ADULT STUDENTS’ SATISFACTION WITH THEIR EDUCATIONAL EXPERIENCE: IMPLICATIONS FOR LEADERSHIP

DISSEYATION

Presented in Partial Fulfillment of the Requirements for

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Barry University

by

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* * * * *

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ADULT STUDENTS’ SATISFACTION WITH THEIR EDUCATIONAL EXPERIENCE: IMPLICATIONS FOR LEADERSHIP

DISSERTATION

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ABSTRACT

ADULT STUDENTS’ SATISFACTION WITH THEIR EDUCATIONAL EXPERIENCE: IMPLICATIONS FOR LEADERSHIP

Audrey J. Kelleher

Barry University, 2007

Dissertation Chairperson: Dr. Zorka Karanxha

Purpose

The purpose of this study was to investigate adult student satisfaction with their educational experience, by campus type (main or external), along the dimensions of the Principles of Effectiveness for Serving adult Learners.

Method

Principally a quantitative study, a mixed methodology approach was used to gain a richer understanding of the issues surrounding adult student satisfaction with their educational experience as it relates to the type of campus they are attending. The adult student sample ($n = 114$) was comprised of students from an external campus ($n = 20$) and a main campus ($n = 94$) at a four-year university located in the southeastern United States. The *Adult Learner Inventory* by Noel-Levitz (2005) was
the primary instrument used to measure student satisfaction along the seven Principles of Effectiveness for Serving Adult Learners, which include institutional accommodations, career services, financing options, assessment of learning, teaching, support systems, and technology.

Leadership from the university \( (n = 8) \), holding various positions within the adult education school, participated in one-on-one structured interviews to share their perception of how well the institution is meeting the needs of the adult students. Four of the participants were from the external campus and four were from the main campus.

**Major Findings**

The findings indicate that adult students on the main campus in this study experience greater levels of satisfaction with career services, their assessment of learning, teaching, support systems, and the use of technology, while the external campus students experience higher levels of satisfaction with their financing options and institutional accommodations. The leadership perspective did not completely align with the students’ perception of satisfaction in the area of support systems. What the leadership felt was their greatest strength was actually scored low by the students. These findings point out how important it is for the leadership of adult education programs to have a clear understanding of how well they are meeting the unique needs of their adult students.
ACKNOWLEDGMENTS

“I can do all things through Christ who strengtheneth me.” Philippians 4:13 (KJV). Without the strength I received through my relationship with Jesus Christ, I would not have succeeded in finishing this project.

No project of this magnitude is completed without the help of others. Dr. Zorka Karanxha is due a very special thanks for shepherding me through the dissertation process. Her encouragement and wise guidance is deeply appreciated. I would also like to thank the other members of my dissertation committee, Dr. Carmen McCrink, Dr. Marilyn Lutz, and Dr. Paul Rendulic, for sharing their valuable insights and knowledge with me. A special thanks to Dr. Catharina Eeltink for her help and encouragement both in the classroom and as a friend during my tenure in the doctoral program.

To the adult student participants who took time out of their already packed schedules to participate in this study, I would like to say thank you. I am grateful to the leadership participants at the university who enthusiastically shared their knowledge and perspectives with me. Thank you for making time to help me.

Without the support of my family, I would not have made it. Jerry, my devoted husband, you stuck with me, even when I was not the best company during those long weekends I spent writing. You are the love of my life. To my daughters, Jennifer, Ashley, and Heather I want to say thank you for encouraging me along the
way, just like I did when you were younger. Thank you for understanding when I had to work on this project instead of spending time with you. I am so proud of all of you. Lastly, I would like to thank my friend, Stormy, for your constant companionship during the writing of this dissertation.
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CHAPTER I

THE PROBLEM

Background

At the dawn of American Higher Education, the landscape was dominated with colleges established for the advancement of religious ideologies (Rudolph, 1990). Harvard College was founded in 1636 and Yale, Princeton, King’s College (now known as Columbia), and William and Mary soon followed. Students attending these colleges were males preparing for the clergy or a position of leadership within the community (Lucas, 1994). By the end of the nineteenth century, these religious institutions were joined by a variety of other colleges such as city colleges, land grant colleges, and for-profit colleges. The establishment of these colleges marked the initial diversification of American Higher Education as women, African Americans, Native Americans, and older students were attending classes on America’s college campuses. No longer was higher education just for men.

As the institutional curriculum broadened, from being purely for religious training of the aristocracy and clergy, to include the education of the working class, providing them with agricultural and mechanical skills, a debate ensued over the purpose of higher education (Kerr, 1991). In addition to the debate over what should be taught at colleges and universities, overall institutional purposes became diverse. Non-profit colleges and universities (institutions exempt from paying income tax) believed that their purpose for existing was for the social good of American society (Lucas, 1994). On the other hand, for-profit institutions (institutions taxed like any
other business) maintained a business or economic mission (Berg, 2005a). As the types of colleges and universities diversified, so did the types of students attending them.

At the same time that such changes occurred in colleges’ purposes and their student populations, the leadership role within these institutions also changed. The prototypical leader of the seventeenth century colleges was very different from the type of leader found on today’s campuses (Bornstein, 2003). The first college presidents were mostly clergymen. In 1860, clergy held 90% of the presidencies whereas by 1933, they held only 12% of the presidential roles (Lucas, 1994).

Bornstein (2003), recently retired president of Rollins College, writes that the role of the college president in the twenty-first century is much like a juggler because they must meet the many demands and needs coming from both inside and outside the institution. University presidents find that their biggest challenges are (a) raising funds under today’s economic conditions, (b) fierce competition trying to attract students to their institution, and (c) changing student demographics; in particular the large influx of non-traditional or adult students.

Although there is disagreement over the defining characteristics of an adult student, it is widely recognized in the literature that the adult student population is growing both in number and in proportion to the traditional student population (Knowles, 1968; McNair, 1998; National Center for Educational Statistics, 2002). The campus environment and academic programming of many colleges still caters to the traditional student, leaving college administrators in a quandary as to how adult students should be assimilated into this environment (Sissel, Hansman & Kasworm,
2001). Near the end of the twentieth century, for-profit or non-traditional colleges responded to the increased number of adult students in higher education and began offering academic programs targeted to the adult student (Berg, 2005a; Hagedorn, 2005).

The mission, curricular structure, leadership orientation, and institutional accommodations are very different when comparing the traditional (non-profit) colleges and the non-traditional (for-profit) colleges (Berg, 2005a). Although only 2.5% of the adult student population is enrolled at non-traditional colleges, institutions like the University of Phoenix are experiencing 30% annual growth rates (Berg), while enrollments in adult undergraduate programs at traditional colleges remain flat or are declining (Hoffman, 2000). The mission of non-traditional colleges is focused on the working adult while the mission of the traditional college is focused on the traditional student. The curricular structure of the non-traditional college has shortened class terms and incorporates adult learning and adult teaching methodologies into the curriculum. Traditional colleges focus on teaching the traditional student, who has just graduated from high school. The leadership perspective of non-traditional and traditional colleges is very different. Non-traditional college leaders view their role as that of a manager with a business orientation, while the traditional college leaders are interested more in social good (Berg, 2005a). Institutional accommodations at the traditional colleges fall short in taking into consideration a working adult’s schedule and family commitments (Donaldson, 1999; Hagedorn, 2005; Kasworm, 2003b). College catalogs, web pages, campus newspapers, and administrative office hours target the traditional student on
these traditional campuses (Hagedorn, 2005; Mancuso, 2001; Mcnair, 1998). Conversely, the non-traditional college’s service orientation claims to accommodate the adult student needs (Berg, 2005).

Although many traditional colleges have adult friendly programs, they are not experiencing the growth rates at the same level as the non-traditional colleges and both types of colleges struggle with high adult student attrition rates (Hoffman, 2000). In an effort to attract more adult students, traditional colleges and universities have explored the use of external campuses as a means to reach out to adults who live a distance from the main campus and whose lifestyle and work constraints prohibit them from participating in residential traditional education (Benson, Johnson, Taylor, Treat, Shinkareva & Duncan, 2005).

Theoretical Framework

Declining retention rates of adult students have been a factor that has caused administrators to look at issues specific to the adult student population (Bean & Metzner, 1985). Even though studies show that adult students enter college with high levels of self-efficacy, they are at a higher risk of dropping out before achieving their educational goals (Rautopuro & Vaisanen, 2001). The National Center for Educational Statistics (2002) reports that 31% of the nontraditional or adult students enrolled in a bachelor’s degree program in the 1989-1990 academic year had earned their degree by 1994, while their traditional counterparts had a 54% bachelor’s degree completion rate in the same period. Some studies have linked retention with student satisfaction with the learning environment and institutional practices, but fall short because they do not look specifically at the adult student satisfaction with these issues.
Barfield, 2003; Benjamin & Hollings, 1995; Elliott & Shin, 2002; Juillerat & Schreiner, 1999). Based on a constructivist epistemology, Donaldson’s (1999) model of college outcomes for adult students notes that satisfaction with the college experience is the key to an adult student’s success in college.

In addition to Donaldson’s (1999) model of college outcomes, several earlier models of student retention have been advanced as a plausible explanation of retention, persistence, and attrition issues. Spady (1971) is credited with one of the early models of the student drop out process. His model is based on Durkheim’s (1966) theory of suicide in which he likened the phenomena of a student making the decision to drop out of school to suicide. Building on Spady’s model, Tinto (1975) based his model of student integration on the idea that there must be a match between the student and the institution in order for the student to persist in completing his or her educational goals. Although Tinto’s model is one of the most frequently tested models, it was based on studies of traditional students. Bean and Metzner (1985) developed a model that provided a better explanation of the issues surrounding adult student attrition. Pascarella’s (1980) model of student-faculty informal contact and Sandler’s (2000) model of career decision-making self-efficacy, perceived stress, and student persistence have all added to the current understanding of student attrition.

Statement of the Problem

The retention rates of adult undergraduate students are much lower than the retention rates of traditionally aged students (Hoffman, 2000). Adult undergraduate students experience varied levels of satisfaction with their educational experience when they perceive their needs and expectations are not being met (Donaldson, 1999;
Mancuso, 2001; Merriam, 2001b). Current models of retention link the institution’s ability to meet student expectations with retention (Pascarella, 1980; Sandler, 2000; Spady, 1971; Tinto, 1975). Adult student needs and expectations can be grouped into seven general categories:

1. Institutional accommodations,
2. Achievement of career goals,
3. Flexible options to pay tuition,
4. Coursework that is relevant,
5. Instructors who know how to teach adult students,
6. Support systems to help with the educational process,
7. Technologically enhanced learning experiences (Flint, 2005).

Rationale

The phenomena of adult education began appearing in the literature as early as 1920, but even with an 80-year history, there is little research that provides a comprehensive theoretical basis for understanding the unique needs and learning styles of the adult learner within the college environment (Donaldson, 1999; Kasworm, 2003a; Merrill, 2001). Prior research in this field has focused on various aspects of the adult student experience such as motivation (Clayton & Smith, 1987; Grany, 1980; Morstain & Smart, 1977), persistence (Bean & Metzner, 1985; Brown, 2004; Hadfield, 2003; Hensley & Kinser, 2001; MacKinnon-Slaney, 1994; McGivney, 2004; Sandler, 2000), learning styles (Bowden & Merritt, 1995; Cross, 1981; Huang, 2002; Knowles, 1968; Merriam, 2001a, Wlodkowski, 2003), and satisfaction (Barfield, 2003; Benjamin & Hollings, 1995; Elliott & Shin, 2002;
Juillerat & Schreiner, 1999). The Council for Adult and Experiential Learning (CAEL) developed the Eight Principles of Effectiveness for Serving Adult Learners using this prior research and the models of best practices from 21 colleges and universities (Flint, 2005). They include:

1. Outreach such as making the institutional accommodations that adult students need,
2. Life and career planning, which helps adult learners achieve career goals,
3. Financing options that allow flexibility in paying tuition,
4. Assessment of learning outcomes that are based on adult learning theory,
5. A teaching-learning process that allows adult learner to connect classroom concepts with useful knowledge and skills,
6. Student support systems targeted to adult student needs,
7. Availability of technology that will enhance the learning experience,
8. Strategic agreements with outside partners (Flint).

The first seven principles of effectiveness will be the focus of this study, since strategic agreements have an indirect relationship to the adult student. Adult students typically would not know about partnerships intuitions have made with outside partners therefore, measuring adult student perceptions of strategic partnerships would not provide information salient to this study.

The influence of different types of campus environments (main campus or external campus) on adult student satisfaction is not considered in the current models explaining student attrition (Donaldson 1999; Pascarella, 1980; Sandler, 2000; Spady, 1971; Tinto, 1975). These models of persistence and attrition have not considered
that college environments vary in how adult friendly they are. Previous models of student attrition and persistence lump the campus environment together as a single component, without considering that different environments are created by how well institutions integrate adult student best practices into institutional policy and procedures on both their main and external campuses. Even though the Bean and Metzner (1985) model looked specifically at the adult student population, it was built on previous research that examined traditional student populations. By focusing solely on the experiences of the adult student, this study responds to challenges for expanding the testing of persistence theories beyond a homogenous population of college students (Bean & Metzner 2005, Sandler, 2000). Through the inclusion of how well institutions adhere to the Eight Principles of Effectiveness for Serving Adult Learners (Flint, 2005), this study explores the need to break down the campus environment component of previous persistence and attrition models.

Purpose of the Study

It is important to have a better understanding of how the campus environment affects satisfaction, since satisfaction with the college experience has been linked to retention rates in previous studies (Barfield, 2003; Benjamin & Hollings, 1995; Elliott & Shin, 2002; Juillerat & Schreiner, 1999). The purpose of this study is to compare adult student satisfaction with their educational experience along the dimensions of the Principles of Effectiveness for Serving Adult Learners (Flint, 2005) by campus type, since institutions create various types of campus environments through varying degrees of implementation of the Principles of Effectiveness for Serving Adult Learners (Flint, 2005) at their main campus or external campus(es). The question is
raised in the literature as to whether or not external campuses provide an equal educational experience for students when compared to the students on the institution’s main campus (Ball & Cook, 1994; Freddolino & Sutherland, 2000; McFall & Freddolino, 2000). Therefore, it is important to consider how different types of campuses are serving adult students and how an institution’s main and external campus(es) are promoting the satisfaction of the adult student.

Significance of the Study

With the adult undergraduate student population growing and the retention rates of these students declining, college leaders are looking for ways to improve the retention rates of the adult undergraduate students. Demographic trends would indicate that the traditional student population will continue to shrink in size and the adult student population will continue to grow, as the Baby Boomer generation ages (National Center for Educational Statistics, 2002). The results of this study may serve to inform institutional policy and give valuable insight to college leaders as to how they can improve the educational experience of the adult undergraduate students on both their main and external campuses.

This study could be useful in identifying the components of the college environment that adult students perceive as not meeting their expectations and needs. Intervention methods could be developed to increase retention of the adult student. The campuses (main or external) under study may meet some of the criteria of the Eight Principles of Effectiveness for Serving Adult Learners (Flint, 2005), but not others. Institutional leadership can make informed decisions concerning adult student issues, when they compare their institutional practices to the student perceptions of
satisfaction along the dimensions of the Eight Principles of Effectiveness for Serving Adult Learners (Flint, 2005).

Research Methodology

This study is a mixed methodology study. Although principally a quantitative study, this research uses a mixed methods approach. Creswell (1994) supports the use of mixed methodology research by observing that researchers often make a false hypothesis that there is a dichotomy between qualitative and quantitative research. The use of both research methods has the potential to provide a broader understanding of the phenomena under study.

Research Questions

RQ1. To what extent, if any, do different types of college campuses employ the Principles of Effectiveness for Serving Adult Students and does implementation of these principles affect adult student satisfaction with their educational experience? The adult student’s educational experience is broken down into seven areas of investigation.

1. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for adult friendly institutional accommodations?
   b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectations for adult friendly institutional accommodations?

2. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for adult friendly career services?
b) To what extent, if any does an institution’s external campus(es) meet adult students’ expectations for adult friendly career services?

3. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for flexible financing options?
   
b) To what extent, if any does an institution’s external campus(es) meet adult students’ expectations for adult friendly career services?

4. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for adult learning theory based assessments of learning outcomes?
   
b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectation for adult learning theory based assessments of learning outcomes?

5. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for them to connect the classroom teaching-learning process to useful knowledge and skills?
   
b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectations for them to connect the classroom teaching-learning process to useful knowledge and skills?

6. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for student support systems?
   
b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectations for student support systems?
7. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for technology availability that will enhance the learning experience?

b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectation for technology availability that will enhance the learning experience?

RQ2: What are the practices institutions use to reduce adult student attrition on their main and external campus(es) and how do these practices compare to the Principles of Effectiveness for Serving Adult Learners (Flint, 2005)?

Null and Research Hypotheses

Hypotheses

\( H_0 \) There will be no significant difference in the levels of satisfaction of adult students attending classes at a college or university, regardless of either the type of campus (main or external) they attend or the degree to which campus leaders have incorporated the Principles of Effectiveness of Serving Adult Learners into the campus environment. The seven areas of investigation include:

1. There will be no significant difference in the satisfaction levels of adult students with the institutional accommodations at their college or university, regardless of either the type of campus they attend (main or external) or the degree to which campus leaders have incorporated institutional accommodations into the campus environment.

2. There will be no significant difference in the satisfaction levels of adult students with the career services at their college or university, regardless of
either the type of campus they attend (main or external) or the degree to which campus leaders have incorporated career services into the campus environment.

3. There will be no significant difference in the satisfaction levels of adult students with the financing options available at their college or university, regardless of either the type of campus they attend (main or external) or the degree to which campus leaders have incorporated financing options into the campus environment.

4. There will be no significant difference in the satisfaction levels of adult students with the adult learning based assessments of learning outcomes at their college or university, regardless of either the type of campus they attend (main or external) or the degree to which campus leaders have incorporated adult learning based assessments of learning outcomes into the campus environment.

5. There will be no significant difference in the satisfaction levels of adult students with their ability to connect the classroom learning with useful knowledge and skills at their college or university, regardless of either the type of campus they attend (main or external) or the degree to which campus leaders have incorporated the connection of the classroom teaching with useful knowledge and skills into the campus environment.

6. There will be no significant difference in the satisfaction levels of adult students with the student support systems at their college or university, regardless of either the type of campus they attend (main or external) or the
degree to which campus leaders have incorporated student support systems into the campus environment.

7. There will be no significant difference in the satisfaction levels of adult students with the technologically enhanced learning experiences at their college or university, regardless of either the type of campus they attend (main or external) or the degree to which campus leaders have incorporated technology that enhances the learning experience into the campus environment.

\( H_1 \) There will be a significant difference in the levels of satisfaction of adult students attending classes at a college or university, in regard to both the type of campus (main or external) they attend and the degree to which campus leaders have incorporated the Principles of Effectiveness of Serving Adult Learners into the campus environment. The seven areas of investigation include:

1. There will be a significant difference in the satisfaction levels of adult students with the institutional accommodations at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated institutional accommodations into the campus environment.

2. There will be a significant difference in the satisfaction levels of adult students with the career services at their college or university, in regard to both the type of institution they attend (main or external) and the degree to which campus leaders have incorporated career services into the campus environment.
3. There will be a significant difference in the satisfaction levels of adult students with the financing options available at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated financing options into the campus environment.

4. There will be a significant difference in the satisfaction levels of adult students with the adult learning based assessments of learning outcomes at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated adult learning based assessments of learning outcomes into the campus environment.

5. There will be a significant difference in the satisfaction levels of adult students with their ability to connect the classroom learning with useful knowledge and skills at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated the connection of the classroom teaching with useful knowledge and skills into the campus environment.

6. There will be a significant difference in the satisfaction levels of adult students with the student support systems at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated student support systems into the campus environment.
7. There will be a significant difference in the satisfaction levels of adult students with the technologically enhanced learning experiences at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated technology that enhances the learning experience into the campus environment.

Scope and Delimitations of the Study

This study will examine adult student populations attending classes on what would be considered a main and external college campus. Students engaged in online programs will not be included because the virtual environment adds a dimension that falls beyond the scope of this study. The study will be limited to those students who are seeking to complete a bachelor’s degree and meet the commonly accepted characteristics that define an adult student. The college campuses will be limited only to a regionally accredited institution. Colleges and universities that hold regional accreditation have undergone a rigorous review process in the areas of mission alignment, governance and administration, institutional effectiveness, academic programs, faculty credentials, learning resources, student affairs, student services, and financial viability (Council for Higher Education Accreditation, 2002).

Definition of Terms

**Adult student**- For the purposes of this study, an adult student is defined as someone over the age of 25, who is employed full time, has family and community responsibilities, and is motivated to attend college for career reasons or personal reasons (Aslanian, 2001).
Attrition- A student’s departure from school without completing the intended course of study would be considered attrition. This departure could be voluntary on the part of the student or involuntary at the request of the institution (Tinto, 1975).

Campus environment- An interwoven web of factors makes up the campus environment. They include the culture of the campus, the faculty’s values and professional pursuits, organizational makeup, institutional branding, administrative policies, size of the campus and the physical buildings and grounds (Pascarella, 1980).

Constructivism- The epistemological basis for constructivism is the idea that knowledge is constructed in the mind of the individual. It is a broad theory that combines ideas from philosophy, psychology, and sociology. Piaget, Vygotsky, Gilford, and Bloom provide the basis for the constructivist learning theory (Heppner, Kivlighan, & Wampold, 1999). Much of the literature on satisfaction and adult learning is based on constructivism (Kasworm & Marienau, 1997; Knowles, 1968; Lamport, 1993).

Persistence- The decision a student makes to continue working toward an educational objective. Factors such as satisfactions, academic performance, and the fit between the student and the institution are a few of the factors that can influence a student’s decision to persist (Tinto, 1975).

Regional accreditation- Regional accreditation is widely used and a respected form of college accreditation in the United States. Regionally accredited colleges and universities must meet the academic and operational standards of the individual regional accrediting agency. Agencies are divided by geographic region and they
oversee the colleges and universities in that region (Council for Higher Education Accreditation, 2002). No single regional agency is rated better than another (Wlodkowski, 2003). The six regional accrediting agencies are:

1. Middle States Association of Colleges and Schools (MSACS)
2. New England Association of Colleges and Schools (NEACS)
3. North Central Association of Colleges and Schools (NCAS)
4. Northwest Association of Colleges and Schools (NASC)
5. Southern Association of Colleges and Schools (SACS)
6. Western Association of Colleges and Schools (WASC)

**Retention** - Students who complete a prescribed course of study would be considered retained students. The opposite of retention is attrition (Bean & Metzner, 1985).

**Satisfaction** - Congruence between the expectations an adult student has for their educational experience and their perception of how well the institution meets those expectations is the basis for determining satisfaction (Juillerat & Schreiner, 1999).

**Self-Efficacy** - Developed from social cognitive theory; self-efficacy is defined as a belief a person holds in his or her capabilities to implement a plan to a goal. This belief in ability comes from performance, precise incidents, verbal influence, and physiological states (Bandura, 1986).

**Traditional student** - A traditional college student is defined by the National Center for Educational Statistics (2002) as someone who is attending college full time, is financially dependent, and has just graduated from high school. These students are between 18 and 24 years of age.
Organization of the Remainder of the Study

Chapter II is a review of related literature that will provide the reader with an expanded understanding of the subject area. The methodology, procedures, and data analysis techniques are described in Chapter III. The results of the study are reported in Chapter IV, and Chapter V contains conclusions, implications, and recommendations for further study.
CHAPTER II

REVIEW OF LITERATURE

Introduction

The purpose of this study is to investigate, by campus type, adult student satisfaction with their educational experience along the dimensions of the Principles of Effectiveness for Serving Adult Learners (Flint, 2005). The review of literature is divided into four major sections: (a) The background of American Higher Education, (b) adult student issues, (c) attrition and, (d) implications for leadership. The background of American Higher Education section reviews the history of higher education and the historical events that have influenced today’s colleges and universities. These shaping influences have had a profound effect on higher education leadership as institutions struggle over the conflict of purpose for higher education and the changing student demographics. A historical review, profiling the types of students found on a college campus, dates back to Harvard and traces the changing student demographics to the twenty-first century. This leads to a discussion of the issues concerning the adult student, who is quickly approaching majority status on many college campuses. These issues include the differences between traditional and non-traditional students as it relates to institutional accommodations, student success, satisfaction, and retention. The attrition section reviews the development of student retention models currently employed by colleges and universities. Both traditional and non-traditional student models are reviewed as they relate to the adult student.
Background of American Higher Education

American Higher Education began with the founding of Harvard College in 1636 by the Puritans. The intended purpose for founding Harvard was for the religious training of future clergy, schoolmasters, rulers, and the education of the aristocracy of the Massachusetts society (Kerr, 1991; Lucas, 1994; Ruch, 2001; Rudolph, 1990). The vision of Harvard’s founding fathers laid the groundwork for the system of higher education operating in America today. Subsequent to the founding of Harvard, other religious schools soon followed with the establishment of William and Mary in 1693 by the Church of England, Yale by the Puritans in 1701, Princeton by the Presbyterians in 1746, and King’s College, now known as Columbia, in 1754 by the Anglicans of New York. Colonial America’s system of higher education was bigger and wider ranging than Great Britain’s, yet these colleges were largely influenced by the British system of higher education (Rudolph, 1990).

