or advertising materials, any consent forms or information sheets given to subjects, or any other pertinent documents.

6. Final Report When you have completed work on your research protocol, you should submit a final report to the Office for Protection of Research Subjects (OPRS).

7. Information for Human Subjects UIC Policy requires investigators to provide information about the research protocol to subjects and to obtain their permission prior to their participating in the research. The information about the research protocol should be presented to subjects in writing or orally from a written script. When appropriate, the following information must be provided to all research subjects participating in exempt studies:
 - a. The researchers affiliation; UIC, JBVMAC or other institutions,
 - b. The purpose of the research,
 - c. The extent of the subject's involvement and an explanation of the procedures to be followed,
 - d. Whether the information being collected will be used for any purposes other than the proposed research,
 - e. A description of the procedures to protect the privacy of subjects and the confidentiality of the research information and data,
 - f. Description of any reasonable foreseeable risks,
 - g. Description of anticipated benefit,
 - h. A statement that participation is voluntary and subjects can refuse to participate or can stop at any time,
 - i. A statement that the researcher is available to answer any questions that the subject may have and which includes the name and phone number of the investigator(s).
 - j. A statement that the UIC IRB/OPRS or JBVMAC Patient Advocate Office is available if there are questions about subject's rights, which includes the appropriate phone numbers.

Please be sure to:

→Use your research protocol number (listed above) on any documents or correspondence with the IRB concerning your research protocol.

We wish you the best as you conduct your research. If you have any questions or need further help, please contact me at (312) 355-2908 or the OPRS office at (312) 996-1711. Please send any correspondence about this protocol to OPRS at 203 AOB, M/C 672.

Sincerely,

Charles W. Hoehne, B.S., C.I.P.

Assistant Director, IRB # 2

Office for the Protection of Research Subjects

cc: Mark Smylie, Educational Policy Studies, M/C 147

Steven Tozer, Education, M/C 147

Appendix G

Research Protocol-Qualitative

Office for the Protection of Research Subjects

Institutional Review Board Request for Approval for Claim of Exemption

Doctoral Dissertation Title: An Examination of Commuter Student and Resident Student Time Allocation and the Relationship to Student Retention (*Approved Dissertation Proposal Attached*)

Institution Review Board Request: Claim of Exemption (*Application Attached*)

Doctoral Student: Michael M. Landek (*Also an employee of UIC Associate Vice Chancellor for Student Affairs*)

Principle Investigator: Michael Landek

Faculty Advisor: Steven Tozer, PhD, College of Education

Study Background and Specific Aims: Over the past five decades a myriad of theories about college student persistence have attempted to explain student departure. Conclusions drawn by the literature broadly acknowledge that a student is less likely to depart if they are academically engaged and socially integrated with the campus. Further the literature suggests that if a student resides in a campus residence hall, there is also less likelihood of student departure. The literature also informs us that a residential student's activities while living on campus affects persistence and graduation and causes them to depart from the institution less often than their commuter counterparts. Understanding how commuter students allocate their time as compared to residential students may reveal important differences.

At the institution at which the study is being conducted (UIC), it is known that first-year persistence and graduation rates between residential and commuter students differ. The study will examine how these two cohorts allocate their time for academic and social engagements using data from the College Student Experiences Questionnaire, as well as Focus Groups. If correlations between time allocation behaviors are significant, then it might be possible to create programs and initiatives which will help commuters more effectively allocate their time.

Methods: The study will employ both a quantitative element and qualitative element. The Claim of Exemption being submitted is for the qualitative section of the study. The use of two

focus groups will follow the moderator's guide that has been developed to explore student time allocation. Students will be recruited from the population of currently enrolled undergraduate students. The questions are designed to be open-ended and move from general to specific. Question design is based on the results of the College Student Experiences Questionnaire (CSEQ) that was administered by the campus.

Twenty students will be recruited for the groups. Focus group discussions will be conducted in one of the UIC Student Centers. The PI will recruit the students.

Only students who are 18 years of age or older will be allowed to participate. As an incentive, students will receive refreshments and \$25.00 in cash.

Relevant Literature

Astin, A. (1977). *Four critical years*. San Francisco: Jossey-Bass.

Braxton, J., Sullivan, A. & Johnson, R. (1988). Appraising Tinto's theory of college student departure. In J.C. Smart (Ed.), Higher education: Handbook of theory and research.

Pascarella, E. & Terenzini, P. (1991). *How college affects students: Findings and insights from twenty years of research*. San Francisco: Jossey-Bass.

