Retention and Attrition in Higher Education: Demographic Characteristics and the Role of the Secondary School

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Retention and Attrition in Higher Education: Demographic characteristics and the role of the secondary school

by

Michael J. Celento

December 2008

A project submitted to the Department of Education and Human Development of the State University of New York College at Brockport in partial fulfillment of the requirements of the degree of Master of Science in Education
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Chapter I

Introduction
The Problem and Its Significance

According to Joseph Hermanowicz, attrition in higher education is one of the most menacing problems facing American education today, and there are few signs, if any, of its decreasing (91). In fact, there are more students who leave their college or university before the completion of their degrees than those who stay (1). DeBerard, Spielmans, and Julka echo Hermanowicz in their report that “40% of college students will leave higher education without getting a degree” (66), while Perry et al. reports that fewer than 55% of students in higher education graduate after five years (535-36). Furthermore, “in 1995 the national four-year graduation rate was only 38%, compared to the five-year and six-year graduation rates of 50% and 54% respectively” (Lau 126).

Although attrition in higher education is a pervasive problem, schools experience attrition at rates that are far from static. For example, the University of New Mexico and the University of Wisconsin-Milwaukee have six-year graduation rates lower than 50%, while New York University and the University of Rochester report six-year graduation rates closer to 75%. To further highlight the disparity among attrition rates within institutions of higher education, Texas Southern University, at the low end, experiences six-year graduation rates near 10%, and Princeton University, at the high end, has six-year graduation rates occurring near 97% (Hermanowicz 2).

While the rate at which attrition occurs among higher education institutions is inconsistent, there is a commonality relative to attrition within these institutions.
Those students who do choose to withdraw usually do so within their first year of matriculation (Lau 127). DeBerard, Spielmans, and Julka report that attrition rates among freshmen “are typically greater than any other academic year and are commonly as high as 20-30%” (66), while Pritchard and Wilson claim that “approximately one-quarter of incoming freshmen do not return to the same institution the following year, with half of these students making the decision to leave in the first six weeks” (201). Furthermore, in 2002, the attrition rate at two-year public colleges from freshmen to sophomore year was 48%, and at four-year, baccalaureate-granting public colleges, it was 32% (Tinnesz, Ahuna, and Kiener 303).

The repercussions of attrition in higher education are at least twofold. For the institution, there are significant financial implications. Institutions potentially lose thousands of dollars for every student who leaves their institution—monies that would be realized in tuition, fees, and possible, alumni contributions. For the student, there are similar, significant, financial implications. Often, the choice to leave higher education will leave the student in circumstances that will allow him or her to earn much less money over his or her lifetime (DeBerard, Spielmans, and Julka 66).

A glut of research has been done—and is being done—to help illuminate the source or sources of this insidious problem within higher education. However, much of the research points to myriad factors that lead to attrition and different strategies to address the dilemma. It is difficult to pinpoint a particular reason why attrition continues to be such a persistent problem in American higher education, but the factors that lead to attrition can be differentiated into six categories: demographic
characteristics, institutional factors, student-level factors, factors beyond institutional or student control, student-institution compatibility, and extraneous factors.

Purpose

In all of the pertinent information unearthed toward the completion of the present thesis, not one journal article, book, website, or other resource material was discovered that speaks to the role of the secondary education institution in promoting retention or preventing attrition within higher education. The research component of this thesis project was months long, and to say that the paucity of information about the relationship between the secondary school and degree attainment or graduation rate in higher education is surprising would be an understatement. It was at the end of the research component of this thesis project when it became clear that if anything new and meaningful was to be said about the dire problem of attrition from higher education, then it needed to be said about the aforementioned relationship. The decision was made to explore this relationship and then develop a plan that secondary schools could implement in order to better prepare their respective students for higher education and degree attainment.

It quickly became evident that the factors that lead to attrition from higher education are numerous, and to deal with each of those factors and then develop a concise plan for secondary schools to implement in order to combat those factors would look more like a text book or dissertation than a Master’s thesis. In other words, developing such a plan would be an endeavor too complex and time-consuming for the goals and objectives of the present thesis; it was unrealistic. So,
another decision needed to be made. In order to create congruence between the goals and objectives of this thesis project and the development of a concise plan that secondary schools could implement in order to better groom their respective students for the rigors of higher education, a choice of which category of attrition-related factors upon which to focus was made.

The process of making that choice was not an easy one. Each of those categories related to attrition from higher education—demographic characteristics, institutional factors, student-level factors, factors beyond institutional or student control, student-institution compatibility, and extraneous factors—have components that secondary schools could address in order to reduce attrition numbers within higher education. For example, relative to student-level factors, it is feasible for a secondary education institution to address its respective students’ academic performance and abilities in order to better guide the students in their preparation for higher education. In terms of student-institution compatibility, shifting the focus of guidance departments within secondary schools toward the college-choice process for prospective students of higher education is a potential intervention for attrition risk. When the difficult decision was finally made on which attrition-related factor to focus, demographic characteristics was the factor of choice.

The primary rationale for deciding upon demographic characteristics as the central focus for developing a retention-promoting, attrition-preventing action plan for secondary education institutions was the fact that all secondary schools would find relative ease in collecting the demographic data for their respective students if they
did not already have such data available. As students register in school districts or particular schools, collecting such demographic data as the age, race/ethnicity, and gender of students is almost invariably a formality in the registration process. With such readily available information at the disposal of secondary schools, it seemed to be the most universal and practical attrition-related factor on which to focus for the development of a retention-promoting, attrition-preventing action plan. The present thesis focuses on the latest information and research about the impact of demographic characteristics on retention and attrition within higher education and then illuminates the way in which a secondary school can use that information to develop a retention-promoting, attrition-preventing action plan.

Rationale

Although the absence of information and research about the role of the secondary school in the promotion of retention and the prevention of attrition in higher education was the deciding factor toward the synthesis of the present thesis, it was not the original reason the topic was chosen. The true impetus behind this work was a term that is often used by secondary schools, both public and private—“college-preparatory institution.” These words beg a variety of questions: *What does it mean to be prepared for college?*, *What does it mean to be a college-preparatory institution?*, *Are there secondary schools that are not preparing students for higher education?*, *How does an institution justify the claim that it is a college-preparatory institution?*. It was questions such as these that first led to the creation of this thesis, and the thesis, itself, is, in part, an attempt to help clarify the meaning of the term and
help answer the questions related to the term.

What was found in exploring the term “college-preparatory institution” was that, almost invariably, secondary schools claiming that they are college-preparatory institutions base that claim on the percentage of their graduates that go on to matriculate in higher education. However, what was also found was that these same schools, almost invariably, do not keep track of their graduates’ eventual attrition from or retention to their intended schools after graduation. In other words, most secondary schools putting forth the claim that they are college-preparatory institutions base that claim on the fact that their graduates are accepted into higher education rather than on the eventual success or failure of those graduates once they are matriculating within their intended schools. Whether or not these secondary schools are justified in their claims of being college-preparatory is left up to the reader, but the present thesis examines one such secondary school, which purports itself to be a college-preparatory institution.

For the purposes of respect and anonymity, the secondary school of focus for this thesis project will be referred to as “St. Jude the Apostle High School.” St. Jude the Apostle is a co-educational, private, Catholic high school located in the heart of a major city in upstate New York. Its urban location is the educational setting for over 800 students, grades 7 – 12 (at the time of the data collection on St. Jude the Apostle, the school was grades 9 – 12). The students come from a variety of racial/ethnic and socioeconomic backgrounds, as well as from diverse geographic settings (i.e., urban, suburban, and rural). Its claim to being a college-preparatory institution can be found
in the first line of the school’s “Statement of Mission,” which reads, “[St. Jude the Apostle High School] is a Catholic, private, college preparatory, co-educational school…” (“Profile”), and its justification for such a claim is twice published on the school’s website. Within the website’s “Academics” section, it states that “Every year, over 97% of [St. Jude the Apostle’s] graduates go on to college” (“Academics”), while within the website’s “Profile” section, it is reported that 98% of the graduating class of 2007 went on to attend college (“Profile”).

