

ACADEMIC AND SOCIAL INTEGRATION OF THE NON-TRADITIONAL  
COLLEGE STUDENT: DOES ENGAGEMENT AFFECT RETENTION?

by

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A dissertation submitted to the faculty of  
The University of North Carolina at Charlotte  
in partial fulfillment of the requirements  
for the degree of Doctor of Education in  
Educational Leadership

Charlotte

2013

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## ABSTRACT

BARBARA GROVES COX. The effect of academic and social integration on non-traditional college student engagement and retention.  
(Under the direction of DR. J. ALLEN QUEEN)

For years, educators from colleges and universities across the country have searched for ways to improve student engagement and increase retention. Changing demographics, decreasing enrollments and greater public demands have created unique challenges for functional and sustainable solutions. The researcher reviewed the recent literature about student retention and academic success, identifying possible solutions school administrators and faculties could utilize in the change process. One approach for colleges has been to reach out to the various types of non-traditional students. Unfortunately, the approach led to gaps in knowledge and experience required for future success. This can be easily examined by researchers analyzing the level of concern non-traditional students have through the limited social and academic experiences available when compared to regular peers who begin college at the same institution from high school. An example was the easier transition of regular students compared to the difficulty that transfers have connecting with the university faculty, students and the institution, often resulting in feelings of experiencing a disconnect from the institution (Kuh , 2009).

The researcher's intention was to examine the extent non-traditional college students interacted with faculty, fellow students and the university emphasis on engagement and retention. Students in the study were transfers from two-year or four-year institutions and were accepted to the university as juniors or seniors to complete the bachelor's degree. The researcher's approach included evaluation of academic and social

integration based upon attitudes and opinions reported by individuals completing the 2010 National Student Survey Engagement (NSSE) at a private, liberal arts university located in the southeastern United States.

Student demographic characteristics were analyzed to determine whether there were relationships of gender, ethnicity, grades and employment with interactions with faculty, students, institutional emphasis and retention. Statistically, none of the t-tests for gender, ethnicity, and employment were significant when predicting engagement. Some of the comparisons revealed small effect sizes. Male students reported more frequent interaction with faculty in discussing ideas or readings outside of class than female students. Grades were positively and significantly correlated with overall relationships with faculty such as asking questions in class and receiving prompt feedback from faculty members. When analyzing the correlation of grades with interaction with students, there was one statistically significant correlation - discussing ideas from readings or classes with other students outside of class.

Student demographic characteristics were studied to determine the relationship with retention. Females reported that the institution supported them academically, and students of other races reported more frequently than White students on institutional emphasis. Employment was associated with decreases in retention while gender, race and grades were positively associated with retention. Males were retained more than females. There were no statistically significant predictors of retention among the student interaction and institutional emphasis variables.

Different aspects of social and academic integration are implemented at the university that is being studied. Even with the decrease of returning students and budget considerations,

funding and resources continued to be allocated to support these activities, though these interactions have not been analyzed quantitatively to determine effectiveness or lack of effectiveness. Perhaps, the most important outcome for this study was insight to the institution about who their students were, what was important to them in the college environment and student expectations of the university. The researcher provided results of the study and insight about the specific non-traditional transfer student population and suggested guidance for researchers as well as university administration. As the cost of a college education increased and accountability for university administration is demanded, retention remains a critical issue in higher education.

## DEDICATION

This dissertation is dedicated to the memory of Annie Sarah Reece, whose strength and faith gave me an appreciation for servant leadership. She lived her life well, taught our family Christian values and acted upon her spiritual beliefs each day of her life by conscientiously living with grace and humbleness. The foundation that Grandma Annie provided me early in life gave me strength and perseverance as I faced life's challenges.

## ACKNOWLEDGEMENTS

The attainment of a doctoral degree was a strangely humbling, but rewarding solo performance, yet to attempt this mission without the support of many people would not be possible. I wish to acknowledge and show gratitude to those who have made my achievement possible.

First, I would like to thank my family. My husband, Jack; son, Jason and wife, Lindsay; sister, Kris; brother, John and especially my mother, Elizabeth, who spent years waiting patiently for me to finish my doctorate degree, all while wondering why I was so distracted from the ordinary business of family life.

I want to extend my gratitude to the faculty members of the Department of Educational Leadership, and especially to my dissertation committee, for guidance and counsel along the way. Dr. Queen, thank you for agreeing to chair my committee. Thank you, Dr. Dika, for assisting me in quantifying my questions, selecting appropriate methods to explore my research and for being a professor who listens and guides her students to success. Dr. Watson, I appreciate your insight about committee work, and your words of support during the process. Dr. Hancock, I appreciate the leadership and diplomacy that you bring to the Department of Educational Leadership. Your kind and caring attitude toward all students was noticed, appreciated and made a difference. Dr. Harver, thank you for agreeing to serve on the committee and for the insight and direction that you provided me about transfer students.

Last, I would like to thank the administration of Gardner-Webb University who encouraged my higher education goals and supported me financially to pursue my doctoral degree.

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## CHAPTER ONE: INTRODUCTION

Social and academic student disengagements are two issues faced by college and university educators influencing retention today. In examining the concept of retention in higher educational literature, a theoretical framework emerged - Tinto's Interactionist Theory (Braxton & Hirschy, 2004). In several revisions of the theory over the past decades, Tinto (1975, 1988, 1993) continued to identify the main predictive factors of success as the levels of integration experienced by students within a social and institutional context of individual academic experiences (Astin, 2005). Braxton, Milem, and Sullivan (2000) explained within theory analysis that the availability of empirical support in an academic community supported graduation rates. Both academic and social integration were further supported and directly affected student levels of commitment by completing graduation requirements (Gilardi & Guglielmetti, 2011). Further support was discovered in Sullivan's (2010) analyses of retention and factors which affected graduation rates. At this point, Sullivan took the entire debate to a different level.

Sullivan (2010) proposed three factors that determined student success upon admission: relevant ability, academic preparation and perceived motivation to complete college level work. Further recommendations were that institutions must provide learning services for student engagement, and academic leaders were warned to respond positively in meeting or improving services to students in the future. Pompper (2006) explored the concept of public relations efforts by higher education institutions advocating to students in attempts to increase positive feelings valued by the college were paramount to individual satisfaction.

The author over emphasized the importance students must feel more than being just a number within the college environment. Equally important was the belief that student's personal and cultural needs should be met and a sense of personal security within the intended integration of college surroundings. These students had a greater probability of graduating than peers not perceiving such needs and securities being met (Pompper, 2006). While Pompper (2006) emphasized student engagement and public relations were integral to the development of student relationships with faculty, other students and the institution, Tinto (1975, 1988, and 1993) confirmed the findings of Pompper's research as the author stressed the impact of engagement on relationships of attrition and retention.

Most transfer students were admitted to the university with either an earned AA or AS degree, while others were "transfers" from two-year institutions with completed course credit, but no degree. The remaining students transferred from another four-year university, usually with majors unrelated to new life goals or needed work related skills. Regardless of prior educational experiences, all transfer students faced adjustment and transitional issues (Lynch & Wolf-Johnson, 2007). Referred to as "transfer shock" by Lynch & Wolf-Johnson (2007), most problems contributed well beyond academic performance. Transfer students faced overwhelming intellectual and psychosocial difficulties generally found in two categories of issues. The first category of issues is academic which includes: faculty interaction, advising, career choice, academic skill deficits, credit transfer, and performance issues. Second, the student concerns are focused on management and finances (Eggleton & Laanan, 2001). While transfer students were faced with adjustment to the new institution, continued academic skill deficits, related negative results, and experiences from the last

institution attended frequently required longer time to graduation (Eggleton & Lanaan, 2001).

Universities officials were faced with increased pressure to improve academic outcomes of students focused more on increasing success and the persistence of students (Tinto, 1993). Transfer students from two-year to four-year institutions (vertically) and from four-year institutions (laterally) were similar, representing the experience of a majority of students, and many had special needs (Li, 2010). These transfer students were considered by college faculty members as an at-risk group, and only received moderate academic support ineffective for current needs which prompted calls for a greater range and depth of services targeted for transfer students (Eggleston & Laanan, 2001; Li, 2010). Addressing these needs and challenges, the researchers focused on a model that explained student engagement, interaction and retention and thus, promoted greater academic satisfaction for non-traditional adult learners.

Pompper (2006) advocated when a bridge was constructed between public relations theory and practice, universities internally analyzed organizational relationships with key publics to strengthen retention. Relationship-centered approaches were presented when technology was promoted as a future communication medium for student interaction (Sullivan, 2010). Sullivan further advocated that university administrators must provide learning services to keep students engaged. Universities should meet reasonable expectations of students and continually strive to revise services and activities when expectations of students are not met (Sullivan, 2010). While Pompper (2006) emphasized the importance of student integration and development of relations, higher education professionals professed

levels of student engagement within and outside college classrooms were important to student success (Astin, 2005).

### Significance of the Study

The researcher proposed the importance of the study as the imbalance of both perceived and real research conducted on types of disengagement of transferred, non-traditional students. When students attended colleges that did not present opportunities for interaction and provided little emphasis on social coherence outside the classroom, there was an effect on retention (Tinto, 1993). This researcher focused on variables leading to student engagement and retention.

In the past, researchers provided insight on disengagement of traditional age college students. The focus of the researcher was to outline the problematic nature of transfer non-traditional student integration into the university culture. Tinto's Interactionist Theory (1993), which explored failure of colleges to integrate students into university culture, was among one of the major research studies examined by the researcher. Student disengagement has been studied by many authors (Astin, 1984; Hu & Kuh, 2002; Knowles, Holton & Swanson, 1998; Pascarella & Terenzini, 1991, 2005). Adding to this body of literature, Kuh (2001) advocated Tinto's theory considered the time and energy students devoted to academic activities, and how students perceived different facets of institutional environment that facilitated student learning. Additionally, Gilardi & Guglielmetti (2011) offered solutions to integrate non-traditional students into college life by utilizing such assimilation tools as attending evening lectures, library services, learning support services and study groups as academic integration opportunities.

Non-traditional student social engagement was an important antecedent of student learning outcomes and institutional quality effectiveness. For instance, peer support, interaction with faculty outside the classroom, and cultural university activities are examples of successful engagement opportunities for students that have been documented effectively through research (Astin, 1984; Donaldson & Graham, 1999; Hu & Kuh, 2002; Kasworm, 2005; Knowles, Holton & Swanson, 1998; Kuh, 2001; Pascarella & Terenzini, 1991, 2005; Tinto, 1993;). Donaldson and Graham (1999), in the Model of College Outcomes for Adults, explained the relationship adult learners developed with faculty members and other students were the most powerful influences on personal academic experiences. As relationships began in the classroom during the pedagogy and learning process, engagement and integration into university culture developed outside the classroom. As reinforcement of Tinto's Theory, Donaldson and Graham (1999), and Knowles, Holton and Swanson (1998), confirmed that social aspects of education established a foundation for building role identification of the non-traditional university student.

#### Purpose of the Study

The purpose of the researcher was to explore indicators that predicted non-traditional transfer student success and demonstrate the effectiveness of Interactionist Theory. Student engagement experiences, which impacted student success, were identified through empirical research and presented to provide emphasis about critical nature of assimilation into college culture. The assessment of social and academic integration in the college environment was based on the actual knowledge gained by students. Discussion regarding absence of student engagement and failure of students to connect with other students, faculty and university social and academic opportunities was presented in the works of several researchers. While

critical to student success, non-traditional college students failed to engage with fellow students, faculty, and environment of the college (Gibson & Slate, 2010). When students failed to integrate into the university culture, there were common indicators of high drop-out rates (Gibson & Slate, 2010). According to Tinto (1993; Pompper, 2006), the importance of social and academic integration was important to student satisfaction and retention.

Engagement opportunities with faculty and other students were explored through analytical methods utilizing survey data of non-traditional students.

Different aspects of social and academic integration were being implemented at the university being studied. Even with decrease of continuing students and budget considerations, funding and resources continued to be allocated to support these activities, though these interactions have not been analyzed quantitatively to determine effectiveness or lack of effectiveness. There was a need to provide insight to the institution about what is important to the non-traditional transfer student population, and determine student expectations of the university. The researcher fulfilled this need by providing insight about the specific transfer student population, and suggested guidance for university administration. University administrators were presented the study results so informed decisions about transfer students could be made, strategic plans developed and the integration of student initiatives that support these findings could be implemented.

#### Academic and Social Engagement

Institutions have undertaken a wide variety of activities designed to improve retention through increasing student engagement, both academically and socially. Interactions with student services and academic professionals revealed that retention practices on campus were informed by theoretical work of Tinto (1993) and Astin (1984), and that staff charged with

developing, implementing, maintaining, and assessing programs were familiar with the theoretical underpinnings of these activities (Braxton & Hirschy, 2004). Student activities should be based on a system of efforts, grounded in theory, that improve the student college experience and increase retention.