During the eighteenth century, the religious colleges were so interwoven into the life of Colonial America that there was a blurring of the lines between private colleges, which were under control of the founding church, and public colleges, which were under control of the local government (Lucas, 1994). The Supreme Court decision of 1819, in The Dartmouth Case, established the guidelines for distinguishing colleges as either private or public entities (Lucas, 1994; Rudolph, 1990). The New Hampshire legislature had violated Dartmouth’s founding charter and tried to exercise direct control of the school. The court ruled five to one that Dartmouth was indeed a private institution. It was not until 1850 that Harvard made the decision to remain private (Ruch, 2001).
The state-supported land grant colleges, established by the Morrill Act of 1862, joined private religious institutions and public state schools already established. Under provisions of this Act, each state was offered 30,000 acres for the purpose of establishing an institute to educate the industrial classes (Berg, 2005a; Rudolph, 1990). These land grant colleges taught the practical subjects of agriculture and mechanics (Rudolph). This allowed access to higher education for more than just the elite or prestigious few (Lucas, 1994). On the eve of the Civil War there were over twelve land grant schools admitting students. Religious institutions viewed these land grant colleges as competitors, and they were denounced as godless (Lucas, 1994; Rudolph, 1990).

Land grant colleges had a profound effect on small-town America, largely because rural America in the nineteenth century was an agrarian society and the practical agricultural and mechanical studies, offered at these colleges, had a direct benefit to the communities in which they were established (Lucas, 1994). City colleges had a similar effect on the cities in which they were founded. The Free Academy of New York City, chartered in 1847, was the beginning of what is known today as a vast, expansive college system. Charleston, South Carolina assumed support for a struggling private college and many other cities followed suit either taking over struggling private colleges or establishing new city colleges. The purpose of city colleges was to meet the needs of urban students (Rudolph, 1990).

The city colleges pioneered alternative class schedules such as evening classes and allowed students to attend part time. These colleges became accessible to what would be known today as “non-traditional” students. City colleges organized
themselves to meet the special needs of students who had dropped out of college and later re-enrolled, older students with spouses and families, and many who needed additional training for a new career. Institutions created extension campuses in response to the needs of urban students.

In 1885, the University of Chicago, under the leadership of William Rainey Harper, incorporated a provision for off-campus centers in an effort to offer education to a wider group of students; in particular the adult student (Lucas, 1994). This program started with 82 students enrolled in 39 different courses on extension campuses (Adams, 2006). Upon the death of Harper in 1906 there were 1600 students enrolled in 300 different courses (Adams). Harper pioneered distance education prior to his appointment at the University of Chicago. He headed the Chautauqua University from 1883-92, which was the first major correspondence school in the United States (Scott, 2005). The key ideas embodied in the Chautauquan vision were summer semesters, correspondence courses, extension campuses, and the university press (Scott). The precursor to extension campuses were correspondence courses. Illinois Wesleyan University is credited with developing the first degree program offered through the mail (Adams, 2006). Correspondence courses offered at both non-profit and for-profit institutions grew at astounding rates. By 1915, 1.75 million students were taking classes through correspondence (Galloway, 1916).

As the history of American Higher Education is reviewed, one frequently unnoticed facet in the story is the contribution made by the for-profit institutions, often serving marginalized students. Since women were not allowed to attend the city
schools in the early nineteenth century, private for-profit schools opened their doors to them (Berg, 2005a; Ruch, 2001). Specialized schools saw the opportunity to serve other marginalized students. Thomas Hopkins Gallaudet opened a school for the deaf and blind in 1817. The Brainerd Missions schools, started by the Missionary David Brainerd, served the Native Americans, while clandestine schools served the African Americans. For-profit agricultural schools prospered until the land grand colleges were established. As early as 1660, Dutch settlers held evening schools that taught mathematics, reading, and writing, allowing local clergy to make their living teaching in these schools (Ruch, 2001).

Today, education is the second largest industry in the United States, and the monetary investment in education is twice as much as what is invested in national defense (Ruch, 2001). The Integrated Postsecondary Education Data System (IPEDS) recently reported that there were 4,300 regionally accredited institutions in the United States (Barbett, 2003). In the last 20 years, for-profit degree granting institutions of higher learning have increased in number by 112% while as many as 200 non-profit colleges have ceased to exist during the same period of time (Ruch, 2001). In the school statistics reported by IPEDS, two-year and four-year for-profit institutions represented 15% of the total number of degree granting colleges and universities. During the same period that for-profit colleges and universities have doubled in number, American Higher Education has observed a dramatic shift in the student demographics on all college campuses. Major contributing factors to this demographic shift were the G.I. Bill passed after WWII, the Civil Rights movement, and the Women’s movement (Berg, 2005b; Lucas, 1994; Rudolph, 1990). These
factors paved the way for the entrance of large numbers of older non-traditional learners into undergraduate education.

Leadership

Today’s colleges and universities are the most intricate institutions in our society, even more so than corporations, trade unions, government agencies, or foundations (Kerr 1994; Sweet, 2001). University leadership must remain mindful of the fact that their administrative role should not become an obstacle to the academic pursuits of the institution, yet the leadership of these institutions of higher education is getting more difficult (Schaefer, 1990). As the institutions of higher learning have grown, so has the role of the college or university president (Lucas, 1994).

The first college presidents were mostly clergymen. In 1860, clergy held 90% of the presidencies but by 1933, members of the clergy held only 12% of the presidential roles (Lucas, 1994). These clergy presidents took on the role of moral leader, instructor, administrator, and fund-raiser (Bornstein, 2003; Lucas, 1994; Rudolph, 1990). Today, the position of president enjoys less authority and autonomy than the presidential position from previous centuries. Presidents of the twenty-first century have taken on the role of a juggler and are expected to meet the unending stream of needs and demands both within and outside the institution (Bornstein, 2003). University presidents find that their biggest challenges are today’s economic conditions, increased competition for students, and changing student demographics; in particular, the large influx of non-traditional or adult students.
Conflict of Purpose

The landscape of higher education in America has experienced great diversity since Harvard’s founding by the Puritans. In addition to private colleges founded by religious groups, land grant colleges, city colleges, two-year colleges, research oriented colleges, colleges with extension campuses, and for-profit proprietary colleges have all shared in the American educational process (Ruch, 2001; Rudolph, 1990). Traditional, non-profit private and public institutions have been viewed by the American culture as institutions serving a social good that provide benefits to society (Ehrenberg, 2006). While many for-profit universities claim to have a social mission, they tend to be organized around business principles that focus on meeting the needs of the market place (Berg, 2005a; Ruch, 2002). The tension between social good and economic opportunity is at the root of the conflict of purpose for institutions of higher education. Kerr (1963) admonished American colleges and universities, in his essay on *The Uses of the University*, to discover their complete identity and their theory of purpose in order to remain competitive in our global economy. Some 40 years later American colleges and universities are still in conflict over the purpose of higher education (Berg, 2005a; Kerr, 1991; Lucas, 1994; Rudolph, 1990).

The practical skills taught by land grant colleges and the expanded access of “non-traditional” students to the city colleges, extension campuses, and proprietary schools sparked a debate on the goals and purposes of higher education (Kerr, 1994). A shift away from the classical curriculum of the eighteenth century was a catalyst for changing the American view of the purpose of higher education (Rudolph, 1990). The Yale Report of 1828 came out in support of the classical curriculum, which was
considered, at the time, the definitive statement on the purpose of education. The classical curriculum should serve as the guardian of the culture and protect our heritage, the report admonished (Lucas 1994; Rudolph, 1990). The Wisconsin Idea of 1877 purported that the purpose of the university was to investigate solutions to public problems (Lucas, 1994). Many colleges incorporated the Wisconsin Idea into their own mission in the latter part of the nineteenth century. Differing ideas over the purpose of higher education still drive today’s institutional missions, which permeates the entire institutional culture.

Colonial American colleges were defined by teaching a fixed curriculum dominated by classical languages and literature, and they were paternalistic in their view of the students. By contrast, twentieth century colleges wanted to be all things to all people and were more impersonal in their attitude toward students (Lucas, 1994; Rudolph, 1990). Kerr (1991) believes that there are five different approaches to the purpose of higher education. The elite-oriented approach serves the elite of society either by birth or talent. The production-oriented approach concludes that the purpose of education is to train students for specific occupations. The open-access approach believes that higher education should be open to all and responds to outside pressures in the subjects being taught. The horizontal approach embraces homogenization and education would be a tool of conformity. The atomistic approach believes that education can come from many sources, both formal schooling and informally through life experience or on the job.

In conclusion, the conflict over the purpose of higher education may never be resolved. Many views are represented in today’s literature. Historically, the major
purposes for founding institutions of higher education were for individual aspirations, religious convictions, political participation, economic growth, enculturation of immigrants, or national power (Kerr, 1991; Quigley, 1997). Schaefer (1990) believes undergraduate education should prepare a student for life through a liberal arts curriculum and graduate education should prepare one for a profession. Derek Bok, former president of Harvard, questions whether American colleges are meeting their responsibility of putting social agendas in place (Berg, 2005b). Many for-profit colleges have socially conscious motivations but they focus on the student as a customer (Berg). This business mindset seems to run contrary to the traditional culture of higher education. While for-profit institutions are focused on the needs of the market place, non-profit public and private institutions still tend to focus on responding to the social environment and stakeholder interests (Ruch, 2001). This conflict of purpose has had the effect of polarizing educators around tightly held convictions over the purpose of higher education (Berg, 2005b). What most do agree upon is that the growth of America’s public and private colleges and universities is fundamental to America’s social and economic future (Douglass, 2005).

**Student Demographics**

Today’s colleges and universities have adapted not only to social and economic changes in America but also to the changing demographics of the individual student (Kasworm, 1990). A twenty-first century traditional college student is very different from the typical student found at Harvard in 1636. The first students entering Harvard were men preparing for the clergy or community leadership (Rudolph, 1990). Almost 200 years later Oberlin College enrolled the first female
students, ushering in coeducational higher education. The Civil War and the Civil Rights movement opened the way for African American students to have access to higher education (Kasworm, 2003b). The G.I. Bill has been credited with creating the most dramatic change in the age composition of the college student by granting access to college for increasing numbers of older, non-traditional students (Lucas, 1994). The fastest growing enrollment of students in higher education is among these older non-traditional students (Kerr, 1991).

Just since the beginning of the twentieth century, the growth of non-traditional student enrollment has been significant. The number of older, non-traditional college students enrolled in 2000 exceeded the total enrollment of students enrolled in college in 1968. Enrollment projections for 2010 estimate that 38% of all undergraduate students enrolled in college will be classified as adult or non-traditional students (National Center for Education Statistics, 2002). Although the discussion of increasing numbers of adult students on college campuses began appearing in the literature in the 1960s, many colleges are still unprepared to handle the escalating numbers of adult students on their campuses (Rawlins, 1979; Sissel et al., 2001).

Part of the problem lies in the fact that there is some disagreement in the literature over the definition of an adult student. McNair (1998) argues, since all students entering college are of voting age, all would be considered adult students. Senter and Senter (1998) conclude that age should not be the only criteria used to define adult students. Knowles (1968) distinguishes an adult learner as one who engages in self-directed learning, possessing life experience that contributes to learning, has needs that are correlated to a changed social role, has a need to apply
knowledge immediately, and is internally motivated to learn. Between 1969 and 1986 there were 39 major studies attempting to profile the adult student (Kasworm, 1990). They focused on many different variables such as conceptual orientations, psychosocial dimensions, or key life factors to identify this group. These studies provided the basis for the most commonly used definition found in current literature. The National Center for Educational Statistics (2002) defines a non-traditional or adult student as someone over the age of 25 who has financial independence, attends classes part time, works full time, has dependents, and has delayed college enrollment since graduating from high school.

The terms adult student (Kasworm, 2003a), adult learner (Knowles 1968), and non-traditional student (Justice & Dornan, 2001) are used interchangeably in the literature to describe what will be referred to in this study as the adult student. For the purposes of this study, an adult student is defined as someone over the age of 25, who is employed full time, has family and community responsibilities, and is motivated to attend college for career reasons or personal reasons (Aslanian, 2001).

By contrast, today’s traditional college student is defined by the National Center for Educational Statistics (2002) as someone who is attending college full time, is financially dependent, and has just graduated from high school. These students are between 18 and 24 years of age and are considered part of the Millennial generation; a generation that outnumbers the Baby Boomer generation and is the most racially and ethnically diverse generation in the history of America (Howe & Strauss, 2000).
Adult Student Issues

Adult and traditional students sharing the same college campuses have different needs, learning styles, and motivation for attending college. It is important to understand these differences as a basis for discussing adult students. The literature overwhelmingly supports the assumption that the characteristics and needs of the adult student are very different from the traditional student (Donaldson, 1999; Kasworm, 1990; Mancuso, 2001; Merriam, 2001b).

Student Differences

The motivation for earning a bachelor’s degree, prior life experience, and unique needs all combine to make the adult student different from their traditional counterparts as they access institutions of higher learning (Kasworm, 2003a). Understanding what motivates adult students to enroll in college is a key to recruiting and retaining them (Aslanian, 2001). Internal motivations for going to college might include returning to college for personal enrichment or achieving a specific goal (Kilgore, 2003). Adult students over the age of 65 rank the desire to acquire general knowledge as the number one reason for going to college (Kim & Merriam, 2004; Laanan, 2003). For most adult students though, interest in advancing their career, improving their study skills, and applying knowledge are examples of some of the motivational factors that would cause an adult to consider returning to college (Graham & Donaldson, 1999). Others are motivated to attend college due to a recent job loss or desire to change career fields completely (Davey, 2003; Kasworm, 1990).

West (1995) suggests that getting a better job or other economic factors are superficial motivations; rather, what motivates adults is more complex when
psychological factors are considered. Through their beliefs of self-efficacy, a college education has the potential to organize disjointed lives and help adults reach a better self-understanding (West). When compared to traditional students in a recent study, adult students have more self-confidence when they begin their degree program (Rautopuro & Vaisanen, 2001). Those adult students who enter a degree program with a low level of self-efficacy are at a higher risk of dropping out (Devonport & Lane, 2006). The choice that an adult makes to participate in higher education is not just a matter of an individual decision; Jung and Cervero (2002) suggest that the decision may be conditioned by “social structural threads of the individual adults’ lives” (p. 316).

Adult students come to college with life experiences and realities that are markedly different from traditional undergraduate students (Okezie, 2003). These prior experiences can affect their motivation and capacity to engage in the learning process required for successfully completing a bachelor’s degree (McGivney, 2004; Verduin, Miller, & Green, 1977). Adults typically have a rigid way of thinking and a strong belief of how things should work. Their prior experience also influences self-efficacy or the way they view themselves across a number of societal and psychological dimensions. This can influence their ability to learn or remain in college (Donaldson, 1999).

Juggling multiple roles while in college can influence how an adult student experiences college. Adult program planners and administrators need to take into consideration that adult students have many obligations to family, work, and community while fulfilling their role as a student (Donaldson, 1999). These multiple
roles can cause conflict, overload, and contagion or preoccupation with one role while performing another role (Home, 1998). Compromising their career role in an effort to handle family and academic demands can have both health and financial consequences for adult students (Terrell, 1990).

Institutional Accommodation

Differing needs of adult students may preclude them from being fully engaged in college (Mancuso, 2001). More support services are needed among adult students, which include tutoring services, study skills assistance, and self-confidence building through academic counseling or advising (Bauman et al., 2004; MacKinnon-Slaney, 1994; Senter & Senter, 1998; Wilson, 2006). In addition, career planning assistance is also a greater need among adult students when compared to traditional students (Aslanian & Brickell, 1988).

Mancuso (2001) suggests that inflexible school calendars and scheduling, academic programming, classroom instructional methods, and the availability of student services are among the prevailing themes in the literature that keep potential adult students from enrolling in college. In a benchmarking study involving six colleges and universities, Mancuso cites thirteen best practices benchmarks for adult-centered education. The ones related to overcoming the barriers to participation include (a) decision making that is quick and flexible in response to the needs of the adult learner, (b) many different ways of delivering instruction, (c) prior learning assessment credit, (d) curriculum designed for the adult student, (e) admissions procedures that are inclusive, (f) student services that are offered in varied venues, and (g) faculty who are involved in advising not just instruction.
Even with the plethora of research involving adult student issues, it appears that this segment of college students often remains the invisible majority (Kasworm, 1990; McNair, 1998; Sissel et al., 2001). Indications that colleges and universities have the ability to support adult students have been sporadic (Fairchild, 2003; Youngman, 1995). Adult students do require more services and support but the question is raised by Kasworm (1990), who should adapt the college, or the adult student?

Numerous studies support the assumption that the campus environment has an effect on the learning outcomes for both traditional and adult students (Donaldson, 1999; Kuh, 1998; Pascarella, 1991; Terenzini & Pascarella, 1994). Although the institutional mission is varied among different types of colleges and universities, educating the adult learner has become the focus of many of the reforms in higher education today (Hanna, 1998; Kasworm, 1990; Kilgore & Rice, 2003). Adult student accommodations should include opportunities for frequent student-faculty interaction, reasonably priced education with generous financial aid offerings, course offerings and class times that fit adult student needs, on-campus tutoring and study centers, localized extension campuses, and adult focused career counseling (Bowden & Merritt, 1995; Hagedorn, 2005; Hensley & Kinser, 2001; Rosenthal et al., 2000; Rossiter, 1999).

Other institutional accommodations might include alternative admission policies for adult learners such as waiving a minimum SAT score requirement or allowing life experience to count as college credit, but studies reveal that age is a statistically significant predictor of student success when they are admitted through
alternative or non-traditional means (Cantwell, Archer, & Bourke, 2001; Fairchild 2003; Muse & Teal, 1993). When one college under study chose to admit adult students under non-traditional admissions criteria, the resulting logistical problems such as greater demand for limited courses and heavier advising loads for faculty were not perceived negatively when compared to the positive results (Muse & Teal, 1993). More adult students were able to access college through the non-traditional admission policies and achieve degree completion, thus increasing this college’s overall enrollment and graduation rate.

In an effort to put the needs of the adult student into a framework that can guide institutional policy, the Council for Adult and Experiential Learning (CAEL) has published a report, using best practices from 21 colleges and universities. This report outlines the Eight Principles of Effectiveness for Serving Adult Learners (Flint, 2005). They include:

1. Outreach such as making the institutional accommodations that adult students need,
2. Life and career planning, which helps adult learners achieve career goals,
3. Financing options that allow flexibility in paying tuition,
4. Assessment of learning outcomes that are based on adult learning theory,
5. Teaching-learning process that enables the adult learner to connect classroom concepts with useful knowledge and skills,
6. Student support structures appropriate for adult students,
7. Availability of technology that will enhance the learning experience,
8. Strategic agreements with outside partners (Flint, 2005).
From this study, the *Adult Learner Inventory* was developed in collaboration with Noel-Levitz in an effort to help institutions assess and meet the needs of adult students (Flint, 2005).

The needs of the adult students have been met by varying degrees through changing the organizational patterns of American universities. The traditional non-profit universities have created semi-autonomous units focused on serving adult students (Hanna, 1998). The for-profit adult-centered universities have developed market driven programs that offer classes in multiple locations (Bash, 2003; Berg, 2005b; Ruch, 2002). Distance education or technology-based universities are focused on a technology based delivery model utilizing the World Wide Web and other virtual classroom enhancements (Huang, 2002). The corporate universities have developed out of a response to the specific education and training needs of the corporation. Other university models include university/industry strategic alliances, degree/certification competency-based organizations, and global multinational universities (Hanna, 1998). Little empirical research has been published on how well these various institutional types are meeting the needs of the adult students but a recent study links institutional type with student success for African-American students when they are measured along the dimensions of good practices for undergraduate education (Seifert, Drummond, & Pascarella, 2006).

*Adult Student Success*

Providing institutional accommodations and learning opportunities, which meet the needs of the adult student, have been shown to contribute to their overall success in college (Kuh, Kinsie, Schuh, & Whitt 2005). Success is often equated with
grade point average (GPA) and studies have shown that the average GPA of the adult student tends to be higher than the average GPA of the traditional student (Hegedorn, 2005). Other research suggests that student success involves more than just GPA measures (Donaldson, 1999). In addition to cognitive growth, often measured by GPA, studies have shown that adults feel that their view of self has also changed (Merrill, 2001). Adult students’ self-efficacy has been found to be high when they begin a bachelor’s degree, allowing them to overcome personal and institutional barriers, but upon achieving a bachelor’s degree, they report increased self-efficacy or self-confidence (Bingman, Ebert, & Bell, 2000; Cubeta, Travers, & Sheckley, 2000-2001; Norman & Hyland, 2003; Rawlins, 1979). In addition, they reported higher levels of self-awareness and a better outlook on life upon achieving their goals (Rawlins, 1979).

*Program design.*

Adult student academic performance is shaped by many factors such as the design of the program, the learning theory that underlies the curriculum, and the student’s prior life experience (Merrill, 2001). Program planning for adult students has intrinsic problems. Since adult education curricula are not highly regulated, decisions about learning objectives, pedagogy or andragogy, and ways of assessment are largely contextual and individualized by colleges and universities (St. Clair, 2004). Many adult education programs are described as accelerated. Research suggests that in order for these programs to be successful they should be learner focused, built on adult learning theory, have a passion for quality, be easily accessible to the adult student, and provide a number of delivery options such as live instruction.
or on-line instruction (Husson & Kennedy, 2003). Some studies point out that many adults do not have the time commitment or associated learning strategies to be successful in an accelerated degree (Kasworm, 2003b).

Distance or on-line learning, while meeting the adult students’ need for schedule flexibility, can limit their learning experience to standardized information. Being devoid of human contact, adult students have not responded well to the on-line learning environment in some studies (Kressley & Huebschmann, 2002; Rivera & Rice, 2002). Although no national statistics report retention rates of students in on-line programs, several studies have reported retention as low as 40 to 50% (Howell, Laws, & Lindsay, 2004). Other research suggests that technology can be viewed as an adult student’s academic partner and students are very satisfied with this course delivery format (Allen, Bourhis, Burrell, & Mabry, 2002). From a constructivist point of view, on-line learning helps them express what they know, cause them to reflect on their learning, support internal meaning making, and support higher level thinking (Jonassen, 2000).

Both on-line learning programs and live instruction programs need to include assessment strategies that measure adult student performance against the learning goals in the curriculum (Walvoord, 2003). Student performance can be measured by direct measures such as performance on exams, projects, or papers graded to a specific rubric or indirect measures such as surveys of student satisfaction, employer satisfaction with the student, or student perceptions of their learning experience. Assessment of the overall program requires a comprehensive framework to review student performance and is often required by accrediting agencies (Kilgore, 2003).
Kirkpatrick & Kirkpatrick’s (2005) four level evaluation model is often used to measure the effectiveness of adult learning programs. The first level looks at the adult student’s overall satisfaction with the program. This often includes not only the classroom experience, but also how well the college is meeting the adult student service needs. The second level measures the student performance against specific learning outcomes. The third level reviews the behavioral changes; what have they learned that they have transferred to the real world. The fourth level looks at the results after students have graduated from the program (Kirkpatrick & Kirkpatrick). The most successful adult programs are those that are built around adult learning theory.

*Learning theory.*

Adult learning is so complex that one single theory or model cannot fully explain this phenomenon (Birzer, 2004; Knowles, Holton, & Swanson, 2005). Early research on adult learning questioned whether adults could even learn after a certain age (Merriam, 2001a). Moran (2001) points out that Piaget, a developmental theorist, suggested that humans go through stages of thinking, or cognitive development, and that those stages are hierarchical. Little is known about the particular factors that influence cognitive development, but recent research suggests that adult cognitive development is at least equal to that of their younger counterparts, the traditional students (Graham & Donaldson, 1999). Moran theorizes that adult levels of thought are achieved through both educational and cultural factors rather than through hierarchical stages of cognitive development. Adult students have the need for both academic learning and learning that can be applied directly to their life experience.
In studying the differences between traditional and adult student populations, Rautopuro & Vaisanen (2001) found that adult students were more internally oriented and more goal oriented in their academic pursuits. Even with the plethora of literature on adult learning, there are many unresearched questions in this area.

Both scholars and practitioners have wrestled with the question of how adults learn since adult education became a professional field of practice in the early 1920s (Merriam, 2001a). Thorndike, Bregman, Tilton, and Woodyard (1928), some of the first adult learning theorists, viewed learning from a behavioral psychological perspective. In their study, participants were tested on learning and memory tasks that were timed. Under these conditions, the older adults did not perform as well as the younger test participants. Lorge (1944) later theorized that Thorndike’s et al. test scores were related to education and not age. Older adults performed poorly on Thorndike’s et al. tests because they had not developed the test-taking skills, through higher education, which would have improved their scores. Much of the early research on adult learning was based on the philosophies of behaviorism, and findings from the studies of children were generalized to adults.