Appendix H

Focus Group Participation Consent

University of Illinois at Chicago

Consent for Participation in Research

“Student Time Allocation Focus Group”

Why am I being asked?

You are being asked to participate in a research study on student allocation of time because you volunteered to participate in it and you meet the study's eligibility requirements, which are that you are a registered undergraduate student at UIC. A total of about 20 persons are being asked to participate in this research study.

Read this consent form carefully and ask any questions you may have before you agree to participate in this research. Your participation in this research is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University or any community service agency where you might have found out about this research.

What is the purpose of this research?

The purpose of this research is to understand how students allocate their time for academic, employment, and social obligations.

What procedures are involved?

If you agree to participate in this research, we will ask you to participate in a group discussion that will take about 90 minutes to talk with about 7-9 other persons.

What are the potential risks and discomforts?

Unless you have difficulty participating in group discussions, there are no potential risks or discomforts.

Are there benefits to taking part in this research?

Helping the researchers to understand how you allocate your time may help determine programs and policies that universities can implement to assist students achieve their goals of degree attainment. Although there are no direct benefits to you from participating in this research, participating in the group discussion might help you to understand better how utilization of your time might help increase your academic and personal success.

What about privacy and confidentiality?

Although the other participants in the group discussion will be asked not to tell other people what you say, the researchers cannot guarantee that this will not happen. The only other people who will know that you are a participant in this research are members of the research team. Reports of the results of this research will not include any information that would reveal your identity. No information about you will be disclosed to others without your written permission. Information about your name, telephone number, and email address will be destroyed upon completion of the group.

The group discussion will be recorded on videotape to help keep track of what is discussed. The researchers will listen to and view the tape and the tape also will be transcribed onto paper to help the researchers to review the discussion. The transcription of the tape will not include any identifying information about you, such as your name. If there is a time when you do not feel comfortable about this, the tape recording will be stopped. When the research is finished, the tape will be destroyed. This will be done no later than December 1, 2011.

Will I be reimbursed for any of my expenses or paid for my participation in this research?

You will be paid \$25 in cash to compensate you for your time and travel.

Whom should I contact if I have questions later?

This research study is directed by Michael Landek, PhD student at UIC. You may contact Mr. Landek at (312) 413-5902.

What are my rights as a research subject?

If you have any questions about your rights as a research subject, you may call the UIC Office for Protection of Research Subjects at (312) 996-1711.

You will be given a copy of this form for your information and to keep for your records.

Remember

Your participation in this research is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University. If you decide to participate, you are free to withdraw at any time without affecting that relationship.

Signature of Subject or Legally Authorized Representative

I have read (or someone has read to me) the above information. I have been given an opportunity to ask questions and my questions have been answered to my satisfaction. I agree to participate in this research. I have been given a copy of this form.

Signature

Date

Printed Name

Signature of Researcher

Date

Appendix I

Focus Group Moderator's Guide

Student Time Allocation Commuter Focus Group

Moderator's Guide

Focus Group Introduction

- Introduce yourself to the group and thank them for their participation.
- Have participants sign the informed consent agreement.
- Review guidelines and procedures:
 - The discussion will be for one hour.
 - All participants must sign the informed consent form.
 - The purpose of the group is to get student input on student time allocation behaviors of residential and commuter students at UIC. The study may help identify programs which might better serve the needs of students.
 - The facilitator is not involved in the development of the project, so answers will not impact the demeanor of the facilitator. It is important to express honest opinions.
 - There is a limited timeframe, so if too much time is spent on one question, the moderator may cut off discussion to be sure to cover all questions.
 - The session will be audio-taped so that we can be sure to capture all of the comments. No names will be included in the final report.
 - Participants will be compensated at the end of the session.
- Have participants introduce themselves by first name only.

Focus Group Questions

Conclusion

Thank you for participating in our focus group. Your input will be helpful as we work toward improving the quality of campus life at UIC.

Appendix J

Focus Group Questions and Moderator's Prompts

Focus Group Questions with Moderator Opening Comments and Moderator Probes

for Each Question

Group Questions Focus

The results for research question one indicate that commuter students spend more time in the library, spend less time with computers/IT, have fewer writing experiences, have fewer art, music; and theater experiences, spend less time using campus facilities, spend less time involved in clubs or organizations, have fewer personal experiences, and have fewer student acquaintances. It is from these results that the focus group questions were developed.

Commuter Student Focus Groups Questions

Moderator Opening For Question One: *From a survey of students who are commuters like you, we learned that commuter students spend more time in the library than residential students. The time you spend in the library includes all types of activities. For example, studying, browsing for a book or other literature, writing a paper, looking up references for a paper, using the library database to find material for any number of reasons.*

1. Do you agree with the survey results that commuter students spend more time in the library than residential students? Could you tell us about your library experiences?