Academic and social integrations were selected for this study because of the deep roots in Interactionalist Theory (Astin, 1984). Integration activities were carefully chosen and occurred across time as students became interested in programs through enrollment with university. By determining activities that were integral in theory, the researcher explored Tinto's student departure theory, which revealed that decisions to depart from college occurred over time, and included three psychological stages, which are separation, transition, and incorporation. According to Tinto, when students failed to transition between these three stages of development, students often left the university. The researcher explored the extent of non-traditional transfer student engagement in academic and social integrative activities with faculty, fellow students and institutional emphasis and the impact on retention. Integration activities and opportunities for student engagement are explored in more detail in Chapter 2.

#### Assumptions and Definitions of Key Terms

**Non-traditional student.** A non-traditional student was defined as a transfer student who has one or more of the following characteristics: had transferred to university from a community college or other senior college; had delayed enrollment; attended part-time; worked fulltime; was financially independent; had dependents other than a spouse; or, was a single parent (Gilardi and Guglielmetti, 2011). While much of the past research had focused on the traditional, residential student, the researcher provided insight about non-traditional



students who returned or transferred to the university to complete their junior and senior years of college.

Engagement. Student engagement was the social and academic integration into university. Engagement was measured by the student's voluntary responses to items on the National Survey of Student Engagement (NSSE). The survey was administered nationally on an annual basis and hundreds of institutions participated. Designed to provide information about the student experience at a university, the researcher explored survey items that revealed aspects of social and academic integration (NSSE, 2010). The subject university administered NSSE every other year. Non-traditional students were given opportunity to participate in spring, 2010. Specific measurements of engagement have been presented in detail in Chapter Three.

Retention. Students were considered retained if they returned in fall, 2010 semester. Even though, The United States Department of Education Integrated Postsecondary Data Set (IPEDS, 2006) defined retention as rate at which full-time students seeking a bachelor's degree return fall semester after entry, this definition was used cautiously by the researcher, because at the institution being studied, transfer students entered the degree completion program beginning any semester during academic year.

#### Delimitations and Limitations

The researcher acknowledged the study was delimited by single institution and number of non-traditional students who participated in the NSSE survey in spring, 2010. Only transfer students were selected, from a population of 3,100 students. Between-group homogeneity was described through use of student characteristics such as gender,

race/ethnicity, grades, and employment. These data were readily available to the researcher.

### Summary

Scholars stated in past research (Astin, 1984; Donaldson & Graham, 1999; Hu & Kuh, 2002; Kasworm, 2005; Knowles, Holton & Swanson, 1998; Kuh, 2001; Pascarella & Terenzini, 1991, 2005; Tinto, 1993), student engagement with faculty, fellow students and the institution were integral to retention. The researcher included relevant findings of previous researchers as foundation for the study. Given the fact that non-traditional transfer students have been an important part of student population, university administrators wanted to be informed of the needs of the population. The researcher's findings from the study provided the university with needed engagement and retention information about non-traditional transfer students.

The researcher included a detailed and comparative Review of the Literature in Chapter Two, procedures and methods for conducting the study have been provided in Chapter Three, followed by an analyses of the findings and the conclusions in Chapters Four and Five, respectively.

## CHAPTER TWO: REVIEW OF THE LITERATURE

Student disengagement has been studied for many decades (Astin, 1984; Hu & Kuh, 2002; Pascarella & Terenzini, 1991, 2005). Focused on Interactionist Theory (1975, 1988, 1993), Tinto provided primary conditions which were essential to student success: expectations, support, feedback and involvement. Adding to a growing body of literature, in Kuh's 2001 work, Tinto explored time and energy students devote to academic activities, and how students perceived different facets of institutional environment that facilitated student learning (Gilardi & Guglielmetti, 2011). In support of Tinto's theory, the researcher revealed engagement as an important antecedent of student learning outcomes and institutional quality effectiveness. Attending lectures, utilizing learning support services, interacting with faculty outside the classroom, and engaging in cultural university activities were examples of engagement opportunities for students that have been documented effectively through research (Astin, 1984; Donaldson & Graham, 1999; Hu & Kuh, 2002; Kasworm, 2005; Kuh, 2001; Pascarella & Terenzini, 1991, 2005; Tinto, 2002). Review of literature confirmed that the non-traditional student relationships that develop with faculty members and other students are powerful influences on academic success.

The majority of the literature on student disengagement in higher education focused on traditional students which left a gap in literature related to non-traditional, transfer students and the relationship of engagement to retention in 4-year colleges. Researchers have struggled with establishing relationships between disengagement and

retention while attempting to apply traditional college student findings to non-traditional students. There was little empirical research that addressed non-traditional student population. Degree completion students attended community colleges and then transferred to 4-year universities were very different in backgrounds, experiences and engagement practices than traditional college students which further established the need for this study.

Transfer students constituted the study population. These students mostly entered the university with AA or AS degrees or completed course credit. While students transferred from two-year institutions with completed course credit, other students transferred from another four-year university. As noted by Lynch and Wolf-Johnson (2007), in a study at a southwestern urban research university, all transfer students faced adjustment and transition issues. Changing from one institution to another is challenging, and those students who transferred from a community college to a university face transition issues that impact retention. As a transfer student accumulated to a more homogenous population, personal adjustments may be difficult. Transfer students generally held full or part-time jobs while attending school and had complicated personal demands. As transfer students faced many challenges in their transition to a new institution of higher education, the change could result in decreased academic performance and departure (Eyer & Wolf-Johnson, 2010). Universities were faced with increased pressure to improve academic outcomes of students and to focus more on increasing success and persistence of students (Tinto, 1993). Transfer students from two-year to four-year institutions and from four-year institutions were common and represented the experience of a majority of students (Li, 2010). Eggleston and Laanan (2001) identified transfer students who received moderate academic support to be at risk

which may be inadequate. This institutional shortcoming prompted calls for greater range and depth of services especially for transfer students (Eggleston & Laanan, 2001; Li, 2010). In light of these facts, the researcher utilized Interactionalist Model to propose areas of engagement including the classroom, faculty and delivery system of pedagogy as important factors when discussing retention. By addressing these needs and challenges, the researcher focused the model that explained student engagement, interaction with faculty, students and institutional emphasis for non-traditional adult learners.

The researcher explored predictive factors of transfer student success. The main focus of the researcher was student engagement and retention. Engagement experiences of adult college students were identified through empirical research and presented to provide emphasis to critical nature of assimilation into college culture. Further discussion supported assessment of social and academic integration in college environment, where results were based on survey data provided by students. Discussion regarding student disengagement and failure of students to connect with other students, faculty and university was presented in the works of several writers and outcome of this research was validated through the survey results from the 2010 National Student Engagement Survey (NSSE) data analysis. As critics have suggested, absence of participation was evidence regarding student dissatisfaction, and was reflective of student retention (Gilardi & Guglielmetti, 2011). The researcher established the importance of student connectedness with other students and faculty through documented work of several scholars. Bodies of literature were examined, and the researcher presented the current state of knowledge in student engagement research, which revealed a gap in the literature regarding non-traditional transfer students which further established the need for this study.

The researcher established the purpose of the study by emphasizing importance of engagement and summarizing social and academic integration of non-traditional students into university culture. This important concept of student engagement, linked with Tinto's Interactionalist theory, provided a foundation for empirical research which explored the characteristics of individual students as a measure of retention. The researcher connected engagement and retention with importance of social and academic integration, defined the survey results of NSSE, and provided a summary of literature review. With the groundwork of study established, the following section explored student engagement and assimilation into college culture by examining social and academic integration through Interactionalist Theory (Astin, 1984; Donaldson & Graham, 1999; Gilardi & Guglielmetti, 2011, Hu & Kuh, 2002).

#### Social and Academic Integration

The researcher approached student engagement as an important component of student social and academic outcomes and institutional effectiveness. Interaction with faculty outside class and engaging with other students were examples of engagement opportunities for successful students that were documented effectively through the research (Astin, 1984; Donaldson & Graham, 1999; Hu & Kuh, 2002; Kasworm, 2005; Kuh, 2001; Pascarella & Terenzini, 1991, 2005; Tinto, 2002). Throughout literature, students who developed relationships with faculty members and other students proved to be the most powerful influences on personal academic experiences (Kuh, 2001; Tinto, 1993.). Further, using Tinto's theory, Kuh (2001) advocated that, time and energy students devoted to academic activities and how students perceived different facets of institutional environment that facilitated student learning (Gilardi & Guglielmetti, 2011), was important to student success. Scholarly research provided basis for this study of non-traditional student social and academic integration in college culture.

The researcher emphasized that institutional leadership was seeking answers to better understand the impact of non-traditional student engagement and retention. As the university under study sought to foster student learning and supported students striving to accomplish their educational goals, administrators turned their attention to the National Survey of Student Engagement (NSSE) as an important instrument which captured the impact of institution on students and educational activities. The popularity of NSSE was illustrated by increased number of students and institutions participating in annual survey. When first introduced in 2000, less than 300 colleges and universities included about 60,000 students who participated in NSSE (Kuh, 2001). At its fifth year, 972 colleges and universities representing 844,000 students participated in NSSE annual survey (Kuh, 2009).

The researcher explained social and academic theory and linked these concepts to student retention. Four major themes of literature are public relations efforts, assimilationist perspective, social aspects of college education, and meaningfulness of learning experience for adult learners. Following discussion of major themes, the researcher focused on student characteristics: gender, ethnicity, grades and employment. Review of national survey research (NSSE) guided the researcher. NSSE data from a liberal arts university in southwestern United States was foundation for this research which provided outcome and conclusions. In following sections, the researcher closely examined Tinto's Interactionalist theory as a basis for this study.

## Interactionalist Theory

Within the literature on student disengagement in higher education, a theoretical framework emerged, Vincent Tinto's Interactionalist Theory (Braxton & Hirschy, 2004). Tinto's theory had several revisions (1975, 1988, 1993) that identified main predictive factors of success as the level of integration experienced by students in social and institutional context of academic experience. In analysis of theory, Braxton, Milem, and Sullivan (2000) explained empirical support for student social integration in campus communities that influenced the level of commitment during academic experience and thus, affected the likelihood of successfully completing the journey (Gilardi & Guglielmetti, 2011). Further support of theory was explored by Sullivan (2010) who analyzed retention and identified the factors that affected graduation rates. Sullivan proposed that there were three factors which determined a student's success and advocated that successful students upon admission: demonstrated that they have ability, academic prepared, and motivated to do college level work. Sullivan (2010) advocated that institutions must provide learning services to keep students engaged, need to meet reasonable expectations of students, and continually strive to revise services and activities.

Tinto (1993) advocated four primary conditions essential to engagement: expectations, support, feedback and involvement. First, Tinto promoted that students were more likely to be engaged in settings that had clear expectations for student success. Students wanted to know what to expect and what they needed to do to succeed. The role of the faculty was to hold students to high expectations. Students were not engaged when low expectations were perceived. Second, students were likely to be engaged if provided the pedagogy experience which encouraged academic and social support. Academic support should be carefully administered by university administration and aligned with classroom instruction. Students should be constantly



aware of their progress and receive prompt feedback from faculty members which should provide them adequate academic knowledge. Early academic warning systems and mid-semester grade reporting were examples of information that can be provided to assist students complete the academic journey. Last, students who were actively engaged in university life with faculty, staff, peers, and activities in general, were more likely to be successful which positively affected student retention (Tinto, 1993).

Tinto (2002) explained that first-year university students were often in large classes (150-200 students) where lecture teaching method which was not conducive to student participation, especially for mature students. In consideration of the theory, assumption that non-traditional students recognized value in simply being present at the lecture, students did not find large class size teaching practices helpful in overcoming initial feelings of isolation. The students experienced personal anxiety about being older which represented a risk of withdrawal (Kasworm, 2005). Throughout the literature, scholars acknowledged departure rates of these students; but, further emphasized need to analyze why students decided to depart. When conditions on college campuses affected student engagement, then universities determined source of dissatisfaction and considered institutional improvements that would have encouraged participation. On the other hand, employed students who recognized value of investing in relationships outside class and do so, apart from doing what is formally required (attending lectures), had a higher chance of feeling part of the learning community (Kasworm, 2005). As suggested by Kasworm (2005), relational engagement assisted students with developing identity.