Regardless of the school’s claims, the data collection and research that was completed on the school’s graduating classes of 2005 and 2006 indicate that although the vast majority of St. Jude the Apostle’s graduates go on to higher education, a significant percentage of its graduates withdraw from their intended schools within the first two years of matriculation (see Appendix A). This is not to say that St. Jude the Apostle fails to prepare its graduates for higher education or that the school is misrepresenting itself. It is only to say that a broader definition and more specific criteria may be necessary in order for a secondary school to responsibly assert itself as a college-preparatory institution.

The information, research and suggestions presented within this thesis project are meant to foster, promote, and encourage St. Jude the Apostle and other such college-preparatory-purporting secondary schools in the redefining of their definition of and their identity as college-preparatory institutions and to offer simple and practical intervention strategies for them to utilize toward better preparing their graduates for higher education. That has always been the rationale in the pursuance
of this topic and the completion of this thesis project. If only modest improvements
are made at even one such college-preparatory institution toward these ends, this
thesis project can be considered a success.

Definition of Terms

academic integration—"refers to the extent of congruence between students’
intellectual ability, involvement, and performance on the one hand and a school’s
intellectual expectations on the other" (Hermanowicz 8)

academic program—see “field of study”

academic remediation—“extra time with elemental curricula to overcome
background deficits” (Steele)

access funds—government monies provided to educational institutions and other
institutional sources of financial support (Yorke 104)

attrition—“Loss of students through means other than graduation” (“Attrition”)

cohort—“A group of study subjects, selected based on predetermined criteria, who
are followed over a period of time” (“Cohort”)

degree program—see “field of study”

demographic—“a statistic characterizing human populations (or segments of human
populations broken down by age or sex or income etc.)” (“demographic”)

demographic characteristics—see “demographic”

drive for thinness—“an excessive concern with dieting, preoccupation with
weight, and fear of weight gain” (Pavelo)

field of study—“An approved sequence of units in cognate areas” (“field of study”)
financial counseling—"counseling designed to help individuals make the best use of their financial assets and achieve specific economic objectives, such as adequate funding of a child's college education expenses, or post-retirement needs"
("Investments")

first-year academic program—see "first-year seminars"

first-year seminars—programs designed to increase academic performance, persistence, and degree attainment through academic and social integration

(Goodman and Pascarella 26)

freshman learning community—see "learning communities"

GPA—"Shorthand for ‘grade point average.’ The standard measure for determining overall academic standing...almost all U.S. institutions [use] the scale A=4, B=3, C=2, D=1 and F=0. No other grades (Audit or Withdraw, for example) are included in computing the gpa. Grade points for each course are multiplied by the number of credits assigned to that course, these values are summed, and that total is finally divided by the total number of credits for these courses to arrive at the GPA" ("gpa")

graduation rate—"Extent to which students at institution of postsecondary education complete an academic program, or enroll in a subsequent educational program for which the prior program provided substantial preparation, within 150 percent of the normal time for completion of the program" ("Graduation rate")

higher education institution—“(a) Institution of higher education...an educational institution in any State that—(1) admits as regular students only persons having a certificate of graduation from a school providing secondary education, or the
recognized equivalent of such a certificate; (2) is legally authorized within such State to provide a program of education beyond secondary education; (3) provides an educational program for which the institution awards a bachelor's degree or provides not less than a 2-year program that is acceptable for full credit toward such a degree; (4) is a public or other non-profit institution; and (5) is accredited by a nationally recognized accrediting agency or association, or if not so accredited, is an institution that has been granted preaccreditation status by such an agency or association that has been recognized by the Secretary for the granting of preaccreditation status, and the Secretary has determined that there is satisfactory assurance that the institution will meet the accreditation standards of such an agency or association within a reasonable time. (b) Additional institutions included...(1) any school that provides not less than a 1-year program of training to prepare students for gainful employment in a recognized occupation and that meets the provision of paragraphs (1), (2), (4), and (5) of subsection (a) of this section; and (2) a public or nonprofit private educational institution in any State that, in lieu of the requirement in subsection (a)(1) of this section, admits as regular students persons who are beyond the age of compulsory school attendance in the State in which the institution is located” (“1001.General definition of institution of higher education”)

**institutional factors**—those characteristics of an educational institution that are related to retention and attrition, such as the availability of institutional resources and the level of institutional support

**interactionism**—“a social theory, synonymous with symbolic interactionism, which
is characterized by three tenants: (1) "People act toward things based on the meanings those things have for them; (2) These meanings are derived through interaction with other people; and (3) Meanings are managed and transformed through the processes of interpretation and self-reflection that individuals use to make sense of and handle the things they encounter" ("Symbolic Interactionism"; McClelland)

interactionist—see "interactionism"

learning banks—flexible spending accounts with a quantum of funding, which are provided to students, to which students can add from other sources (Yorke 113)

learning communities—“Concurrent student enrollment in two or more disciplines connected by a common theme; sometimes targeted to a particular student group such as entering freshmen” (MacGregor, et al.)

maintenance grants—a component of financial aid arrangements for students, they are non-repayable award funds (Hermanowicz 36)

major—see "field of study"

matriculation—“a process that brings a college and a student who enrolls for credit into an agreement for the purpose of realizing the student’s educational objective through the college’s established programs, policies and requirements. This agreement is implemented by the student’s educational plan” (“Definition of Matriculation”)

novelty-seeking behavior—“impulsive and risk-taking behavior and an increased need for stimulation” (UPHS News)

persistence—“Continual enrollment in pursuit of a credential or credit” (Sale)
retention—"The continuation of a student's involvement in an academic endeavor until graduation" (Thompson, Tinto, and Bean)

retention rate—"Percent of students remaining within an institution once matriculating at that institution" ("Retention rate")

sense of belonging—"the psychological sense that one is a valued member of the college community" (Hausmann, Schofield, and Woods 804)

social integration—"refers to the extent of congruence between individual students and a college social system, which includes interpersonal and extracurricular involvements and attachments, among other facets of college social life" (Hermanowicz 9)

student-institution compatibility—the degree to which a student is able to academically and socially integrate into a higher education institution, as the higher education institution attempts to meet the needs and expectations of the student

student-level factors—those student characteristics that are related to retention and attrition, such as social and academic integration.

working class—A term that emerged in the early 19th century, it refers to people who "[own] no productive property, like land or machinery, but [do] own [their self] and can therefore earn an income by selling their labor" (Jones)
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Chapter II

Literature Review
Theory

Vincent Tinto

The influence of Vincent Tinto's research in the field of attrition is difficult to ascertain. Hermanowicz claims that, relative to attrition, Tinto has possibly been the most significant and well-respected contributor of research (8). Hermanowicz's claim is reverberated by Hausmann, Schofield, and Woods in their claim that Tinto's model of student departure is "the most influential model of student persistence" (803). Tinto's often-cited and distinguished Model of Institutional Departure may be summarized as follows. The interactions between students and their educational environments is what results in either attrition or retention (Hermanowicz 8). In other words, students' satisfaction or dissatisfaction with a college or university's social and academic systems will be the primary determinant in their eventual attrition from or retention to a particular college or university (Lau 127). Where a student's social and academic experience within an institution is negative, he or she is much more likely to withdraw. Conversely, a student having a positive academic and social experience will be more likely to persist (Yorke 9).

Two key concepts characterize Tinto's model—academic and social integration. Academic integration refers to a student's intellectual ability, involvement, and performance and its congruence with a college or university's intellectual expectations (Hermanowicz 8). Social integration pertains to the extent to which a student engages in a college or university's social system (9), which includes both making friends and extracurricular activities (Grayson 412). The degree to
which a student is academically and socially integrated will have a substantial effect on a student’s decision to withdraw or persist. Simply stated, “the more academically and socially integrated, the less likely students are to leave, precisely because of the density of attachments that keep them in school” (Hermanowicz 9).

Critics of Tinto’s model often call attention to the lack of substantiation for its theoretical claims, via empirical support. Since the turn of the century, many researchers, such as Braxton and Lien, have begun to examine the empirical and theoretical fissures of Tinto’s model. Furthermore, researchers of attrition are also beginning to give more earnest consideration to theoretical perspectives that call attention to the college culture, in lieu of the college structure focus of Tinto’s model (Hermanowicz 9).