Andragogy and self-directed learning are adult-centered learning theories recently explored in the adult education field (Merriam, 2001a). Andragogy is founded on Knowles’ (1968) five assumptions about adult learners. The adult learner has an independent self-concept and can direct his/her own learning, has accumulated a reservoir of life experiences that is a rich resource for learning, has learning needs closely related to changing social roles, is problem centered and interested in
immediate application of knowledge, and is motivated to learn by internal rather than external factors.

Knowles introduced the idea of andragogy in the early 1970s, but little empirical research supports Knowles’ theories (Hartree, 1984; Shannon, 2003). One of the basic tenants of Knowles’ adult learning theory is that adults are self-directed (Merriam, 2001a). Reiter’s (2002) research suggests that adults are not innately self-directed and have trouble knowing their own strengths and weaknesses. Hartree (1984) suggests that Knowles’ andragogy is more of a model of best practice rather than a theory of adult learning.

Self-directed learning, a learning model developed by Tough (1967), began appearing in the literature about the same time as Knowles’ andragogy. Grounded in a humanistic perspective, the goal of self-directed learning is self-actualization (Merriam, 2001b). Brookfield (1986) suggests that another goal of self-directed learning is that of transformation.

Contemporary literature has de-emphasized the self-directed learning model as a way for understanding adult learning. Newer theories of adult learning have a more holistic view of the adult returning to college. The Four-Lens Model of Adult Learning includes the learner, the process, the teacher, and the context (Kiely, Sandmann, & Truluck, 2004). Kasworm and Marienau (1997) identified five key principles of adult learning that should be the foundation for adult focused programs. They fit closely with the Four-Lens Model of Adult Learning and include the premises that learning comes from multiple sources; that learning should engage the whole person; appropriate feedback from the teacher will increase self-direction;
learning takes place in context; and, the learning experience is a meaning-making event that is unique to the individual adult student.

*Prior life experience.*

Current approaches to adult learning acknowledge that an adult student’s learning experience in higher education can be influenced by memories, emotions, cognition, and the context where learning occurs (Merriam, 2001b). How adults view themselves can also influence to what degree they participate in the institutional environment (Cross, 1981). Studies of the context where learning occurs suggest that adult students are engaged in the college environment in much different ways than their traditional counterparts due to their prior life experience (Graham & Donaldson, 1999). Prior life experience can influence the decision to persist or drop out of school, particularly if an adult student had a negative experience at a previous college (Allen, 1993). Additionally, students who expressed greater satisfaction with the academic ethos or college climate had greater gains on outcome measures including cognitive growth (Graham, 1998).

*Satisfaction and Retention*

Studies show that the campus environment is a web of interrelated events that influence a student’s satisfaction with their educational experience (Elliott & Shin, 2002; Kuh et al., 2005). Although the literature abounds with studies on student satisfaction, few focus on satisfaction among adult students (Lamport, 1993; Taniguchi & Kaufman, 2005). A recent study involving satisfaction found that older or adult students were more likely to be dissatisfied with receiving grades based on a group project (Barfield, 2003). The prevailing themes found in the literature that
influence the overall satisfaction for adult students are faculty-student interaction, social support systems, and student services (Pacarella & Terenzini, 1980).

*Faculty-student interaction.*

Faculty-student interaction for adult students significantly influenced satisfaction in a recent study comparing traditional and non-traditional students (Rosenthal et al., 2000). Although the definitions of the variables under study in the satisfaction research tend to be vague, faculty-student interaction has been shown to have a positive impact on satisfaction (Astin, 1977; Lamport, 1993; Spady, 1971). One program quality concern that is frequently noted in the research is the extensive use of adjunct faculty who teach in the adult programs (Council for Adult and Experiential Learning, 1993). Adjunct faculty tend not to interact with students as frequently as full-time faculty and this could have an impact on the overall quality of the student-faculty interaction, which has been demonstrated to be a key component in overall satisfaction.

Faculty, adjunct or full time, who meet the learning needs of the adult student are a key factor in motivating adult students to persist. Adult students who perceive their professors as boring or the course material irrelevant are at higher risk for dropping out, especially if they do not have a strong social support system (McGivney, 2004).

*Social support systems.*

An adult student’s social support system is another key factor in measuring adult student satisfaction. Adult students generally do not employ the use of college campus support systems, such as counseling services, but their academic performance
is reported to be better than traditional students, who rely more heavily on campus support systems (Carney-Crompton & Tan, 2002). While traditional students tend to find support among their friends on the college campus, adult students derive support from friends, family, and coworkers who are external to the college campus (Bean & Metzner, 1985; Carney-Crompton & Tan, 2002; Donaldson, 1999, McGivney, 2004). Three types of social support prevail in the literature: (a) instrumental support, which includes family and friends, (b) informational support, which helps with information and advice that the student needs to deal with personal problems while in school, and (c) appraisal support, which helps bolster self-efficacy (Bauman et al., 2004). The quality of these external support systems has been shown to influence both satisfaction and retention (Carney-Crompton & Tan, 2002).

*Student services.*

Most of the satisfaction literature on adult students has focused on the social support systems provided by family, friends, and coworkers but little research exists on satisfying the service needs of the adult student (Bauman et. al, 2004). The service needs of the adult student are different from the traditional student needs. As a result, the adult student expectations also are different. Identifying the student needs and meeting them has been a challenge for institutions of higher education (Fall, 2001). Career service needs were ranked higher by adult students than the need for counseling services in a study done by Bauman et al (2004). This study pointed out that social support systems outside of the college campus replaced the need for counseling services on campus among adult students. Some adult student friendly institutions of higher education have recognized that adult students require different
services such as extended office hours for financial aid and the business office (Howard-Vital, 2006). The satisfaction level of students in this adult friendly environment tends to be high. Treating the adult student as a consumer also increases their satisfaction levels with their overall educational experience (McGivney, 2004).

The student as consumer viewpoint borrows from a business model where the trustees could be considered partners, the professors are the sales representatives, and the students are the consumers (Rudolph, 1990). A consumer model for fulfilling the adult student needs equates satisfaction with meeting expectations (Brocato & Potocki, 1996; Elliott & Shin, 2002). Although satisfying adult student expectations is just one constituency that the college must satisfy, studies show when institutions actively address adult student needs they improve the retention rates of adult students (Brocato & Potocki, 1996; Cheng & Tam, 1997). There is evidence that satisfaction is positively correlated with persistence (Bean & Metzner, 1985) and that it is one of the key variables to consider in studying attrition among adult students (Donohue & Wong, 1997).

**Attrition**

The National Center for Education Statistics (2002) reports that the graduation rate for adult students is 31% while the graduation rate for traditional students is 54%. Both scholars and practitioners in higher education have concluded that understanding what causes adult students to drop out of school prior to obtaining a bachelor’s degree have implications for program design, recruiting practices, and institutional accommodations. High attrition rates among adult students increases higher education costs, therefore leaders charged with the financial oversight for
colleges and universities would be wise to investigate best practices for retaining adult students (Hoffman, 2000; Taniguchi & Kaufman, 2005; Towles & Spencer, 1993).

Attrition is commonly defined as students who no longer attend school for more than two semesters in a row and do not complete the requirements for their degree program (Resch & Hall, 2002). Studies have identified factors such as being over the age of 24, having a negative experience within the first six to eight weeks of starting classes, and being married as predictors of students who are at risk to drop out (Cantwell et al., 2001; Rautopuro & Vaisanen, 2001; Wylie, 2004). Several models have been developed in an effort to discover all the factors that influence student attrition but relatively few have addressed the factors related to adult students (Andres & Carpenter, 1997; Bean & Metzner, 1985; Taniguchi & Kaufman, 2005).

Early models of retention and attrition focused on traditional students (Astin, 1977; Tinto, 1975; Spady, 1971; Terenzini & Pascarella, 1984). Although these models provide some understanding into retention and attrition issues, they do not adequately encompass the specific issues related to the adult student (Andres & Carpenter, 1997). This section reviews the models that have contributed most directly to the current understanding related to adult student persistence.

Spady’s (1971) model of undergraduate dropout decision processes focuses on interactions between the student characteristics of family background, academic potential, friendship support, and grade performance and the campus environment, which includes social integration, satisfaction, and institutional commitment. Spade’s model is based on Durkheim’s (1966) theory of suicide in which he argued that
suicide is the result of a person breaking ties with a social system. Low moral consciousness and low friendship support create a lack of integration into society. Spady theorized that these same assumptions can be applied within the higher education environment. Low integration into the campus environment, which includes both the college’s social and academic systems, will result in a student dropping out.

Tinto (1975) extended Spady’s retention model by combining the exchange theory with Durkheim’s theory of suicide. Exchange theory is based on the assumption that people avoid unpleasant behavior and seek rewarding behavior such as relationships, interactions, and emotional states (Nye, 1979). If the student perceives the benefits of staying in college to achieve their educational goal to outweigh the costs, the student will remain in school whereas, if the student perceives the costs of staying in school to be too high and other activities outweigh staying in school, the student will decide to drop out, according to Tinto’s model.

One component of the Tinto model is the student-institution match. The student-institution match is influenced by several variables such as student family background, individual attributes such as race and gender, and schooling prior to entering the university (Tinto, 1975). These student characteristics collectively influence the student’s commitment to the institution of higher education. Successful academic integration is measured by grade performance and social integration is measured by the student’s positive interaction with peers and faculty, according to the Tinto model. If the commitment to the university is strong and the academic and social integration is strong, the student is likely to remain in school (Stoecker,
Pascarella, & Wolfle, 1988). Several studies found that withdrawal patterns among traditional students supported Tinto’s model but when they viewed the results by institutional type academic and social integration did not have the same level of influence. Social integration was a more significant factor in influencing persistence at four-year residential institutions, while academic integration was more influential at four-year commuter institutions (Glynn, Sauer, & Miller, 2003; Pascarella & Chapman, 1983).

Tinto’s model has been the most empirically tested model of all the attrition and persistence models advanced in the last 30 years (Cabrera, Nora & Castaneda, 1993). The results from the studies that have tested Tinto’s model, as a plausible explanation of why students drop out, have been mixed (Anders & Carpenter, 1997; Brunsden, Davies, Shevlin, & Bracken, 2000; McCubbin, 2003; Sandler, 2000). Some studies found support for the argument that there must be a fit between the individual student and the institution in order to avoid dropout behavior (Pascarella & Terenzini, 1980). Criticisms of Tinto’s model include the idea that Tinto’s Student Integration Model of persistence is inadequate in modeling student attrition, the model is only applicable to traditional students, and academic integration is not an important predictor of student attrition in adult student populations (McCubbin, 2003). Tinto’s (1993) response to these criticisms resulted in a revised model, which included academic integration as a nested element in the social integration component. Testing this revised model where social integration is viewed as part of the academic integration at the classroom level, Ashar and Skenes (1993) found support for the 1993 model, when applied to adult student populations.
Bean and Metzner (1985) developed the first model of non-traditional student attrition. Previous models of student persistence and attrition focused on social and institutional integration. Because adult students interact with the college environment in a much different way than their traditional counterparts, the traditional student models of Spady (1971) and Tinto (1975, 1993) did not adequately describe adult student dropout decisions. Adult student dropout decisions are based on four sets of variables: (a) poor academic performance, (b) intent to leave, (c) student background which includes age, enrollment status, residence, educational goals, high school performance, ethnicity, and gender, and (d) environmental variables which include finances, hours of employment, outside encouragement, and the opportunity to transfer. Both academic outcomes such as grade point average and psychological outcomes, which include satisfaction, goal commitment, and stress, influence the intent to leave. This model demonstrates a direct link between student satisfaction with their educational experience and the decision to persist or drop out. Some suggest that combining Tinto’s Student Integration Model and Bean and Metzner’s Model of Non-traditional Student attrition will provide a more adequate understanding of the issues related to adult student persistence (Cabrera, Castaneda, Nora, & Hengstler, 1992).

Pascarella’s (1980) model of student-faculty informal contact is based on Katz and Kahn’s (1978) theory of social psychology and its link to organizational behavior. This model brings to light the socialization issues that are a part of the attrition and persistence models of Spady (1971), Tinto (1975, 1993), and Bean and Metzner (1985). Pascarella argues that the student’s background characteristics
intermingle with institutional factors, which has an effect on student satisfaction with the university, academic success, and persistence. Student background characteristics are similar to those identified by Tinto and Bean and Metzner. They include family background, aptitudes, goals, prior school achievement, college expectations, and openness to change. Institutional factors include faculty culture, organizational structure, institutional structure, institutional image, administrative policies, institutional size, admission standards, and academic standards. This model has application for the adult student in that it emphasizes the fit between the student and institutional accommodation.

Sandler’s (2000) path model of career decision-making self-efficacy, perceived stress, and student persistence is the most noteworthy research since Bean and Metzner’s 1985 research. His variables of interest were career decision-making self-efficacy, encouragement from the family, perceived stress, attitudes toward the cost of attending school, academic integration, social integration, grade point average, institutional commitment, and persistence. Disputing Tinto’s research, Sandler found that institutional commitment and academic integration had a negative effect on persistence decisions. Career decision-making self-efficacy had the largest total effect and the largest influence on all of the other variables in Sandler’s study. This path model reflects the highly interactive exchange between the adult student, the environment, and the institution. Persistence is the result of an inter-related system of relationships. For example, a student’s satisfaction with financial aid will interact with family encouragement to persist to the goal of graduation. In support of
Sandler’s theory, Taniguchi and Kaufman (2005) found that adult students who had a managerial or professional career were more likely to persist in attaining a degree.

Outcomes

Using attrition models as a basis for inquiry, Donaldson (1999) has developed a model of college outcomes that takes a holistic view of adult student college outcomes. This model reviews many of the issues that influence attrition but it also addresses the adult student experience on the college campus and outside environmental factors.

Donaldson’s (1999) model of college outcomes is a six-component model that attempts to explain the complex nature of an adult student’s life and how environmental factors outside the college environment have an influence on college outcomes. His model is based on Astin’s (1984) theory of involvement, which attempts to explain the environmental influences on student development. Involvement theory appears to underlie many of the adult educational outcome models proposed in recent literature (Berger & Milem, 1999). Astin’s theory of involvement is based on an input-environment-outcomes model. The environment component of the model refers to programs, policies, faculty, peers, and educational experiences that the student encounters while at college. Based on this model, Astin proposes that the more the students are involved in the college environment, the better the outcomes (Tam, 2002).

McClanahan (1993) summarizes Astin’s theory of involvement as how much physical and psychological involvement students invest in college. Involvement is not a single measure but rather occurs along a continuum. Involvement can be
measured both quantitatively and qualitatively. The effectiveness of a program is related to the ability of the program to increase student involvement (Moore, Lovell, McGann, & Wyrick, 1998). Student involvement, according to Astin, is defined as the interactions between students and the college staff or faculty. A deeper study of Donaldson’s model can provide guidance for both researchers and practitioners. The six components of the model (a) prior experience, (b) psychosocial and value orientations, (c) adult cognition, (d) the classroom connection, (e) life-world environment, and (f) college outcomes are discussed in further detail in the paragraphs to follow.

**Prior Experience**

An adult’s experience in college is influenced by prior life experience and the varied roles adults assume while in college such as employee, family member, and community member (Kasworm, 1995). These prior experiences also have an influence on the motivation to return to school and set the stage for how adults will achieve in the college environment (Donaldson, 1999).

**Psychosocial and Value Orientations**

Since adults must balance competing roles, while a student, their commitment to the student role is another dimension to consider when reviewing college outcomes for adults (Cross, 1981). Because they made the decision to return to school, they may experience additional stress balancing these varied roles. In spite of the added stress, in many cases, adult students are more committed to their education than traditional students are. Even though the stress of balancing multiple roles may cause students to be more committed to their education, other elements such as lack of
confidence and the fear of being too old might have a negative influence how well an adult will achieve in college (Novak & Thacker, 1991). The reduction of these negative influences has been connected with higher levels of achievement (Chartrand, 1992). Adult students value the quality and cognitive components of their education while their traditional counterparts value the social aspects of the college experience (Kasworm & Blowers, 1994).

**Adult Cognition**

This part of the model considers the knowledge structures or learning processes that adults use in college. Adults can make the connection to the real world by finding the context of how their new knowledge can be used theorizes Donaldson (1999). This portion of the model is based on previous work by Lave and Wenger (1991). The adult students’ social and psychological interactions with their professors will range from looking to them as authorities on one end of the spectrum or responding to them as peers at the other end of the spectrum (Kasworm, 1997). How well adult students make the connection to the real world from a combination of what they learn in college and the quality of their interactions in the broader college environment will influence college outcome, theorized Donaldson.

**The Classroom Connection**

Research suggests that the classroom is the focal point for the adult student (Imel, 2001; Kasworm, 1997). This might explain why many adults prefer live classroom instruction to computer based classes (Youngman, 1995). The adult student uses the classroom to create a distinction between the college experience and the student’s personal life, to illuminate existing knowledge with what is being
learned in the classroom, and to create new meaning from a constructivist’s perspective.

Life-world Environment

The life-world component is defined by Donaldson (1999) as the context of the adult student’s life such as the varied roles the student fulfills while a college student. Another facet of this component is the psychological and social support adults receive, while in college, from family, work, and the community (Merriam & Heuer, 1996).

College Outcomes

Although traditional outcomes such as grades and overall satisfaction with the college experience are part of this model, Donaldson (1999) has expanded the definition to include adult perceptions of how they integrate college and their life-world environment (Kasworm, 1997). This model suggests that adults’ achievement in college is based in part on the prior life experience of the adult student. Although adults engage in the college experience in very different ways than their traditional counterparts, the outcome is equal to that of traditional students (Donaldson, 1999).

Implications for Leadership

The increased number of adults attending colleges and universities over the last two decades has radically changed the face of higher education (Imel, 2001). Although the research on adult student issues reveals a need for college and university leadership to reform their administrative practices, many leaders are reluctant to make the needed changes to accommodate adult students, or they lack a sense of commitment to the success of the adult students found on their campuses.
(Bowden & Merritt, 1995). Leaders in higher education often find it difficult to see alignment between the institution’s mission and the need for adult specific programs and accommodations. As Bornstein (2003) has pointed out, one of the major issues facing leadership in higher education today is increased competition for students. Enrollment trends indicate that adult students will soon be the majority on most college campuses. These trends would signify that colleges with successful enrollment strategies are those whose leadership is willing to create an adult student friendly environment (Hagedorn, 2005).

Kerr (Munitz & Kerr, 1998) admonishes higher education leadership to set new priorities based on today’s trends in higher education, make college campuses more of a human community, and evaluate how resources can be used effectively. From a customer service perspective, Hadfield (2003) suggests that higher education leadership should listen to adult students to find out their specific needs and expectations. They should provide student services that fit an adult student’s work and family schedule, find out what adult students need to learn, hire faculty who can teach adult students, and most importantly, walk the talk. If a college or university claims to be adult friendly, they need to communicate that to the adult student through their leadership decisions.

By placing an emphasis on the adult student and creating intervention strategies to increase retention rates of the adult student, higher education leadership increases the chances that the adult student will be satisfied with their educational experience (Hadfield, 2003). Marketing research reveals that a satisfied student is the school’s best advertisement, increasing enrollment of future students (Brown, 2004).
Increasing adult student enrollment and retention rates has the potential to increase an institution’s net profits by as much as 50% (Bowden & Merritt, 1995). With limited resources and many demands on these limited resources, it would be wise for the leadership in higher education to consider expanding the amount of resources allocated to adult education programs (Hadfield, 2003).

Both traditional and non-traditional colleges have a responsibility to address the diversity issues found on their campuses (Hadfield, 2003). A recent study by Cubeta et al. (2000/2001) found that campuses where a tolerant attitude is expressed toward their diverse student population were more successful in attracting adult students to enroll. There needs to be congruence between what adult students perceive as their needs and expectations and what the leadership perceives as being important to the adult students.

Campus leadership who have the greatest influence on the organization’s culture and are responsible for making policy decisions that affect the whole institution tend to have the least amount of contact with students; both traditional and adult students (Hadfield, 2003). The front line employees of an institution are in the best position to influence how an adult student perceives their educational experience. Given these parameters, Hadfield suggests that campus leadership can and must take action that will create a more adult friendly environment. She proposes that leadership should purposefully reinforce the type of organizational culture they wish to create through rewards and praise, delegate some authority to the front line employees so they can satisfy adult needs and expectations, and provide training and resources for the front line employee so they share the vision for having an adult
friendly school. Focusing on the things that will satisfy adult student needs and expectations will help the campus leadership shape the culture of the institution (Elliott & Shin, 2002).

Summary

A review of relevant literature indicates that colleges and universities of today are very different from the colleges founded during America’s early history. Various religious groups started the first colleges and their purpose was to train men who would become clergy and community leaders. Land grant and city colleges soon joined the church sponsored colleges but their purpose was to serve the agricultural and urban needs of the local citizens. Today, many different types of campuses share in the educational landscape and each one has a different purpose for existing. They include two and four year private and public non-profit and for-profit institutes of higher learning. The Civil War, the Women’s movement, and the G.I. Bill were influential in changing the makeup of the students on the various campuses and today adult students are quickly approaching majority status.

Adult students bring a different set of needs and expectations to college and challenge traditional paradigms concerning institutional accommodations, student success, satisfaction, and retention. Retention rates for adult students lag behind those of traditional students but current models of retention, when tested, do not adequately explain what factors influence an adult student to remain in school or drop out.

Higher education leadership has the potential to create an environment that will increase adult student satisfaction and retention rates. By understanding the
importance of adult student issues, they have the potential to increase net profits, fulfill social obligations, and gain a competitive advantage by increasing student enrollments. They can do this by leading change initiatives and policy formation that will change the campus environment into what adult students perceive as welcoming to them.
CHAPTER III

METHODOLOGY

Introduction

The purpose of this study is to investigate adult student satisfaction with their educational experience, by campus type (main or external), along the dimensions of the Principles of Effectiveness for Serving Adult Learners (Flint, 2005). Principally a quantitative study, a mixed methodology approach was used to gain a richer understanding of the issues surrounding adult student satisfaction with their educational experience as it relates to the type of campus they are attending. The primary data gathering process adhered to the survey methodology paradigm. Chapter III includes a description of the research design and discusses the rationale for the approach. In addition, philosophical perspectives, population, participant selection, sample size, instrumentation, research procedures and data analysis are discussed. Lastly, issues of external validity, limitations, and ethical issues are presented.

Philosophical Perspectives

Certain assumptions and theories are the basis that forms the epistemological underpinnings of both qualitative and quantitative research methodologies (Slife & Williams, 1995). The paradigm of positivism, representing the scientific method, typically guides quantitative research methodology and the paradigm of constructivism typically guides qualitative research methodology (Heppner, Kivlighan, & Wampold, 1999).
**Positivism**

The foundational principle of positivism is that “truth” can be discovered through scientific methods of research (Heppner, Kivlighan, & Wampold, 1999). The scientific method involves several steps. First, a researcher makes a speculation about the nature of the universe. Second, the researcher will design a study to test the speculation. Third, the results of the study either support the speculation or disprove the speculation and it is accepted or rejected as a universal “truth” (Heppner, Kivlighan, & Wampold). This deductive way of reasoning, dating back to Aristotle, guides quantitative research methodologies (Best & Kahn, 2003).

Another characteristic of the positivistic paradigm is that causality (A causes B) is expressed in the relationships found in the universe. The positivistic world view is reductionistic in nature, breaking down larger systems into smaller sub-sets and “truth” can be expressed in quantitative measures (Heppner, Kivlighan, & Wampold, 1999).

**Constructivism**

The foundational paradigm of constructivism is the idea that there is no universal truth to be known. Reality or “truth” about the world is constructed in the mind of each person (Heppner, Kivlighan, & Wampold, 1999). The constructions of reality are formed through subjects interacting with their environment and reality formation involves mental interpretation of the events within the environment. This inductive way of reasoning guides the qualitative research methodologies (Best & Kahn, 2003).
The discovery of a universal truth is not part of the constructivist paradigm. Therefore, hypothesis testing is not the focus of gathering data; rather, data may lead the researcher in unanticipated directions causing the researcher to reinterpret data previously gathered ((Heppner, Kivlighan, & Wampold, 1999). The recursive nature of the method and results gives a robust picture of the phenomena under study in qualitative research (Giorgi & Giorgi, 2003).

Research Design

Although primarily a quantitative study, this research used a mixed methods approach. Creswell (2002) supports the use of mixed methodology research by observing that researchers often make the mistake of assuming that there is a dichotomy between qualitative and quantitative research. Use of both research methods has the potential to provide a broader and richer understanding of the phenomena under study.

The quantitative component of this study used what Isaac and Michael (1995) describe as a correlational research design. This type of descriptive research methodology was used to answer research question one. These quantitative data were gathered using the Adult Learner Inventory by Noel-Levitz (2005).