Tinto's Interactionalist Theory was further identified in community college and 2-year college programs. Gibson and Slate (2010) focused on student engagement, age and generational differences two-year institutions. Researchers conducted a survey of 40,000 community college

students and analyzed data related to age, generation and student engagement. The researchers reported statistically significant results. Findings in this study indicated that non-traditional age, first-year students, defined as 25 and above, engaged in more educationally purposeful activities and had higher levels of engagement based on quality of relationships at college than traditional-age first-year students (ages 24 and below), (Gibson & Slate, 2010). The authors indicated an association between generational status and engagement. Non-first-generation, first-year students displayed significantly higher levels of engagement in educationally purposeful activities than first-generation, first-year students. However, when the authors analyzed community colleges in Texas for 2004, 2005 and 2006, determined that first-generation, first-year students had higher levels of engagement associated with quality of relationships with faculty, administrative personnel and other students at the institution. Although the traditionally under-served population in higher education, a majority of community colleges serve large numbers of first-generation students. Non-traditional students whose parents did not attend college were found to be at higher risk for attrition (Lee, Sax, Kim & Hagedorn, 2004).

Embedded in Kasworm's (2005) research was the Interactionist Model which guided determination of these results for community colleges in non-residential context. The author explained that building relationships with faculty members and other students played a crucial role in retention through a stronger sense of integration of non-traditional adult students. Conversely, traditional students revealed a protective factor in the ability to assign meaning to learning experiences. Perceived social integration did not differentiate traditional students who drop out from those who continued. The explanation of results was connected to the way concept of social integration had been defined, focused on the perceptions of social support in learning. As suggested by Kasworm (2003), when referring to full-time versus part-time students for

traditional, non-employed students, the relationship that developed with faculty members was less meaningful than it was for employed students.

Additional support for Interactionalist Theory was found in Gilardi & Gugliemetti's (2011) exploration of first-year, non-traditional students, and the decision to continue their sophomore year of college. Common risk factors which affected non-traditional students in higher education were found in this research. College drop-out rates were cited, and the authors referenced Tinto's Interactionalist Theory (1975, 1988, 1993, 1997). The challenge of integrating non-traditional students into university culture and assimilation was vital to understanding retention (Gilardi & Gugliemetti, 2011). Areas of non-traditional student engagement were specifically addressed which included the relationship between engagement, social integration and persistence was established. From the literature review on engagement, four student characteristics emerged: gender, ethnicity, grades, and employment. These characteristics were analyzed and provided data that contributed to the outcome. In following sections, each student characteristic was discussed.

#### Demographic Characteristics of Non-Traditional Students

Non-traditional students were defined differently over time. Merriam (2007) described an adult as anyone either age twenty-one or over, married, or the head of a household. According to Gilardi and Gugliemetti (2011), an adult student was defined as having one or more of the following characteristics: was a transfer student; has delayed enrollment; attended part-time; worked fulltime; was financially independent; had dependents other than a spouse; or, was a single parent. While both of these definitions were valid, the Gilardi and Gugliemetti (2011) definition was adopted by the researcher.

Because students decided to depart from their college studies for many reasons, it was important to consider individual student characteristics as a part of the study. According to Kuh, Cruce, Shoup, Inzie, and Gonyea (2008), research regarding retention and student success should involve more than student interactions with the university. Kuh et al. (2008) contended that student perception of learning environment, institutional characteristics, student demographics, pre-college experiences, and social and academic integration between peers and faculty were important to student success. With consideration of Kuh et al. research, the researcher identified four important student demographic characteristics which provided context for discussion of persistence and retention. Independent variables: gender, ethnicity, grades and employment, provided insight about expectations. More importantly, discussion about these variables addressed the research questions regarding disengagement, social and academic integration and the relationship to retention. The researcher explored Interactionalist Theory, established the link to non-traditional students, considered characteristics of non-traditional students in learning context, and determined the impact on retention. In establishing this argument, gender, ethnicity, grades and employment of adult students were discussed.

### Gender

Women were becoming increasingly successful in completing college. As revealed by The National Center for Educational Statistics (NCES) in 2009, bachelor's degree completion for males has not increased since the 1970s (approximately 61%). Similarly, females were graduating at higher rates, increasing from 61% in the 1970s compared to about 71% in 1990s. The female college population now outnumbers male population (United States Census Bureau, 2006). Interestingly, women under age 45 were greater than men in the same age group who completed their bachelor's degrees (Justis, 2008).

Pascarella and Terenzini (2005) studied relationships between gender, retention and graduation rates at women's colleges. The authors concluded female students experienced a different type of educational environment at co-educational universities than those students who decided to attend an all-female institution. At women's colleges, female students were more successful than those at co-ed schools. These findings indicated the role of gender was intricately related to enrollment, engagement and retention which further substantiated the need to analyze non-traditional students which was focus of this study. While gender was an important student demographic characteristic, ethnicity of non-traditional learners was explored as retention impact variable.

#### Ethnicity

A culturally based education should establish a relationship between learning and ones' culture (Wlodkowski & Ginsberg, 1995). When considering Interactionalist theory, the researcher acknowledged multicultural environment and world view that was essential for adult students today. The 2003 proceedings of Adult Education Research Conference (Flowers, Lee, Jalipa, Lopez, Schelstrate & Sheared, 2003), contain topics related to Interactionalist Theory. Baumgartner (2003) suggested Interactionalist Theory incorporated aspects of adult learning theory and provided further scholarly support. Baumgartner considered population diversity and multicultural aspects of adult education, and further, emphasized inclusion of diversity and cultural issues into ways of knowing, moving beyond family to a focus on social, economic, political system of learner's world which emphasized indigenous education.

Tisdell (1993, 1995, 1998, 2000, 2003, 2005) advocated that feminism and multiculturalism established basis for educational researchers and others scholars. St. Claire and Sandlin (2004) and Roberson (2002), provided insight about educators' perception of adult

learners' gender and ethnicity. These powerful writings were considered when decisions regarding student engagement and retention decisions were contemplated by university administration (Alfred, 2002; Hansman and Sissel, 2001; St. Clair & Sandlin, 2004).

Pascarella and Terenzini (2005) proposed African-American students were more successful at Historically Black Colleges and Universities (HBCUs). The authors produced research that concluded that minority students at predominantly White institutions felt disconnected and isolated. Focused on the presence of peer groups and culture evolved from student social and academic integration improved persistence and retention. The researchers connected gender and attempted to control for differences in race and ethnicity in full disclosure of the research (Pascarella and Terenzini, 2005). Student characteristics were a consideration of the study. Considering the importance of academic achievement of non-traditional students, grades were the next aspect of the research.

#### Grades

Pascarella and Terenzini (2005) contended that grades may be the single, most important indicator of persistence of non-traditional students. Grades were a dependent variable, and scholars controlled for other independent variables, that had an effect on student success. The outcome of the study indicated academic performance was a convincing indicator of retention. Pascarella and Terenzini concluded that grades were a very good predictor of retention and further, grades tended to suggest that aptitude, academic ability and intellectual competence as indicators of student success. This research implied non-traditional student study habits and motivation were integral to success and graduation. Therefore, the researcher included grades when conducting the study. Student employment was sometimes necessary to afford college

tuition and other expenses. The relationship between employment and retention was established in the literature and an important student demographic characteristic of the study.

### Employment

Kasworm (2005) suggested that relational engagement assisted non-traditional students develop student identity. Employed students were able to recognize value of investing in relationships outside class and reflected a higher chance of feeling part of the learning community. Furr and Elling (2000) contended there were positive aspects of work for students who worked during their college years when employment was in a convenient location, possibly student worker assignments at the selected college. Further positive aspects were content of work, and most importantly, whether work was related to the future career path (Furr and Elling, 2000).

Pascarella and Terenzini (2005) reported number of hours worked had a negative impact on virtually all institutional indicators for retention. Pike, Kuh & Massa-McKinley (2008) narrated a statistically significant, negative relationship between students who work more than 20 hours per week and grades. Astin (2005) confirmed a negative relationship in a study that controlled for student characteristics and social and academic integration. The study revealed that working off-campus negatively associated with degree completion; whereas, working 20 hours or less per week on campus related positive student outcomes. The research was further confirmed by Furr and Elling (2000), who reported a significant relationship between hours worked and student participation in educationally purposeful activities.

The employment research indicated, when a student worked off-campus more than 20 hours per week, there was negative impact to retention and graduation (Dundes & Marx, 2007). As the researcher considered student employment, students who work off-campus and on-

campus employment were determined. On-campus employment was not available to non-traditional students. While employment was established as an important student characteristic in the literature, scholars have linked employment and financial need of students in research (Dundes & Marx, 2007). Further related, adult students with high levels of financial need worked more hours to pay for education (Pike, Kuh & Massa-McKinley, 2008). There was a trend over the past several decades of rising college tuition costs (Baum and Ma, 2009). According to Ziegler (2008), the cost of attending college has risen faster than the rate of inflation. Decreased availability of state and federal funding for education and the rising cost of obtaining a college degree caused students to borrow more, stay in school longer and work more during college years than students who graduated before them. Because of lack of financial aid associated with economic downturn, unemployment and rising college costs, there was pressure for students to work more to pay for college.

While Tinto's early research did not consider impact of economic factors on retention, the amount of funding students borrowed to finance education had increased substantially over past twenty years. With decline in the economy, financial need affected retention which was reflected in more recent writings (Pascarella and Terenzini, 2005). Other scholars have noted the importance of considering economics as a factor of retention research (St. John, Cabrera, Nora, and Asker, 2000). The following discussion provided the foundation for student engagement research.

### Research on Student Engagement

Scholarly research provided framework for discussion of Tinto's Interactional Theory in the previous section. Four major themes of engagement research emerged. In following sections,



public relations efforts, assimilationist perspective, social aspects of college education, and meaningfulness of learning experience are presented and linked to Interactionalist Theory.

#### Public Relations Efforts

Interactionalist theory was supported by Pompper (2006) who explored public relations efforts of higher education institutions. Pompper advocated feeling valued by college was paramount to student satisfaction and was integral to non-traditional student success. Students needed to be more than just a number within college environment. Pompper also stressed adult student perception of needs being met must be realized, which led to feeling secure in college surroundings, and students were more likely to be retained. While Pompper (2006) emphasized that student engagement was important, public relations were integral to development of relationships among faculty, staff, administration, students and community. Tinto's Interactionalist Theory (1975, 1988, and 1993) confirmed findings of Pompper's work where the author related impact of engagement with relationship of attrition and retention.

#### Assimilationist Perspective

Additional evidence of Tinto's influence was found when, according to Hurtado (1997) and Zepke & Leach (2005), concepts of integration provided elements of an assimilationist perspective. Assumptions of assimilationist model promoted ideas of adaption to university culture and were based on non-traditional students identifying with dominant norms and withdrawal from outside influences. This model focused on students distancing themselves from any affiliation outside university environment; however, the study did not take into consideration importance of student diversity. The model did not consider the possibility that students could have a dual association within and outside the university culture where making choices of one environment over another would not be required.

Since non-traditional students were usually employed and had families, the students were stereotyped by the pluralism of affiliations outside university environment. As Donaldson & Graham (1999) described the students as having multiple commitments and were multicultural. Therefore, non-traditional students faced many challenges traditional students did not confront. In Interactionist Model, non-traditional students developed social identity within their new educational experience while balancing external commitments with academic challenges. The students established relationships within university environment that provided engagement opportunities for student success. Further evidence was provided by Astin (1984) and Knowles, Holton & Swanson (1998) who confirmed that student engagement was paramount to academic success which measured devotion to academic activities that supported the learning progress.

Additionally, external commitments in integration process of non-traditional students, adoption of new principles and values of the university environment were discussed (Donaldson, Graham, Kasworm & Dirkx, 1999). The authors' research questions addressed two dimensions – student-faculty interaction on a behavioral level and second, the psychological level which was defined by quality of university experience. Equally important, Donaldson et al. (1999) emphasized the meaningfulness of the learning experience. The researchers focused on specific differences between traditional and non-traditional students in terms of interaction styles and perceived quality of experience. Their findings revealed four possible interaction styles; however, they excluded the strategy of complete retreat (totally inactive) and strategies associated with withdrawal. There were two styles of interaction which emerged as the focus of research. The first style was heavily centered on investing limited time available in formally appropriate behavior (attended lectures). Secondly, the style invested time in developing non-classroom relationships and making use of all opportunities available in the university

environment. The result of data analysis indicated that the second style was associated with higher probability of students continuing studies. However, in the review of traditional students, there were very different results which revealed that most common and protective strategy was classroom participation, which was identified as major differences between non-traditional and traditional students.

### Social Aspects of College Education

The research of Donaldson et al. (1999) confirmed non-traditional students in a non-residential university environment put more energy into informal contact outside formal teaching situations than traditional students. Consequently, these findings were associated with retention and represented variables with predictive qualities. On the other hand, students considered at risk remained on perimeter of college culture, failed to establish social relationships, and were disengaged with faculty, students or the university community in general. Results of this study presented concern about research of adult education (Donaldson & Graham, 1999; Kasworm, 2005; Knowles, Holton & Swanson, 1998). Donaldson & Graham (1999), in their Model of College Outcomes for Adults, explained the relationship adult learners developed with faculty members and other students became powerful influences on academic experiences. These relationships developed outside class, but still revolved around the pedagogy and learning process. As reinforcement of Tinto's Theory, Donaldson & Graham (1999) confirmed that social aspects of education were foundation for building identification in the role of university student.