**Alexander W. Astin**

Alexander W. Astin’s major contribution to attrition research is his *Input – Environment – Outcome (IEO) Model*. The *Input* component of the model pertains to students’ characteristics at the time they enter higher education. *Environment* pertains to students’ exposure to and interactions with the various programs, policies, faculty, peers and educational experiences within their respective higher education institutions. Lastly, the *Outcome* component pertains to characteristics of students after being exposed to the environment of their respective institutions (Grayson 412). It is theorized that as “learning occurs not only in formal classroom situations … students who adjust to university life in the sense that they are involved in various activities are more likely…to achieve high grades than students who are not involved
Gansemer-Topf and Schuh further support this theory with their contention that there is a positive correlation between students’ connectedness to their institution and institutional involvement, and this, in turn, should increase a student’s chances of persistence (633).

Therefore, the primary emphasis of Astin’s model, relative to persistence, is student involvement (Hausmann, Schofield, and Woods 805). In terms of involvement, the five hypotheses of Astin’s model are: (1) To be involved, one must invest both psychological and physical energy; (2) Students will not invest the same amount of energy to every task; (3) There are both qualitative and quantitative characteristics of involvement; (4) There is congruence between the amount of learning and the quality and quantity of involvement; and (5) Whether a policy or practice is educationally effective is dependent upon the degree to which it promotes student involvement. In sum, Astin claims that in order to retain students, a higher education institution must be able to incite student commitment and translate that commitment into valued results (Yorke 8-9).

**John Holland**

The *Theory of Careers*, developed by John Holland, has been used to examine “patterns of student stability and change inherent in the college experience” (Feldman, Smart, and Ethington 528). Holland’s theory is based on the idea that human behavior is a product of the interaction between individuals and their environments. The primary focus of the theory has to do with the compatibility between individuals and their environments, and there are three fundamental facets of
the theory: (1) An individual’s personality type will determine the environment he or
she chooses; (2) Environments have a tendency to foster and promote diverse patterns
of abilities and interests; and (3) Environments that are compatible with an
individual’s personality type will promote success (528).

Conversely, an individual in incongruence with his or her environment will
have experiences that are more dissatisfying and unsuccessful. These individuals will
attempt to resolve their incongruent circumstances by searching out a different and
more congruent environment, changing the dynamic of their present environment, or
altering personal behavior, perceptions and attitudes (Feldman, Smart, and Ethington
532). In other words, a student may withdraw from his or her university, attempt to
change his or her environment (i.e., academic major, residence, etc.), or attempt to
change the way he or she is interacting within his or her environment.

Unfortunately, even if a student does not experience detrimental consequences
in his or her overall pattern of stability and change, they may experience detrimental
consequences on academic, social, and/or personal levels. Some of these
consequences may include “having to exert more academic effort to keep up with
their congruent peers, feeling less comfortable in their interactions with the academic
and administrative sectors of their institutions, having less time for recreational and
social activities, and developing more personal problems” (Feldman, Smart, and
Ethington 532). These consequences—or dissatisfying experiences—may still
increase the likelihood and incidence of attrition.
The contributions of J. B. Berger and J. F. Milem to the field of attrition research are several. Their primary contribution to attrition research is similar to the findings of the aforementioned attrition theorists. Berger and Milem found that “both student involvement behaviors and perceptions of integration play a role in persistence decisions” (Hausmann, Schofield, and Woods 805). This finding is certainly correlative with Tinto’s Model of Institutional Departure, Astin’s IEO Model, and Holland’s Theory of Careers, in that each of these respective models—as well as Berger and Milem’s finding—call attention to the important role that student integration plays in decisions to persist.

A secondary contribution of Berger and Milem has to do with organizational behavior. Berger and Milem theorize that “institutional and student characteristics influence affective and cognitive student outcomes, including persistence” (Titus 356). Berger and Milem posit that this organizational behavior has a systematic dimension, which, when drawing on open-systems theories, can be viewed from several perspectives. One of these perspectives is a resource dependency framework. Titus reports that resource dependency theory translates organizational behavior in terms of the internal adjustment of an organization to changes in the availability of external resources. An example of such necessary adjustments would be to the availability of finances a particular organization must have in order to operate. If a higher education institution is unable to adapt to the availability of external resources such as necessary finances, according to Berger and Milem, this can have a
significant, negative effect on student persistence (356).

A tertiary contribution of Berger and Milem to the field of attrition research is their contention that student entry characteristics, institutional structural-demographic features, and student, peer-group climate influence student persistence. In terms of the Berger-Milem model, student entry characteristics include: gender, race/ethnicity, socioeconomic status, and previous, academic achievement. Institutional, structural-demographic features include: size, control, mission, and student diversity. Lastly, student, peer-group climate includes aggregate behavior and perceptions. All of these features—individually, in combination, or collectively—are posited by Berger and Milem to have an effect on student persistence (Titus 356).

J. P. Bean & B. S. Metzner

The research of J. P. Bean and B. S. Metzner proposes a model of attrition that likens withdrawal to turnover in work organizations. Yorke reports that Bean’s model proposes that “a student’s beliefs (which are influenced by interaction with the institution and other students) shape attitudes which in turn shape behaviour” (10). The model further acknowledges the impact that extra-institutional factors can have on students’ decisions to persist. However, the research of Bean and Metzner has found that the primary determinants of withdrawal are: low grade point average, lower number of hours enrolled, lower satisfaction with the role of the student, relative youth, and relatively restricted opportunity to transfer (10).

In addition, Bean and Metzner express the view that attrition of students is most closely linked to poor academic integration. According to Yorke, “inferior
academic ability or performance and a low level of commitment to study” is most culpable in poor academic integration (10). This contention of Bean and Metzner is a byproduct of earlier research done by Bean, which identifies “academic, social-psychological, and environmental factors” as being likely to affect student socialization, sense of belonging, and, therefore, decisions to persist (Hausmann, Schofield, and Woods 805).

*Other Models*

The few remaining theorists and models worthy of mention include Ernest T. Pascarella’s *Model of Determinants of Change*, J. Wiedman’s *Model of Socialization*, Patrick T. Terenzini’s *College Impact Model*, and the *Ozga and Sukhnandan Model*.

Both Pascarella’s *Model of Determinants of Change* and Wiedman’s *Model of Socialization* point to a similar conclusion. The theorists contend that “if learning and/or socialization are successful, then the likelihood of withdrawal is reduced” (Yorke 11). As with many of the aforementioned theorists and models, Pascarella and Wiedman—in their respective models—deem academic and social integration as key in determining the likelihood of withdrawal or persistence.

Terenzini’s *College Impact Model* focuses upon institutional experiences, which include “coursework and curricular patterns, positive classroom experiences, and positive out-of-class experiences” (Grayson 411-12). The model purports that those students who have a higher aptitude for adjusting to the environment of higher education will be more likely to achieve their desired goals; whereas, the adjustment itself has institutional experiences at its crux. Some of these desired goals may
manifest themselves in the development of “analytic, communication, personal, organizing, math, and computer skills; and the acquisition of subject matter expertise” (412). Yet again, the level at which the student integrates or adjusts to an institution can be seen as the primary determinant of persistence or withdrawal for this model.

Lastly, the Ozga and Sukhnandan Model centers on the importance of student preparedness for higher education and the compatibility between the student and the institution. Compatibility, according to Yorke, includes a range of variables, which include: “geographical environment, the institution, the academic organizational unit, the study programme as a whole and possibly components of the study programme” (12). Yorke further reports that the model’s inherent flaw is that it seems to oversimplify the causality of non-completion (11).

Conclusion

At the very least, it can be stated with certainty that a unifying theory relative to retention and attrition within higher education is in need of further development. However, the overwhelming complexity and number of factors that influence persistence and withdrawal make such a theory difficult to establish. Moving forth on this premise, it is clear that most of the major, theoretical contributors to the field of higher education retention and attrition view completion or non-completion from an interactionist perspective. In other words, these theorists give most credence to the interactions between the student and the institution—academic and social integration. In doing so, the student’s perceptions and interpretations of his or her individual reality have become the central focus and impetus for present—and possibly future—
retention and attrition theory.