Qualitative data were gathered using structured interviews with predetermined questions (Appendix A) to answer research question two. The researcher conducted all of the interviews to reduce the threat of interviewer variance (Groves et al., 2004). The purpose of the interview was to capture the leadership perspectives of how well the institution has implemented the Principles of Effectiveness for Serving Adult Learners (Flint, 2005), and compare it to the student perspectives of how well
the institution has implemented the Principles of Effectiveness for Serving Adult Learners (Flint). Although open-ended questions add to the richness of the data, the structured questions, used in this study, more closely match the areas of interest identified by the research questions. Since the Adult Learner Inventory is designed to capture the student perspective, it was not be appropriate to use this survey to capture the institutional leadership perspective. Table 1 details the research questions, data collection instruments, and method of data analysis the two major research questions.

Rationale

Many of the persistence and attrition models of student behavior are criticized for presenting an incomplete picture of the factors that lead to a student’s drop out decision (Bean & Metzner, 1985). The drop out decision is influenced by many variables, which can be measured by degrees of influence. Additionally, different combinations of variables can influence the drop out decision. As a result, the descriptive correlational research method was an appropriate method to answer the questions guiding this research. One strength of the correlational research method is that many variables can be measured simultaneously (Isaac & Michael, 1997).

The environmental component of many of the persistence and attrition models views the campus environment as one construct (Bean & Metzner, 1985; Donaldson, 1999; Pascarella, 1980; Sandler, 2000; Spady, 1971; Tinto, 1975, 1993). This study breaks down the campus environment component into different campus types. Student satisfaction will be studied as it relates to the particular type of campus they are attending. In order to study students within their own campus environment, a
correlational research design accommodates the need for researching in a realistic setting (Best & Kahn, 2003).

The independent variable in this study, type of campus (main or external), could not be manipulated. As a result, an experimental design would not be an appropriate methodological approach. In addition, students could not be randomly assigned to different types of campuses. They go through a decision process to attend classes on a particular type of campus, which may have a relationship to the satisfaction levels that were measured in this study. The descriptive research paradigm seeks to find answers to research questions through the analysis of relationships between variables, therefore, the predominant method of inquiry is correlational.

Certain limitations are inherent in correlational research. This research methodology describes the degrees of the relationship between variables and does not identify cause and effect. It is also less rigorous than the experimental approach due to a reduced degree of control over the variables (Isaac & Michael, 1997).

The primary quantitative data collection method used in this study was an internet-based survey. Researchers involved in the study of human behavior have used survey methodology for the last 60-80 years (Groves et al., 2004). As a result, survey methodology has specific principles and theories that guide the use of surveys in research, often referred to as the “total survey error” paradigm (Groves et al.). Using a survey is a systematic way of obtaining information from a sample population, enabling the researcher to construct quantitative descriptors of the larger population from which the sample was drawn (Groves, et al.). Total survey error
suggests that errors can occur at every stage in the design and administration of the survey and researchers must be cognizant of and diminish the potential for errors when using survey methodology (Groves, 1987). Potential errors inherent in survey methodology are: (a) measurement validity, which is concerned with accurately measuring the construct of interest (b) measurement error, which is a departure from the true value what is being measured (c) processing error, which is related to errors in processing the data (d) coverage error, in which the sample frame is mismatched with the target population (e) sampling error, where there is a variance between the sample frame and the actual sample (f) no response error, where the data gathered is not representative of the sample due to those who did not respond: and (g) adjustment error, where erroneous adjustments are made to compensate for other aforementioned errors (Groves et al., 2004).

These potential survey errors were addressed in this study. Measurement validity and measurement reliability was addressed by the developer of the survey, Noel-Levitz. Their results are presented in the Instrumentation section. Since the data from the survey was captured electronically, there is a lower probability that there were errors in processing the data. The target population was defined with specific characteristics and the sample frame and actual sample shared these same characteristics. Although there was the potential for coverage and sampling errors, having clearly defined adult student characteristics helped to overcome the potential for these errors. The adjustment error was addressed by adhering to survey protocol at each stage in the survey methodology.
Surveys administered through the internet are one of the fastest growing modes for collecting data (Fricker, 2002). This survey methodology is attractive because it is cost effective, cutting down on the expense due to postage. Other advantages of using an internet survey are the speed of receiving results from the respondents, the enhanced ability to protect respondent identity, the potential to reduce data processing errors, and ease of administration (Groves et al.). When compared to mailed surveys, internet surveys tend to have a higher risk of sampling error (Groves et al., 2004). Other disadvantages of using an internet-based survey are the tendency to have lower response rates (Fricker, 2002), higher costs for design and set up on the internet, and respondent bias because respondents have varying levels of comfort using the internet (Groves et al., 2004). The return rate for this survey was 41% (n = 114), which is supported by Groves et al. as acceptable.

Qualitative data gathered through the interview process was one way to triangulate the data gathered through quantitative methods. Leedy and Ormond (2005) point out that qualitative research aids in exposing the nature of multiple perspectives. Therefore, the qualitative data gathered through the structured interview process helped to construct a richer picture of the adult education phenomena.

Though not as widely accepted in some fields as quantitative research, qualitative research has well defined research paradigms what were observed in this study as it relates to interview protocol (Creswell, 2002). The sample size of campus leadership study volunteers was small (n = 8) which is well suited for a more in-depth qualitative inquiry (Choudhuri, Glauser, & Peregoy, 2004). The focus of research question two was to understand the leadership perspective as it relates to the
Principles of Effectiveness for Serving Adult Learners (Flint, 2005). Choudhuri et al. emphasize that the inductive nature of qualitative research allows the researcher to collect subjective and perceptual data that is context sensitive, which was the focus of research question two.

As with quantitative research, there are certain limitations to qualitative research. The leadership sample size for the qualitative portion of this study was significantly smaller than the student sample size for the quantitative portion. Therefore, comparisons of the data from these two groups may not give an accurate picture of how well institutions are satisfying the adult student needs. In addition, the leadership sample may have provided biased data that cannot be verified from other sources. This qualitative method of inquiry does not establish cause and effect (Creswell, 2002).

Role of Researcher

The role of the researcher in this study was two fold. For the quantitative portion of the study, the researcher was a detached observer. The data from the surveys was gathered electronically and the researcher did not have any contact with the student participants during the time that they completed the survey. There was no relationship between the student participants and the researcher.

For the qualitative portion of the study, the researcher was the main instrument gathering device. A relationship with the leadership participants was developed through the process of enlisting them to volunteer and through the interview process. It was necessary to develop a relationship with the leadership participants in order to understand their interpretation of how well their institution is
meeting the expectations of their adult students. The researcher recognizes that certain personal biases and assumptions have the potential to influence the interpretation of data gathered through the interview process, since the researcher has engaged in educational pursuits as an adult student. Heppner, Kivlighan, and Wampold (1999) validate the importance of the relationship between the researcher and the study participants and encourage the recognition of the researcher’s biases and assumptions in qualitative research.

**Variables of Interest**

The independent variable was a coded vector to identify campus type as the institution’s main or external campus. Previous models of attrition and persistence have viewed the campus environment as a homogeneous construct (Bean & Metzner, 1985; Donaldson, 1999; Pascarella, 1980; Sandler, 2000; Spady, 1971; Tinto, 1975). The Integrated Postsecondary Education Data System (IPEDS) recognizes the importance of campus types since they report higher education data broken down by categories such as two and four year institutions, private and public institutions, and for-profit and non-profit institutions (Barbett, 2003). Refining the IPEDS recognition of different types of campuses even further, this study incorporated data from a four-year private non-profit institution’s main campus and external campus.

The dependent variables in this study consisted of the scores from the Adult Learner Inventory developed by Noel-Levitz (2005) to measure adult student satisfaction with their educational experience along the dimensions of the Principles of Effectiveness for Serving Adult Learners (Flint, 2005). These dimensions are (a) institutional accommodations, (b) career services, (c) financing options, (d) adult
learning theory based assessment, (e) the classroom connection to real life, (f) student support systems, and (g) technology that will enhance the learning experience (Flint).

The Research

Purpose

It is important to have a better understanding of how the campus environment affects satisfaction, since satisfaction with the college experience has been linked to retention rates in previous studies (Barfield, 2003; Benjamin & Hollings, 1995; Elliott & Shin, 2002; Juillerat & Schreiner, 1999). The purpose of this study was to compare adult student satisfaction with their educational experience along the dimensions of the Principles of Effectiveness for Serving Adult Learners (Flint, 2005) by campus type, since different types of institutions create various types of campus environments through varying degrees of implementation of the Principles of Effectiveness for Serving Adult Learners. Therefore, it is important to consider how institutions are serving adult students and how different types of campuses are promoting the satisfaction of the adult student.

Guiding Questions

This study was guided by two major research questions. One question investigated adult student satisfaction and the other question investigated areas of importance to the institutional leadership. The adult student question was refined with sub-questions that break down the major question into the seven areas of the Principles of Effectiveness for Serving Adult Learners (Flint, 2005) included in this study.
RQ1: To what extent, if any, do different types of college campuses employ the Principles of Effectiveness for Serving Adult Learners (Flint, 2005) and does implementation of these principles affect adult student satisfaction with their educational experience? The adult student’s educational experience is broken down into seven areas of investigation.

1. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for adult friendly institutional accommodations?
   b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectations for adult friendly institutional accommodations?

2. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for adult friendly career services?
   b) To what extent, if any does an institution’s external campus(es) meet adult students’ expectations for adult friendly career services?

3. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for flexible financing options?
   b) To what extent, if any does an institution’s external campus(es) meet adult students’ expectations for adult friendly career services?

4. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for adult learning theory based assessments of learning outcomes?
b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectation for adult learning theory based assessments of learning outcomes?

5. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for them to connect the classroom teaching-learning process to useful knowledge and skills?

b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectations for them to connect the classroom teaching-learning process to useful knowledge and skills?

6. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for student support systems?

b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectations for student support systems?

7. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for technology availability that will enhance the learning experience?

b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectation for technology availability that will enhance the learning experience?

RQ2: What are the practices institutions use to reduce adult student attrition on their main and external campus(es) and how do these practices compare to the Principles of Effectiveness for Serving Adult Learners (Flint, 2005)?
Data Generation

Quantitative Instruments

The Adult Learner Inventory (ALI) was developed by Noel-Levitz (2005) in cooperation with the Council for Adult and Experiential Learning (CAEL) as an internet-based assessment tool for adult student programs. The ALI is built on the first seven Principles of Effectiveness for Serving Adult Learners (Flint, 2005), which were developed through extensive research by CAEL (1993). The inventory consists of 47 questions that relate to one of the seven principles. These principles are described below:

1. Outreach questions measure how or if the institution reaches out to adult students by removing perceived barriers. (Questions 1, 7, 13, 24, 26, 30, 40)

2. Life and career planning questions measure how or if the institution meets the career planning needs of the adult student and helps the student reach their life goals. (Questions 2, 8, 15, 35)

3. Financing questions measure how or if the institution makes a variety of payment options available to adult students. (Questions 3, 9, 16, 23)

4. Assessment of learning outcomes questions measure how or if the institution assesses knowledge and skills that the adult learner acquires both from the curriculum and through life experience. (Questions 4, 20, 25, 37, 42)

5. Teaching-learning process questions measure how well the faculty integrates adult learning theory into the curriculum enabling adult students to make the connection with real life. (Questions 10, 17, 29, 36, 38)
6. Student support systems questions measure how or if the institution assists students to become self-directed, lifelong learners. (Questions 11, 19, 22, 28, 31, 34)

7. Technology questions measure now or if the institution uses technology to supplement the adult student’s learning experience. (Questions 5, 12, 18, 32, 39)

8. Several questions are related to what Noel-Levitz describes as transition issues, which were not part of the focus of this study. They are in questions 6, 14, 21, 27, and 33.

Both the adult student’s satisfaction level and the importance of each item are measured on a scale of one (not satisfied at all/not important) to seven (very satisfied/very important). The difference between the satisfaction level and the degree of importance is reported as a gap score. Burns, Graefe, and Absher (2003) support the use of gap scores in reporting satisfaction data.

Other instruments considered for use in this study were the Student Satisfaction Inventory (Juillerat & Schreiner, 1999), the Quality of Student Life (QSL) (Benjamin & Hollings, 1995), the College Student Experiences Questionnaire (CSEQ) (Pace, 1987), and the Institutional Goals Inventory (IGI) (Peterson & Uhl, 1977). Although all of these instruments are widely used in postsecondary educational research, none of them was designed to measure exclusively adult student satisfaction and priorities (National Center for Postsecondary Improvement, 2003), and for this reason the ALI was considered the most appropriate instrument.
Validity and reliability

The ALI has relatively high internal validity and reliability. The scales used in the ALI were tested for homogeneity and found to have an overall homogeneity coefficient of .79 (N=13,519). The ALI was also assessed for test-retest consistency. The scale scores for the two administrations (N=155) generated a reliability coefficient (alpha) of 0.8 (Noel-Levitz, 2005).

Data analysis

When the requisite number of internet surveys and one-to-one interviews were completed, the results were tabulated. Raw data from the surveys was provided by the Noel-Levitz Company for all student responses in SDF, tab delimited formats, and SPSS syntax was included. The composite mean average results for all 47 items was also included in a text file. After a confirmatory factor analysis, the quantitative data from the surveys was analyzed using a multivariate analysis of variance (MANOVA).

Qualitative Instrument

The researcher was the primary qualitative data gathering instrument in this study. These data were gathered through a structured interview process with pre-determined questions (Appendix A). During the data collection process, the researcher was careful to bracket any preconceived ideas about satisfying adult student expectations with their educational experience, since the researcher would have been classified as an adult student when pursuing a bachelor’s degree.

Validity

Although validity and reliability guide quantitative research from a positivistic epistemology, it is important to consider these issues in qualitative research.
Golafshani (2003) suggests that validity in qualitative research can be defined as rigor, trustworthiness, or quality. To maintain the rigor of this study, the researcher followed the interview protocol outlined by Seidman (1998). He cautions against interviewing friends, subordinates, or acquaintances. The researcher did not know any of the leadership participants prior to the commencement of the study. A contact visit was scheduled with willing volunteers to overview the study. The interview took place at a future date, as Seidman suggests. Although the interview was structured by certain questions, they were open ended, allowing some flexibility in the data that was collected. Interviewing several leaders at different leadership levels from each campus allowed for triangulation of the themes that emerged from the data.

**Reliability**

Lincoln & Guba (1985) equate the concept of reliability in quantitative research with dependability in qualitative research. How well the results of the study can be generalized beyond the study population, will determine reliability. Although the population in the qualitative portion of this study was small, this fits within the qualitative paradigm. Small population sizes tend to compromise reliability in qualitative studies but can be compensated for by adhering to the quality and rigor paradigms prescribed by qualitative research methods (Golafshani, 2003). Triangulating the data gathered through a rigorous interview process will result in a quality study, improving the reliability (Golafshani).

**Data and document analysis**

Qualitative data, from the interviews, was analyzed through an inductive process. After transcribing the interviews, the researcher read the transcripts in their
entirety. The next step was to look for common words or phrases between all of the interviews. When the common words or phrases were identified, categories were selected and noted in the margins beside each statement. From these categories, the researcher looked for overall themes to emerge. Creswell’s (1998) recording and coding protocol was observed.

Coding for content analysis

The Principles of Effectiveness for Serving Adult Learners (Flint, 2005) guided the content analysis. The researcher first looked for these themes to emerge from the interview transcripts. In addition, the researcher looked for themes to emerge that are not part of the Principles of Effectiveness for Serving Adult Learners (Flint). By looking for all themes contained in the interview transcripts, the researcher was able to present a robust description of how the leadership, at the institution under study, attempted to satisfy the expectations of their adult students.

Data Record Keeping

The only personally identifying characteristics of the student participants that were known to the researcher were the student’s institution, whether they attended the main campus or external campus, their institutional email address, and their name. This information will be locked, at all times, in the researcher’s office and password protected on the researcher’s computer. No has had access to this information at any time during or after the study.

The leadership participants were assigned a number on their interview transcript and the name of the participant does not appear on the transcript. A spreadsheet cross-referencing the leadership participant and the transcript number and
the signed informed consent forms are being keep in the researcher’s office in a locked file. Electronic versions of the spreadsheet and consent forms are password protected on the researcher’s computer. The researcher transcribed all interviews from the leadership participants. All data from this study will be retrained for five years following the completion of the study.

Population Samples

The institution’s external campus was selected from a convenience sample available in the researcher’s geographical location. The researcher secured approval from the institutional review board for the university who agreed to participate in this study. The institution is in good standing with the regional accrediting body that oversees the geographical area where they are offering classes.

The population of interest for this study was adult students who share the commonly accepted characteristics of an adult student as defined by the National center for Education Statistics (2002). These characteristics include being over the age of 25, being employed either full or part time, being enrolled in at least one live instruction class at a regionally accredited private four year college or university, and being enrolled in a course of study that, upon completion, the student will receive a bachelor’s degree. Although many adult students attend other types of institutions such as community colleges or trade and professional schools, the population for this study was limited to those students who were attending a four-year regionally accredited institution.

The two campuses that participated in this study have 910 adult students attending classes in the geographic area selected for this study. The main campus has
765 students meeting the sample criteria and external campus has 145 students meeting the sample criteria. Krejcie and Morgan (1970) recommend when the frame population is 910 the sample size should be 269.

The leadership volunteer population for this institution was small (n=8). Since the leadership population is small, the researcher elected to schedule an interview with everyone in this population.

**Student Participants**

The frame population is the set of adult students who will have a chance to be selected for this study (Groves et al., 2004). The sample was drawn from a traditional four year regionally accredited university located in the southeastern United States. These students were enrolled in an adult education bachelor’s degree program. Students were selected through a simple random sampling selection process to be explained in the Selection of Participants section.

To be included in the sample frame, the students met the characteristic criteria for the population sample. The contact person for the institution was given this list of criteria for a student to be considered for inclusion in the study:

a. At least 25 years old  
b. Employed either full or part time  
c. Enrolled in a bachelors degree program  
d. Currently attending at least one live instruction class

All students who met these criteria from each of the two campuses was forwarded to the researcher on an Excel spreadsheet, which included the name, campus location (main or external) and institutional email address of the student.
From each of these two lists, the researcher selected student participants for the study. The student participants were selected through a simple random sampling selection process (N = 269).

*Leadership Participants*

The leadership population was leaders from the two campuses participating in this study who have decision-making responsibility for the adult degree programs from which the student participants were selected. The institutional leadership included campus directors, deans, adult student professors, program directors, or equivalent positions. Professors were included in the population because two of the Principles for Effectively Serving Adult Learners are (a) assessment of learning outcomes that are based on adult learning theory and (b) teaching-learning process that allows the adult learner to connect classroom concepts with useful knowledge and skills (Flint, 2005). Professors were in a better position to assess these two principles because of their direct involvement in the teaching-learning process.

The leadership participants were recruited on a volunteer basis. The researcher obtained permission from the assistant dean of academic affairs for the adult program to contact the leaders and professors to ask them to participate in the study. A copy of the cover letter (Appendix B) was distributed to each volunteer, informing them about the details of the study.

*Research Procedures*

*Phase One*

Data collection began after receiving approval from the researcher’s Dissertation Committee, Committee Members of the Barry University Institutional
Review Board, and the Institutional Review Board of the participating university. The Office of Adult Continuing Education from the participating university provided a list of students meeting the study criteria. The list included the student’s institutional email address, the campus they were attending (main or external) and name. After randomly selecting an equal number of students from each campus, the study participants were assigned an eight-digit code, which they will use, instead of their name, when taking the on-line survey. The institutional email addresses and names of the students were sent to Noel-Levitz so they could assign the eight-digit code and distribute the survey. The survey included a question asking the student to identify which campus they were attending.

Phase Two

No response rates plague survey methodology. In an effort to overcome this issue the researcher sent an email to each of the selected students asking them to participate in the survey. A copy of the cover letter (Appendix B) explaining the study and its importance was included in the email.

A week later, an invitation email with a link to the survey was sent electronically to the study participants, asking for a response in the next seven days (Appendix C). After seven days, a follow up email was sent to the participants (identifiable only by the eight-digit code) who did not respond to the survey (Appendix D). Noel-Levitz tracked the student response rates by the eight digit code and sent the second email only to those who had not responded. After the deadline had passed, one final email was sent requesting the student’s participation (Appendix E). The demographic data that was collected on the participants was age, enrollment
status, and level of employment. These data insured that the participants met the criteria for inclusion in the study. Additional demographic data that was collected were ethnicity, gender, marital status, and number of dependent children. Participants participated on a voluntary basis with no incentive being offered for participation.

*Phase Three*

The leaders and professors involved in the study participated on a voluntary basis. Informed consent forms were obtained before the interview commenced (Appendix F). Each participant had direct involvement in the adult education program from which the student population was drawn. A half-hour, one-on-one structured interview was scheduled with each of the leadership participants (n=8). The researcher asked the same set of questions in all the interviews, which focused on the Principles of Effectiveness for Serving Adult Learners (Flint, 2005) (Appendix A). All interviews were conducted by telephone.

*Ethical Issues*

The basic ethical principles of nonmaleficence, beneficence, autonomy, justice, and fidelity, which underlie the published ethical standards of the American Psychological Association (2001), were observed in this study. No harm (nonmaleficence) came to those who participated in this study. The participants were not be subjected to any threats to their physical, mental, or emotional well being. The results of the study have the potential to help the institutional leadership make informed policy decisions and improve the educational experience of the adult students at that institution. This is an example of beneficence. All study participants participated on a voluntary basis and declining to participate did not influence grades,
in the case of the students, or the employment status of the leadership volunteers. This satisfies the principle of autonomy. All participants who met the standards for inclusion in the frame population had an equal opportunity to be selected for the study, thus satisfying the need for justice. Fidelity was observed by carrying out the study as expressly described in the preceding paragraphs. The researcher was honest in presenting the purpose of the study to potential participants and in presenting the data after the completion of the study.

Null and Research Hypotheses

Hypotheses

$H_0$ There will be no significant difference in the levels of satisfaction of adult students attending classes at a college or university, regardless of which type of campus (main or external) they attend or the degree to which campus leaders have incorporated the Principles of Effectiveness of Serving Adult Learners into the campus environment. The seven areas of investigation include:

1. There will be no significant difference in the satisfaction levels of adult students with the institutional accommodations at their college or university, regardless of either the type of campus they attend (main or external) or the degree to which campus leaders have incorporated institutional accommodations into the campus environment.

2. There will be no significant difference in the satisfaction levels of adult students with the career services at their college or university, regardless of either the type of campus they attend (main or external) or the degree to
which campus leaders have incorporated career services into the campus environment.

3. There will be no significant difference in the satisfaction levels of adult students with the financing options available at their college or university, regardless of either the type of campus they attend (main or external) or the degree to which campus leaders have incorporated financing options into the campus environment.

4. There will be no significant difference in the satisfaction levels of adult students with the adult learning based assessments of learning outcomes at their college or university, regardless of either the type of campus they attend (main or external) or the degree to which campus leaders have incorporated adult learning based assessments of learning outcomes into the campus environment.

5. There will be no significant difference in the satisfaction levels of adult students with their ability to connect the classroom learning with useful knowledge and skills at their college or university, regardless of either the type of campus they attend (main or external) or the degree to which campus leaders have incorporated the connection of the classroom teaching with useful knowledge and skills into the campus environment.

6. There will be no significant difference in the satisfaction levels of adult students with the student support systems at their college or university, regardless of either the type of campus they attend (main or external) or the
degree to which campus leaders have incorporated student support systems into the campus environment.

7. There will be no significant difference in the satisfaction levels of adult students with the technologically enhanced learning experiences at their college or university, regardless of either the type of campus they attend (main or external) or the degree to which campus leaders have incorporated technology that enhances the learning experience into the campus environment.

$H_1$ There will be a significant difference in the levels of satisfaction of adult students attending classes at a college or university, in regard to both the type of campus (main or external) they attend and the degree to which campus leaders have incorporated the Principles of Effectiveness of Serving Adult Learners into the campus environment. The seven areas of investigation include:

1. There will be a significant difference in the satisfaction levels of adult students with the institutional accommodations at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated institutional accommodations into the campus environment.

2. There will be a significant difference in the satisfaction levels of adult students with the career services at their college or university, in regard to both the type of institution they attend (main or external) and the degree to which campus leaders have incorporated career services into the campus environment.
3. There will be a significant difference in the satisfaction levels of adult students with the financing options available at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated financing options into the campus environment.

4. There will be a significant difference in the satisfaction levels of adult students with the adult learning based assessments of learning outcomes at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated adult learning based assessments of learning outcomes into the campus environment.

5. There will be a significant difference in the satisfaction levels of adult students with their ability to connect the classroom learning with useful knowledge and skills at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated the connection of the classroom teaching with useful knowledge and skills into the campus environment.