Several authors agreed that social and academic integration involved the building of relationships with other students and making friends in college clubs or organizations (Cabrera, Castaneda, Nora, & Hengstler, 1992); while, others contended that quality of peer relationships, non-classroom faculty interactions, and informal social contacts (Pascarella, Duby, & Iverson,

1982) were important. Pike and Smart (2006) focused on consistency of student relationships and importance of college administration to enhance and fund purposeful engagement opportunities for students. Results of this study was confirmed by Kuh (2001) who suggested that both financial and moral support for student centered policies and programs were necessary for establishing a college culture that promoted and sustained effective educational programs and retention. In Interactionalist model, Tinto (1988, 1993) advocated students reached an adequate degree of integration which required an emotional separation from values, principles, and habits of previous reference groups, and to adhere to new principles, values, and habits of university environment. Tinto (1993) described external commitments as a threat to integration within college environments which affected engagement within the university culture and consequently, predicted retention.

Adult educators must move beyond family and focus on social, economic, and political systems of adult learners. These imperatives of culture resulted in a variety of ways of knowing and learning, such as body knowledge and situational learning, based on culture of individual learners. Adults developed and constructed unique ways of knowing that were different from dominant culture and embraced the social, economic and political world of the learner (Goldberger, Tarule, Clinchy & Belenk, 1996). Students in minority within a dominant white culture received knowledge through various ways. Goldberger, et al. (1996) stated, “Thus, knowing can be passive, unquestioned, chosen, or embraced; it can be infantilizing, soothing, honored, or considered dangerous...affects the force and personal meaningfulness of received knowing.” Educators must incorporate social aspects of cultural imperatives and diversity in ways of knowing in teaching practices to adequately embrace notions of providing adult education in the social, economic and political environment.

## Meaningfulness of the Learning Experience

Context of adult education was defined in terms of individual character, total experiences, and activities engaged in by members of various social groups. More than just a geographic space, it encompassed biographic, interpersonal, political, historical, and sociocultural settings in which individuals are socialized, shaped, and situated in interaction in society. For adult learners, contextual impact comprised diverse and intersecting influences inherent of one's race, class, gender, nationality, communities, and larger political and sociocultural milieu. Context was characterized as dynamic, changing, and polyrhythmic (Alfred, 2002; Sheared, 1994).

In consideration of findings associated with perceived quality of academic experience, Gilardi & Gugliemetti (2011) analyzed what distinguished non-traditional students who had dropped out from those who continued and then, replicated the same study on traditional students. Their findings revealed that, fundamental variables which emerged during study were learning support services where higher levels of social integration were attained when using these services. For non-traditional students, the meaningfulness of learning experience was much higher.

An additional study (Kasworm, 2003) described type of learning context desired by non-traditional students. Differentiating value of meaningfulness indicated adult students considered university enrollment as part of a more defined, conscious personal and professional development project, possibly with capstone emphasis, which aided in understanding the connection between subject-matter taught and practical usefulness. Moreover, adult students, because of personal and professional life experiences, connected theory and practice, autonomously identified professional implications and applications of theoretical knowledge in professional context.

The role of Interactionist Theory was defined by individuals within context of living, and related to culture. As noted by Jarvis (1992) multiculturalism was apparent in today's society and affected adult learning by engagement and social interactions. As Jarvis (1992) observed, "Learning... is about the continuing process of making sense of everyday experience." Jarvis also drew a connection between motivation and context, "the reason for participation does not always lie within the learner but in the dynamic tension that exists between the learner and the socio-cultural world" (Jarvis, 1992). According to Jarvis, potential for learning occurred at the intersection of learners and the world. As adults cared for everyday responsibilities, completed necessary care duties of aging parents, children and other personal responsibilities, learning was influenced by environment (Resnick, 1987). When adults compartmentalized daily, determined their priorities and disciplined themselves with organized and completed tasks, learning outcomes were realized as a side effect to living life. Student engagement and academic integration issues involved in adult learning were often intimately tied to life situations and status as an adult (Resnick, 1987).

With non-traditional students, importance of context was more than just being interactive with life. In a multicultural society, there were structural dimensions within social context, often unseen and unacknowledged, that affected adult student learning. Because our society has become increasingly diverse, there are economic and social implications that were not considered before which affected context of adult learning environment. In education, there are no longer questions concerning whether we should consider gender, race, culture, and politics. These topics were integrated in educational missions and teaching practices. The issue for college administrators is, "How do educators provide an effective educational mission that exposes all students to multicultural world that we live in today?" Educators mostly agree that

meaningfulness of learning experience for adult students included exposure to other cultures through study abroad programs, interdisciplinary and multidisciplinary studies, which prepared non-traditional students skills to function and be successful in a global economy (Bateson, 1994). As Bateson stated, “Each person was calibrated by experience, almost like a measuring instrument for difference, so discomfort was informative, and offered a starting point for new understanding.....it was contrast that makes learning possible.” In linking Interactionist Theory and non-traditional student, considering the National Study of Student Engagement (NSSE), was an important aspect of the study.

#### National Survey of Student Engagement (NSSE)

The National Student Engagement Survey (NSSE) was the student survey administered annually in four-year colleges and universities. This national student survey provided educational institutions with standardized data formats that were used to determine assessments and improve the university experience for all involved. Recent work about student engagement was conducted predominantly by Indiana University Center for Postsecondary Research, who published the “National Survey of Student Engagement,” referred to as the NSSE report. This research was based on responses from 416,000 students attending 673 U.S. baccalaureate degree-granting colleges and universities who completed NSSE in spring, 2011 (NSSE, 2011). Researchers investigated issues regarding support of student engagement across four-year college campuses. Information was collected about student engagement within a variety of campus programs and departments were considered interaction important to student success (NSSE, 2011). In the NSSE report, researchers determined that institutions could utilize results to improve the quality of student engagement in many areas across college campuses. The findings suggested that

college administration can use this information to identify impact of specific experiences on desirable learning goals and to guide programming.

While much past research focused on different aspects of student and college characteristics, few focused on social and academic integration and importance of student engagement of non-traditional college students. The researcher explored a gap in the literature and provided explanations regarding social and academic engagement and retention. Analysis of the independent variables selected from the National Survey of Student Engagement (NSSE) for this study provided insight about these important student success measures.

Since 2000, NSSE data was collected from colleges and universities all over the United States. The purpose of annual survey was to assist institutions with institutional effectiveness and provide information about extent of student involvement in academic and social college activities, and further determined, which engagements were more meaningful to students and university. Student engagement was an important construct for institutional assessment and planning (Kuh, 2009). Student engagement was defined by institutions as being more than just spending time on certain activities. Academic and social integration into college life was a predictor of student success (Kuh, 2009). University administration was very interested in attracting students to attend programs; but, more importantly, colleges wanted to retain the students through graduation. When administrators understood the effort and funding allocated to retention was directly related to student success, then investment was both effectively and efficiently related to lifelong learning (Kuh, 2009). NSSE was administered to more than one and a half million students over the past decade. When the survey was administered, college students provided information about engagement opportunities in the college environment. Students reported on the level of engagement with good practices such as time spent collaborating with



faculty and interacting with students of different racial and ethnic backgrounds (Pascarella, Seifert, & Blaich, 2010). Engagements levels were determined to be proxies for student learning outcomes (Kuh, 2009).

In 1987, Chickering and Gamson wrote about student development theory and practice and developed, “Seven Principles for Good Practice in Undergraduate Education”. These seven principles, written in mid-1980s, identified interaction between faculty and students, active learning, time on task and expectations of a research-based and common sense approach to developing strategies which improve teaching and learning (Chickering and Gamson, 1987). The NSSE benchmarks have been modeled by student development theory and supported the notions of Chickering and Gamson. The NSSE research indicated institutional interventions as a form of student engagement and how students interacted within college environment (Evans, Forney, and Guido-DeBrito, 1998). Further supported by the research of Pascarella and Terenzini (2005), repeated social and academic interactions in college life, allowed students to establish higher self-esteem, and they gained confidence in completing their degree. Kuh et al. (2008) concluded that when students participated in educationally purposeful activities were positively related to student learning outcomes, such as retention and graduation. Thus, the NSSE benchmarks of students’ engagement provided the institution information regarding programs for effective college experiences for students, and also, were educationally purposeful.

As more attention was paid to evaluating the NSSE benchmarks, LaNasa (2009), through a confirmatory factor analysis, explored the use of the benchmarks underlying structure and proposed as an alternative, eight dimensions of student engagement that fit this set of data slightly better and in a more effective way. LaNasa (2009) made the argument that engagement

and interactions of agents of socialization provide a robust mechanism for examining the methods those universities interact to affect student outcomes. By utilizing a set of shared methodological assumptions, LaNasa, Cabrera, Trangsrud and Alleman (2007), developed a scale or score for comparative purposes. Pike (2010) agreed and provided additional evidence and support by using scalelets promoting dependable metrics for assessing student engagement at a university. Table 1 outlines the work of the major authors cited in this literature review.

Table 1: Scholars and major themes in the research

Date	Scholar	Major Themes
1984; 2005	Astin	Student involvement; development
2004	Braxton & Hirschy	Social integration; student departure
2000	Braxton	Influence on active learning on college departure
1992	Cabrera	Convergence of theories college persistence
1999	Donaldson & Graham	College outcomes for adults; participation
2001	Eggleston & Laanan	Transfer students
2010	Eyer & Wolf-Johnson	Transfer students
2011	Gilardi & Gugliemetti	Engagement styles; impact on attrition
2002	Hu & Kuh	Influence of student and institutional characteristics; NSSE
2003;2005	Kasworm	Adult meaning making; student identity
2009	LaNasa	Confirmatory factor analysis; engagement
2007	LaNasa, Cabrera, Trangsrud & Alleman	Engagement as a proxy for learning
2009	Li	Transfer students
2010	Pascarella & Terenzini	How college affects students
1982;1991;		
2005; 2008;	Pike, Kuh, McCormick	Educational expenditures; engagement; scalelets
2010		
2006	Pompper	Relationship-centered approach to retention
2010	Powers	Applied Schlossberg's Transition Theory to male dropouts
2006	Scott Sullivan	Determinants of graduation rates Hidden costs of four-year graduation rates
1975; 1988;	Tinto	Interactionist Theory; student departure;
1993; 1997;		student attrition; classrooms as communities;
2002		retention
1993; 1995;	Tisdell	Feminism; spirituality and culture; adult
1998; 2000;		learning environments
2003; 2005		
1995	Wlodkowsky & Ginsberg	Diversity and motivation; culturally responsible teaching
2005	Zepke & Leach	Integration and adaptation; student retention; achievement

### Summary

College and university administrators wanted to know reasons for student attrition and retention, impact of student engagement, and how to improve delivery systems for non-

traditional students. In past studies, researchers attempted to apply traditional, residential college findings to non-traditional environments. The researcher provided discussion about adult students' complicated lifestyles and emphasized the differences of traditional college students. Balancing work, family obligations, and school was more challenging for those non-traditional students who decided to return to college later in life.

The researcher outlined the importance of non-traditional student integration into university culture and included social and cultural indicators. Educators recognized goals of student success can be realized by knowing backgrounds and experience as individual learners and members of social and culturally constructed categories by gender, ethnicity, grades, and employment. These variables were an important aspect of Interactionalist Theory, and further established importance of this study.

Recent research about the NSSE survey instrument by LaNasa (2009); LaNasa et al. (2007) and Pike (2006) explored the use of the established benchmarks of former research and evaluated the underlying structure. The researcher explored the use of a confirmatory factor analysis (LaNasa, 2009) and, scalelets (Pike, Kuh & McCormick, 2010) and examined methods to evaluate the NSSE as a model of analyzing student engagement with faculty, fellow students and institutional emphasis.

In summary, adult learners were complex individuals with a global perspective and multicultural learning experiences. The researcher examined different methods of NSSE analysis, transfer student engagement factors that predicted non-traditional student retention, presented adult student characteristics, and linked Tinto's Interactionalist Theory to these characteristics. Within the study, student disengagement, which scholars have determined to impact student success, were identified through empirical research and presented to provide

emphasis about the critical nature of assimilation into college culture. Evidence from the scholarly literature regarding the absence of student engagement and connectedness with faculty, fellow students and university emphasis substantiated the need for this study.