**Demographic Characteristics**

**Age**

Although there is a glut of research that indicates the reasons as to why younger, traditional students (under 21 years of age) leave higher education, the research indicating the reasons as to why older, nontraditional students leave higher education is relatively scant (Yorke 14). What can be gleaned, however, from the research that has been done on the relationship between age and retention and attrition within higher education is that the factors influencing the withdrawal of students aged 21 years or older are far different than the factors influencing the withdrawal of students under 21 years of age. In addition, differences in the reasoning for withdrawal between these age groups leads to general conclusions about the relationship between age and retention and attrition, including why the differences exist and what steps can be taken to improve retention and decrease attrition within higher education.

Students under 21 years of age are influenced to withdraw—more than their older peers—by: the wrong choice of field of study, discontent with the social environment, accommodation difficulties, the fear of crime, an aversion toward the city or town in which they study, and homesickness. Of these factors, younger students are nearly twice as likely as their older peers to report the wrong choice of field of study and an inevitable loss of dedication toward their schoolwork as a major influence upon their withdrawal (Yorke 46). Other influential factors leading to the
withdrawal of younger students are: the field of study being incongruent with student
expectations, dissatisfaction with instruction, lack of commitment, and the feeling of
a need for a break from education (107).

For students 21 years of age or older, common influential factors of
withdrawal are: financial problems, the needs of dependents, difficulty in balancing
employment with studying, emotional problems, a lack of familial support, and
difficulty with commuting to and from educational institutions (Yorke 107). Of these
influential factors toward the withdrawal of older students, “financial problems are by
far the most commonly cited” (47). Furthermore, more than their younger
counterparts, older students find the conflict of employment obligations with time for
study a comparatively more prevailing influence upon their withdrawal (53).

A close examination of each of these age groups and their respective reasons
for withdrawal may lead to the conclusions that: (1) the younger students are more
unprepared for the unexpected changes of living away from home than their older
peers, and (2) some of the variance in the influential factors leading to withdrawal
may be, in part, due to a more developed ‘world-wiseness’ of the older students
(Yorke 46). It is, perhaps, this greater world-wiseness of the older students that has
allowed them to “come to terms with a number of the problems that appear to have
precipitated the withdrawal of the younger students” (46). This contention is
supported by the fact that younger students—more frequently than their older peers—
cite “influences related to their unpreparedness for living away from home” (53) as
reasons for their attrition from higher education.
The research and information presented by Yorke are concordant with much of what has been established about the relationship between age and retention and attrition within higher education. In particular, those students who enter higher education at age 21 or older “generally have a better idea of what they want to do and where they want to do it” (Yorke 99). This increased certainty often translates into an easier adjustment to higher education. An example of this increased incidence of adjustment can be seen in Grayson’s analysis of the students at York University in Toronto.

Upon entry, the students at York University, on average, are older and more mature than their American peers or students in the other Canadian provinces (Grayson 425). Grayson reports that of these entry-level students, “a plurality appear to have little difficulty with early adjustment to university and only a minority find adjustment a problem” (425). Furthermore, Grayson contends that it is this increase in average age and maturity that may result in the students being “more able to handle the problems associated with adjustment to university” (427). Aside from adjustment to higher education, Yorke also cites Richardson’s 1995 study, which contends that, within higher education, “successful completion [is] associated with greater age” (21).

The onus in addressing the issue of unpreparedness of students for the vicissitudes and rigor of higher education seems to lie with those members of school communities who are responsible for advising students on careers, higher education institutions, parents, and the students themselves. These parties may do well to
dissent from the common view of education as an uninterrupted progression from primary school to higher education, for it seems that the attrition of younger students from higher education is in large part a product of student unpreparedness. Yorke states that parents and school, career counselors “may do their charges a greater service by explaining the virtues of not rushing in to higher education without a sense of commitment, for...research has turned up plenty of evidence that showed that, for withdrawals, the choice process was deficient” (98). Additionally, students need to do the research necessary to better educate their selves on what will be expected of them within the realm of higher education, while higher education institutions need to make greater efforts during the admissions process to apprise incoming students of those same expectations (107).

**Gender**

Much of the research in regard to the impact of gender on retention and attrition indicates either a slight or non-existent correlation between a person’s sex and the likelihood of staying in or leaving higher education. As recent as 2006, Marvin A. Titus claimed that the results of his study on student persistence at four-year colleges and universities indicated that persistence in higher education is not related to gender (367). Similarly, a study completed by Joseph Hermanowicz concludes that “men are no more likely than women to leave [higher education], and vice versa” (24), and the attrition of men and women from higher education is proportionate to the student populations of men and women within higher education (83).
The findings of Titus and Hermanowicz are only slightly contradicted by studies completed by Johnes and Taylor, in 1990, and Astin et al., in 1996. Yorke reports that one of the major findings of Johnes and Taylor is the consistency of women completing degree programs at a greater rate than men (about five percentage points higher) (21). Yorke further conveys the confirmation of this finding with his reference to Astin et al., which identically concludes that “women complete [degree] programs at five percentage points above men” (16). Based on all of the aforementioned studies and their conclusions, it can be said that, at best, there is only a weak correlation between retention and attrition and gender.

However weak the correlation between gender and retention and attrition is, the reasons that men and women choose to leave higher education are vastly different. For men, the greatest influences on withdrawal are associated with: the wrong choice of academic program, a lack of commitment to furthering education, a lack of ability to cope with academic rigor, a lack of academic progress, and financial hardship (Yorke 47). Dissimilarly, women cited the primary influences on their withdrawal to be: dissatisfaction with social environment, personal health, pregnancy or the needs of dependents, emotional difficulties with others, and homesickness (47, 54). Furthermore, “beyond the age of 24, there is a disproportionate number of women who cite the needs of dependents as bearing on their decision to withdraw” (47), and similarly, “there [is] a greater tendency for older women than for older men (and younger women) to withdraw as a consequence of commitments to nurturing others” (108).
In terms of the men, it would seem that their reasons for withdrawal primarily have to do with a lack of preparedness; either in the congruence of their expectations of and the reality of higher education or in academics. Secondary to these concerns for men is financial hardship. These reasons for the attrition of men leave those who wish to combat male attrition in a difficult position. David Glenn reports that “among men, neither the offering of tutoring nor the prospect of scholarship, nor the combination of both, [is] enough to improve grades, course completion, or dropout rates” (A18). Furthermore, according to Glenn, the study on which he reports is only one of many recent studies that have come to the conclusion that it is easier to improve the academic performance and, thereby, retention of women (A18).

Women, conversely, have a very strong and positive response to scholarship-incentive programs (Glenn A18). Unfortunately, as indicated earlier, the reasons for the withdrawal of women are far different than those of men. Women tend to leave for more emotive and personal reasons than do men, whose leaving tends to be a result of more practical reasoning. One approach that would certainly be a logical attempt at reducing the attrition rate of women would be to implement institutional, policy initiatives, such as childcare, to help subsidize and support the unique needs of women. Nevertheless, what type of effect this would actually have on the attrition rate of women is unclear, due to a lack of such initiatives currently in place. However, according to Yorke, his “personal experience with the administration of ‘Access Funds’ suggests that a greater measure of support regarding childcare and the care of other dependents could reduce the chances of withdrawal” (108).
Race/Ethnicity

There has been more research on the correlation between race/ethnicity and retention and attrition than any other demographic characteristic, and across higher education institutions, five general conclusions can be drawn when examining the correlation between race/ethnicity and retention and attrition: (1) Caucasian students withdraw in the largest numbers, and the proportion of Caucasian withdrawers approximates their proportion within their larger cohorts; (2) African-American students withdraw in the smallest numbers, but the proportion of African-American withdrawers is one and one-half to two times their proportion within their larger cohorts; (3) Hispanic students withdraw in relatively small numbers, but the proportion of Hispanic withdrawers compared to their numbers within their larger cohorts is relatively large; (4) Asian students withdraw in smaller proportions than that of the composition of their wider cohorts, but compared to all withdrawing students, Asian withdrawal most closely resembles the withdrawal of African-American and Hispanic students; and (5) The number of Native American leavers is small, as is their population within their larger cohorts (Hermanowicz 25-26). The two predominant patterns identified by Hermanowicz are that Caucasian students withdraw in the greatest numbers, while African-American and Hispanic students withdraw in the greatest proportions relative to their numbers within their larger cohorts (26, 36-37, 83). Hermanowicz’s conclusions are echoed by the retention and attrition studies of both Massey et al. (2003) and Furr and Elling (2002). Massey et al. claim that “the predominant patterns of Hispanics and [African-Americans]
leaving college in greatest proportion without a degree reflect enduring national
trends” (Hermanowicz 26), while Furr and Elling claim that “a disproportionately
large number of ethnic students drop out of college” (191).