Moderator probe for: real purpose of the visit and what they did while in the library. Possible less orthodox uses might be to have a snack or lunch, take a nap or meet a friend for a social

visit. Also probe the commuter student's perception about residential students and library use.

Moderator Opening for Question Two: *The survey results informed us that commuter students spend less time than residential students using computers/IT. Using a computer for email, as a tutorial for class work, to prepare a course paper, to search the web, for statistical calculations, or in class as part of the group discussion are all considered in this question.*

2. How much time in a day do you spend using a computer? What activities are being engaged in when you are on your computer? Do you have a laptop or do you use the UIC Computer Labs?

Moderator Probe for: any obstacles that hinder the use of computers when they are on or off campus. Understanding how integral the computer is to their daily life routines will be important.

Moderator Opening for Question Three: *Writing experiences were found to be less likely experienced with commuter students than residential students. Writing experiences include writing a paper of 20 pages or more, using a dictionary or thesaurus to more clearly understand a word, revised a paper or composition two or more times before completing it, asking other people to read something you wrote to see if they understood what you wrote or asking a faculty or staff member to help you improve your writing.*

3. Explain your writing experiences. Can you tell us how much time you spend engaged in writing in a week? What do you spend most of your time working on when you write?

Moderator Probe for: how much writing students engage, what kind of writing they do and the value they place on writing. Try to determine if they do most writing on their own and try to gauge the input and assistance they get from other on writing projects.

Moderator Opening for Question Four: *Art, music, and theater were found to be less likely experienced with commuter students than residential students. With art, music, and theater, we are interested in knowing whether you went to a concert, the theater or similar event, played an instrument, whether you were involved in a craft project, spoke to someone about music, went to an art exhibit or dance show.*

4. Explain your art, music and theater experience. Can you tell us how much time you spend engaged in art, music and/or theater experiences?

Moderator probe for: the role that the arts play in their lives. Are they casual participants or immersed in the activity. If students are not involved in the arts, attempt to learn what obstacles or barriers stop this engagement.

Moderator Opening for Question Five: *The survey results informed us that commuter students used campus facilities less than residential students. Campus facilities are the Student Centers, recreation facilities, cafeterias, lounges, tennis and basketball courts and sport fields.*

5. What campus facilities do you use? How often do you use the facilities? What do you do there? Is there any reason you don't use them more frequently?

Moderator probe for: affinity building, whether their time allowed them to study, workout in the recreation facilities, have lunch or sleep and relax. Are they isolated without friends or classmates and using campus facilities is viewed as social space? Try

to understand if the library takes the place of commuter students use of other buildings and facilities.

Moderator Opening For Question Six: *The survey informed us that commuter students spend less time involved in clubs and organizations. Being involved in a club or organization involves attending meetings, possibly serving in a leadership role, being involved in student government, working with a faculty advisor for the organization in which you are involved or serving on some type of campus committee.*

6. Have you been involved in an on or off campus club or organization? If so, could you tell us a little bit about the activities in which you engage?

Moderator probe for: When and why they became involved. If they have not been actively involved in a club or organization, try to find out what obstacles, if any, cause them not to be involved. Attempt to understand if commute time plays into whether or not they become involved.

Residential Student Focus Groups Questions

Moderator Opening For Question One: *The survey results informed us that residential students spend less time in the library than commuter students. The time you spend in the library includes all types of activities a survey of commuter and residential students we learned that residential students spend less. For example, studying, browsing for a book or other literature, writing a paper, looking up references for a paper, using the library database to find material for any number of reasons.*

1. Do you agree with the survey results that residential students spend more less time in the library then commuter students? Could you tell us about your library experiences?

Moderator probe for: real purpose of the visit and what they did while in the library. Possible uses might be to get some quiet time from the residence halls to study, or meet a friend for a social visit. Also probe the residential student's perception about residential commuters and library use.

Moderator Opening for Question Two: *The survey results informed us that residential students spend more time then commuter students using computers/IT. Using a computer for email, as a tutorial for class work, to prepare a course paper, to search the web, for statistical calculations or in class as part of the group discussion are all considered in this question.*

2. How much time in a day do you spend using a computer? What activities are being engaged in when you are on your computer? Do you have a laptop or do you use the UIC Computer Labs?

Moderator Probe for: any obstacles that hinder the use of computers when they are on or off campus. Understanding how integral the computer is to their daily life routines will be important.