## CHAPTER THREE: METHOD

The purpose of the researcher was to measure the rate of retention and engagement of non-traditional students demonstrated by using selected factors within the Interactionist Theory framework. Components embedded within the questions of the NSSE provided a range of general to specific identifiers that could be used as predictors estimating, or even predicting non-traditional transfer student retention. Student engagement influences retention (Astin, 2005). Variables identified in the study emphasized the critical factors and specific behaviors observable to the actions assimilated into the college culture by non-traditional transfer students and measurements on tests that researchers can use to physically assess variables to behaviors and behaviors into observable factors, actions or questions that will equal or represent essential parts for directing assessing or predicting expected behaviors at large or in part of a theory or sub-theory.

Assessment of social and academic integration in college environment was based on student survey responses. The focus of the research was the extent non-traditional transfer students engaged in academic and social integrative activities with faculty, fellow students and institutional emphasis and the relationship with retention.

Student engagement was measured by student's voluntary responses to items on the National Survey of Student Engagement (NSSE). The annual survey was administered nationally to 393,630 students and 595 educational institutions. The value of NSSE in predicting student outcomes such as learning, critical thinking and traditional measures of academic achievement has been established in a variety of settings (Kuh, 2001; LaNasa,

2009; LaNasa et. al. 2007; Pascarella and Terenzini, 2005; Pike, Kuh & McCormick, 2010). Designed to provide information about student experience at particular colleges, both academically and socially (National Survey of Student Engagement, 2010), the institution under study administered NSSE every other year. Enrolled non-traditional students at the institution were provided the opportunity to participate during spring semester, 2010.

Specifically, the researcher investigated the extent to which institutional social and academic integration opportunities affected levels of student engagement and retention during the junior and senior year of college. The researcher also studied relationships between engagement and retention, as proposed by Tinto's Interactionist Theory of student engagement. The researcher outlined the research methodology used, including research hypotheses, sample, data collection procedures, description of independent and dependent variables and statistical analysis approach.

### Context and Research Questions

Student disengagement and failure of students to connect with faculty, fellow students, and institution emphasis through social and academic opportunities affected student retention (Astin, 2005; Braxton, 2000). Using data from the NSSE survey administered at one institution, the writer explored the importance of non-traditional student engagement experiences within the college culture. The research was guided by three research questions, which are shown in Table 2 along with the research hypotheses and data analysis approaches for each one.

Table 2: Research questions, hypotheses, and planned analysis

Category	Research Question	Null Hypotheses	Planned Analysis
Engagement: Predictive value of student demographic characteristics	To what extent are student demographic characteristics (gender, race, grades and hours worked) related to engagement (interaction with faculty, interaction with students and institutional emphasis)?	There is no statistically significant relationship between engagement and student demographic characteristics.	t-tests Correlation
Retention: Predictive Value of Student demographic characteristics	To what extent are student demographic characteristics (gender, race, grades and hours worked) predictors of retention?	There is no statistically significant relationship between demographic characteristics and student retention.	Logistic Regression
Retention: Predictive value of engagement factors.	To what extent is engagement (interaction with faculty, interaction with students and institutional emphasis) related with retention?	There is no statistically significant relationship between engagement factors and retention.	Logistic Regression

The researcher of the current study was steered by the aim to contribute to empirical literature on non-traditional student engagement information. The intent of the researcher was to investigate hypotheses related to the effects of selected institutional integration opportunities on student engagement and retention.

#### Participants

The researcher conducted the study at a small liberal arts university in southeastern United States. From a pool of approximately 3,100 undergraduate students, only those who were degree completion transfer students, considered juniors and seniors, and had participated in the 2010 NSSE study were included. Within the university examined in this study, the non-traditional degree completion program for transfer students had fifteen off-campus locations with almost one thousand enrolled students,



taking classes in traditional classrooms or online. Three campuses located in major cities in the state (Winston-Salem, Charlotte and Statesville, North Carolina) maintained enrollment over sixty percent of the degree completion student population, with other smaller campuses from the coast to the mountains comprising the remaining forty percent of non-traditional students. Over seventy percent of enrollment hours for transfer students were in online classes (GWU Institutional Effectiveness, 2013).

Most retention studies were conducted at single institutions (Crissman-Ishler & Upcraft, 2005) though Tinto's research approach was not a closed system's theory. Tinto's work and supporting work of other scholars has deemed single institution samples as an appropriate research method for retention research (Astin, 2005; Braxton, 2000). For purposes of the study, the testing of these theories was limited to single institution.

The junior to senior retention rate of the 2010 spring class was about 86% (GWU Institutional Effectiveness, 2010). The 2010 group consisted of about 972 non-traditional transfer students. The study was conducted under the supervision of the Office of Institutional Effectiveness, which provided access to appropriate data and ensured student confidentiality.

The 2010 NSSE responses included a sample of 317, of those 972 students, who completed the NSSE. Female students comprised about 71% of the sample ( $n=225$ ) population. White students comprised about 73.5% of the sample ( $n=220$ ), while students with other racial background made up 26.5% ( $n=79$ ), with African Americans making up 18% of the participants. The remaining 8.5% of the sample included American Indian, Asian, Asian American or Pacific Islander, Mexican or Mexican American, Puerto Rican, Hispanic or Latino, and Multi-racial students. Compared to national figures, the

proportion of White students was similar near 70% while African-American students have declined as a percentage of the national population as Hispanic students have increasingly enrolled in college (NCES, 2009)

In the study, the NSSE respondents self-reported a mean grade point average of 3.27 ( $SD=1.75$ ,  $n=317$ ). The grades were evaluated on a scale, with 1=C- or lower and 8=A. Although the respondent grade point averages values were not normally distributed, the assumption of normal distribution may be violated without negatively affecting the validity of the test if the sample is large (Gravetter & Wallnau, 2007). Employment was evaluated by analyzing responses of students who reported work status.

### Procedures

The National Survey of Student Engagement (2010) was administered at university under study in April, 2010 and the data was made available to researcher to conduct the study. Specific variables were identified by researcher to address the research questions. The survey was administered online, and all the data were self-reported by the student respondents.

### Dependent Variable

The dependent variable, retention, was the outcome with which the institution was most concerned. Retention was a dichotomous variable and a measure determined by the Office of Institutional Effectiveness based on whether an individual student was enrolled during their junior year and continued enrollment in the fall semester, 2010. Retention rates were compared against two independent variable groups, student demographic characteristics and engagement factors.

## Independent Variables

Student demographic characteristics comprised the first group of independent variables. The independent variables of gender, ethnicity, grades, and employment provided insight about student characteristics. Equally important, discussion about these variables addressed research questions regarding disengagement, social and academic integration and relationship to retention.

Gender, ethnicity, grades, and employment hours were examined based on previous research indicating these were associated with retention (Chen et. al, 2009). Gender is a dichotomous variable; while hours worked per week responses were coded from 1= zero hours, 2=1-5 hours, 3=6-10 hours, 4=11-15 hours, 5=16-20 hours, 6=21-25 hours, 7-26-30 hours and 8=more than 30 hours of work per week. Grades were continuous scale variables and were treated differently, with the grade scale values coded from an A=8 and C- or lower=1.

Employment was an important consideration for study because scholars have determined when a student works more than 20 hours per week; there was an impact on retention (Astin, 2005; Chen, Gonyea, Sarraf, Brckalorenz, Korkmaz, Lambert, Shoup & Williams, 2009; Pike et al., 2008). Considering the recommendation of Chen et al. (2009), the researcher collapsed the student responses to the number of hours worked into two groups: worked less than 20 hours (included those who do not work) and worked more than 20 hours per week to facilitate interpretation of the analyses.

## Student Engagement and NSSE

Consideration for external validity and generalizability were important to NSSE validation, where there were variables that were statistically significant and positively

related with positive student outcomes such as grades and retention (Gordon, Ludlum and Hoey, 2008). NSSE has been repeatedly analyzed for psychometric properties. According to Kuh (2009), the national sample internal validity, consistency and reliability have been determined to be good. Cronbach's Alpha testing for internal consistency reliability in the national sample benchmark components (academic challenge, etc.) revealed a range from 0.628-0.789 (NSSE, 2010). While the overall Cronbach's alpha level (.71) of NSSE variables in the current study was less than ideal, it certainly was within McMillan and Schumacher's (2001) oft-cited acceptable range of .70-.90 which were scores for similar Carnegie classification schools. In sum, the researcher determined that the instrument and selected variables displayed sufficient reliability, evidence, and were suitable for the study.

While recent research has begun to decompose the five benchmarks in many ways, LaNasa, (2009) addressed the NSSE instrument construct validity by a confirmatory factor analysis which proposed alternative eight dimensions of student engagement that fit this set of data slightly better and in a more robust way. Pike et al. (2010) approach to NSSE evaluation, by using factor analysis with eight dimensions and the use of scalelets, was particularly relevant for the study because the approach was critical in rigorously reviewing validity of scores that served as a potential proxy for institutional quality and accountability.

An exploratory factor analysis (EFA) was conducted to explore items selected to measure engagement and to achieve the most parsimonious set of engagement variables. Exploratory factor analysis was based on correlation, thus while the items have different numbers of scale points, have the same scale format (Likert-type), and EFA was conducted. In the principal component analysis, 83.3% of the variance between the 28

variables was explained by eight dimensions. From a statistical point of view, the principal component test identified factors that accounted for smaller and smaller amounts of variance from a hypothetical regression line drawn on a scree plot of variable scores. This eigenvalue variance can be visually represented on a scree plot. The line indicated where the eigenvalues (Y axis) leveled off by a number of factors (X axis). The scree plot revealed a downward, sharp decrease from the first factor to the second, and then flattening of the line outward for the remaining factors, indicating the factors with a low reliability level.

The results of the EFA are presented in Table 3.

Table 3: Variables used in exploratory factor analysis

Dimensions	Measure-Descriptions	Loading	Variance Explained	Error	Reliability of scale
Learning strategies	synthesz-synthesized content	0.70	0.59	0.41	0.846
	analyze-analyzed content	0.62	0.57	0.43	
	evaluate-judging content	0.40	0.39	0.61	
	applying-apply content	0.51	0.48	0.52	
Academic integration	facgrade-discussed grades	0.32	0.30	0.70	0.758
	clquest-asked questions	0.22	0.26	0.74	
	facideas-discussed ideas	0.60	0.48	0.52	
	facfeed- prompt feedback	0.27	0.29	0.71	
	facplans-career plans	0.53	0.51	0.49	
	occideas-outside class	0.25	0.27	0.73	
Institutional emphasis	envnacac-non-academic	0.62	0.58	0.42	0.810
	envsocial-socially	0.83	0.62	0.38	
	envdivrs-diversity	0.53	0.46	0.54	
	envsuprt-academic	0.54	0.51	0.49	
Co-Curricular activity	facother-not related to class	0.54	0.49	0.51	0.582 <sup>1</sup>
	commpro-community	0.39	0.36	0.64	
Diverse interactions	divrstud-different race	0.54	0.44	0.56	0.888
	diffstu2-differ background	0.63	0.50	0.50	
Effort	acadpr01-preparing for class	0.50	0.33	0.67	0.527 <sup>1</sup>
	envschol-time studying	0.46	0.26	0.74	
	occgrp-classmates outside	0.31	0.27	0.73	
	workhard-harder than thought	0.30	0.31	0.69	
Overall relationship	envfac-faculty	0.71	0.53	0.47	0.701
	envadm-staff	0.55	0.49	0.51	
	envstu-students	0.37	0.38	0.62	
Workload	writemid-papers 5-19 pages	0.25	0.25	0.75	0.586 <sup>1</sup>
	writesml-under 5 pages	0.37	0.25	0.75	
	readasgn- assigned reading	0.30	0.24	0.76	

<sup>1</sup>Low reliability score

Based on the scree plot and on reliability estimates for each of the eight dimensions identified, the researcher then eliminated three groups of survey items in the categories, Co-Curricular Activities (two items), Effort (four items), and Workload (three items) from further analysis. Examination of the survey items for extra-curricular activities revealed that the activities were not available to the students at the institution under study, providing further justification for elimination of these items. Learning strategies (four items) were also eliminated because the questions focused on the coursework and related individual student mental activities and not engagement or retention. Since the focus of the study was interaction with faculty, students and institutional emphasis, staff (one item) was eliminated from the Overall Relationship dimension. After the review of the EFA and NSSE survey questions, the researcher determined those variables worthy to be included in the study. Based on those results and the purpose of the study, the researcher included fourteen variables of interaction with faculty, students and institutional emphasis. The fourteen variables included in the study focused on relationships with faculty and other students. Institutional emphasis variables were included as a measurement of how the institution responded to student needs and opportunities for engagement. Table 4 outlines the variables used in the analysis.