Two of the most recent and influential studies addressing the retention and
attrition of these three ethnic groups were completed by Pidcock, Fischer, and
Munsch, in 2001, and Furr and Elling, in 2002. The study of Pidcock, Fischer, and
Munsch examines the retention rates of first-year Hispanic and Caucasian college
students. They found that many talented Hispanic and Caucasian adolescents who
begin college do not return after their first year or eventually complete a degree (803).
Further, the authors state that even though 1,014,000 Hispanics were enrolled in
higher education institutions within the U.S. in 1995, the proportion of Hispanic high
school graduates attending college has been in a continual decline since the 1980s,
and retention rates among those Hispanic students who do attend institutions of
higher education are particularly poor (804). The most striking statistic provided by
the authors is their indication that “80% of all Hispanic undergraduates leave college
without graduating” (804). Of the Hispanic and Caucasian students involved in the
Pidcock, Fischer, and Munsch study, the Hispanic females withdrew at greater rates
than the Caucasian females, and the Hispanic males withdrew at a lesser rate than did
the Caucasian males (810). However, overall, the Hispanic students withdrew at a
greater rate than the Caucasian students (810); whereas, “Hispanic females
...comprised 92% of those Hispanics who did not return to school” (812), reflecting
the conclusions of previous studies and national trends.
The study of Furr and Elling examines the retention of African-American and Caucasian students in a predominantly-Caucasian university. The impetus behind their study was their observation that a disparity between the graduation rates of African-American students and Caucasian students has continued to exist (Furr and Elling 188). What they found among the population of African-American and Caucasian students within the university they examined was that at the end of four semesters (freshman and sophomore years), 68% of African-American students were still enrolled, compared with 72% of Caucasian students (188). The specific progression of retained, African-American students over six semesters is as follows: “96.7% (n=177) retained after one semester, 82.2% (n=150) retained after two semesters, 76.5% (n=140) retained after three semesters, 72.1% (n=132) retained after four semesters, 65.6% (n=120) retained after five semesters, 65% (n=119) retained after six semesters” (193). Furr and Elling’s findings only serve to fortify the aforementioned conclusions of educational researchers such as Hermanowicz and Massey et al.

The reasons for withdrawal or persistence that are typical to each, respective, ethnic group are just as varied as each group’s retention and attrition rates. Perhaps surprisingly, the least amount of research as to the reasoning behind the persistence and withdrawal of an ethnic group has been performed for Caucasians. What has been found, however, is that social support is a key factor in determining whether or not Caucasian students choose to persist in or withdraw from higher education. Hausmann, Schofield, and Woods found that both peer and parental support for
Caucasian students had a negative correlation with the students' sense of belonging and persistence. Although parental support was shown to be associated with a greater sense of belonging at the beginning of the students’ academic years, the parental support was associated with a rapid decline in sense of belonging as the academic year progressed. Similarly, the more peer support Caucasian students had, the faster the decline in sense of belonging was experienced (828). Further supporting the importance of social support in the retention and attrition of Caucasian students is the finding of Hotchkiss, Moore, and Pitts. These researchers found that the impact of participation in Freshman Learning Communities (FLCs) on the retention of Caucasian males was extremely negative. They cited “a potential 36 percentage point reduction in [Caucasian] male retention” (207), as a result of FLC participation.

However, it is, perhaps, the context of the peer and parental support that may be causing the decline in sense of belonging and, thereby, retention. According to Pidcock, Fischer, and Munsch, past research has found Caucasian students to be at particular risk of experiencing problematic outcomes related to substance abuse and negative college experiences because of parental addiction, family dysfunction, personality factors and family socialization processes (804). So, if the support gleaned by Caucasian students from their peers and parents is unhealthy or dysfunctional, it would logically follow that the academic outcomes of the students would be negative, as well. Pidcock, Fischer, and Munsch give further credence to this line of thinking, as they found Caucasian students to be at an elevated risk for drinking and drug use and evidencing more problem behaviors in the area of
substance abuse during their first semester (810, 814).

Much like Caucasian students, when examining the retention and attrition of African-American students in higher education, social support seems to be the key factor in determining students’ willingness to withdraw or persist. Unlike Caucasian students, however, greater peer support translates into an increase in sense of belonging and, thereby, improved retention for African-American students (Hausmann, Schofield, and Woods 828, 833-34). Furthermore, the social culture of an academic institution has a particularly strong effect on whether or not an African-American student will persist in or withdraw from higher education. Furr and Elling found that African-American students experience the environment of predominantly-Caucasian institutions as more alienating than the environments of historically-African-American institutions (189). This alienation can contribute to a decrease in African-American students’ sense of belonging and, thereby, retention. Furr and Elling further report that African-American students report more problems in making friends and participating in social activities than other ethnic groups, and this “lack of integration may then become an impetus for dropping out” (190). In fact, African-American students from working-class and inner-city families seem to suffer the most from acculturation stress as a result of having to adjust to the culture of higher education (190).

Aside from social support, the key factors contributing to the retention and attrition of African-American students are academics, finances, and institutional resources. While it is true that African-American students leave in disproportionate
numbers, they also enroll in higher education with academic track records that are disproportionately below the norm (Hermanowicz 34). Furthermore, it is often the case that African-American students are severely lacking in academic preparation and performance (84). In terms of finances, African-American withdrawers report much more often that financial problems contributed to their withdrawal (Yorke 48). The importance of finances for African-American students is echoed by Furr and Elling, in their finding that African-American withdrawers are significantly more likely to cite the availability of financial aid as a major factor in their decision to attend a university (194). Lastly, institutional resources tend to play a significant role in African-American students' decisions to withdraw or persist, particularly in terms of the supportiveness of staff and the provision of library resources. According to Yorke, nine of nineteen African-American students indicated the supportiveness of university staff as having "a moderate or considerable influence on their withdrawal" (48), while one in four African-American students similarly reported that a lack of library provision had a "moderate or considerable influence on [their] withdrawal" (49).

For Hispanic students, the research of Pidcock, Fischer, and Munsch has unearthed family and culture as being the primary factors contributing to retention or attrition. They found that Hispanic students appeared to be at greater risk for problematic behaviors in the area of family and culture because of the frequency of paternal addiction and a lack of mentoring (810, 813). The authors state that the "greater number of Hispanic student-reported paternal addictions, as well as the social
vulnerabilities illustrated by less mentoring, identified a greater vulnerability to risk for these Hispanic students as they began their college education” (813). As a result of these findings, and in light of the aforementioned finding that Hispanic females make up most of the attrition numbers for Hispanic withdrawal, the authors speculate that the way family dysfunction affects Hispanic students may be unique. The authors contend that “a dysfunctional family of origin characterized by the presence of paternal addiction may undermine the academic career of an Hispanic female by producing demands to return home to help manage the affairs of the household, including assisting in the rearing of younger siblings” (814). In terms of a lack of mentoring, Hispanic students also scored significantly higher on tests to measure novelty-seeking behavior and drive for thinness (812). Novelty-seeking behavior and drive for thinness—particularly in terms of Hispanic females—may be providing additional pathways out of school for Hispanic students. The absence of someone to provide high levels of mentoring for Hispanic students in finding alternative solutions to resolving these types of personal and family problems may limit Hispanic students’ options (814).