6. There will be a significant difference in the satisfaction levels of adult students with the student support systems at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated student support systems into the campus environment.
7. There will be a significant difference in the satisfaction levels of adult students with the technologically enhanced learning experiences at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated technology that enhances the learning experience into the campus environment.

External Validity and Limitations

The results of this study have limited external validity due to the restricted geographic area in which the study was completed. The small sample size of both the number of campuses and student participants also influenced the study’s validity. The students were studied as a homogenous group based on the campus type they are attending. This level of inquiry also limited the validity of this study when factors such as race, gender, marital status, employment level, and the student’s major area of study were not considered. Although the ALI has relatively high internal validity and is considered a reliable instrument, it is possible that using a different instrument might have yielded different results.

Assumptions

This study was conducted based on the following assumptions:

1. All students and leadership participants were honest in relating both their perceptions and answers to demographic information in both the ALI and the structured interviews.

2. All student participants were legitimately enrolled at the participating institution at the time of the study.
3. The respondents who answered the internet questions on the ALI were the students and not a friend or family member.

Summary

This study was a mixed method study using the *Adult Learner Inventory* with appropriate correlational analysis of the resulting data. Qualitative interview data was analyzed through rigorous coding methods commonly accepted in qualitative research. Satisfaction levels and degree of importance were measured along the dimensions of the Principles for Effectiveness for Serving Adult Students. The student responses were compared to the perceptions of the institutional leadership. Results from the data and additional details that resulted from the analysis will be discussed in Chapter IV.
Table 1

*Research Questions, Sources, and Analysis*

<table>
<thead>
<tr>
<th>Question</th>
<th>Source</th>
<th>Analysis</th>
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<tbody>
<tr>
<td>RQ1: To what extent, if any do different types of campuses employ the Principles of Effectiveness for Serving Adult Learners and does implementation of these principles affect adult student satisfaction with their educational experience? The adult student’s educational experience is broken down into seven areas of investigation.</td>
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<tr>
<td>1a. To what extent, if any, does an institution’s main campus meet adult student’s expectations for adult friendly institutional accommodations?</td>
<td>ALI</td>
<td>MANOVA</td>
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<tr>
<td>1b. To what extent, if any, does an institution’s external campus(es) meet adult students’ expectations for adult friendly institutional accommodations?</td>
<td>ALI</td>
<td>MANOVA</td>
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<td>Question</td>
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<tr>
<td>2a. To what extent, if any, does an institution’s main campus meet adult students’ expectations for adult friendly career services?</td>
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<td>MANOVA</td>
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<tr>
<td>2b. To what extent, if any, does an institution’s external campus(es) meet adult students’ expectations for adult friendly career services?</td>
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<td>MANOVA</td>
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<tr>
<td>3a. To what extent, if any, does an institution’s main campus meet adult students’ expectations for flexible financing options?</td>
<td>ALI</td>
<td>MANOVA</td>
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<tr>
<td>3b. To what extent, if any, does an institution’s external campus(es) meet adult students’ expectations for flexible financing options?</td>
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<tr>
<td>4a. To what extent, if any, does an institution’s main campus meet adult students’ expectations for adult learning theory based assessments of learning outcomes?</td>
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<tr>
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</tr>
<tr>
<td>6b. To what extent, if any, does an institution’s external campus(es)</td>
<td>ALI</td>
<td>MANOVA</td>
</tr>
<tr>
<td>meet adult students’ expectations for student support systems?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7a. To what extent, if any, does an institution’s main campus</td>
<td>ALI</td>
<td>MANOVA</td>
</tr>
<tr>
<td>meet adult students’ expectations for technology availability that</td>
<td></td>
<td></td>
</tr>
<tr>
<td>will enhance the learning experience?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7b. To what extent, if any, does an institution’s external campus(es)</td>
<td>ALI</td>
<td>MANOVA</td>
</tr>
<tr>
<td>meet adult students’ expectations for technology availability that</td>
<td></td>
<td></td>
</tr>
<tr>
<td>will enhance the learning experience?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RQ2. What are the practices that institutions use on their main and</td>
<td>Interview</td>
<td>Thematic</td>
</tr>
<tr>
<td>external campus(es) to reduce adult student attrition and how do</td>
<td>Questions</td>
<td>Analysis</td>
</tr>
<tr>
<td>these practices compare to the Principles of Effectiveness for Serving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult Learners?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. ALI = Adult Learner Inventory developed by Noel-Levitz*
CHAPTER IV

RESULTS

Introduction

The purpose of this study was to investigate adult student satisfaction with their educational experience, by campus type (external or main), along the dimensions of the Principles of Effectiveness for Serving Adult Learners (Flint, 2005). Institutional leaders were interviewed to gain their perspective of how well the institution satisfies the adult learner needs. The adult students were queried about their satisfaction with their educational experience, in the areas identified by the Principles of Effectiveness for Serving Adult Learners, through an on-line survey. The seven principles recognized by Flint (2005) that were the focus of this study were:

1. Outreach such as making the institutional accommodations for adult student needs,
2. Life and career planning, which helps adult learners achieve career goals,
3. Financing options that allow flexibility in paying tuition,
4. Assessment of learning outcomes that are based on adult learning theory,
5. A teaching-learning process that allows adult learners to connect classroom concepts with useful knowledge and skills,
6. Student support systems targeted to adult student needs,
7. Availability of technology that enhances the learning experience.

The Statistical Package for the Social Sciences for Windows, Version 15.0 (SPSS 15.0 Chicago, Ill) software was used to analyze the quantitative data collected.
The adult student data were collected from the Noel-Levitz *Adult Learner Inventory*. The Principles of Effectiveness for Serving Adult Learners (Flint, 2005) was the basis for constructing the survey items. The data identify what is important to these adult students and how satisfied they are with their educational experience. A gap score, which is the difference between how important an item is to an adult student and how satisfied they are, was calculated for each of the 47 items on the survey.

The results are presented in the sections that follow. The first section provides pertinent sample characteristics for the adult student participants \((n = 114)\) and the campus leadership participants \((n = 8)\). The data analysis section contains both the descriptive statistics for the adult student data and the thematic analysis for the campus leadership interviews. Also, included in Chapter IV are the results of the hypotheses tests and a presentation of the research questions.

**Sample Attrition**

The frame population of adult students \((N = 910)\) at the institution under study had 145 students on an external campus and 765 on the main campus. Krejcie and Morgan’s (1970) guidelines were used to determine the sample size. Through a random selection process, 270 students (an equal number from each campus) were selected to receive an email invitation to participate in the web based Noel-Levitz *Adult Learner Inventory*. The number of respondents \((n = 114)\) represented a 42% response rate on the survey. Five participants from the sample opted out of the study.

The average response rate for web based surveys launched by Noel-Levitz is 10% to 30% (Noel-Levitz, 2002). Although a 42% response rate on this web based survey is considered better than average, when broken down by campus, the results
are disproportionate. The return rate for the external campus was 15% \( (n = 20) \) and
the return rate for the main campus was 70% \( (n = 94) \).

Several factors contributed to the disproportionate response rates. The university requested that the survey be sent to the students’ institutional assigned email address. Adult students at this institution are encouraged to check their school email address frequently, but they are not required to do so. Therefore, it is not possible to estimate how many actually saw the email invitation asking them to participate in the study. The larger response rate from the main campus might indicate that main campus students receive more encouragement to use their institutional email address.

Judging from the number of email responses \( (n=12) \) the researcher received from main campus employees, expressing an interest in seeing the results of the survey, there are institutional employees in the adult program on the main campus. By virtue of the fact that staffing on external campuses tends to be smaller, there would be a smaller number of external campus employees in the adult program on the external campus. Being an employee of the institution may have encouraged the students to participate in the survey at a greater rate than students who are not employed at the institution.

The first email invitation to participate in the study was sent just before a three-day holiday weekend with a deadline to respond within a week. The first 100 email invitations were sent out to the main campus students but the institution’s spam blocker suppressed the other 170 invitations. The researcher discovered this over the holiday weekend but by the time the researcher secured the proper approvals to
“white list” the emails from Noel-Levitz, there were only three days left before the deadline. The response deadline was extended and the invitations were resent but the extension fell during finals week. Four students emailed to say they did not have time to complete the survey because of finals.

Sample Demographics

Adult Students

Table 2 shows the percent of participants by gender on the external campus and main campus of the institution under study. The number of female students surpasses the number of male students at both campuses, although the percentage of male students at the external campus is higher.

Table 2

Gender Breakdown by Campus

<table>
<thead>
<tr>
<th>Gender</th>
<th>External</th>
<th>Main</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>29%</td>
<td>24%</td>
</tr>
<tr>
<td>Female</td>
<td>71%</td>
<td>76%</td>
</tr>
</tbody>
</table>

The age distribution of the participants is illustrated in Table 3. In the 25-34 age range, the percent of students for the external campus was 29% and the main campus was 23%. This range and the 55-64 age range are the two age ranges where both campuses shared a similar percent. In the 35-44 age range, the percent of main campus students (34%) was more than double the percent of the external campus students (14%). The largest percent of external campus students falls in the 45-54 age range (43%). This is a larger percent than the same age range for the main campus.
The student participants from the external campus appear to be slightly older than the main campus students.

Table 3

*Age Distribution by Campus*

<table>
<thead>
<tr>
<th>Age</th>
<th>External</th>
<th>Main</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-34</td>
<td>29%</td>
<td>23%</td>
</tr>
<tr>
<td>35-44</td>
<td>14%</td>
<td>34%</td>
</tr>
<tr>
<td>45-54</td>
<td>43%</td>
<td>29%</td>
</tr>
<tr>
<td>55-64</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>65+</td>
<td>0%</td>
<td>1%</td>
</tr>
</tbody>
</table>

The racial representation from the student sample is not distributed in the same proportion on each campus. Table 4 shows the comparison between the two campuses. On the external campus the African American representation (23%) is about half of what it is on the main campus (44%), while those who identified themselves as white are in greater proportion on the external campus.
Table 4

*Racial Distribution by Campus*

<table>
<thead>
<tr>
<th>Race</th>
<th>External</th>
<th>Main</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>African American</td>
<td>23%</td>
<td>44%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>24%</td>
<td>29%</td>
</tr>
<tr>
<td>White</td>
<td>38%</td>
<td>18%</td>
</tr>
<tr>
<td>Multi</td>
<td>15%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Table 5 breaks out the marital status of the student participants. Although unplanned, the two campuses reported the same proportion of single or married students with both at around 50% each.

Table 5

*Marital Status by Campus*

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>External</th>
<th>Main</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>50%</td>
<td>51%</td>
</tr>
<tr>
<td>Married/Partner</td>
<td>50%</td>
<td>49%</td>
</tr>
</tbody>
</table>

Students on both campuses reported having dependents in greater proportion than those students reporting no dependents. The external campus students are almost split evenly between having dependents (57%) and not having dependents.
The proportion of students on the main campus who reported having dependents (67%) was greater than those who reported not having dependents (33%). Full results are displayed in Table 6.

Table 6

Dependents by Campus

<table>
<thead>
<tr>
<th>Has Dependents?</th>
<th>Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>External</td>
</tr>
<tr>
<td>Yes</td>
<td>57%</td>
</tr>
<tr>
<td>No</td>
<td>43%</td>
</tr>
</tbody>
</table>

Campus Leadership

The campus leadership sample consisted of eight volunteers who all participated in an interview with the researcher using the set of questions in Appendix A. Four of the leaders were from the university’s main campus and four were associated with the external campus. The breakdown of the leadership sample can be found in Table 7.
Table 7

*Leadership Sample Demographics*

<table>
<thead>
<tr>
<th>Position</th>
<th>Years Employed</th>
<th>Campus</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dean</td>
<td>6 years</td>
<td>Main</td>
<td>Female</td>
</tr>
<tr>
<td>2. Regional Director</td>
<td>8 years</td>
<td>External</td>
<td>Male</td>
</tr>
<tr>
<td>3. Associate Dean</td>
<td>10 years</td>
<td>Main</td>
<td>Female</td>
</tr>
<tr>
<td>4. Assistant Dean</td>
<td>7½ years</td>
<td>Main</td>
<td>Male</td>
</tr>
<tr>
<td>5. Faculty</td>
<td>25 years</td>
<td>Main</td>
<td>Female</td>
</tr>
<tr>
<td>6. Campus Administrator</td>
<td>14 years</td>
<td>External</td>
<td>Male</td>
</tr>
<tr>
<td>7. Student Advisor</td>
<td>4 years</td>
<td>External</td>
<td>Female</td>
</tr>
<tr>
<td>8. Office Manager</td>
<td>10 years</td>
<td>External</td>
<td>Female</td>
</tr>
</tbody>
</table>

Results of Hypotheses Tests

**H₀** There will be no significant difference in the levels of satisfaction of adult students attending classes at a college or university, regardless of which type of campus (main or external) they attend or the degree to which campus leaders have incorporated the Principles of Effectiveness of Serving Adult Learners into the campus environment. The seven areas of investigation include:

1. There will be no significant difference in the satisfaction levels of adult students with the institutional accommodations at their college or university, regardless of either the type of campus they attend (main or external) or the
degree to which campus leaders have incorporated institutional accommodations into the campus environment.

2. There will be no significant difference in the satisfaction levels of adult students with the career services at their college or university, regardless of either the type of campus they attend (main or external) or the degree to which campus leaders have incorporated career services into the campus environment.

3. There will be no significant difference in the satisfaction levels of adult students with the financing options available at their college or university, regardless of either the type of campus they attend (main or external) or the degree to which campus leaders have incorporated financing options into the campus environment.

4. There will be no significant difference in the satisfaction levels of adult students with the adult learning based assessments of learning outcomes at their college or university, regardless of either the type of campus they attend (main or external) or the degree to which campus leaders have incorporated adult learning based assessments of learning outcomes into the campus environment.

5. There will be no significant difference in the satisfaction levels of adult students with their ability to connect the classroom learning with useful knowledge and skills at their college or university, regardless of either the type of campus they attend (main or external) or the degree to which campus
leaders have incorporated the connection of the classroom teaching with useful knowledge and skills into the campus environment.

6. There will be no significant difference in the satisfaction levels of adult students with the student support systems at their college or university, regardless of either the type of campus they attend (main or external) or the degree to which campus leaders have incorporated student support systems into the campus environment.

7. There will be no significant difference in the satisfaction levels of adult students with the technologically enhanced learning experiences at their college or university, regardless of either the type of campus they attend (main or external) or the degree to which campus leaders have incorporated technology that enhances the learning experience into the campus environment.

**H1** There will be a significant difference in the levels of satisfaction of adult students attending classes at a college or university, in regard to both the type of campus (main or external) they attend and the degree to which campus leaders have incorporated the Principles of Effectiveness of Serving Adult Learners into the campus environment. The seven areas of investigation include:

1. There will be a significant difference in the satisfaction levels of adult students with the institutional accommodations at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated institutional accommodations into the campus environment.
2. There will be a significant difference in the satisfaction levels of adult students with the career services at their college or university, in regard to both the type of institution they attend (main or external) and the degree to which campus leaders have incorporated career services into the campus environment.

3. There will be a significant difference in the satisfaction levels of adult students with the financing options available at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated financing options into the campus environment.

4. There will be a significant difference in the satisfaction levels of adult students with the adult learning based assessments of learning outcomes at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated adult learning based assessments of learning outcomes into the campus environment.

5. There will be a significant difference in the satisfaction levels of adult students with their ability to connect the classroom learning with useful knowledge and skills at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated the connection of the classroom teaching with useful knowledge and skills into the campus environment.
6. There will be a significant difference in the satisfaction levels of adult students with the student support systems at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated student support systems into the campus environment.

7. There will be a significant difference in the satisfaction levels of adult students with the technologically enhanced learning experiences at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated technology that enhances the learning experience into the campus environment.

A one-way multivariate analysis of variance (MANOVA) was conducted to determine the level of satisfaction along the dimensions of institutional accommodations (outreach), financing options, career planning, assessment, teaching, student support services, and technology on the campus variable, the main campus and external campus of a university. A significant difference was found between campuses for the student support and technology dimensions, Wilks’s Λ = .86, $F(7,106) = 1.96, p<.05$. The multivariate $\eta^2$ based on Wilks’s Λ was not strong, .12 (see Table 8).
Table 8

*Results of the One Way Multivariate Analysis of Variance (MANOVA) on Satisfaction*

<table>
<thead>
<tr>
<th>Principle</th>
<th>df</th>
<th>F</th>
<th>η</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outreach</td>
<td>1</td>
<td>.065</td>
<td>.001</td>
<td>.799</td>
</tr>
<tr>
<td>Career Services</td>
<td>1</td>
<td>1.036</td>
<td>.009</td>
<td>.311</td>
</tr>
<tr>
<td>Financing Options</td>
<td>1</td>
<td>.054</td>
<td>.000</td>
<td>.817</td>
</tr>
<tr>
<td>Assessment</td>
<td>1</td>
<td>1.634</td>
<td>.014</td>
<td>.204</td>
</tr>
<tr>
<td>Teaching</td>
<td>1</td>
<td>1.445</td>
<td>.020</td>
<td>.137</td>
</tr>
<tr>
<td>Support Systems</td>
<td>1</td>
<td>4.295*</td>
<td>.037</td>
<td>.041</td>
</tr>
<tr>
<td>Technology</td>
<td>1</td>
<td>4.879*</td>
<td>.042</td>
<td>.029</td>
</tr>
</tbody>
</table>

*p < .05

Table 9 contains the means and standard deviations on the seven scales for the two campuses. The external campus students are more satisfied than the main campus students with institutional accommodations and financing options, while the main campus students are more satisfied with career services, assessment of learning, adult friendly teaching, support systems, and technology.
Table 9

*Means and Standard Deviations for Satisfaction Score by Campus for Principles of Effectiveness for Serving Adult Learners (Flint, 2005)*

<table>
<thead>
<tr>
<th>Principle</th>
<th>External</th>
<th></th>
<th>Main</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Outreach (Accommodations)</td>
<td>5.80</td>
<td>0.50</td>
<td>5.76</td>
<td>0.58</td>
</tr>
<tr>
<td>Career Services</td>
<td>5.47</td>
<td>0.74</td>
<td>5.64</td>
<td>0.65</td>
</tr>
<tr>
<td>Financing Options</td>
<td>5.73</td>
<td>0.74</td>
<td>5.69</td>
<td>0.66</td>
</tr>
<tr>
<td>Assessment of Learning</td>
<td>5.24</td>
<td>1.00</td>
<td>5.52</td>
<td>0.88</td>
</tr>
<tr>
<td>Teaching</td>
<td>5.64</td>
<td>0.78</td>
<td>5.93</td>
<td>0.81</td>
</tr>
<tr>
<td>Support Systems</td>
<td>5.65</td>
<td>0.74</td>
<td>5.97</td>
<td>0.59</td>
</tr>
<tr>
<td>Technology</td>
<td>5.37</td>
<td>0.77</td>
<td>5.73</td>
<td>0.64</td>
</tr>
</tbody>
</table>

Research Questions

*Research Question One*

To what extent, if any, do different types of college campuses employ the Principles of Effectiveness for Serving Adult Learners (Flint, 2005) and does implementation of these principles affect adult student satisfaction with their educational experience? The adult student’s educational experience is broken down into seven areas of investigation.

1. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for adult friendly institutional accommodations?
b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectations for adult friendly institutional accommodations?

2. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for adult friendly career services?
   b) To what extent, if any does an institution’s external campus(es) meet adult students’ expectations for adult friendly career services?

3. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for flexible financing options?
   b) To what extent, if any does an institution’s external campus(es) meet adult students’ expectations for adult friendly career services?

4. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for adult learning theory based assessments of learning outcomes?
   b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectation for adult learning theory based assessments of learning outcomes?

5. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for them to connect the classroom teaching-learning process to useful knowledge and skills?
   b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectations for them to connect the classroom teaching-learning process to useful knowledge and skills?
6. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for student support systems?
   
b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectations for student support systems?

7. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for technology availability that will enhance the learning experience?
   
b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectation for technology availability that will enhance the learning experience?

A one-way multivariate analysis of variance (MANOVA) was conducted to determine if the gap between the importance score and the satisfaction score along the dimensions of institutional accommodations (outreach), financing options, career planning, assessment, teaching, student support services, and technology was significant on the campus variable, the main campus and external campus of a university. Wilks’s Λ = .89, $F(7,106) = 1.88, p < .05$. The multivariate $\eta^2$ based on Wilks’s Λ was not strong, .11. A significant difference was found between campuses for the outreach dimension, $F(7,106) = .026, p < .05$. The results of the MANOVA are shown in Table 10.
Table 10

Results of the One Way Multivariate Analysis of Variance (MANOVA) for Gap Score

<table>
<thead>
<tr>
<th>Principle</th>
<th>df</th>
<th>F</th>
<th>η</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outreach</td>
<td>1</td>
<td>6.770*</td>
<td>.044</td>
<td>.026</td>
</tr>
<tr>
<td>Career Services</td>
<td>1</td>
<td>.351</td>
<td>.003</td>
<td>.351</td>
</tr>
<tr>
<td>Financing Options</td>
<td>1</td>
<td>4.123</td>
<td>.017</td>
<td>.162</td>
</tr>
<tr>
<td>Assessment</td>
<td>1</td>
<td>.003</td>
<td>.000</td>
<td>.960</td>
</tr>
<tr>
<td>Teaching</td>
<td>1</td>
<td>.076</td>
<td>.000</td>
<td>.815</td>
</tr>
<tr>
<td>Support Systems</td>
<td>1</td>
<td>1.026</td>
<td>.005</td>
<td>.461</td>
</tr>
<tr>
<td>Technology</td>
<td>1</td>
<td>1.660</td>
<td>.009</td>
<td>.308</td>
</tr>
</tbody>
</table>

* p < .05

Table 11 contains the means and standard deviations on the seven dimensions for the two campuses. A positive mean indicates that the student expectations were higher than the students’ satisfaction, while a negative mean indicates that the student expectations were lower than the student reported satisfaction.
Table 11

*Means and Standard Deviations of Gap Score by Campus for Principles of Effectiveness for Serving Adult Learners (Flint, 2005)*

<table>
<thead>
<tr>
<th>Principle</th>
<th>External</th>
<th></th>
<th>Main</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Outreach (Accommodations)</td>
<td>-0.06</td>
<td>1.60</td>
<td>0.58</td>
<td>1.04</td>
</tr>
<tr>
<td>Career Services</td>
<td>0.43</td>
<td>1.55</td>
<td>0.62</td>
<td>1.22</td>
</tr>
<tr>
<td>Financing Options</td>
<td>-0.13</td>
<td>2.02</td>
<td>0.38</td>
<td>1.30</td>
</tr>
<tr>
<td>Assessment of Learning</td>
<td>0.51</td>
<td>1.49</td>
<td>0.49</td>
<td>1.29</td>
</tr>
<tr>
<td>Teaching</td>
<td>0.46</td>
<td>1.10</td>
<td>0.39</td>
<td>1.19</td>
</tr>
<tr>
<td>Support Systems</td>
<td>-0.01</td>
<td>1.96</td>
<td>0.24</td>
<td>1.21</td>
</tr>
<tr>
<td>Technology</td>
<td>0.17</td>
<td>1.67</td>
<td>0.49</td>
<td>1.16</td>
</tr>
</tbody>
</table>

Table 12 shows the satisfaction means of the seven Principles of Effectiveness for Serving Adult Learners (Flint, 2005) for the institution compared to the national means. The institution had higher means than the national means in all seven areas.
Table 12

Comparison of the Institutional Means and Standard Deviations to National Means and Standard Deviations for Principles of Effectiveness for Serving Adult Learners (Flint, 2005)

<table>
<thead>
<tr>
<th>Principle</th>
<th>Institution</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Outreach (Accommodations)</td>
<td>5.77</td>
<td>1.02</td>
</tr>
<tr>
<td>Career Services</td>
<td>5.61</td>
<td>1.18</td>
</tr>
<tr>
<td>Financing Options</td>
<td>5.70</td>
<td>1.33</td>
</tr>
<tr>
<td>Assessment of Learning</td>
<td>5.47</td>
<td>1.13</td>
</tr>
<tr>
<td>Teaching</td>
<td>5.88</td>
<td>1.01</td>
</tr>
<tr>
<td>Support Systems</td>
<td>5.91</td>
<td>1.19</td>
</tr>
<tr>
<td>Technology</td>
<td>5.67</td>
<td>1.19</td>
</tr>
</tbody>
</table>

Table 13 shows the comparison of overall student satisfaction at the institution compared to the national average. Over half of the students at the institution under study reported being very satisfied with their overall educational experience compared to 36% of the students in the national study.
Table 13

Comparison of Overall Satisfaction of Institutional Students to National Student Satisfaction

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>Institutional Percent</th>
<th>National Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Not satisfied at all</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>2 = Not very satisfied</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>3 = Somewhat dissatisfied</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>4 = Neutral</td>
<td>1%</td>
<td>3%</td>
</tr>
<tr>
<td>5 = Somewhat satisfied</td>
<td>6%</td>
<td>12%</td>
</tr>
<tr>
<td>6 = Satisfied</td>
<td>34%</td>
<td>41%</td>
</tr>
<tr>
<td>7 = Very satisfied</td>
<td>51%</td>
<td>36%</td>
</tr>
</tbody>
</table>

Research Question Two

What are the practices institutions use to reduce adult student attrition on their main and external campus(es) and how do these practices compare to the Principles of Effectiveness for Serving Adult Learners (Flint, 2005)?