Table 4: Variables used in the study – Means and standard deviations

Dimensions	Variables - Descriptions	<i>M</i>	<i>SD</i>
Interaction with faculty	envfac-faculty	5.81	1.114
	facgrade-discussed grades	2.92	0.870
	clquest-asked questions	3.29	0.793
	facideas-discussed ideas	2.10	0.992
	facfeed-prompt feedback	2.89	0.793
	facplans-career plans	2.35	0.994
Interaction with students	envstu-students	5.86	1.226
	divrstud-different race	2.66	0.924
	diffstu2-different background	2.66	0.924
	occideas-outside class	2.88	0.798
Institutional emphasis	envnacad-non-academic		
	envsocial-socially	2.54	0.903
	envdivrs-diversity	2.76	0.890
	envsuprt-academic	2.38	0.958

In research question 1, an exploration of the engagement variables was conducted to determine if there was any association with demographic characteristics. For research question 2, student demographic characteristics were examined to determine whether these variables contributed to retention. Research question 3 determined whether engagement variables: interaction with faculty, students and institutional emphasis were related to retention.

#### Data Collection and Analysis

The researcher received approval from the Institutional Review Board (IRB) in fall, 2012 from the target institution to conduct the study. Request for access to institutional data was submitted to the target institution's Office of Institutional Effectiveness and Assessment. IRB approval was requested and approved from the major institution, The University of North Carolina – Charlotte in November, 2012. An



institutional data set which included unidentified student responses was provided to the researcher in the fall, 2012 in SPSS format and statistical analysis began.

Correlations, t-tests and logistic regressions were used by the researcher and were appropriate when no assumption was made about differences in the distribution of the population (Gravetter & Wallnau, 2007). The researcher used two-tailed t-tests to examine the relationship between engagement and student demographic characteristics of gender, ethnicity, and employment. To test the association between grades and engagement factors, inter-correlations were calculated. Logistic regression was used to determine statistically significant predictors of retention among demographic characteristics, and among specific engagement factors which represented interactions with faculty, students, and institutional emphasis. The standard alpha level of .05 was selected for all statistical tests.

### Summary

In summary, the intent of the researcher was to investigate hypotheses related to the effects of selected institutional integration opportunities on student engagement and retention. The sample studied was non-traditional transfer, degree-completion junior and senior students who were enrolled during spring semester, 2010 and had participated in the 2010 NSSE survey at the selected institution ( $n=317$ ).

Student retention was an important outcome of interest for the institution under study. Retention was operationalized as students had finished their junior year and were enrolled in fall, 2010. Gender, ethnicity, grades, and employment hours were proposed as independent variables based on previous research indicating association with retention (Astin, 2005; Chen et. al, 2009; Gordon, Ludlum, and Hoey, 2008; Pike et al, 2008).

To identify the engagement variables to be included in the study, the researcher conducted an exploratory factor analysis of 28 items included in the NSSE benchmarks. Based on analysis of the results and upon further examination of the NSSE items, fourteen variables were finally identified to address the interaction with faculty, students, and institutional emphasis to have the best statistical advantage of answering the research questions. T-tests, correlations, and logistic regressions were conducted by the researcher to address the specific research questions as outlined in Table 2.

## CHAPTER FOUR: RESULTS

### Research Questions and Hypotheses Relating to Engagement

The research questions and hypotheses were related to student characteristics, engagement variables and retention. An alpha level of .05 was used for all statistical tests.

Table 5: Research questions and hypotheses

Category	Research Question	Null Hypotheses	Planned Analysis
Engagement: Predictive value of student demographic characteristics	To what extent are student demographic characteristics (gender, race, grades and hours worked) related to engagement (interaction with faculty, interaction with students and institutional emphasis)?	There is no statistically significant relationship between engagement and student demographic characteristics.	T-Tests Correlation
Retention: Predictive Value of Student demographic characteristics	To what extent are student demographic characteristics (gender, race, grades and hours worked) predictors of retention?	There is no statistically significant relationship between demographic characteristics and student retention.	Logistic Regression
Retention: Predictive value of engagement factors.	To what extent is engagement (interaction with faculty, interaction with students and institutional emphasis) related with retention?	There is no statistically significant relationship between engagement and retention.	Logistic Regression

### Predictive Value of Student Characteristics for Engagement

In research question 1, the researcher explored whether there was a statistically significant relationship between the engagement variables and the selected characteristics: gender, ethnicity, grades and employment ( $n=317$ ). To control for errors

in running multiple t-tests, the researcher applied the Bonferroni correction to the interpretation of  $p$  values. Bonferroni adjustment was the most frequently used strategy for correcting the Type I error rate (Huck, 2012), in which the  $p$  value was divided by the number of tests. Thus, the t-tests will be considered statistically significant when  $p < .004$ .

#### Relationship of Gender with Engagement

The results of the t-tests for the relationship of gender with engagement were shown in Table 6. Descriptive data (mean, standard deviation,  $n$ ) was presented for male and female students separately, along with the t-test value, statistical significance ( $p$ ) and Cohen's  $d$  for each comparison.

Interaction with faculty. To determine whether gender was related to perceived relationships with faculty, t-tests were conducted on the five faculty interaction variables – discussing grades, asking questions, sharing ideas, receiving prompt feedback and talking with faculty about career plans. None of the t-tests were statistically significant based on the Bonferroni correction. However, when considering effect size, there was a small effect of gender on discussing ideas or readings with faculty outside of class  $t(170) = 1.603$ ,  $d=0.20$ , with male students ( $M=2.24$ ,  $SD=0.995$ ) reporting greater frequency of discussions with faculty than female students ( $M=2.04$ ,  $SD=1.006$ ).

Interaction with students. Next, t-tests were conducted to determine whether gender was related to relationships with other students including having quality relationships with fellow students, having conversations with students from different races, having discussions with students from different backgrounds and discussing ideas from readings/class with others outside class. Again, none of the t-tests were statistically significant at the  $p < .004$  level. However, three of the comparisons indicated a small effect

of gender when considering Cohen's  $d$ , with male students reporting higher values than female students: overall student relationships with fellow students,  $t(199) = 1.532$ ,  $d=0.18$ , having conversations with other students of a different race than their own  $t(184) = 2.158$ ,  $d=0.26$ , and having discussions with students of different backgrounds  $t(170) = 2.273$ ,  $d=0.28$ .

Institutional emphasis. When the researcher analyzed the relationship of institutional emphasis variables and gender, none were statistically significant. There was a small effect of gender on perceptions that the institution provided the support students needed to succeed academically  $t(193) = -1.677$ ,  $d=0.22$ . Female students reported higher agreement ( $M=3.20$ ,  $SD=0.750$ ).

Table 6: T-Tests and effect sizes for relationships of gender to interaction with faculty, interaction with students and institutional emphasis

Relationships	Gender	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i> ( <i>df</i> )	<i>p</i>	<i>d</i>
Interaction with Faculty							
Faculty	Male	92	5.87	1.121	0.545	.578	0.07
	Female	225	5.79	1.156	(177)		
Discussed grades	Male	92	2.86	0.829	0.860	.391	0.10
	Female	225	2.95	0.773	(182)		
Asked questions	Male	92	3.34	0.749	-.009	.993	0.00
	Female	225	3.34	0.773	(172)		
Discussed ideas	Male	92	2.24	0.995	1.603	.110	0.20
	Female	225	2.04	1.008	(170)		
Prompt feedback	Male	92	2.85	0.850	-.285	.778	0.04
	Female	225	2.88	0.770	(150)		
Discussed career	Male	92	2.30	0.996	0.018	.986	0.00
	Female	225	2.30	0.989	(170)		
Interaction with Students							
Students	Male	92	6.04	1.056	1.532	.101	0.18
	Female	225	5.81	1.286	(199)		
Other races	Male	92	2.89	0.917	2.158	.026	0.26
	Female	225	2.64	0.988	(184)		
Different backgrounds	Male	92	2.84	0.915	2.273	.024	0.28
	Female	225	2.58	0.914	(170)		
Discussed ideas	Male	92	2.71	0.688	-2.585	.010	0.32
	Female	225	2.96	0.831	(203)		
Institutional Emphasis							
Non-academic	Male	92	2.38	0.990	-0.015	.988	0.00
	Female	225	2.38	0.994	(186)		
Socially	Male	92	2.46	0.919	-0.844	.404	0.10
	Female	225	2.55	0.901	(166)		
Diversity	Male	92	2.77	0.927	0.306	.765	0.03
	Female	225	2.74	0.885	(162)		
Academic	Male	92	3.04	0.651	-1.677	.077	0.22
	Female	225	3.20	0.750	(193)		

## Relationship of Ethnicity with Engagement

The results of the t-tests for the relationship of ethnicity with engagement were shown in Table 7. Descriptive data (mean, standard deviation,  $n$ ) was presented for White and other race students separately, along with the t-test value, statistical significance ( $p$ ) and Cohen's  $d$  for each comparison.

Interaction with faculty. Among the t-tests to compare White students and students of other races on the faculty interaction variables, none were statistically significant based on Bonferroni corrected  $p$ -value of .004. The t-tests were not statistically significant and effect sizes were negligible. Students of other races reported slightly higher frequencies than White students about discussing ideas from readings/class with faculty outside class. ( $M=2.34$ ,  $SD=1.061$ ).

Interaction with students. Among the t-tests to analyze ethnicity and student engagement with other students, having conversations with students of other races, other backgrounds, discussing ideas from readings or classes outside of class, none were statistically significant and effect sizes were negligible. The findings indicated that students of other races reported higher frequency than White students ( $M=2.95$ ,  $SD=0.973$ ).

Institutional emphasis. The t-test analysis indicated there was a negligible effect size of ethnicity on all institutional emphasis variables and none were statistically significant. Students of other races reported more frequently than White students on institutional emphasis overall.

Table 7: T-Tests and effect sizes for relationships of ethnicity to interaction with faculty, interaction with students and institutional emphasis

Relationship	Ethnicity	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i> ( <i>df</i> )	<i>p</i>	<i>d</i>
Faculty	White	220	5.85	1.172	-0.017 (141)	.986	0.00
	Other Race	79	5.85	1.145			
Discussed grades	White	220	2.90	0.867	-0.580 (134)	.562	0.07
	Other Race	79	2.96	0.898			
Asked questions	White	220	3.34	0.757	-0.009 (132)	.993	0.00
	Other Race	79	3.34	0.799			
Discussed ideas	White	220	2.00	0.963	-2.669 (127)	.008	0.34
	Other Race	79	2.34	1.061			
Prompt feedback	White	220	2.90	0.746	0.880 (123)	.379	0.12
	Other Race	79	2.81	0.863			
Career plans	White	220	2.25	0.941	-1.398 (130)	.163	0.19
	Other Race	79	2.43	1.009			
Interaction with Students							
Students	White	220	5.86	1.220	-1.008 (137)	.314	0.14
	Other Race	79	6.03	1.230			
Other races	White	220	2.62	0.940	-2.624 (134)	.009	0.35
	Other Race	79	2.95	0.973			
Different Background	White	220	2.65	0.907	-0.276 (129)	.783	0.03
	Other Race	79	2.68	0.981			
Discussed ideas	White	220	2.88	0.796	-0.521 (134)	.603	0.07
	Other Race	79	2.94	0.822			
Institutional Emphasis							
Non-Academic	White	220	2.35	0.936	-0.833 (126)	.405	0.11
	Other Race	79	2.46	1.048			
Social	White	220	2.49	0.884	-1.020 (128)	.308	0.13
	Other Race	79	2.61	0.996			
Diversity	White	220	2.72	0.861	-1.204 (121)	.229	0.16
	Other Race	79	2.86	1.009			
Academic	White	220	3.16	0.696	-0.540 (122)	.616	0.08
	Other Race	79	3.22	0.811			



## Relationship of Grades with Engagement

The results of the correlations for the relationship of grades with engagement were shown in Table 8. Correlations for grades with relationships with faculty, students and institutional emphasis ( $r$  and  $p$ -values) were presented for engagement variables.

Interaction with faculty. The researcher used correlational analysis for analyzing the relationship of grades to faculty interaction variables. There were three low, but statistically significant relationships of grades with interaction with faculty, overall relationships with faculty ( $r=0.123$ ,  $p=.028$ ), asking questions in class ( $r=0.236$ ,  $p=.000$ ), and receiving prompt feedback from faculty ( $r=0.129$ ,  $p=.022$ ).

Interaction with students. When analyzing the relationship of grades with interaction with students, there was only one statistically significant correlation, that of discussing ideas from readings or classes with other students outside of class ( $r=0.161$ ,  $p=.004$ ).

Institutional emphasis. There were no statistically significant correlations between the institutional emphasis variables and grades.