Beside family and culture, academics also play a role in the attrition and retention of Hispanic students. Like African-American students, Hispanics enroll in college with academic track records that are below the norm (Hermanowicz 34, 84). Due to having lower high school grades and test scores, Hermanowicz claims that Hispanic students are “also prone to have lower college grades” (34), with these lower college grades eventually leading to attrition.
When looking at the disparities in retention and attrition numbers between racial/ethnic groups, one might be compelled to argue that if the population of minorities within an institution reached a critical mass, minority students would be less inclined to withdraw from that institution. This is what Hermanowicz calls a "safety in numbers’ line of reasoning" (26). This is both a logical and compelling argument in light of the retention and attrition numbers of both Caucasian and Asian students; “as their numbers increase, the proportion of these students who leave either equals or is less than the proportions of their larger make-up” (26). However, a closer look at schools that possess a large number of minorities reveals attrition rates that are among the highest, nationwide. Recently, Morehouse College reported its five-year graduation rate to be 62%, while Howard University reported its five-year graduation rate to be 57%. At the low end, Cleveland State University reported a five-year graduation rate of 28% (27). Based on these numbers, combating attrition and promoting retention among racial/ethnic groups seems to be a much more complicated problem with a much more difficult solution than simply directing students to higher education institutions in which they can find a population that is congruent with their own race/ethnicity.

Recent research has found that first-year academic programs have significant benefits for incoming freshmen, particularly minority students. Goodman and Pascarella found general and widespread benefits for college freshmen who participated in first-year seminars, “irrespective of differences in…ethnicity” (28). Similarly, Hotchkiss, Moore, and Pitts found that first-year academic programs for
incoming freshmen increase student retention, particularly for minority groups.

Hotchkiss, Moore, and Pitts researched the impact of Freshman Learning Communities (FLCs) on the retention of college students and found that there was an increase in student grade point average (GPA)—ranging from three-quarters to over one full letter grade—as a result of belonging to a FLC (207). The impact of belonging to a FLC was felt most strongly by the African-American students in the study; whereas, being enrolled in a FLC increased the probability that an African-American male would be enrolled one year later by 31% (19% for African-American females) (205). The authors suggest that since the greatest retention benefit of FLCs is felt by African-American males, “tailoring FLCs to the interest of [African-American] men would yield an even greater measured benefit to the program” (207-08).

The retention benefits of social and academic involvement for minority students are also reported by Furr and Elling. The authors focused their 2002 study on the retention of African-American students and found environmental factors, including social and academic involvement, to be critical in the retention of these students (189). Relative to academic involvement, the authors state that “involvement in academic-related activities has been shown to be…important for the academic and personal development of African-American students,” and “African-American students who met with instructors outside of class were more successful academically than African-American students who did not meet with instructors outside of class” (189). The authors further state that although the benefits of
meeting with instructors outside of class are felt by other ethnic groups, including Caucasi

cans, the benefits are particularly strong for African-American students (189). The 

involvement of African-American students in mentoring or support programs has also been shown to have a significant impact on the retention of these students; whereas, African-American participants indicated that academic tutoring and skills training were the most helpful services offered by these programs (191). The authors state that “African-American freshmen participating in a mentor program were more likely to be retained and to participate in campus organizations and other campus activities” (191). In terms of this type of social involvement, the authors report that peer-related activities have a positive effect on the educational and personal development of African-American students, and participation in campus activities has, in general, been seen as a factor in the persistence and retention of these students (189-90). Furthermore, “African-American students who reported that they enjoyed the social life on campus reported higher GPAs than students who did not report this,” (189) and, perhaps most convincingly, 75% of all the African-American students surveyed by Furr and Elling stated that they would like to participate in more campus activities (194). Therefore, a focus on the academic and social involvement and development of African-American students should serve to increase their desire to persist within higher education.

For Hispanic students, there has been far less research toward the determination of what interventions might be effective in their retention within higher education. Hermanowicz claims that a focus on financial counseling and academic
remediation will elicit significant gains in the retention of Hispanic students (84), but
Pidcock, Fischer, and Munsch have completed more in-depth research on the
retention of Hispanic students and suggest more specific intervention strategies. The
first, significant finding of Pidcock, Fischer, and Munsch is that, for Hispanic
students, the freshmen year represents a time of resilience or vulnerability to the
expression of risk factors associated with academic success (814). A secondary
finding of these authors is the consistent, higher scores of Hispanic students on drive
for thinness and novelty-seeking behavior tests, as well as a greater number of
Hispanic students reporting paternal addictions and a lack of mentoring (812-13).
Therefore, interventions during Hispanic students’ freshman years, which focus on
the areas of eating disorders, interpersonal values, substance abuse, and mentoring,
should yield an increase in the retention numbers of these students.

Regardless of the particular racial/ethnic population of students within
individual institutions of higher education, these institutions should be moving toward
the development of initiatives to manage multiculturalism and diversity on their
respective campuses (Lau 130). Linda Lau suggests that special offices on the
campuses of higher education institutions should be developed, whose missions
should include: (1) "To provide a friendly and harmonizing environment for students
who come from different cultures and/or countries, resulting in the recruitment and
retention of a diversified student body; (2) To develop policies and programs that will
enrich campus-wide understanding and appreciation of diversity, and to encourage
multicultural awareness and sensitivity; (3) To work with campus organizations,
committees, and the local community on diversity-related activities; and (4) To ensure that student support services, academic support services, and co-curricular programs meet the needs of a diversified, multicultural student body” (130). While there is no panacea for remedying the attrition of particular racial/ethnic groups, Lau’s top-down approach (administration down to students) appears to be the most holistic, culturally sensitive, and potentially effective method by which to: (1) promote cultural appreciation and awareness, (2) collectively and individually support students, and (3) increase the retention of all racial/ethnic groups.

Socioeconomics

A substantial amount of the research on the correlation between socioeconomics and retention and attrition speaks to the impact of low socioeconomic status and financial difficulty on retention and attrition. However, what can be said about the overall relationship between socioeconomic status and retention and attrition is that withdrawing students describing themselves as working class more frequently cite financial difficulties as influential on their departure, while withdrawing students describing themselves as middle or upper class have a tendency to cite a wrong choice of field of study and the dislike of the city or town in which the higher education institution is located as influential upon their departure (Yorke 48, 55, 108). When shifting the focus to withdrawing students, at large, and their stated reasons for withdrawal, a dominant trend quickly becomes evident. Regardless of a higher education institution’s academic rigor or cost, greater proportions of students report financial concerns as motivation for their withdrawal (Hermanowicz 91-92).
This finding is consistent with nearly every recent study that examines the correlation between socioeconomics and retention and attrition, including Yorke (1999), Furr and Elling (2002), and Hawking (2005).

Yorke reports that two circumstances, which often lead to withdrawal or failure, are students finding themselves in financial difficulty and students coming from a working class background (26). He goes on to state that of the withdrawing students in his study, three main influences on withdrawal dominate their responses; whereas, the citation of wrong choice of field of study and financial problems are roughly equal in frequency (38, 53). In fact, Yorke found that thirty-seven percent of the withdrawing, full-time students in his study identified financial problems as a moderate or considerable influence on their withdrawal (103). Supporting his findings, he cites a face-to-face survey conducted at NatWest at seven university sites, which found that of the 2000 undergraduates surveyed, “a third felt that their finances were out of control and that a quarter had not matured in their attitude towards money since going to university” (104). Of the information provided by Yorke’s study on the impact of socioeconomics on retention and attrition, one last finding is worth noting: “26.3% of the students who were not retained versus 14.1% of the retained students indicated that their family income at time of admission was $15,000 or less…while 90.4% of students with family incomes of $50,000 or more were retained versus only 75.8% of those students whose family income was less than $50,000” (194).

The findings of Furr and Elling, as well as the findings of Hawking, are much
more generalized, but are certainly congruent with the findings of both Yorke and Hermanowicz. Furr and Elling report that the characteristics that place students at an increased risk for attrition from higher education are “having a lower socioeconomic status, living in an urban environment, being raised by a single parent, and being a first generation college student” (190)—all factors that can potentially contribute to financial difficulty. In addition, the authors claim that financial support is a key predictor of persistence in higher education (190). Similarly, Hawking states that “attrition can result from various circumstances, including ... financial setbacks” (234).

When considering the varied costs of higher education, financial difficulty can manifest itself in myriad ways. It has been discussed in relatively general terms thus far; however, the term itself and its effect on retention and attrition within higher education is made clearer by Yorke:

Full-time...students have, in recent years, necessarily contributed more of the costs of their education due to constraint on the maintenance award and an increasing expectation on the part of institutions that they contribute towards the cost of consumables...At the same time, their basic living expenses have risen: rents have increased, and those students who need childcare facilities find it very difficult to purchase these at prices that they can afford from their existing finances...As a consequence, students are increasingly taking out loans and running overdrafts at banks (104).