Each of the eight interviews with the campus leaders lasted an average of 30 minutes. Within a week after the interview, the researcher transcribed the answers to each of the questions asked during the interview. After all eight interviews were concluded and transcribed, the researcher looked for themes to emerge from both the individual questions and from the interview as a whole. The thematic analysis outlined by Creswell (2002) guided this process.
Although the length of participant employment ranged from four years to twenty-five years, the overall impression from the interviews was that all of the participants were very supportive and knowledgeable about the adult education program at their school. The sections that follow recap the leadership participants’ responses to the sixteen questions asked during the interview.

Question One: What institutional accommodations has your institution made for the adult student?

After reading the transcript from the eight participants’ answers, the researcher assigned a one word theme that summarized the focus of each participant’s response. Each one looked at institutional accommodations through a different lens. The themes that emerged were intentional, scheduling, efficiency, life-learning, historical, social, instruction, and processes. Participant One emphasized that the institutional accommodations for adults were intentional. They were well thought out and integrated into the fiber of the institution. Their institution created a school focused specifically, on the adult student. Adult students were included in the overall strategic planning process. As the planning process unfolded, this institution did a competitive analysis of other schools in the state offering adult education programs.

Participant Two focused on scheduling accommodations. This participant pointed out that the institution shortened the length of the classes, created smaller class sizes and instituted class times in the evening to accommodate work schedules.

Efficiency was the prevailing theme in Participant Three’s answer. This participant spoke about the streamlined registration process and the concept of “One-stop shopping.” They went on to define “one-stop shopping” as having
financial aid, advising, and the business office all in one location for the students so they did not have to “run all over campus” during the registration process. The advisors were also available through email, which allowed the student to communicate as their schedule permitted.

Participant Four heads up the portfolio program so the responses from this participant focused on the credit given for lifelong learning. Participant Five had the longest tenure with the institution, so this participant was able to give a rich history of the institutional accommodations made for adult students. She talked of the changes made to the schedule as the institution launched the adult education school. The original schedule did not allow students to attend full time as recognized by state guidelines. As a result, students could not take advantage of the state aid offered to full time students. The schedule was reorganized for the adult students so that they went from attending four nights a week to attending two nights a week. Through this restructure and accelerating the curriculum adult students could be classified as full time and take advantage of the full time state aid.

The social needs of the adult students were addressed by Participant Six. This participant talked about the role of the advisor and how the advisors would “hand hold” the adult students as they matriculated through the adult program. The professors teaching in the adult programs were predominantly adjuncts who were practitioners in the field from which they taught. This participant felt that was important so that adult students could identify with their instructors.

Surprisingly, the only participant to mention the physical arrangement of the classroom was Participant Seven. This participant recognized that students preferred
a table and chair arrangement rather than the desks that adorn most classrooms equipped for the traditional students. “Adult students need a place to spread out their stuff,” observed Participant Seven.

Participant eight spoke about “process.” This participant mentioned the one-stop shopping but went a step further to mention the career services that recently went on-line. Included in this participant’s answer was the fact that both the financial aid process and the advising process was streamlined for adult students.

In summary, all of the participants were able to identify the institutional accommodations that their institution has made for the adult students. The most commonly mentioned accommodations were the “one-stop shopping” processes, the role of the advisor and how that was different from advisors for traditional students, and the scheduling accommodations. All of them articulated that adult students had different needs than traditional students and that their institution recognized those differences.

Question Two: Do you feel it has reduced the attrition rates of adult students?

When asked if, in their opinion, making institutional accommodations reduced attrition rates the resounding answer from all eight participants was, “Yes, it has!!” Participant Six quoted a student as saying, “If it had not been for my advisor, I would have quit the program.” Participant Seven pointed out that the schedule changes had some “hiccups” but once those were worked out, the students were very happy. Participant Eight observed that students who did leave, left for financial reasons, not because the institution was negligent in making institutional accommodations.
Question Three: What has your Career Services department done to make their services more adult friendly?

Without exception, all of the participants mentioned a new on-line career services system that the institution is using. What several pointed out was that the system was not adult friendly. This on-line system services both adult and traditional students. Since it is an on-line environment, half of the participants felt that adults would be less likely to use it. Those on the extension campus do not have an alternative to the on-line career services system.

Question Four: In your opinion, has this helped reduce the attrition rates of adult students?

Again, without exception, all of the leadership participants felt that the system was too new to evaluate whether or not it has helped to reduce the attrition rates of adult students. One participant ventured to guess that it probably is helping with the reduction of attrition.

Question Five: What financing options are available to adult students?

The most frequently mentioned financing options were Federal loans, a state grant, employer tuition reimbursement, and a monthly payment plan. All bemoaned the fact that scholarships were very limited for the adult students. Participant Four reminded the researcher that the portfolio program could save a student money because the per credit hour charges for portfolio credit were less than traditional course credits. A student can earn up to 30 credit hours through the portfolio program, so this has the potential to reduce the students’ overall educational costs.
Question Six: Do you think your institution is doing enough to offer flexible financing options?

Participant responses were mixed when asked this question during the interview. Three indicated that the institution was doing all that could be done to offer flexible financing options. Two said that there needed to be more scholarship options and three did not offer an opinion.

Question Seven: Tell me how you perceive that your curriculum is adult friendly.

This question elicited quite a bit of dialog with the participants. All noted that the curriculum was application based but were quick to add that theory did play a part in the curriculum design. Several mentioned that the majority of the classes were taught by adjuncts, both on the main campus and on the external campus. One participant from the main campus and one from the external campus mentioned that the curriculum was designed based on the needs of the adult students. One program in particular, Public Service, was developed based on student requests.

Participant Eight could not speak to curriculum because she stated that she was not involved in curriculum on her job. She did go on to mention that she was a student in the program on an external campus and that “what I learned in class at night I was able to take to my job the next day.”

Three of the respondents from the external campus emphasized that student experiences are as much of the classroom experience as the instructor experience. One of the respondents from the main campus made the same observation.
An issue raised by Participant One was that students love the delivery of the curriculum but struggle with math and English. Many of the adult students are returning to school after a long absence from higher education. They do not have updated math and English skills, so much of the curriculum is geared toward remediation.

In summary, both the main campus and external campus leadership participants felt that the curriculum was application based. Both the students’ and instructors’ lived experiences enhance the teaching and learning process in the classroom. Capstone classes allow the student to demonstrate the applied learning that is so central to this institution’s adult curriculum.

Question Eight: What responses do your adult students have to your curriculum?

Participant Eight summed up the responses for both the main campus and external campus groups by exclaiming, “overwhelmingly positive.” Although Participant Six noted that some students struggle with math and English, she went on to assure the researcher that the general response was very positive. Participant Two revealed that some students did leave the program because the accelerated format was too rigorous for them.

Question Nine: Can you give me any examples of how adult students are connecting what they learn in class to their real world experiences?

All participants related recent student responses to this question, indicating that all of the participants have regular interaction with adult students. Participant One mentioned a student who was successful in obtaining the full 30 credits allowed by
submitting a portfolio, documenting the student’s life experience. Participant Two related a student story where the student got a job promotion because of what the student learned in the program. Participant Three noted that the capstone classes allowed students to “strut their stuff.” Participant Four teaches a political science class and told the story of a student who was inspired to start a clean up program in her community as a result of a conversation held in class about the environment.

Participant Five reiterated that students tell her on a daily basis that what they learned in class at night they took to work the next day. Participant Six knows of a student who was offered a job because, during the interview, she was asked what she would do concerning a certain state statute. The student had just studied that statute in class the night before. Participant Seven told about a psychology class discussion that caused the students to look at commercials in a totally different way after discussing manipulation in marketing. Participant Eight had a student on the external campus who learned about team concepts. He took these concepts to his team at work, developed a very successful team strategy and the end result was a promotion for the student.

Question Ten: Do you feel this is important in order to retain adult students? All but one of the leadership participants felt that being able to connect the classroom with real life was important to retention. All of the participants from the external campus enthusiastically supported the importance of this issue for retention. Participant Five went one step further and observed that when student expectations are being met they will bring in additional new students. This not only helps with retention but also with recruiting, “a nice bonus,” Participant Five stated.
Question Eleven: What support systems are in place to help adult students on your campus?

Three of the four main campus participants advanced the idea that the biggest support system in place was the role of the academic advisor. One of the main campus participants lamented that not enough support services were in place for the adult student. The external campus participants’ responses mirrored the responses from the main campus. Three of the four said that the academic advisor was the best support system in place for adult students. The other external campus participant felt that the math and English tutors and the on-line library access were the key support systems in place for adult students.

Question Twelve: Do you feel these are helping to reduce attrition?

Without exception, all of the leadership participants stated that the support systems they mentioned did help to reduce attrition. “Without the academic advisor role, the adult program at this school would not be a success,” stated Participant Seven. Participant Two expressed the opinion that most adult students have been out of school for a long period of time and needed the support services to “get through the program.”

Question Thirteen: How is technology used to enhance the learning experience for adult students?

The researcher discovered that there was wide diversity of thought on the subject of educational technology. One participant from the main campus felt that the institution used technology more than most other institutions in the area, but informed the researcher that they “had to fight for it”. One participant from the external
campus said that their institution was, “a day late and a dollar short” when it came to the use of technology. Several from both campuses mentioned the use of on-line classes. One of the participants from the external campus astutely noted that through the use of technology many classes that normally would not “make” on the external campus could be taught from the main campus through the use of technology. This gives the external campus the ability to offer a wider range of classes to the students attending the external campus. The number of students attending the external campus under study (n = 145) is significantly smaller than the main campus under study (n = 765).

The prevailing impression among the leadership participants was that adult students, as a whole, do not come into the classroom with the same level of computer skills as their traditional counterparts. By incorporating technology into the classroom, through the use of Blackboard (an on-line instructional environment), requiring PowerPoint presentations of the students, and offering a basic computer class as part of the core curriculum, the students have the opportunity to become more comfortable with the use of technology.

Question Fourteen: Is this important to retaining your students?

Even though the external campus of this institution realizes a greater benefit from the educational technology in use at this institution, half of the participants felt that technology was not directly related to retention. All but one of the main campus participants felt that incorporating technology was an important part of retention. One of the main campus participants advanced the idea that adult students preferred
live instruction over on-line instruction, therefore, technology was not important to retaining adult students.

Question Fifteen: Is it important for institutions to be concerned with satisfying the needs of the adult student?

Participant Six expressed the strongest opinion about the need to satisfy the adult student by stating, “no, it is critical.” Three of the participants used the word “absolutely” in their response to this question. All participants from both the main campus and the external campus agreed that being concerned with the needs of the adult student is important. Although higher educational institutions are “not a real business” said one participant, this participant noted that institutions should be concerned with and employ good “customer service.” Several participants observed that the adult student population is getting larger on most college campuses as is the case with the institution under study.

Question Sixteen: What roadblocks has your institution encountered in becoming a more adult friendly institution?

“We are our own worst enemy,” and “macro decisions reflect traditional models,” are the two biggest roadblocks mentioned by the participants. One participant noted that adult students on external campuses do not have access to the main campus and the resources offered there. Other roadblocks mentioned were budget constraints and a mismatch between the mission of the institution and the mission of the adult school within the institution.

There appears to be a breakdown in the communication among other schools at the institution with others not understanding the unique needs of the adult student.
Part of this is perpetuated by the fact that 100% of the administration and 80% of the faculty are focused on the traditional student, reported one of the participants.

Because the adult curriculum is accelerated and adult students are given credit for experiential learning through the portfolio program, there is a perception that the adult student curriculum is “less than,” expressed another participant. “Remove the cataracts from the eyes of the institution,” encouraged another participant.

Those who had been associated with the adult school for a period of time expressed the sentiment that they felt like the adult school was a “step child” of the institution. They also expressed concern over the “cash cow” syndrome. The adult school brings in a lot of tuition dollars but they are still treated as less than equal with the other schools at the institution.

To summarize, the adult school at this institution understands the needs of the adult student and has adjusted the curriculum and student services to accommodate these special needs. The roadblocks that keep this institution from becoming more adult friendly, according to the leadership participants, are ingrained in the organizational fabric of the institution, not within the adult school itself. Several of the participants indicated that they felt that faculty and staff not associated with the adult school just did not understand the needs of the adult student. They are trying to make the adult school conform to the same standards as the traditional student model.

Summary

Quantitative data were collected through the Adult Learner Inventory, produced by Noel-Levitz and built on the Principles of Effectiveness for Serving Adult Learners (Flint, 2005). The sample population (n= 114) consisted of 20 adult
students from the external campus and 94 adult students from the main campus of a university located in the southeastern United States.

Qualitative data were collected through one-on-one structured interviews with the campus leadership \((n = 8)\) from both the external and main campus of the institution under study. The transcripts were reviewed and analyzed by the researcher and prevailing themes were identified. The interview questions sought to gain insight into the leadership perspective of how well the institution is satisfying the needs of the adult learners along the dimensions of the Principles of Effectiveness for Serving Adult Learners (Flint, 2005).

A hypothesis test was conducted using a one-way multivariate analysis of variance (MANOVA). The null hypothesis (there would not be any significant difference between the external and main campus along the dimensions of the Principles for Serving Adult Learners) was not rejected for five of the seven Principles of Effectiveness for Serving Adult Learners (Flint, 2005). The support and technology dimensions were found to have significant differences between the external and main campuses.

Gap scores, the difference between importance and satisfaction along the dimensions of the Principles of Effectiveness for Serving Adult Learners (Flint, 2005) were calculated for the two campuses, external and main. A one-way multivariate analysis of variance (MANOVA) was conducted for the gap scores to address research question one, how well the external and main campus is meeting the expectations of the adult students. No significant difference was found between the two campuses with the exception of outreach (campus accommodations).
The thematic analysis of the interview questions, outlined by Creswell (2002), was presented in response to research question two, how well the campus leaders perceive they are meeting the needs of the adult students on their external or main campus.
CHAPTER IV

RESULTS

Introduction

The purpose of this study was to investigate adult student satisfaction with their educational experience, by campus type (external or main), along the dimensions of the Principles of Effectiveness for Serving Adult Learners (Flint, 2005). Institutional leaders were interviewed to gain their perspective of how well the institution satisfies the adult learner needs. The adult students were quarrried about their satisfaction with their educational experience, in the areas identified by the Principles of Effectiveness for Serving Adult Learners, through an on-line survey. The seven principles recognized by Flint (2005) that were the focus of this study were:

1. Outreach such as making the institutional accommodations for adult student needs,
2. Life and career planning, which helps adult learners achieve career goals,
3. Financing options that allow flexibility in paying tuition,
4. Assessment of learning outcomes that are based on adult learning theory,
5. A teaching-learning process that allows adult learners to connect classroom concepts with useful knowledge and skills,
6. Student support systems targeted to adult student needs,
7. Availability of technology that enhances the learning experience.

The Statistical Package for the Social Sciences for Windows, Version 15.0 (SPSS 15.0 Chicago, Ill) software was used to analyze the quantitative data collected.
The adult student data were collected from the Noel-Levitz Adult Learner Inventory. The Principles of Effectiveness for Serving Adult Learners (Flint, 2005) was the basis for constructing the survey items. The data identify what is important to these adult students and how satisfied they are with their educational experience. A gap score, which is the difference between how important an item is to an adult student and how satisfied they are, was calculated for each of the 47 items on the survey.

The results are presented in the sections that follow. The first section provides pertinent sample characteristics for the adult student participants \((n = 114)\) and the campus leadership participants \((n = 8)\). The data analysis section contains both the descriptive statistics for the adult student data and the thematic analysis for the campus leadership interviews. Also, included in Chapter IV are the results of the hypotheses tests and a presentation of the research questions.

Sample Attrition

The frame population of adult students \((N = 910)\) at the institution under study had 145 students on an external campus and 765 on the main campus. Krejcie and Morgan’s (1970) guidelines were used to determine the sample size. Through a random selection process, 270 students (an equal number from each campus) were selected to receive an email invitation to participate in the web based Noel-Levitz Adult Learner Inventory. The number of respondents \((n = 114)\) represented a 42% response rate on the survey. Five participants from the sample opted out of the study.

The average response rate for web based surveys launched by Noel-Levitz is 10% to 30% (Noel-Levitz, 2002). Although a 42% response rate on this web based survey is considered better than average, when broken down by campus, the results
are disproportionate. The return rate for the external campus was 15% \( (n = 20) \) and the return rate for the main campus was 70% \( (n = 94) \).

Several factors contributed to the disproportionate response rates. The university requested that the survey be sent to the students’ institutional assigned email address. Adult students at this institution are encouraged to check their school email address frequently, but they are not required to do so. Therefore, it is not possible to estimate how many actually saw the email invitation asking them to participate in the study. The larger response rate from the main campus might indicate that main campus students receive more encouragement to use their institutional email address.

Judging from the number of email responses \( (n=12) \) the researcher received from main campus employees, expressing an interest in seeing the results of the survey, there are institutional employees in the adult program on the main campus. By virtue of the fact that staffing on external campuses tends to be smaller, there would be a smaller number of external campus employees in the adult program on the external campus. Being an employee of the institution may have encouraged the students to participate in the survey at a greater rate than students who are not employed at the institution.

The first email invitation to participate in the study was sent just before a three-day holiday weekend with a deadline to respond within a week. The first 100 email invitations were sent out to the main campus students but the institution’s spam blocker suppressed the other 170 invitations. The researcher discovered this over the holiday weekend but by the time the researcher secured the proper approvals to
“white list” the emails from Noel-Levitz, there were only three days left before the deadline. The response deadline was extended and the invitations were resent but the extension fell during finals week. Four students emailed to say they did not have time to complete the survey because of finals.

Sample Demographics

Adult Students

Table 2 shows the percent of participants by gender on the external campus and main campus of the institution under study. The number of female students surpasses the number of male students at both campuses, although the percentage of male students at the external campus is higher.

Table 2

*Gender Breakdown by Campus*

<table>
<thead>
<tr>
<th>Gender</th>
<th>External</th>
<th>Main</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>29%</td>
<td>24%</td>
</tr>
<tr>
<td>Female</td>
<td>71%</td>
<td>76%</td>
</tr>
</tbody>
</table>

The age distribution of the participants is illustrated in Table 3. In the 25-34 age range, the percent of students for the external campus was 29% and the main campus was 23%. This range and the 55-64 age range are the two age ranges where both campuses shared a similar percent. In the 35-44 age range, the percent of main campus students (34%) was more than double the percent of the external campus students (14%). The largest percent of external campus students falls in the 45-54 age range (43%). This is a larger percent than the same age range for the main campus.
The student participants from the external campus appear to be slightly older than the main campus students.

Table 3

*Age Distribution by Campus*

<table>
<thead>
<tr>
<th>Age</th>
<th>External</th>
<th>Main</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-34</td>
<td>29%</td>
<td>23%</td>
</tr>
<tr>
<td>35-44</td>
<td>14%</td>
<td>34%</td>
</tr>
<tr>
<td>45-54</td>
<td>43%</td>
<td>29%</td>
</tr>
<tr>
<td>55-64</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>65 +</td>
<td>0%</td>
<td>1%</td>
</tr>
</tbody>
</table>

The racial representation from the student sample is not distributed in the same proportion on each campus. Table 4 shows the comparison between the two campuses. On the external campus the African American representation (23%) is about half of what it is on the main campus (44%), while those who identified themselves as white are in greater proportion on the external campus.
Table 4

*Racial Distribution by Campus*

<table>
<thead>
<tr>
<th>Race</th>
<th>Campus</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>External</td>
<td>Main</td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>0%</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>23%</td>
<td>44%</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>24%</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>38%</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td>Multi</td>
<td>15%</td>
<td>8%</td>
<td></td>
</tr>
</tbody>
</table>

Table 5 breaks out the marital status of the student participants. Although unplanned, the two campuses reported the same proportion of single or married students with both at around 50% each.

Table 5

*Marital Status by Campus*

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Campus</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>External</td>
<td>Main</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>50%</td>
<td>51%</td>
<td></td>
</tr>
<tr>
<td>Married/Partner</td>
<td>50%</td>
<td>49%</td>
<td></td>
</tr>
</tbody>
</table>

Students on both campuses reported having dependents in greater proportion than those students reporting no dependents. The external campus students are almost split evenly between having dependents (57%) and not having dependents
The proportion of students on the main campus who reported having dependents (67%) was greater than those who reported not having dependents (33%). Full results are displayed in Table 6.

Table 6

*Dependents by Campus*

<table>
<thead>
<tr>
<th>Has Dependents?</th>
<th>Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>External</td>
</tr>
<tr>
<td>Yes</td>
<td>57%</td>
</tr>
<tr>
<td>No</td>
<td>43%</td>
</tr>
</tbody>
</table>

*Campus Leadership*

The campus leadership sample consisted of eight volunteers who all participated in an interview with the researcher using the set of questions in Appendix A. Four of the leaders were from the university’s main campus and four were associated with the external campus. The breakdown of the leadership sample can be found in Table 7.
Table 7

Leadership Sample Demographics

<table>
<thead>
<tr>
<th>Position</th>
<th>Years Employed</th>
<th>Campus</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dean</td>
<td>6 years</td>
<td>Main</td>
<td>Female</td>
</tr>
<tr>
<td>2. Regional Director</td>
<td>8 years</td>
<td>External</td>
<td>Male</td>
</tr>
<tr>
<td>3. Associate Dean</td>
<td>10 years</td>
<td>Main</td>
<td>Female</td>
</tr>
<tr>
<td>4. Assistant Dean</td>
<td>7½ years</td>
<td>Main</td>
<td>Male</td>
</tr>
<tr>
<td>5. Faculty</td>
<td>25 years</td>
<td>Main</td>
<td>Female</td>
</tr>
<tr>
<td>6. Campus Administrator</td>
<td>14 years</td>
<td>External</td>
<td>Male</td>
</tr>
<tr>
<td>7. Student Advisor</td>
<td>4 years</td>
<td>External</td>
<td>Female</td>
</tr>
<tr>
<td>8. Office Manager</td>
<td>10 years</td>
<td>External</td>
<td>Female</td>
</tr>
</tbody>
</table>

Results of Hypotheses Tests

\( H_0 \): There will be no significant difference in the levels of satisfaction of adult students attending classes at a college or university, regardless of which type of campus (main or external) they attend or the degree to which campus leaders have incorporated the Principles of Effectiveness of Serving Adult Learners into the campus environment. The seven areas of investigation include:

1. There will be no significant difference in the satisfaction levels of adult students with the institutional accommodations at their college or university, regardless of either the type of campus they attend (main or external) or the
degree to which campus leaders have incorporated institutional accommodations into the campus environment.

2. There will be no significant difference in the satisfaction levels of adult students with the career services at their college or university, regardless of whether the type of campus they attend (main or external) or the degree to which campus leaders have incorporated career services into the campus environment.

3. There will be no significant difference in the satisfaction levels of adult students with the financing options available at their college or university, regardless of whether the type of campus they attend (main or external) or the degree to which campus leaders have incorporated financing options into the campus environment.

4. There will be no significant difference in the satisfaction levels of adult students with the adult learning based assessments of learning outcomes at their college or university, regardless of whether the type of campus they attend (main or external) or the degree to which campus leaders have incorporated adult learning based assessments of learning outcomes into the campus environment.

5. There will be no significant difference in the satisfaction levels of adult students with their ability to connect the classroom learning with useful knowledge and skills at their college or university, regardless of whether the type of campus they attend (main or external) or the degree to which campus
leaders have incorporated the connection of the classroom teaching with useful knowledge and skills into the campus environment.

6. There will be no significant difference in the satisfaction levels of adult students with the student support systems at their college or university, regardless of whether the type of campus they attend (main or external) or the degree to which campus leaders have incorporated student support systems into the campus environment.

7. There will be no significant difference in the satisfaction levels of adult students with the technologically enhanced learning experiences at their college or university, regardless of whether the type of campus they attend (main or external) or the degree to which campus leaders have incorporated technology that enhances the learning experience into the campus environment.

$H_1$ There will be a significant difference in the levels of satisfaction of adult students attending classes at a college or university, in regard to both the type of campus (main or external) they attend and the degree to which campus leaders have incorporated the Principles of Effectiveness of Serving Adult Learners into the campus environment. The seven areas of investigation include:

1. There will be a significant difference in the satisfaction levels of adult students with the institutional accommodations at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated institutional accommodations into the campus environment.
2. There will be a significant difference in the satisfaction levels of adult students with the career services at their college or university, in regard to both the type of institution they attend (main or external) and the degree to which campus leaders have incorporated career services into the campus environment.