Table 8: Correlations for grades with relationships with faculty, students and institutional emphasis

Relationships	<i>r</i>	<i>p</i>
Interactions with Faculty		
Faculty	0.123	.028
Discussed grades	0.38	.504
Asked questions	0.236	.000
Discussed ideas	0.010	.859
Prompt feedback	0.129	.022
Career Plans	0.019	.742
Interactions with Students		
Overall students	0.098	.081
Other races	-0.039	.487
Other backgrounds	-0.003	.952
Discussed ideas	0.161	.004
Institutional Emphasis		
Non-academic	-0.049	.386
Socially	0.002	.965
Diversity	-0.036	.525
Academic	0.095	.093

#### Relationship of Employment with Engagement

The results of the t-tests for the relationship of employment with engagement were shown in Table 9. Descriptive data (mean, standard deviation, *n*) was presented for students who work less than 20 hours per week, which included those who do not work and students who work more than 20 hours per week separately, along with the t-test value, statistical significance (*p*) and Cohen's *d* for each comparison.

Interaction with faculty. There were no statistically significant relationships between employment and the interaction with faculty considering Bonferroni corrected value of .004. A small effect of employment was indicated for discussing grades with faculty  $t(285) = -2.017$ ,  $d=0.23$  and asking questions in class  $t(294) = -2.685$ ,  $d=0.30$ . While students who worked more than 20 hours reported more frequency of discussing

grades ( $M=3.05$ ,  $SD=0.860$ ), students who worked fewer than 20 hours reported greater frequency of asking questions in class ( $M=3.47$ ,  $SD=0.734$ ).

Interaction with students. The t-tests indicated that none were statistically significant between employment and relationships with other students. Further, the effect sizes were very small to negligible.

Institutional emphasis. The t-tests for student employment and institutional emphasis indicated that none were statistically significant. There was a small effect for student employment on perceived institutional emphasis on diversity  $t(264) = -2.834$ ,  $d=0.32$ ), where students who worked over 20 hours per week indicted a greater emphasis on institutional emphasis on diversity ( $M=2.92$ ,  $SD=0.942$ ). Overall, employment was not statistically significant with interactions with faculty, students or institutional emphasis.

Table 9: T-Tests and effect sizes for relationships of employment to interaction with faculty, interaction with students and institutional emphasis

Relationships	Employ	<i>N</i>	<i>M</i>	SD	<i>t</i> (df)	<i>p</i>	<i>d</i>
Interaction with Faculty							
Faculty	<20	183	5.84	1.077	0.351	.726	0.04
	≥20	133	5.79	1.280	(254)		
Discussed grades	<20	183	2.85	0.864	-2.017	.045	0.23
	≥20	133	3.05	0.860	(285)		
Asked questions	<20	183	3.24	0.782	-2.685	.008	0.30
	≥20	133	3.47	0.734	(294)		
Discussed ideas	<20	183	2.06	0.927	-0.660	.521	0.08
	≥20	133	2.14	1.093	(255)		
Feedback	<20	183	2.81	0.790	-1.406	.161	0.17
	≥20	133	2.94	0.776	(287)		
Career plans	<20	183	2.34	0.880	0.820	.428	0.09
	≥20	133	2.25	1.083	(248)		
Interaction with Students							
Students	<20	183	5.87	1.168	-0.093	.926	0.02
	≥20	133	5.89	1.289	(267)		
Other races	<20	183	2.64	0.961	-1.321	.187	0.16
	≥20	133	2.79	0.962	(284)		
Background	<20	183	2.61	0.942	-0.895	.371	0.11
	≥20	133	2.71	0.911	(290)		
Discussed ideas	<20	183	2.85	0.781	-0.955	.340	0.11
	≥20	133	2.94	0.833	(274)		
Institutional Emphasis							
Non-academic	<20	183	2.40	0.889	0.276	.789	0.03
	≥20	133	2.37	1.069	(252)		
Socially	<20	183	2.57	0.855	.916	.370	0.10
	≥20	133	2.47	0.974	(262)		
Diversity	<20	183	2.64	0.839	-2.834	.006	0.32
	≥20	133	2.92	0.942	(264)		
Academic	<20	183	3.13	0.683	-.679	.508	0.08
	≥20	133	3.19	0.799	(257)		

In summary, the results of the t-tests of the relationship between student characteristics and engagement interactions indicated none were statistically significant

based on the Bonferroni corrected  $p$  value of .004. When considering effect size, there was a small effect of gender on discussing ideas or readings with faculty outside of class (0.20). Three of the student interaction comparisons indicated a small effect of gender when considering Cohen's  $d$ : overall student relationships with fellow students, (0.18), having serious conversations with other students of a different race than their own (0.26), and having discussions with students of different backgrounds (0.28). However, a few of the comparisons on employment showed a small effect size (0.23 to 0.32); asking questions to faculty (0.30), discussing grades with faculty (0.23), and institutional emphasis on diversity (0.32). Among the correlations of engagement variables with grades, three faculty interactions were statistically significant: overall relationships with faculty ( $p=.028$ ), asking questions to faculty ( $p=.000$ ), and receiving prompt feedback from faculty ( $p=.022$ ). One interaction with students that reached statistical significance: discussing ideas with other students outside of class ( $p=.004$ ). None of the institutional emphasis interactions reached statistical significance.

#### Predictive Value of Student Characteristics on Retention

In research question 2, the researcher tested the relationship between selected demographic characteristics and retention using logistic regression. The results of the analysis are shown in Table 10.

The chi square for the model for student demographic characteristics was statistically significant,  $\chi^2(4) = 82.41$ ,  $p=.000$ , which indicated there was no significant difference between the observed frequencies and expected frequencies. By using logistic regression, the researcher evaluated the contribution of an individual predictor to the model. The  $\text{Exp}(B)$  or the odds ratio is the predicted change. Students who worked more

than 20 hours were significantly less likely to be retained ( $\text{Exp}(B)=0.086$ ,  $p<.000$ ), whereas White students were 2.22 times as likely to be retained than other races ( $p=.017$ ). The prediction of retention with student demographic characteristics resulted in a Nagelkerke  $R^2 = .310$ , which was referred to as an approximate or pseudo-measure of explained variability because of the way it was computed (Huck, 2006). The percent correctly classified was 71%.

Table 10: Simultaneous logistic regression analysis of student demographic characteristics and predicting retention

Variable	<i>B</i>	S.E.	<i>p</i>	$\text{Exp}(B)$ (Odds)
Gender	0.129	0.295	.662	1.138
Ethnicity	0.799	0.334	.017	2.224
Grades	0.062	0.078	.427	1.064
Employment	-2.455	0.323	.000	0.086
Constant	1.035	0.543	.057	2.184

#### Predictive Value of Engagement Factors on Retention

A simultaneous logistic regression was performed on Retention (DV), and predictors (IVs) interaction with faculty, interaction students and institutional emphasis (IVs). The chi square for the model for engagement was statistically significant,  $\chi^2(14) = 46.99$ ,  $p=.000$ , which indicated there was no significant difference between the observed frequencies and expected frequencies. Nagelkerke  $R^2$  was .186 for the model and 68.6% of the students were correctly classified. See Table 11 for the results.

Interaction with faculty. The faculty engagement variables on retention included were discussing grades with faculty, discussing ideas from class with faculty, receiving prompt feedback from faculty, asking questions in class, and talking to faculty about career plans. All the assumptions were met. There were three statistically significant predictors of retention, asking questions in class ( $\text{OR}=2.256$ ,  $p=.000$ ) signifying a

positive relationship that students who asked questions in class were 2.26 times as likely to be retained than those who do not ask questions. Another statistically significant finding was talking to faculty about career plans (OR=0.637,  $p=.008$ ). More frequent discussion of career plans with faculty was negatively associated with retention.

Interaction with students. Four predictors on relationships with other students were included in the logistic regression model: discussing ideas with others outside class, having serious conversations with students of other races, having serious conversations with students with different backgrounds, and overall quality of student relationships. All the assumptions were met. There were no statistically significant predictors among these variables.

Institutional emphasis. Four institutional emphasis variables were included as predictors of retention: institution helped coping with non-academic responsibilities, providing support needed to thrive socially, supporting student diversity, and supporting students academically. An institutional emphasis variable, supporting diversity was statistically significant, (OR=1.415,  $p=.050$ ) and was positively related to retention. Other institutional variables were not statistically significant.

Table 11: Simultaneous logistic regression analysis for predicting retention and relationships with faculty, students and institutional emphasis

Variable	<i>B</i>	S.E.	<i>p</i>	Exp( <i>B</i> )
Interaction with faculty				
Faculty	0.085	0.139	.538	1.089
Discussed grades	0.175	0.167	.296	1.191
Asked questions	0.813	0.177	.000	2.256
Shared ideas	0.161	0.166	.330	1.175
Prompt feedback	0.028	0.182	.877	1.029
Career plans	-0.451	0.171	.008	0.637
Interaction with students				
Students	-0.025	0.124	.840	0.975
Other races	-0.261	0.169	.123	0.770
Different backgrounds	0.220	0.182	.226	1.246
Shared ideas	0.004	0.178	.983	1.004
Institutional Emphasis				
Non-academic	-0.146	0.190	.443	0.864
Socially	-0.264	0.208	.204	0.768
Diversity	0.347	0.177	.050	1.415
Academic	-0.031	0.228	.892	0.970
Constant	-2.230	0.896	.013	0.108



## CHAPTER FIVE: DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

Private universities face increased pressure to improve learning outcomes of students and focus more on engagement and retention of enrolled students (Tinto, 1993). Student engagement and retention remained areas of concern as the institution sought to improve the delivery of the educational mission. There was substantial literature that defined strategies for universities to improve retention (Jones & Braxton, 2009) of traditional students; but, the scholarly research was brief in the literature of non-traditional college transfer students. The findings of this study contributed to the literature by examining the relationship between interactions with faculty, students, perceived institutional emphasis and retention of non-traditional students at the institution based on responses to the 2010 NSSE survey.

The purpose of the researcher was to examine effects of engagement variables that transfer students experienced during junior and senior years of bachelor's degree completion. These integrative opportunities were designed to assist students successfully transition to the college environment and determined the relationship between student engagement and retention. The students were surveyed in April, 2010 by the institution using the National Survey of Student Engagement (NSSE). The NSSE included student engagement variables of faculty, students and institutional emphasis as well as individual student demographic characteristics. Student demographic characteristics were analyzed to determine if there were relationships of gender, ethnicity, grades and employment with interactions with faculty, students, institutional emphasis and retention. The indicators of

engagement were analyzed to determine the relationships with retention. The researcher discussed the findings of the study, implications these findings might have for the institution, and possibilities for future research were suggested.

### Student Demographic Characteristics and Engagement

The researcher explored the extent to which student demographic characteristics (gender, race, grades and employment) were related to engagement (interaction with faculty, students and institutional emphasis) using t-tests and correlations.

#### Interaction with Faculty

Five faculty interaction variables: discussing grades, asking questions, sharing ideas, receiving prompt feedback, and talking with faculty about career plans – were examined in the analyses. None of the t-tests for gender, ethnicity, and employment were statistically significant, due to the conservative p-value resulting from the Bonferroni correction ( $p=.004$ ). However, some of the comparisons revealed small effect sizes (0.20 to 0.35). Male students and students of other races reported more frequent interaction with faculty in discussing ideas or readings outside of class than female students and White students, respectively. These findings were contrary to expectations, as previous research had indicated that female students and White students were more likely to interact with faculty when Pascarella and Terenzini (2005) studied relationships between gender, retention and graduation rates at women's colleges. The authors concluded female students experienced a different type of educational environment at co-educational universities than those students who decided to attend an all-female institution. At women's colleges, female students were more successful than those at co-ed schools. These findings indicated the role of gender was intricately related to engagement and retention which further substantiated the need to study non-traditional students.

Grades were positively and statistically significantly correlated with overall relationships with faculty, asking questions in class, and receiving prompt feedback from faculty. Students who worked more than 20 hours indicated more frequent discussions of grades with faculty, while students who worked less than 20 hours per week reported more frequently asking questions in class. There were no statistically significant correlations between the relationship of employment and the interaction with faculty. A small effect was indicated in the relationship of employment and discussing grades with faculty and asking questions in class.

#### Interaction with Students

Interactions with students included quality relationships with fellow students, conversations with students from different races, discussions with students from different backgrounds and discussing ideas from readings/class with other students outside class. None of the t-tests for gender were statistically significant, but there was a small effect of gender on overall quality of student relationships, having conversations with students of a different race than their own and having discussions with students of different backgrounds. In all cases, male students reported higher frequency of interactions than female students.

Similarly, there were no statistically significant comparisons for ethnicity and interaction with students, but a small, bordering on moderate, effect of ethnicity on having conversations with students of other races. When analyzing the relationship of grades with interaction with students, there was one statistically significant correlation: discussing ideas from readings or classes with other students outside of class was

significant. Further, none of the t-tests for employment and interactions with other students were statistically significant.