Moderator Opening for Question Three: *Writing experiences were found to be more likely experienced with residential students than commuter students. Writing experiences include writing a paper of 20 pages or more, using a dictionary or thesaurus to more clearly understand a word, revising a paper or composition two or more times before completing it, asking other people to read something you wrote to see if they understood what you wrote or asking a faculty or staff member to help you improve your writing.*

3. Explain your writing experiences. Can you tell us how much time you spend engaged in writing in a week? What do you spend most of your time working on when you write?

Moderator Probe for: how much writing students engage, what kind of writing they do and the value they place on writing. Try to determine if they do most writing on their own and try to gauge the input and assistance they get from other on writing projects.

Moderator Opening for Question Four: *Art, music, and theater were found to be more likely experienced with residential students than commuter students. With art, music, and theater, we are interested in knowing whether you went to a concert, the theater or similar event, played an instrument, whether you were involved in a craft project, spoke to someone about music, went to an art exhibit or dance show.*

4. Explain your art, music, and theater experience. Can you tell us how much time you spend engaged in art, music, and/or theater experiences?

Moderator probe for: the role that the arts play in their lives. Are they casual participants or immersed in the activity. If students are not involved in the arts, attempt to learn what obstacles or barriers stop this engagement.

Moderator Opening for Question Five: *The survey results informed us that residential students used campus facilities more than commuter students. Campus facilities are the Student Centers, recreation facilities, cafeterias, lounges, tennis and basketball courts and sport fields.*

5. What campus facilities do you use? How often to you use the facilities? What do you do there? Is there any reason you don't use them more frequently?

Moderator probe for: affinity building, whether their time allowed them to study, workout in the recreation facilities, have lunch or sleep and relax. Are they isolated without friends or classmates and using campus facilities is viewed as social space? Try to understand if the library takes the place of commuter students' use of other buildings and facilities.

Moderator Opening For Question Six: *The survey informed us that residential students spend more time involved in clubs and organizations then commuter students. Being involved in a club or organization involves attending meetings, possibly serving in a leadership role, being involved in student government, working with a faculty advisor for the organization in which you are involved or serving on some type of campus committee.*

6. Have you been involved in an on or off campus club or organization? If so, could you tell us a little bit about the activities in which you engage?

Moderator probe for: When and why they became involved. If they have not been actively involved in a club or organization, try to find out what obstacles, if any, cause them not to be involved.

Appendix K

Focus Group Email Solicitation

From: "Michael Landek" <mmlandek@GMAIL.COM>

To: <FOCUSGROUP@LISTSERV.UIC.EDU>

Subject: \$25.00 To Participate In A Focus Group

Date: Tue, Apr 5, 2011 12:46 pm

A UIC Doctoral Research Project Needs Participants!

We are looking for students in their second year of classes to participate in a Focus Group Research Study. The Focus Group will meet in Student Center East, Room 611 on Thursday April 21 beginning at 2:00pm.

You may be eligible to participate in a small group discussion on how you allocated your time during the school year if you commuted to Campus last year.

Compensation is \$25.00 in cash for your time, approximately 90 minutes.

Pre-registration is required. Space is very limited!

FOR FURTHER DETAILS or TO REGISTER, CONTACT:

Michael Landek at email: mmlandek@gmail.com or by telephone at [312-413-5902](tel:312-413-5902).

Michael Landek is the research project principle investigator and is a doctoral student at UIC.

VITA

NAME: Michael M. Landek

Education: PhD, Policy Studies in Urban Education, University of Illinois at Chicago, Chicago, Illinois, 2013

Med, Educational Administration, University of Illinois at Chicago, Chicago, Illinois, 1994

B.A. Human Justice, Governors State University, University Park, Illinois, 1977

Experience: Associate Vice Chancellor for Student Affairs and Director of Campus Auxiliary Services, University of Illinois at Chicago, 1998- 2004 and 2006 to Present

Interim Vice Chancellor for External Affairs, University of Illinois at Chicago, 2005-2006

Interim Director of Telecommunications, University of Illinois at Chicago, 1997-1999

Director of Parking Services, University of Illinois at Chicago, 1995-1998

Director of Bookstores, DePaul University, Chicago, Illinois, 1983-1985

Assistant Director / Retail Operations, University of Illinois at Chicago, 1980-1983

Publications: “Linking Campus Life Facilities with Student Success” by Barbara Henley, Kim I. Savage and Michael Landek in *The Leadership Exchange* (National Association of Student Personnel Administration, Spring 2004)

Professional
Affiliations &

Memberships: Society for College and University Planning (SCUP)
National Association of College Auxiliary Services (NACAS)