3. There will be a significant difference in the satisfaction levels of adult students with the financing options available at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated financing options into the campus environment.

4. There will be a significant difference in the satisfaction levels of adult students with the adult learning based assessments of learning outcomes at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated adult learning based assessments of learning outcomes into the campus environment.

5. There will be a significant difference in the satisfaction levels of adult students with their ability to connect the classroom learning with useful knowledge and skills at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated the connection of the classroom teaching with useful knowledge and skills into the campus environment.
6. There will be a significant difference in the satisfaction levels of adult students with the student support systems at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated student support systems into the campus environment.

7. There will be a significant difference in the satisfaction levels of adult students with the technologically enhanced learning experiences at their college or university, in regard to both the type of campus they attend (main or external) and the degree to which campus leaders have incorporated technology that enhances the learning experience into the campus environment.

A one-way multivariate analysis of variance (MANOVA) was conducted to determine the level of satisfaction along the dimensions of institutional accommodations (outreach), financing options, career planning, assessment, teaching, student support services, and technology on the campus variable, the main campus and external campus of a university. A significant difference was found between campuses for the student support and technology dimensions, Wilks’s $\Lambda = .86, F(7,106) = 1.96, p<.05$. The multivariate $\eta^2$ based on Wilks’s $\Lambda$ was not strong, .12 (see Table 8).
Table 8

*Results of the One Way Multivariate Analysis of Variance (MANOVA) on Satisfaction*

<table>
<thead>
<tr>
<th>Principle</th>
<th>df</th>
<th>F</th>
<th>η</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outreach</td>
<td>1</td>
<td>.065</td>
<td>.001</td>
<td>.799</td>
</tr>
<tr>
<td>Career Services</td>
<td>1</td>
<td>1.036</td>
<td>.009</td>
<td>.311</td>
</tr>
<tr>
<td>Financing Options</td>
<td>1</td>
<td>.054</td>
<td>.000</td>
<td>.817</td>
</tr>
<tr>
<td>Assessment</td>
<td>1</td>
<td>1.634</td>
<td>.014</td>
<td>.204</td>
</tr>
<tr>
<td>Teaching</td>
<td>1</td>
<td>1.445</td>
<td>.020</td>
<td>.137</td>
</tr>
<tr>
<td>Support Systems</td>
<td>1</td>
<td>4.295*</td>
<td>.037</td>
<td>.041</td>
</tr>
<tr>
<td>Technology</td>
<td>1</td>
<td>4.879*</td>
<td>.042</td>
<td>.029</td>
</tr>
</tbody>
</table>

* p < .05

Table 9 contains the means and standard deviations on the seven scales for the two campuses. The external campus students are more satisfied than the main campus students with institutional accommodations and financing options, while the main campus students are more satisfied with career services, assessment of learning, adult friendly teaching, support systems, and technology.
Table 9

*Means and Standard Deviations for Satisfaction Score by Campus for Principles of Effectiveness for Serving Adult Learners (Flint, 2005)*

<table>
<thead>
<tr>
<th>Principle</th>
<th>External M</th>
<th>SD</th>
<th>Main M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outreach (Accommodations)</td>
<td>5.80</td>
<td>0.50</td>
<td>5.76</td>
<td>0.58</td>
</tr>
<tr>
<td>Career Services</td>
<td>5.47</td>
<td>0.74</td>
<td>5.64</td>
<td>0.65</td>
</tr>
<tr>
<td>Financing Options</td>
<td>5.73</td>
<td>0.74</td>
<td>5.69</td>
<td>0.66</td>
</tr>
<tr>
<td>Assessment of Learning</td>
<td>5.24</td>
<td>1.00</td>
<td>5.52</td>
<td>0.88</td>
</tr>
<tr>
<td>Teaching</td>
<td>5.64</td>
<td>0.78</td>
<td>5.93</td>
<td>0.81</td>
</tr>
<tr>
<td>Support Systems</td>
<td>5.65</td>
<td>0.74</td>
<td>5.97</td>
<td>0.59</td>
</tr>
<tr>
<td>Technology</td>
<td>5.37</td>
<td>0.77</td>
<td>5.73</td>
<td>0.64</td>
</tr>
</tbody>
</table>

Research Questions

*Research Question One*

To what extent, if any, do different types of college campuses employ the Principles of Effectiveness for Serving Adult Learners (Flint, 2005) and does implementation of these principles affect adult student satisfaction with their educational experience? The adult student’s educational experience is broken down into seven areas of investigation.

1. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for adult friendly institutional accommodations?
b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectations for adult friendly institutional accommodations?

2. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for adult friendly career services?

  b) To what extent, if any does an institution’s external campus(es) meet adult students’ expectations for adult friendly career services?

3. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for flexible financing options?

  b) To what extent, if any does an institution’s external campus(es) meet adult students’ expectations for adult friendly career services?

4. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for adult learning theory based assessments of learning outcomes?

  b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectation for adult learning theory based assessments of learning outcomes?

5. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for them to connect the classroom teaching-learning process to useful knowledge and skills?

  b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectations for them to connect the classroom teaching-learning process to useful knowledge and skills?
6. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for student support systems?
  b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectations for student support systems?

7. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for technology availability that will enhance the learning experience?
  b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectation for technology availability that will enhance the learning experience?

A one-way multivariate analysis of variance (MANOVA) was conducted to determine if the gap between the importance score and the satisfaction score along the dimensions of institutional accommodations (outreach), financing options, career planning, assessment, teaching, student support services, and technology was significant on the campus variable, the main campus and external campus of a university Wilks’s $\Lambda = .89$, $F(7,106) = 1.88$, $p<.05$. The multivariate $\eta^2$ based on Wilks’s $\Lambda$ was not strong, .11. A significant difference was found between campuses for the outreach dimension, $F(7,106) = .026$, $p < .05$. The results of the MANOVA are shown in Table 10.
Table 10

Results of the One Way Multivariate Analysis of Variance (MANOVA) for Gap Score

<table>
<thead>
<tr>
<th>Principle</th>
<th>df</th>
<th>F</th>
<th>η</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outreach</td>
<td>1</td>
<td>6.770*</td>
<td>.044</td>
<td>.026</td>
</tr>
<tr>
<td>Career Services</td>
<td>1</td>
<td>0.351</td>
<td>.003</td>
<td>.351</td>
</tr>
<tr>
<td>Financing Options</td>
<td>1</td>
<td>4.123</td>
<td>.017</td>
<td>.162</td>
</tr>
<tr>
<td>Assessment</td>
<td>1</td>
<td>0.003</td>
<td>.000</td>
<td>.960</td>
</tr>
<tr>
<td>Teaching</td>
<td>1</td>
<td>0.076</td>
<td>.000</td>
<td>.815</td>
</tr>
<tr>
<td>Support Systems</td>
<td>1</td>
<td>1.026</td>
<td>.005</td>
<td>.461</td>
</tr>
<tr>
<td>Technology</td>
<td>1</td>
<td>1.660</td>
<td>.009</td>
<td>.308</td>
</tr>
</tbody>
</table>

* p < .05

Table 11 contains the means and standard deviations on the seven dimensions for the two campuses. A positive mean indicates that the student expectations were higher than the students’ satisfaction, while a negative mean indicates that the student expectations were lower than the student reported satisfaction.
Table 11

*Means and Standard Deviations of Gap Score by Campus for Principles of Effectiveness for Serving Adult Learners (Flint, 2005)*

<table>
<thead>
<tr>
<th>Principle</th>
<th>External M</th>
<th>External SD</th>
<th>Main M</th>
<th>Main SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outreach (Accommodations)</td>
<td>-0.06</td>
<td>1.60</td>
<td>0.58</td>
<td>1.04</td>
</tr>
<tr>
<td>Career Services</td>
<td>0.43</td>
<td>1.55</td>
<td>0.62</td>
<td>1.22</td>
</tr>
<tr>
<td>Financing Options</td>
<td>-0.13</td>
<td>2.02</td>
<td>0.38</td>
<td>1.30</td>
</tr>
<tr>
<td>Assessment of Learning</td>
<td>0.51</td>
<td>1.49</td>
<td>0.49</td>
<td>1.29</td>
</tr>
<tr>
<td>Teaching</td>
<td>0.46</td>
<td>1.10</td>
<td>0.39</td>
<td>1.19</td>
</tr>
<tr>
<td>Support Systems</td>
<td>-0.01</td>
<td>1.96</td>
<td>0.24</td>
<td>1.21</td>
</tr>
<tr>
<td>Technology</td>
<td>0.17</td>
<td>1.67</td>
<td>0.49</td>
<td>1.16</td>
</tr>
</tbody>
</table>

Table 12 shows the satisfaction means of the seven Principles of Effectiveness for Serving Adult Learners (Flint, 2005) for the institution compared to the national means. The institution had higher means than the national means in all seven areas.
Table 12

Comparison of the Institutional Means and Standard Deviations to National Means and Standard Deviations for Principles of Effectiveness for Serving Adult Learners (Flint, 2005)

<table>
<thead>
<tr>
<th>Principle</th>
<th>Institution M</th>
<th>Institution SD</th>
<th>National M</th>
<th>National SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outreach (Accommodations)</td>
<td>5.77</td>
<td>1.02</td>
<td>5.75</td>
<td>1.00</td>
</tr>
<tr>
<td>Career Services</td>
<td>5.61</td>
<td>1.18</td>
<td>5.30</td>
<td>1.03</td>
</tr>
<tr>
<td>Financing Options</td>
<td>5.70</td>
<td>1.33</td>
<td>5.37</td>
<td>1.09</td>
</tr>
<tr>
<td>Assessment of Learning</td>
<td>5.47</td>
<td>1.13</td>
<td>5.38</td>
<td>1.11</td>
</tr>
<tr>
<td>Teaching</td>
<td>5.88</td>
<td>1.01</td>
<td>5.80</td>
<td>1.18</td>
</tr>
<tr>
<td>Support Systems</td>
<td>5.91</td>
<td>1.19</td>
<td>5.43</td>
<td>1.10</td>
</tr>
<tr>
<td>Technology</td>
<td>5.67</td>
<td>1.19</td>
<td>5.51</td>
<td>1.05</td>
</tr>
</tbody>
</table>

Table 13 shows the comparison of overall student satisfaction at the institution compared to the national average. Over half of the students at the institution under study reported being very satisfied with their overall educational experience compared to 36% of the students in the national study.
Table 13

Comparison of Overall Satisfaction of Institutional Students to National Student Satisfaction

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>Institutional Percent</th>
<th>National Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Not satisfied at all</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>2 = Not very satisfied</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>3 = Somewhat dissatisfied</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>4 = Neutral</td>
<td>1%</td>
<td>3%</td>
</tr>
<tr>
<td>5 = Somewhat satisfied</td>
<td>6%</td>
<td>12%</td>
</tr>
<tr>
<td>6 = Satisfied</td>
<td>34%</td>
<td>41%</td>
</tr>
<tr>
<td>7 = Very satisfied</td>
<td>51%</td>
<td>36%</td>
</tr>
</tbody>
</table>

Research Question Two

What are the practices institutions use to reduce adult student attrition on their main and external campus(es) and how do these practices compare to the Principles of Effectiveness for Serving Adult Learners (Flint, 2005)?

Each of the eight interviews with the campus leaders lasted an average of 30 minutes. Within a week after the interview, the researcher transcribed the answers to each of the questions asked during the interview. After all eight interviews were concluded and transcribed, the researcher looked for themes to emerge from both the individual questions and from the interview as a whole. The thematic analysis outlined by Creswell (2002) guided this process.
Although the length of participant employment ranged from four years to twenty-five years, the overall impression from the interviews was that all of the participants were very supportive and knowledgeable about the adult education program at their school. The sections that follow recap the leadership participants’ responses to the sixteen questions asked during the interview.

Question One: What institutional accommodations has your institution made for the adult student?

After reading the transcript from the eight participants’ answers, the researcher assigned a one word theme that summarized the focus of each participant’s response. Each one looked at institutional accommodations through a different lens. The themes that emerged were intentional, scheduling, efficiency, life-learning, historical, social, instruction, and processes. Participant One emphasized that the institutional accommodations for adults were intentional. They were well thought out and integrated into the fiber of the institution. Their institution created a school focused specifically, on the adult student. Adult students were included in the overall strategic planning process. As the planning process unfolded, this institution did a competitive analysis of other schools in the state offering adult education programs.

Participant Two focused on scheduling accommodations. This participant pointed out that the institution shortened the length of the classes, created smaller class sizes and instituted class times in the evening to accommodate work schedules.

Efficiency was the prevailing theme in Participant Three’s answer. This participant spoke about the streamlined registration process and the concept of “One-stop shopping.” They went on to define “one-stop shopping” as having
financial aid, advising, and the business office all in one location for the students so
they did not have to “run all over campus” during the registration process. The
advisors were also available through email, which allowed the student to
communicate as their schedule permitted.

Participant Four heads up the portfolio program so the responses from this
participant focused on the credit given for lifelong learning. Participant Five had the
longest tenure with the institution, so this participant was able to give a rich history of
the institutional accommodations made for adult students. She talked of the changes
made to the schedule as the institution launched the adult education school. The
original schedule did not allow students to attend full time as recognized by state
guidelines. As a result, students could not take advantage of the state aid offered to
full time students. The schedule was reorganized for the adult students so that they
went from attending four nights a week to attending two nights a week. Through this
restructure and accelerating the curriculum adult students could be classified as full
time and take advantage of the full time state aid.

The social needs of the adult students were addressed by Participant Six. This
participant talked about the role of the advisor and how the advisors would “hand
hold” the adult students as they matriculated through the adult program. The
professors teaching in the adult programs were predominantly adjuncts who were
practitioners in the field from which they taught. This participant felt that was
important so that adult students could identify with their instructors.

Surprisingly, the only participant to mention the physical arrangement of the
classroom was Participant Seven. This participant recognized that students preferred
a table and chair arrangement rather than the desks that adorn most classrooms equipped for the traditional students. “Adult students need a place to spread out their stuff,” observed Participant Seven.

Participant eight spoke about “process.” This participant mentioned the one-stop shopping but went a step further to mention the career services that recently went on-line. Included in this participant’s answer was the fact that both the financial aid process and the advising process was streamlined for adult students.

In summary, all of the participants were able to identify the institutional accommodations that their institution has made for the adult students. The most commonly mentioned accommodations were the “one-stop shopping” processes, the role of the advisor and how that was different from advisors for traditional students, and the scheduling accommodations. All of them articulated that adult students had different needs than traditional students and that their institution recognized those differences.

Question Two: Do you feel it has reduced the attrition rates of adult students?

When asked if, in their opinion, making institutional accommodations reduced attrition rates the resounding answer from all eight participants was, “Yes, it has!!” Participant Six quoted a student as saying, “If it had not been for my advisor, I would have quit the program.” Participant Seven pointed out that the schedule changes had some “hiccups” but once those were worked out, the students were very happy. Participant Eight observed that students who did leave, left for financial reasons, not because the institution was negligent in making institutional accommodations.
Question Three: What has your Career Services department done to make their services more adult friendly?

Without exception, all of the participants mentioned a new on-line career services system that the institution is using. What several pointed out was that the system was not adult friendly. This on-line system services both adult and traditional students. Since it is an on-line environment, half of the participants felt that adults would be less likely to use it. Those on the extension campus do not have an alternative to the on-line career services system.

Question Four: In your opinion, has this helped reduce the attrition rates of adult students?

Again, without exception, all of the leadership participants felt that the system was too new to evaluate whether or not it has helped to reduce the attrition rates of adult students. One participant ventured to guess that it probably is helping with the reduction of attrition.

Question Five: What financing options are available to adult students?

The most frequently mentioned financing options were Federal loans, a state grant, employer tuition reimbursement, and a monthly payment plan. All bemoaned the fact that scholarships were very limited for the adult students. Participant Four reminded the researcher that the portfolio program could save a student money because the per credit hour charges for portfolio credit were less than traditional course credits. A student can earn up to 30 credit hours through the portfolio program, so this has the potential to reduce the students’ overall educational costs.
Question Six: Do you think your institution is doing enough to offer flexible financing options?

Participant responses were mixed when asked this question during the interview. Three indicated that the institution was doing all that could be done to offer flexible financing options. Two said that there needed to be more scholarship options and three did not offer an opinion.

Question Seven: Tell me how you perceive that your curriculum is adult friendly.

This question elicited quite a bit of dialog with the participants. All noted that the curriculum was application based but were quick to add that theory did play a part in the curriculum design. Several mentioned that the majority of the classes were taught by adjuncts, both on the main campus and on the external campus. One participant from the main campus and one from the external campus mentioned that the curriculum was designed based on the needs of the adult students. One program in particular, Public Service, was developed based on student requests.

Participant Eight could not speak to curriculum because she stated that she was not involved in curriculum on her job. She did go on to mention that she was a student in the program on an external campus and that “what I learned in class at night I was able to take to my job the next day.”

Three of the respondents from the external campus emphasized that student experiences are as much of the classroom experience as the instructor experience. One of the respondents from the main campus made the same observation.
An issue raised by Participant One was that students love the delivery of the curriculum but struggle with math and English. Many of the adult students are returning to school after a long absence from higher education. They do not have updated math and English skills, so much of the curriculum is geared toward remediation.

In summary, both the main campus and external campus leadership participants felt that the curriculum was application based. Both the students’ and instructors’ lived experiences enhance the teaching and learning process in the classroom. Capstone classes allow the student to demonstrate the applied learning that is so central to this institution’s adult curriculum.

Question Eight: What responses do your adult students have to your curriculum?

Participant Eight summed up the responses for both the main campus and external campus groups by exclaiming, “overwhelmingly positive.” Although Participant Six noted that some students struggle with math and English, she went on to assure the researcher that the general response was very positive. Participant Two revealed that some students did leave the program because the accelerated format was too rigorous for them.

Question Nine: Can you give me any examples of how adult students are connecting what they learn in class to their real world experiences?

All participants related recent student responses to this question, indicating that all of the participants have regular interaction with adult students. Participant One mentioned a student who was successful in obtaining the full 30 credits allowed by
submitting a portfolio, documenting the student’s life experience. Participant Two related a student story where the student got a job promotion because of what the student learned in the program. Participant Three noted that the capstone classes allowed students to “strut their stuff.” Participant Four teaches a political science class and told the story of a student who was inspired to start a clean up program in her community as a result of a conversation held in class about the environment.

Participant Five reiterated that students tell her on a daily basis that what they learned in class at night they took to work the next day. Participant Six knows of a student who was offered a job because, during the interview, she was asked what she would do concerning a certain state statute. The student had just studied that statute in class the night before. Participant Seven told about a psychology class discussion that caused the students to look at commercials in a totally different way after discussing manipulation in marketing. Participant Eight had a student on the external campus who learned about team concepts. He took these concepts to his team at work, developed a very successful team strategy and the end result was a promotion for the student.

Question Ten: Do you feel this is important in order to retain adult students?

All but one of the leadership participants felt that being able to connect the classroom with real life was important to retention. All of the participants from the external campus enthusiastically supported the importance of this issue for retention. Participant Five went one step further and observed that when student expectations are being met they will bring in additional new students. This not only helps with retention but also with recruiting, “a nice bonus,” Participant Five stated.
Question Eleven: What support systems are in place to help adult students on your campus?

Three of the four main campus participants advanced the idea that the biggest support system in place was the role of the academic advisor. One of the main campus participants lamented that not enough support services were in place for the adult student. The external campus participants’ responses mirrored the responses from the main campus. Three of the four said that the academic advisor was the best support system in place for adult students. The other external campus participant felt that the math and English tutors and the on-line library access were the key support systems in place for adult students.

Question Twelve: Do you feel these are helping to reduce attrition?

Without exception, all of the leadership participants stated that the support systems they mentioned did help to reduce attrition. “Without the academic advisor role, the adult program at this school would not be a success,” stated Participant Seven. Participant Two expressed the opinion that most adult students have been out of school for a long period of time and needed the support services to “get through the program.”

Question Thirteen: How is technology used to enhance the learning experience for adult students?

The researcher discovered that there was wide diversity of thought on the subject of educational technology. One participant from the main campus felt that the institution used technology more than most other institutions in the area, but informed the researcher that they “had to fight for it”. One participant from the external
campus said that their institution was, “a day late and a dollar short” when it came to the use of technology. Several from both campuses mentioned the use of on-line classes. One of the participants from the external campus astutely noted that through the use of technology many classes that normally would not “make” on the external campus could be taught from the main campus through the use of technology. This gives the external campus the ability to offer a wider range of classes to the students attending the external campus. The number of students attending the external campus under study (n= 145) is significantly smaller than the main campus under study (n = 765).

The prevailing impression among the leadership participants was that adult students, as a whole, do not come into the classroom with the same level of computer skills as their traditional counterparts. By incorporating technology into the classroom, through the use of Blackboard (an on-line instructional environment), requiring PowerPoint presentations of the students, and offering a basic computer class as part of the core curriculum, the students have the opportunity to become more comfortable with the use of technology.

Question Fourteen: Is this important to retaining your students?

Even though the external campus of this institution realizes a greater benefit from the educational technology in use at this institution, half of the participants felt that technology was not directly related to retention. All but one of the main campus participants felt that incorporating technology was an important part of retention. One of the main campus participants advanced the idea that adult students preferred
live instruction over on-line instruction, therefore, technology was not important to retaining adult students.

Question Fifteen: Is it important for institutions to be concerned with satisfying the needs of the adult student?

Participant Six expressed the strongest opinion about the need to satisfy the adult student by stating, “no, it is critical.” Three of the participants used the word “absolutely” in their response to this question. All participants from both the main campus and the external campus agreed that being concerned with the needs of the adult student is important. Although higher educational institutions are “not a real business” said one participant, this participant noted that institutions should be concerned with and employ good “customer service.” Several participants observed that the adult student population is getting larger on most college campuses as is the case with the institution under study.

Question Sixteen: What roadblocks has your institution encountered in becoming a more adult friendly institution?

“We are our own worst enemy,” and “macro decisions reflect traditional models,” are the two biggest roadblocks mentioned by the participants. One participant noted that adult students on external campuses do not have access to the main campus and the resources offered there. Other roadblocks mentioned were budget constraints and a mismatch between the mission of the institution and the mission of the adult school within the institution.

There appears to be a breakdown in the communication among other schools at the institution with others not understanding the unique needs of the adult student.
Part of this is perpetuated by the fact that 100% of the administration and 80% of the faculty are focused on the traditional student, reported one of the participants.

Because the adult curriculum is accelerated and adult students are given credit for experiential learning through the portfolio program, there is a perception that the adult student curriculum is “less than,” expressed another participant. “Remove the cataracts from the eyes of the institution,” encouraged another participant.

Those who had been associated with the adult school for a period of time expressed the sentiment that they felt like the adult school was a “step child” of the institution. They also expressed concern over the “cash cow” syndrome. The adult school brings in a lot of tuition dollars but they are still treated as less than equal with the other schools at the institution.

To summarize, the adult school at this institution understands the needs of the adult student and has adjusted the curriculum and student services to accommodate these special needs. The roadblocks that keep this institution from becoming more adult friendly, according to the leadership participants, are ingrained in the organizational fabric of the institution, not within the adult school itself. Several of the participants indicated that they felt that faculty and staff not associated with the adult school just did not understand the needs of the adult student. They are trying to make the adult school conform to the same standards as the traditional student model.

Summary

Quantitative data were collected through the Adult Learner Inventory, produced by Noel-Levitz and built on the Principles of Effectiveness for Serving Adult Learners (Flint, 2005). The sample population (n= 114) consisted of 20 adult
students from the external campus and 94 adult students from the main campus of a university located in the southeastern United States.

Qualitative data were collected through one-on-one structured interviews with the campus leadership \((n = 8)\) from both the external and main campus of the institution under study. The transcripts were reviewed and analyzed by the researcher and prevailing themes were identified. The interview questions sought to gain insight into the leadership perspective of how well the institution is satisfying the needs of the adult learners along the dimensions of the Principles of Effectiveness for Serving Adult Learners (Flint, 2005).

A hypothesis test was conducted using a one-way multivariate analysis of variance (MANOVA). The null hypothesis (there would not be any significant difference between the external and main campus along the dimensions of the Principles for Serving Adult Learners) was not rejected for five of the seven Principles of Effectiveness for Serving Adult Learners (Flint, 2005). The support and technology dimensions were found to have significant differences between the external and main campuses.

Gap scores, the difference between importance and satisfaction along the dimensions of the Principles of Effectiveness for Serving Adult Learners (Flint, 2005) were calculated for the two campuses, external and main. A one-way multivariate analysis of variance (MANOVA) was conducted for the gap scores to address research question one, how well the external and main campus is meeting the expectations of the adult students. No significant difference was found between the two campuses with the exception of outreach (campus accommodations).
The thematic analysis of the interview questions, outlined by Creswell (2002), was presented in response to research question two, how well the campus leaders perceive they are meeting the needs of the adult students on their external or main campus.
CHAPTER V
SUMMARY, CONCLUSIONS, RECOMMENDATIONS

Introduction

The purpose of this study was to examine adult student satisfaction with their educational experience on an external campus compared to a main campus along the dimensions of the Principles of Effectiveness for Serving Adult Learners (Flint, 2005). Chapter V presents a review of this study’s problem statement, the methodology, and a summary and interpretation of the results. This chapter finishes with a review of the study’s limitations, conclusions, and recommendations for further study.