Employment over 20 hours per week created some serious limitations for social and academic integration in the university environment. About 52% of the students who responded to the institutional survey indicated students were working, with 41.6% indicating students worked 20 or more hours per week, a time commitment that the literature suggests is a break point for student retention (Chen et. al, 2009). Based on these findings, engagement for working students was not negatively impacted by employment. Interestingly, student employment research has started to include economic factors (Sullivan, 2010). When Tinto did his original work, the cost of higher education was significantly lower. Research has now been extended to include financial need when discussing engagement, as the stress of the need to work to pay tuition increases, there was an indication that work may have negative impact on engagement in the future (Sullivan, 2010).

#### Institutional Emphasis

The perceived institutional emphasis variables included emphasis on supporting students with non-academic issues, helping students to thrive socially, supporting diversity and supporting students to succeed academically. None of the t-tests for gender, ethnicity, grades, and employment were statistically significant, due to the conservative p-value resulting from the Bonferroni correction. However, some of the comparisons revealed small effect sizes (0.20-0.32), provided the support students need to succeed academically, student employment and institutional emphasis on diversity. Females were more likely to report that the institution supported them academically, and students of

other races reported more frequently than White students on institutional emphasis. Overall, employment was not statistically significant with interactions with faculty, students or institutional emphasis.

#### Predictive Value of Student Characteristics and Retention

Retention is a critical issue in higher education. In research question 2, the researcher tested the extent that student demographic characteristics (gender, race, grades and employment) as predictors of retention. Students who worked more than 20 hours were significantly less likely to be retained, whereas White students were more likely to be retained than other races. Non-traditional college student retention is an important measure of institutional effectiveness and research in this area was important to universities. Students of other races were less likely to persist because they were in the minority at the institution (Pascarella & Terenzini, 2005). Pascarella and Terenzini (2005) proposed African-American students were more successful at Historically Black Colleges and Universities (HBCUs). The authors produced research that concluded that minority students at predominantly White institutions felt disconnected and isolated. Focused on the presence of peer groups and culture evolved from student social and academic integration improved persistence and retention. The outcome of this study regarding lower levels of interactions with students of other races supported the research of Pascarella and Terenzini (2005).

Grades were positively related to retention. When hours of employment were increased, the retention of non-traditional students was negatively impacted. Employment was associated with decreases in retention while gender, race and grades were positively associated with retention. Students who worked more than 20 hours were less likely to be retained. Males were more likely to be retained than females.

### Predictive Value of Engagement Factors and Retention

A simultaneous logistic regression was performed on retention and predictors interaction with faculty, interaction students and institutional emphasis. The researcher explored the extent that engagement (interaction with faculty, students and institutional emphasis) was related with retention.

#### Interaction with Faculty

The faculty engagement factors on retention included were discussing grades with faculty, discussing ideas from class with faculty, receiving prompt feedback from faculty, asking questions in class, and talking to faculty about career plans. Asking questions in class increased odds of retention, which supported findings in the literature about academic engagement (Astin, 2005; Tinto, 1993). Students who were actively engaged in university life with their faculty, staff, peers, and activities in general, were more likely to be successful which positively affected student retention and graduation rates (Tinto, 1993). As the critics suggested, absence of participation was evidence regarding student dissatisfaction, and was reflective of student retention (Gilardi & Guglielmetti, 2011). Talking to faculty about career plans decreased odds of retention. One explanation could be due to students who discussed career plans are leaving to pursue a career, or continue one they already had as non-traditional, adult students.

#### Interaction with Students

In relationships with other students, four variables were included in the second logistic regression model: discussed ideas with other students, conversations with students of other races, discussions with students with different backgrounds and overall quality of student relationships. There were no statistically significant predictors among these variables, which was unexpected. According to the literature, engagement with fellow students was important to retention (Gilardi & Guglielmetti, 2011).

## Institutional Emphasis

Institutional emphasis variables as predictors of retention included institution helped students coping with non-academic responsibilities, providing support needed to thrive socially, supporting student diversity and supporting students academically. None of the institutional variables were statistically significant predictors of retention.

Interesting to note, the student response rates to the NSSE survey at the institution under study (35.2%) were very similar to the nationally reported average (35%) from 758 institutions (NSSE, 2010). This pattern was reflected when analyzing the student response rate by participation in the survey.

As the cost of a college education increased and accountability for university administration was demanded, retention remained a critical issue in higher education. Higher education was a difficult issue to quantify because of the many reasons that non-traditional students return to finish their college education. Even so, it was necessary for universities to determine the cost and effect of student retention. One measure was to conduct comparable analysis with sister institutions and make determinations about individual college efficiency and effectiveness. While valuable that administrators were aware of overall institutional effectiveness, it was the individual institutional emphasis that needed to be determined for each university. Non-traditional college student retention will continue to be an important measure of institutional effectiveness and research in this area is likely to continue persistently by researchers.

## Implications for the Institution

The researcher presented an explorative study aimed at analyzing the relationship between the non-traditional college transfer student and the university. According to

Gilardi and Guglielmetti (2011), higher numbers of non-traditional students are entering universities. Many surveys show that non-traditional students presented a higher risk of dropping out (Provasnik & Planty, 2008).

Non-traditional transfer students entered their junior year with different individual demographic characteristics, along with personal experiences. Therefore, institutions must make efforts to engage transfer students toward academic and social integration. Since one of the significant predictors was asking questions in class, the institution should strive to develop teaching methods that encourage non-traditional students' involvement in class, as this was their main connection with the university. Institutional emphasis can influence the students' decision to return to college to their conscious effort to successful college graduation. Interactionalist theory reached near paradigmatic status (Braxton & Hirschy, 2004). Since Tinto began researching student departure and persistence in 1970s, much research concerning the effects of academic and social integration in the college culture. Reflecting on his past research, Tinto (1993) suggested that Interactionalist theorists should consider the changing demographics and dynamics of college education in the 21<sup>st</sup> century. Although not strongly supported by the findings in this study, the foundation of the research was rooted in Interactionalist Theory and formed the basis for this research which provided guidance for institutional emphasis that focused on improvement of academic and social integration of non-traditional college students.

Institutional emphasis was an important factor for students in the decision to stay or leave a college that has been documented in the literature. In a survey of 54 institutions, Jones and Braxton (2009) opined that because public institutions generally



have lower retention rates than private ones because more effort was needed public institutions to provide programming designed to reduced student attrition. The authors established that universities needed effective institutional effectiveness research to assist administrators in assessing programs to improve retention. The private university under study provided limited research resources to assess academic and student development programs for non-traditional students while this group comprises almost one-third of the student population. Increasing resources to perform this type of assessment would benefit the institution by allowing more informed decision making about programming for smaller demographic groups (or even individual students), and would likely promote scholarship of practice among other private universities. Potts and Schultz (2008) suggested that student typology would be a valuable lens with which to view student retention efforts. In the study of students, Potts and Schultz found no significant differences between students in different programs; however, when observing types of students, certain types of students clearly benefitted from social and academic integrations. The researcher further substantiated this finding with the work of Jamelske (2008) and wrote about the need for individualized student plans of integration into the college environment. Even Tinto, (1997) in his earlier work, advocated for a change institutional attitudes writing that one cannot “inoculate” students against departure. In the work of Potts and Schultz (2008), transfer students who participated in a new student orientation significantly improved student retention rates aligns well with the outcome that indicates the importance of student engagement. The institution under study did not provide orientation sessions to non-traditional transfer students.

In summary, suggested by Tinto (1975, 1993), and confirmed by Zepke and Leach (2005), the crucial importance of building relationships required the institutional culture to adapt. Encouraged by the cited authors and established by the Interactionist Theory, it was important that the college faculty and administration assist non-traditional students with understanding the value of proactive behavior in their university life, through specific tutorial initiatives. Although many non-traditional students request tutorial services, individual in-person tutorial services are only provided on the main campus and do not serve the multiple off-campus locations. Multi-role students who have little time for university activities may sometimes have difficulty achieving academic success. Setting aside time for oneself has proven to be one of the most frequently cited difficulties among the non-traditional transfer students. University administrators and faculty may consider implications related to student success and assist these students in recognizing the value of how investing in social relationships during college life could be an important objective for the university. Retention research has two very important goals (Astin, 2005). Astin advocates that first, the institution needs to be able to predict persistence. The second goal that Astin promotes is university leadership needs to take responsibility, determine and provide funding to create conditions that affect a student's chances for success. For adult students, as opposed to those students who are younger and non-working, the crucial dimension was not the perceived social integration, but the meaningfulness of the learning experience. This implies that universities should be purposeful in educational methods inside the classroom and give non-traditional students guidance in understanding how to relate contents of learning to personal and professional development. With findings from this research model, institution leadership may consider providing purposeful, meaningful engagement

opportunities for all students that would affect student engagement and retention which were factors of student success.

### Recommendations for Further Study

The relationship between student demographic characteristics, engagement and retention has been the focus of this study. When students attend colleges that do not present opportunities for interaction and provide little emphasis on social coherence outside the classroom, there was an effect on engagement and retention. Many previous studies identified in this paper focus on factors that led to retention. According to Tinto (2002), engagement does matter with students providing insight into the relationship between student departure and the importance of socially integrating non-traditional students into college campus life. Student persistence and success is a current issue at the forefront of higher education. Retention of college students continues to be an important discussion topic for college administrators, accrediting commissions, politicians, and the students. A more comprehensive study of specific private universities that have non-traditional populations would provide more specific insight and guidance for researchers as well as university administration.

During this study, the researcher explored the effectiveness of institutional activities that are predictors of retention. According to Glatthorn and Joyner (2005), there are tests of professional significance for a study in that the problem has an intrinsic importance, previous research is not fully conclusive, and the researcher examined the implementation of theory that was widely accepted. Meaningful results were obtained which would be of interest and value to practitioners. Creating programs designed to impact the majority of students was the most logical response for an organization as complex as a university. In the case of the institution studied, results of programming and benefits to students of participating in engagement

activities were clear. The study could be repeated longitudinally to determine if gains in retention were predictable for students engaged in those academic and social integration activities. Additional control variables could be included in the study to consider pre-enrollment activities that the literature supports as being related to retention.

The NSSE instrument continued to be analyzed for efficacy as well. Pike (2006) found that NSSE scalelets provide dependable metrics for assessing student engagement at a university. Building on this research, Pike determined that the NSSE scalelets had greater explanatory power and provided richer detail than the NSSE benchmarks. In 2010, Pike, Kuh and McCormick examined the contingent relationships between learning community participation and student engagement in educational activities inside and outside the classroom using data from the 2004 administration of the NSSE. A substantial amount of variability in engagement – learning community relationships remained unexplained prompting the use of the new scalelets. Practices that support the construct of engagement tested by NSSE provided a more robust database for future analysis (LaNasa, 2009).

Administrators charged with improving the student experience must have insightful information to make decisions about enrollment, programming and student persistence. Given the fact that the gap in lifetime earnings between those who attend college and those who do not is increasing regularly, more non-traditional students may pursue a college education. As the cost of that education rises, institutions increase their effort to understand non-traditional students, both as groups and as individuals, and create programming that enables them to become engaged, be retained and graduate.

Research Questions for future consideration include:

1. How does type of institution potentially influence engagement and retention rates of non-traditional students?
2. What services and resources are provided by these colleges best serve the learning needs of the non-traditional student and provide opportunities for engagement?
3. What methods do faculty members provide to stimulate interesting, engaging learning experiences that strengthen the pedagogy of the university?

Private universities will continue to seek higher retention rates. Through institutional research and attention to academic and social interaction of their non-traditional students, administrators should seek guidance, develop and implement programs to assist transfer students. Researchers will continue to look for ways to predict which students will be retained and those who will depart. Davidson, Beck and Milligan (2009) studied and documented the obstacles inherent in trying to predict attrition and provide programming. The researcher notes that applying findings across institutions should be approached with caution. Programs that proved effective for one university may not provide the same outcome in other college settings. As Tinto (2002) and other theorists have stressed, the decision to depart is complex and personal.

The researcher presented findings about the effect on retention when combining a learning integration with student engagement factors. With the concept of a compounding effect of integrations posited by Smith and Windham (2009), the combination offered the best opportunity of assisting students with integration into the university environment. In fact, the student integration activities should be embedded in new student orientation, thus producing a higher retention rate than those who do not participate. Institutions

should establish and promote programs designed to parallel those stages which would yield improvements in retention for a transfer population. Institutional effectiveness needs to focus on the composition of the non-traditional student body. Non-traditional aged student have different needs and set different priorities when compared to residential, traditional students. In the 21<sup>st</sup> Century, educational institutional contexts are so different it is difficult to generalize results when developing and implementing university programs that focus on student engagement and retention. One size fits all programing is no longer effective in higher education.

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