Supplementing these remarks, Yorke writes that maintenance grants—non-repayable
award funds (Hermanowicz 36)—have, in general, been frozen and have begun to be phased out by American higher education institutions as of 1998 (Yorke 19). This, in conjunction with “a tendency for programmes to require students to fund ‘extras’ that in earlier times came as part of the institutional provision” (19), has helped to create the aforementioned situation that necessitates students’ taking out of loans and running overdrafts (19). In addition, although ‘Access Funds’—government monies provided to institutions and other institutional sources of financial support—remain available to higher education institutions, these funds “are able to deal with only a proportion of the hardship claims made upon them…and many students’ applications cannot be accommodated” (104, 112).

Yorke’s findings are reverberated by Lau (2003) and Joni E. Finney, a vice president at the National Center for Public Policy and Higher Education. Lau states that students are finding it increasingly more difficult to secure financial assistance due to the escalating costs of college education and the diminishing availability of federal and state grants and loans (128). Joni E. Finney is quoted as saying, in a 2006 article by Sara Hebel, that “the United States does face a college-cost crisis, with rising tuition limiting opportunities,” and that “no state will ever have deep enough pockets to keep up with [financial] need by relying on aid alone” (A33).

Aside from the apparent costs of tuition, books, housing and food, students need also be concerned about the fiscal responsibilities of health care, child care (as mentioned earlier), and transportation. Many withdrawing students who cited financial difficulties as a primary correlate to their decision to withdraw also reported
that their financial difficulties had an adverse effect on their health and ability to buy medicines (Yorke 19). Many of these same students also remarked that the expense of having to travel into the institution from a moderately distant location also factored in to their decision to withdraw (44).

With all the monetary responsibilities associated with a commitment to higher education, it is not surprising that many students attain and attempt to sustain employment whilst studying (Yorke 104). Of the students in Yorke’s study, one-third was employed part-time (19). Employing this strategy in order to combat the financial strain that often occurs for full-time, higher education students, however, can have detrimental effects on campus integration, students’ academic performance, and, ultimately, retention (14, 19, 26). Two-thirds of the students employed part-time in Yorke’s study stated that their employment had an adverse effect on their studies (19), and, for some, the need to work can be the main factor preventing the pursuance of higher education altogether (Hebel A32).

Among those researchers echoing and expanding upon Yorke’s findings on the impact of employment on retention and attrition are Furr and Elling, who state that “more nonpersisting students have been found to be employed than persisting students” (190). The two primary findings of Furr and Elling’s study deal with number of hours students work per week and students’ stated reasons for working. First, after three semesters, 43.5% of the withdrawing students had indicated prior to entering that they intended to work 20 or more hours per week, while 10.1% of retained students had indicated the same intention. Further, working students who
were retained averaged 18 hours per week; whereas, withdrawing students averaged 25 work hours per week. Second, of those students not returning after three semesters, 51% reported that their intended reason for working was to pay for tuition, fees, and books, while only 33% of retained students indicated the same reason for working (194). Overall, Furr and Elling found that retained, working students are more likely to work for spending money, and the intention to work more than twenty hours per week and the perception that the extent of work does not interfere with academic performance are highly correlative with retention and attrition (195-96).

The unmanageability that seems to be created by simultaneously pursuing both employment and higher education begs the question of what interventions might be effective in creating success within higher education for the socioeconomically disenfranchised. Empowering working class students to pursue and attain higher education degrees is most feasible by focusing on three areas: increasing the availability of and disseminating information about financial issues within higher education to students and their caretakers, increasing the availability of monies to subsidize the financial burdens of higher education, and obliging local, state and the federal governments, as well as institutions of higher education, to reform the ways in which their monies are distributed.

In response to an opinion poll, which indicated that only 10% of prospective college students had received information about issues related to college preparation and that approximately 50% of prospective college students believe that their school or college should help prepare them to be self-sufficient, the charity, Shelter,
distributed informational packets with the aforementioned information to various secondary schools, hoping that it would be of assistance in allaying the information gap (Yorke 104). Author, Joseph Hermanowicz, would certainly praise the efforts of Shelter, as he states that “often information about costs and finance is all that is needed to retain at-risk students,” and “had [the at-risk students] received that information, attrition risk would [be] lower” (57). Hermanowicz further states that the information also needs to be made available to parents and caretakers of students, claiming that the risk for attrition would decrease “if parents also were informed, or informed more fully, since they often bear a significant fraction of expenses and because financial difficulties that prompt attrition often begin with them” (57). The author concludes that schools should take cue from charities such as Shelter and invest in initiatives that communicate the varied aspects of managing the costs of higher education, such as financial counseling services (57, 84). Hermanowicz’s conclusion is affirmed by Yorke, as he states that financial counseling and guidance prior to higher education entry is a way for students to organize and budget their finances and, thereby, help them to mitigate potential, financial stress (112).

Several researchers have commented on the positive influence of grants and scholarships toward student success, retention, and, inevitably, degree attainment. Included in these researchers are Yorke (1999), Gansemer-Topf and Schuh (2006), Lau (2003), and Glenn (2007). It is Yorke’s finding that both scholarships and grants have the greatest beneficial effects on persistence (14, 113), and his findings are reiterated by Gansemer-Topf and Schuh. Similarly, they found that increasing
financial aid and institutional grants is a substantial contributor to improving retention and graduation rates (635), and, likewise, both Lau and Glenn found that students who are offered scholarship incentives are more likely to be retained (Lau 128; Glenn A18). Institutions of higher education do offer financial assistance to students from working-class backgrounds through their allocation of Access Funds, but they continue to be inadequate (Yorke 112). In general, if higher education institutions wish to improve retention and graduation rates, institutional leaders should work toward providing adequate and appropriate financial aid packages for their respective populations of students (Gansemer-Topf and Schuh 635).

The last intervention that would facilitate an increase in students of low socioeconomic status pursuing and attaining degrees is the reform of the ways and means by which government agencies and institutions of higher education utilize and disseminate their educational funding. The development of programs and policies toward this end is crucial if the negative impact of low socioeconomic status on retention is to be tempered. The recent research of Gansemer-Topf and Schuh is instrumental in indicating the positive impact that a change in institutional spending policies would have on student retention. These researchers invariably found a strong, positive correlation between an emphasis on student-centered, institutional expenditures (i.e., institutional grants) and first-year retention rates, as well as on overall retention rates and graduation rates (622, 624-26, 629). Overall, the authors conclude that if “improving persistence and graduation rates is an institutional goal, then securing gifts and grants to enhance scholarships…is warranted” (636).
Sara Hebel and Joni E. Finney agree. Hebel, in a recent article, stated that there exists a small group of potential and current students who do find cost to be an obstacle to persistence and degree attainment in higher education. She recommends that state and college officials should develop strategies in order to encourage college participation among these students and help them with the fiscal responsibilities of higher education. Further, she specifically recommends that policy makers focus on “making sure students in rural areas have a community college or other higher-education opportunity nearby, and doing more to bolster rural economies” (A33). Similarly, Ms. Finney specifically recommends that policy makers should do more to “increase access, make college more affordable, and close the growing participation gap between people from low-income and high-income families” (A33).