Statement of the Problem

The retention rates of adult undergraduate students are much lower than the retention rates of traditionally aged students (Hoffman, 2000). Adult undergraduate students experience varied levels of satisfaction with their educational experience when they perceive their needs and expectations are not being met (Donaldson, 1999; Mancuso, 2001; Merriam, 2001b). While current models of retention link the institution’s ability to meet student expectations with retention, the influence of different types of campus environments (main campus or external campus) on adult student satisfaction is not considered in the current models explaining student attrition (Donaldson 1999; Pascarella, 1980; Sandler, 2000; Spady, 1971; Tinto, 1975). Adult student needs and expectations can be grouped into seven general categories:
1. Institutional accommodations,
2. Achievement of career goals,
3. Flexible options to pay tuition,
4. Coursework that is relevant,
5. Instructors who know how to teach adult students,
6. Support systems to help with the educational process,
7. Technologically enhanced learning experiences (Flint, 2005).

Review of the Methodology

While principally a quantitative study, this study employed a mixed methods approach. Creswell (2002) supports the use of mixed methodology research by observing that researchers often make the mistake of assuming that there is a dichotomy between qualitative and quantitative research.

The adult student sample population consisted of 135 randomly selected students from a main campus and 135 randomly selected students from an external campus of a university in the southeastern United States. Quantitative data were collected through the use of a web-based survey by Noel-Levitz, the Adult Learner Inventory (2005). This instrument was developed in collaboration with the Council for Adult and Experiential Learning (CAEL) and was built on the Principles of Effectiveness for Serving Adult Learners (Flint, 2005).

The response rate for this web-based survey was 42%, exceeding the average rate of 10% to 30% for this instrument as reported by Noel-Levitz (2005). The campus participation was disproportionate between the external campus with 15% participation ($n = 20$) and the main campus with 70% participation ($n = 94$). Raw
data from the surveys were analyzed using a multivariate analysis of variance (MANOVA).

The leadership perspective of how well the institution is meeting the expectations of the adult students was captured through one-on-one 30 minute interviews with four leaders from the main campus and four leaders from the external campus, all holding various leadership roles within the adult education school. The researcher asked sixteen questions (Appendix A) related to the Principles of Effectiveness for Serving Adult Learners (Flint, 2005). The transcripts from the interviews were examined through a thematic analysis process.

Research Questions

RQ1: To what extent, if any, do different types of college campuses employ the Principles of Effectiveness for Serving Adult Learners (Flint, 2005) and does implementation of these principles affect adult student satisfaction with their educational experience? The adult student’s educational experience is broken down into seven areas of investigation.

1. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for adult friendly institutional accommodations?
   b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectations for adult friendly institutional accommodations?

2. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for adult friendly career services?
b) To what extent, if any does an institution’s external campus(es) meet adult students’ expectations for adult friendly career services?

3. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for flexible financing options?

b) To what extent, if any does an institution’s external campus(es) meet adult students’ expectations for adult friendly career services?

4. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for adult learning theory based assessments of learning outcomes?

b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectation for adult learning theory based assessments of learning outcomes?

5. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for them to connect the classroom teaching-learning process to useful knowledge and skills?

b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectations for them to connect the classroom teaching-learning process to useful knowledge and skills?

6. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for student support systems?

b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectations for student support systems?
7. a) To what extent, if any, does an institution’s main campus meet adult students’ expectations for technology availability that will enhance the learning experience?

b) To what extent, if any, does an institution’s external campus(es) meet adult students’ expectation for technology availability that will enhance the learning experience?

RQ2: What are the practices institutions use to reduce adult student attrition on their main and external campus(es) and how do these practices compare to the Principles of Effectiveness for Serving Adult Learners (Flint, 2005)?

Summary and Interpretation of Results

It is important to have a better understanding of how the campus environment affects satisfaction, since satisfaction with the college experience has been linked to retention rates in previous studies (Barfield, 2003; Benjamin & Hollings, 1995; Elliott & Shin, 2002; Juillerat & Schreiner, 1999). The framework for guiding this study was the Principles of Effectiveness for Serving Adult Learners (Flint, 2005), which were developed by Council for Adult and Experiential Learning (CAEL) using the best practices from 21 colleges and universities. The first research question focused on how well the institution was meeting the expectations of the adult students along the seven dimensions identified in the Principles of Effectiveness for Serving Adult Learners (Flint, 2005). Satisfaction with the educational experience is a part of several models of attrition developed in recent years but relatively few have addressed the factors related to adult students (Andres & Carpenter, 1997; Bean & Metzner, 1985; Taniguchi & Kaufman, 2005). The environmental component of
many of the persistence and attrition models views the campus environment as one construct (Bean & Metzner, 1985; Donaldson, 1999; Pascarella, 1980; Sandler, 2000; Spady, 1971; Tinto, 1975, 1993). This study broke down the campus environment component into different campus types.

Quantitative data were collected through the *Adult Learner Inventory*, produced by Noel-Levitz and built on the Principles of Effectiveness for Serving Adult Learners (Flint, 2005). Students were asked to rate 47 statements on how important it was to them and how satisfied they were on a seven point scale from one (not satisfied at all/not important) to seven (very satisfied/very important). The sample population (n = 114) consisted of 20 adult students from the external campus and 94 adult students from the main campus of a university located in the southeastern United States.

Qualitative data were collected through one-on-one structured interviews with the campus leadership (n = 8) from both the external and main campus of the institution under study. The transcripts were reviewed and analyzed by the researcher and prevailing themes were identified according to Creswell’s (2005) protocol. The interview questions sought to gain insight into the leadership perspective of how well the institution is satisfying the needs of the adult learners along the dimensions of the Principles of Effectiveness for Serving Adult Learners (Flint, 2005).

**Institutional Accommodations**

The student satisfaction perceptions of institutional accommodations were higher for the external campus (M = 5.80, SD = .50) than the main campus (M = 5.76, SD = .58). Although this was not found to be statistically significant, $F(7,106)$
when the one-way multivariate analysis of variance (MANOVA) was conducted, it is interesting to note that the students on the external campus did rate their satisfaction level higher than the main campus. Part of the reason for this might be the fact that the adult students on the external campus do not share the campus with traditional students. Donaldson’s (1999) model of college outcomes found that peers are one of the factors that influence outcomes for adult students. The main campus students share their campus with traditional students, thus this might have influenced the perception that the institution was not making accommodations for them like they did on the external campus.

A gap score was calculated by subtracting the satisfaction mean from the importance mean. A positive score indicated that the student expectations were higher than their satisfaction, while a negative score indicated that the student expectations were lower than the student reported satisfaction. This score was found to be statistically significant, $F(7,106) = .026, p = .05$, when the researcher conducted the MANOVA. The gap scores indicated higher satisfaction for the external campus students (external campus $M = -0.06$, $SD = 1.60$, main campus $M = .58$, $SD = 1.04$). Numerous studies support the assumption that the campus environment has an effect on the learning outcomes for both traditional and adult students (Donaldson, 1999; Kuh, 1998; Pascarella, 1991; Terenzini & Pascarella, 1994). This study supports these previous studies.

The leadership responses to the institutional accommodations interview questions centered around the schedule accommodations and the efficiency of “one-stop shopping” for advising, financial aid, and business office. This institution was
intentional in making accommodations for the adult students. Advisors who are specifically assigned to adult students, “hand hold” them through the matriculation process. All eight leadership participants said that the institutional accommodations that they have made have helped to reduce attrition rates. Overall, 85% of the students at this institution reported being satisfied with the adult program as compared to the national average of 77%.

*(Career Services)*

Career planning assistance is a greater need among adult students when compared to traditional students (Aslanian & Brickell, 1988). The student satisfaction in the area of career services for the external campus \( (M = 5.47, SD = .74) \) was reported lower than the satisfaction level on the main campus \( (M = 5.64, SD = .65) \). Although this was not found to be statistically significant, \( F(7,106) = .311, p = .05 \), when the one-way multivariate analysis of variance (MANOVA) was conducted, the main campus reported higher satisfaction with career services. Bauman et al (2004) found that career service needs were ranked higher by adult students than the need for counseling services, so this is an area that institutional leaders should consider when making decisions concerning career services.

The leadership of the institution under study recognized the importance of career services. Without exception, all eight of the leadership participants talked about a new on-line career services system that the institution is using. Because this system is so new, they were not able to evaluate whether or not this has helped reduce student attrition rates.
Financing Options

Sandler’s (2000) path model of career decision-making serf-efficacy, perceived stress, and student persistence shows that student satisfaction with financial aid, when combined with other institutional factors will influence the student’s decision to persist through the program or drop out. The student satisfaction with financing options for the external campus \((M = 5.73, SD = .74)\) was higher than the reported satisfaction of the students on the main campus \((M = 5.69, SD = .66)\). This was not found to be statistically significant, \(F(7,106) = .817, p = .05\), when the one-way multivariate analysis of variance (MANOVA) was conducted. Flint (2005) suggests that flexible financing options for adult students should be greater since they have fewer scholarships and grants available to them.

The external campus students have a higher satisfaction for the financing options than what they expect \((M = -.13, SD = 2.02)\) but the main campus students have a lower satisfaction than what they expect \((M= .38, SD = 1.30)\). The gap scores were not found to be statistically significant, \(F(7,106) = .162, p = .05\), when a one-way multivariate analysis of variance (MANOVA) was conducted.

Federal loans, a state grant, employer tuition reimbursement, and a monthly payment plan were the financing options listed by the campus leaders during the interviews. All expressed a desire to have more scholarships available to adult students. This does not completely align with the student perceptions. On the external campus, the satisfaction mean for financing options was the second highest of the seven satisfaction mean scores. Upon further investigation, the researcher
discovered that the external campus students receive a discount on tuition, while the main campus students do not.

Assessment of Learning

Knowles (1968) distinguishes an adult learner as one who engages in self-directed learning, possessing life experience that contributes to learning, has needs that are correlated to a changed social role, has a need to apply knowledge immediately, and is internally motivated to learn. Students on the external campus were less satisfied with the assessment of their learning ($M = 5.24, SD = 1.00$) than the students on the main campus ($M = 5.52, SD = .88$). Imel, (2001) points out that adult students have the need for both academic learning and learning that can be applied directly to their life experience. The questions on the Adult Learner Inventory focused on this aspect of the adult learning theory. The score for the external campus ($M = 5.24$) was the lowest of all the scores for the seven dimensions.

During the interviews with the leadership participants, the researcher discovered that the classes on the external campus are staffed with a greater percent of adjunct professors than on the main campus. It is possible that the adjunct professors are not as well versed in adult learning theory as the full-time professors teaching in the adult program. The gap score for both campuses was about the same (external campus $M = .51, SD = 1.49$, main campus $M = .49, SD = 1.29$). This gap score was not found to be statistically significant, $F(7,106) = .960, p = .05$, when a one-way multivariate analysis of variance (MANOVA) was conducted.

Credit for prior life experience also falls under the assessment category. The leadership participants on both the external and main campuses spoke of a portfolio
program in which students can earn college credit for life experience. The adult students are reported to be very happy with this program. The one question on the Adult Learner Inventory that related to credit for life learning was higher than the national average (institution $M = 6.32$, national $M = 5.16$).

**Adult Friendly Teaching**

Faculty-student interaction for adult students significantly influenced satisfaction in a recent study comparing traditional and non-traditional students (Rosenthal et al., 2000). Although the definitions of the variables under study in the satisfaction research tend to be vague, faculty-student interaction has been shown to have a positive impact on satisfaction (Astin, 1977; Lamport, 1993; Spady, 1971). The external campus reports being less satisfied with the teaching process ($M = 5.64$, $SD = .78$) than the main campus ($M = 5.93$, $SD = .81$).

The leadership participants understand the importance of an adult friendly teaching process. All of them mentioned the importance of being able to apply what they are learning in the classroom to their jobs. Many related stories of students who had learned something in class that they were able to apply to their job. Some students benefited from a job promotion, as a result. The perception of the leadership participants aligns with Knowles’ (1968) theory of the adult student learning. The adult learner has an independent self-concept and can direct his/her own learning, has accumulated a reservoir of life experiences that is a rich resource for learning, has learning needs closely related to changing social roles, is problem-centered and interested in immediate application of knowledge, and is motivated to learn by internal rather than external factors.
Support Services

The external campus students do not report as high a level of satisfaction with support services \((M = 5.65, SD = .74)\) as the main campus \((M = 5.97, SD = .59)\). The questions on the Adult Learner Inventory that focused on support services asked how the institution supplied strategies for juggling multiple roles while in school, the “one stop shopping” concept, convenient hours, and tutoring availability for math and English. This support services satisfaction score was found to be statistically significant, \(F(7,106) = .041, p = .05\), when a one-way multivariate analysis of variance (MANOVA) was conducted. The service needs of the adult student are different from the traditional student needs. As a result, the adult student expectations also are different. Identifying the student needs and meeting them has been a challenge for institutions of higher education (Fall, 2001).

The leadership participants’ perception of the support services area was that this was the strongest area of adult accommodations for the institution. The academic advisor role was the most often mentioned support service that was making a positive impact on students. The perception of the students and that of the leadership are not in agreement on the level of support services being offered at this institution. One leadership participant said, “Without the academic advisor role, the adult program at this school would not be a success.” Campus leaders would be wise to enhance the communication of and use of support services at this institution.

Technology

Adult students on the external campus are not as satisfied with the technology implementation on the external campus \((M = 5.37, SD = .77)\) as the main campus.
students ($M = 5.73, SD = .64$). The technology satisfaction score was found to be statistically significant, $F(7,106) = .029, p = .05$, when a one-way multivariate analysis of variance (MANOVA) was conducted.

The leadership perception on technology implementation was also varied. There is some disparity between the technology that is available and in use on the external campus when compared to the main campus. The external campus experiences less technological support and fewer technology upgrades, according to the leadership participants. This disparity may be the reason that the external campus students are less satisfied with the available technology than the main campus students. Flint’s (2005) findings show that technology, when used to enhance the learning experience, is a key to the satisfaction of adult students. Although resources are limited, the leaders of this institution should consider ways to enhance the technology support and implementation on their external campuses.

Limitations of the Study

Generalizing this study to a larger population is cautioned. There are several limitations to this study that compromise the validity of generalizing the results to the adult student population in general. Only one school in the southeastern United States participated in the study. Although this school has multiple external campuses, only one was selected as a convenience sample. If all external campuses were included in the study, the different geographical locations of the external campuses may produce different results. Schools from a different geographic area and size might also produce different results.
The sample size was small and disproportionate between the main and external campus. Although the participants were randomly selected, increasing the external validity, the participants were not randomly assigned to the campus group under study.

The *Adult Learner Inventory* is a valid and reliable instrument but using a different instrument to measure adult student satisfaction may produce different results. Using a different instrument to measure adult student satisfaction in a larger sample may increase the validity of this study.

Using the institutional email address, rather than the students’ personal emails, may have reduced the response rate to the survey, since students are not required to use their institutional email address at this institution. The distribution of the invitation email to participate in the study was not consistent. The first 100 invitations went to the main campus students and a week later the remaining 170 invitations were sent. The 135 external campus students did not receive their invitation at the same time as the first 100 main campus students. It was final exam week when the remaining 170 email invitations were received by the students. Because the students were focused on preparing for finals, the response rate might have been less than it might have been, had the emails been sent the week before.

Conclusions

Declining retention rates of adult students have been a factor that has caused administrators to look at issues specific to the adult student population (Bean & Metzner, 1985). The influence of different types of campus environments (main campus or external campus) on adult student satisfaction is not considered in the
current models explaining student attrition (Donaldson 1999; Pascarella, 1980; Sandler, 2000; Spady, 1971; Tinto, 1975). This study broke down the campus environment within an institution. By reviewing student satisfaction along the dimensions of the Principles of Effectiveness for Serving Adult Students, this study compared the external student satisfaction with the main campus student satisfaction.

In this study, the external and main campus students did express different levels of satisfaction with their educational experience. The external campus students expressed a higher degree of satisfaction than the main campus students with institutional accommodations and financing options. The main campus students expressed a higher degree of satisfaction than the external campus students with career services, assessment of learning, adult friendly teaching, support systems, and technology. The campus differences between the dimensions of support systems and technology were found to be statistically significant.

Campus leaders for both the external and main campus of this institution provided valuable insight into the ways that this institution has intentionally become more adult friendly. When compared to the national averages, this institution rated higher than the national average on all seven of the Principles of Effectiveness for Serving Adult Students. There appears to be a misalignment between the student satisfaction with support services and the leadership perspective. The campus leaders felt that the advisor role is their most important asset in providing student support services, yet this is one area where the students from the two campuses were significantly different in their satisfaction with support services. Technology integration on the external and main campus is the other area in which the students
from the two campuses differed in their satisfaction. The campus leadership did acknowledge that this was an area of opportunity for this institution.

As more universities launch external campuses in an effort to accommodate the growing adult student population, more research is needed to examine how the educational experience for the adult students on external campuses might influence their satisfaction level and ultimately their willingness to persist to graduation. As the leadership of this institution pointed out, planning for the adult student program must be intentional and part of the overall strategic plan of the university. Extension campuses provide a different set of challenges for institutions with limited resources by offering classes in different geographic locations. Campus leaders need to be aware of the potential for external campus adult students to be less satisfied with their educational experience and be intentional in how they address institutional accommodations, career planning help, financing options, assessment of learning outcomes, adult friendly teaching, student support systems, and technology integration.

Recommendations

This study was limited in scope with a small sample size. The following is a list of possible research areas and could serve to validate the findings of this study, build on the strengths of the outcomes, and expand the scope of the investigation:

1. Expand the scope of this study to include multiple institutions and multiple external campuses in various geographic areas. This could also include different types of institutions such as two-year and for-profit intuitions.
2. Break down the level of study to include satisfaction by demographics of the student population such as marital status, field of study, hours employed, race, and gender.

3. Consider the use of other instruments to measure student satisfaction and the leadership perspective. Although the Adult Learner Inventory is found to be highly valid and reliable, the development of other instruments to measure specifically, adult student satisfaction, might contribute to the overall findings in the area of adult education.

4. Use alternate delivery methods for obtaining adult student and leadership perspective data. All methods of delivery, such as web-based surveys, mailed surveys, and personally administered surveys and interviews have inherent strengths and weaknesses. Using alternative methods of obtaining data such as video taping students in class or interviewing family and friends of the student may improve the validity and strength of the findings.

5. The Principles of Effectiveness for Serving Adult Learners (Flint, 2005) was the basis used in obtaining satisfaction data for this study. Expanding the dimensions of study to include other areas of satisfaction may give a more complete picture of the issues leaders need to consider in designing programs and institutional accommodations, specifically for the adult student.
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Appendix A: Interview Questions

1. What institutional accommodations, in the areas of staffing, facilities, marketing, and policies and procedures, has your institution made for the adult student?

2. How do you feel it has reduced the attrition rates of adult students?

3. What has your Career Services department done to make their services more adult friendly.

4. In your opinion, how has this helped reduce the attrition rates of adult students?

5. What financing options are available to adult students?

6. Please share what your institution is doing to offer flexible financing options.

7. Tell how you perceive that your curriculum is adult friendly.

8. What responses do your adult students have to your curriculum?

9. Please give some examples of how adult students are connecting what they learn in class to their real world experiences?

10. How do you feel this is important in order to retain adult students?

11. What support systems are in place to help adult students on your campus?

12. How do you feel these are helping to reduce attrition?

13. How is technology used to enhance the learning experience for adult students?

14. How is this important to retaining your students?

15. What is important for institutions to be concerned with in satisfying the needs of the adult student?

16. What roadblocks has your institution encountered in becoming a more adult friendly institution?
Dear Research Participant:

Your opinions are important to your institution and by participating in this study you have the opportunity to express how you feel. The title of the study is *Adult Students’ Satisfaction with their Educational Experience: Implications for Leadership.* The goal of the research is to understand how your satisfaction with your educational experience influences your decision to continue your education. What I need from you is about 15 to 20 minutes of your time to answer 40 questions on a survey that will be emailed to you. The subject line on the email will read, “*Adult Learner Inventory Invitation*”. We anticipate that there will be 250 participants in this study.

Your consent to be a research participant is strictly voluntary and should you decline to participate or should you choose to drop out at any time during the study, there will be no adverse effects on you or your grades.

There are no known risks to you for being involved in this study. Although there are no direct benefits to you, the results of this study may help the leadership of your institution identify areas that are very adult friendly and other areas that are not quite so adult friendly. Your participation in this study may help our understanding of how colleges can become more adult friendly.

As a research participant, information you provide will be kept anonymous, that is, no names or other identifiers will be collected on this inventory. Data will be kept in a locked file in the researcher’s office for a period of five years. By completing this online inventory, you have shown your agreement to participate in the study.

If you have any questions or concerns regarding the study or your participation in the study, you contact me, Audrey Kelleher, at 407-719-1925, my supervisor, Dr. Karanxha, at 321-235-8403, or the Institutional Review Board point of contact, Ms. Avril Brenner, at 305-899-3020.

Thank you for your participation.

Sincerely,

[Signature]
Appendix C: Invitation email

Subject: Adult Learner Inventory Invitation

Hello (first name of participant)

Your opinions matter to us! We are inviting you to complete a short survey about your experiences at this institution. Your feedback will provide this institution with insights about the aspect of your experience, which is most important to you as well as how satisfied you are with them. Your responses will help the leadership determine what is working and what is not working at this institution.

This survey is available for online completion. Please enter your unique passcode of (passcode) at this website:

http://survey.noelleitz.com/

The survey is available for a limited time. Please complete the survey by no later than (due date). The survey must be completed in one sitting and should take you no longer than 20 minutes. Your responses will be kept confidential.

Thank you in advance for completing this important survey.
Appendix D: First Reminder

Subject: Reminder: Adult Learner Inventory Invitation

Hello (first name of participant)

Recently you received an invitation to complete a survey that this institution is conducting. We would appreciate your taking 20 minutes to complete this survey at your earliest convenience.

As a reminder, you need to enter your unique passcode of (passcode) at this Website:

http://survey.noelleitz.com/

Please complete the survey by no later than (due date). The survey must be completed in one sitting and should take you no longer than 20 minutes. Remember, your responses will be kept confidential.

Thank you in advance for completing this important survey.
Appendix E: Last Reminder

Subject: Survey Extended: Adult Learner Inventory Invitation

Hello (first name of participant)

Your input is valued, so we have extended the availability of the institution survey to (due date) to give you a chance to complete the survey.

As a reminder, you need to enter your unique passcode of (passcode) at this Website:

http://survey.noellevitz.com/

The survey must be completed in one sitting and should take you no longer than 20 minutes. Remember, your responses will be kept confidential.

Thank you in advance for completing this important survey.
Appendix F: Informed Consent
Barry University Informed Consent Form

Your participation in a research project is requested. The title of the study is Adult Students’ Satisfaction with their Educational Experience: Implications for Leadership. The research is being conducted by Audrey Kelleher, a student in the Education and Leadership department at Barry University, and is seeking information that will be useful in the field of adult education. The aims of the research are to understand how adult student satisfaction with their educational experience influences their decision to persist in their education and how leadership views the importance of satisfaction. We anticipate the number of student participants to be 230 and leadership participants to be 20.

If you decide to participate in this research, you will be asked to complete a one-to-one recorded interview with the researcher lasting 30 minutes. You may decline to answer any of the interview questions.

Your consent to be a research participant is strictly voluntary and should you decline to participate or should you choose to drop out at any time during the study, there will be no adverse effects on you.

There are no known risks to you for being involved in this study. Although there are no direct benefits to you, your participation in this study may help our understanding of how colleges can become more adult friendly.

As a research participant, information you provide will be kept confidential, that is, no names or other identifiers will be reported. The data from the interviews will be transcribed by the researcher only within one week of the interview. Data will be kept in a locked file in the researcher's office for a period of five years. This consent form and your name and interview pseudonym will be kept in a separate file locked in the researcher's office. The digital audio recording of your interview will be deleted when the interview has been transcribed by the researcher.

If you have any questions or concerns regarding the study or your participation in the study, you contact me, Audrey Kelleher, at 407-719-1925, my supervisor, Dr. Karanxha, at 321-235-8403, or the Institutional Review Board point of contact, Ms. Nildy Polanco, at 305-899-3020. If you are satisfied with the information provided and are willing to participate in this research, please signify your consent by signing this consent form.

I acknowledge that I have been informed of the nature and purposes of this study by Audrey Kelleher and that I have read and understand the information presented above, and that I have received a copy of this form for my records. I give my voluntary consent to participate in this study.

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IRB

Signature: ____________________________