Relative to the types of programs that can be developed to help temper the negative impact of low socioeconomic status on retention, Lau and Yorke have suggestions. Lau states that some learning centers provide resources for students from disadvantaged socioeconomic backgrounds. She says that many more of these learning centers should be developed and their services geared toward provisions for this population of students in order to help them deal with “competing demands related to work, family, peers, culture, and schoolwork” (128). Yorke suggests that ‘learning banks’ should be developed in order to give students more flexibility and options as to how they wish to spend their award monies. Learning banks, Yorke states, are accounts in which “students are provided with a quantum of funding to which they can add from other sources” (113). An example of the flexibility that this
type of program can offer is the option for students to spend their funding on either full-time or part-time study; thereby, creating a scenario where students can choose to freely—and without penalty—vacillate between full-time and part-time studies, as their respective funding allow. It is only through the development of programs such as this and an increase in the availability of information and funding that socioeconomically disenfranchised students will be able to persist within higher education and attain degrees with any amount of consistency.
Works Cited


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Chapter III

Action Research
Age

Summary of St. Jude the Apostle’s Age Data

- At the time this data was collected, St. Jude the Apostle’s total enrollment (grades 9 – 12) was 817 students, ranging in age from 13 – 18 years old.
- In grade 9, St. Jude the Apostle’s total enrollment was 215 students, ranging in age from 13 – 15 years old.
- In grade 10, St. Jude the Apostle’s total enrollment was 221 students, ranging in age from 14 – 16 years old.
- In grade 11, St. Jude the Apostle’s total enrollment was 178 students, ranging in age from 15 – 17 years old.
- In grade 12, St. Jude the Apostle’s total enrollment was 203 students, ranging in age from 16 – 18 years old.
- Although the curriculum (grades 9 – 12) at St. Jude the Apostle is designed to prepare students for higher education, school officials, parents, and students do not truly begin to mobilize for the students’ movement to higher education until the students’ eleventh-grade year. This movement often takes the shape of: a strong focus on grade attainment, the Practice Standardized Achievement Test, the Standard Achievement Test, encouraging students to engage in college-level coursework, and beginning the college-choice process.
- During students’ twelfth-grade year, there remains a focus on grade attainment, college-level coursework, and the college-choice process.

However, by the twelfth-grade year, students are also being guided through
the college-application process, which includes: filling out and sending out college applications, writing application essays, procuring letters of recommendation for college entry, visiting colleges and universities, and narrowing down and, inevitably, choosing a higher education institution to attend.

Retention-Improving Findings for Age-Specific Factors

- Members of school communities responsible for advising student on careers, higher education institutions, parents and students could improve the retention of prospective higher education students by dissenting from the common view of education as an uninterrupted progression from primary school to higher education.

- Parents, as well as school and career counselors, could improve the retention of prospective higher education students by explaining the virtues of not rushing in to higher education without a sense of commitment.

- The choice process in selecting a higher education institution is often deficient.

- Prospective higher education students could improve their own retention by spending the necessary time and making the necessary commitment to research what is necessary and what will be expected of them as students within higher education (i.e., academically, financially, etc.).

- Higher education institutions could improve the retention of prospective higher education students by making the necessary efforts to acquaint those
students with what is necessary and expected of them as students within higher education.

Suggested Action Plan for the Improved Retention of St. Jude the Apostle's Graduates Based on Its Age Data

Based on the above research findings and data collection, the retention of St. Jude the Apostle graduates within higher education would improve if the school developed a retention-improving program that, in part, focused on (1) educating students, parents, and school officials about the age-specific factors that lead to attrition from higher education and (2) further improving and developing their prospective higher education students' college-choice process.

Education—Explaining the benefits of delaying higher education until such time that students glean a greater emotional and psychological maturity and exhibit an earnest desire to pursue the academic journey of higher education may be very difficult in a setting that purports itself to be college-preparatory. Parents and students have an expectation that part of their participation in such an academic setting is that the students will be entirely prepared for the rigors of higher education upon their graduation—intellectually, psychologically and emotionally. However, although St. Jude the Apostle has much more control over and does an adequate job of designing the academic curriculum in order to prepare its graduates for higher education, it has much less control over the psychological and emotional maturation processes of its students. Unfortunately, these maturation processes primarily rely on experience and are less predictable and controllable than the intellectual maturation process.
Bringing students, parents, and school officials to a point of understanding that intellectual maturity does not necessitate psychological or emotional maturity and that a lack of psychological and emotional maturity is likely to contribute to a withdrawal from higher education is important for any secondary school whose focus is college preparation. In part, this educating of students, parents and school officials about the benefits of delaying higher education is about redefining what it means to be prepared for college and what it means to be a college-preparatory institution. The implementation of an education initiative in order to create a greater awareness of and insight about college preparedness within St. Jude the Apostle or any college-preparatory institution could have the following characteristics:

- The implementation of staff-development training for school officials
- The implementation of seminars for parents and students
- The implementation of in-school assemblies for those students engaged in the college-choice process.

**College-Choice Process**—To say that the college-choice process for students and parents at St. Jude the Apostle is deficient could be construed as an indictment on, primarily, the school’s Guidance Department, whose responsibility it is to assist parents and students in both the application, choice and admissions processes for higher education. This would be an unfair indictment, as students, parents and other school officials also play a role in these processes. All parties would improve the retention numbers of St. Jude the Apostle graduates within higher education by shoring up their responsibility in these processes.
For students, they would do themselves a service by taking the necessary time and making the necessary commitment to perform their own research into what higher education institutions best meet their needs (i.e., academically, socially and financially). For parents, it may be as simple as acting as a mediator between those school officials charged with guiding students through the application, choice, and admission processes and their children, or it may be as time-consuming as sacrificing their time and energy to personally visit several higher education institutions with their children. For school officials, the development and synthesis of a student and parent survey to help narrow down potential higher education institutions that meet important criteria for both students and parents would be a simple and appropriate method by which to improve the college-choice process.

Perhaps a more effective method by which school officials at St. Jude the Apostle could improve the college-choice process of its students and, thereby, the retention of its graduates within higher education would be to develop more intimate and cooperative relationships with higher education institutions and further open lines of communication with these institutions; clarifying expectations on both ends. Within these cooperative relationships, St. Jude the Apostle may invite more higher education institutions to visit St. Jude’s, present their respective institution’s varied programs and resources, and interact with prospective students on a more personal basis. Also, these cooperative relationships may offer more opportunities for St. Jude the Apostle students to partake in school visits in which they can experience a day or more in the life of a particular higher education institution’s student (i.e., visit the
Regardless of the methods by which the college-choice process is improved, all parties—students, parents and school officials—must take responsibility for their role in ensuring that prospective students are making a sound and informed decision about which higher education institution to attend. The onus in improving the college-choice process seems to primarily lie with school officials, but both students and parents have the ultimate choice of which higher education institution to attend and must take full advantage of and participate in the resources available to them in making that choice. If all parties invested in the college-choice process are fulfilling their respective roles, the retention rate of St. Jude the Apostle graduates within higher education will improve.

Gender

**Summary of St. Jude the Apostle's Gender Data**

- Of the 817 total students enrolled at St. Jude the Apostle at the time this data was collected, 448 students were male, and 369 were female—55% and 45% of the total enrollment, respectively.

- Of the 215 students enrolled in grade 9 at St. Jude the Apostle, 125 were male, and 90 were female—58% and 42% of the ninth-grade enrollment, respectively.
• Of the 221 students enrolled in grade 10 at St. Jude the Apostle, 122 were male, and 99 were female—55% and 45% of the tenth-grade enrollment, respectively.

• Of the 178 students enrolled in grade 11 at St. Jude the Apostle, 94 were male, and 84 were female—53% and 47% of the eleventh-grade enrollment, respectively.

• Of the 203 students enrolled in grade 12 at St. Jude the Apostle, 107 were male, and 96 were female—53% and 47% of the twelfth-grade enrollment, respectively.

• There is a slight shift toward equality in gender numbers from grade 9 to grade 12—58% males in grade 9, 55% males in grade 10, and 53% males in both grades 11 and 12.

Retention-Improving Findings for Gender-Specific Factors

• The choice process in selecting a higher education institution, particularly for males, seems to be an area of deficiency.

• The addition of financial counseling for males during the selection and admission processes could improve their retention within higher education.

• Participation in scholarship-incentive programs improves the retention of women within higher education.

• A focus on increasing an awareness of those higher education institutions that have implemented policy initiatives to help subsidize and support the unique
needs of women could improve the retention of females within higher education.

*Suggested Action Plan for the Improved Retention of St. Jude the Apostle’s Graduates Based on Its Gender Data*

Based on the above research findings and data collection, the retention of St. Jude the Apostle graduates within higher education would improve if the school developed a retention-improving program that, in part, focused on: (1) further improving and developing their prospective higher education students' college-choice process (particularly for the male students), (2) educating parents and students about the financial responsibilities of higher education as part of the application, choice and admission processes (particularly for male students), (3) educating female students about the availability of resources—specific to the needs of women—in particular higher education institutions, and (4) encouraging female students to engage in the pursuit and attainment of scholarships.

*College-Choice Process*—Suggested ideas for the improvement and development of the college-choice process for St. Jude the Apostle students are well-outlined in the “Age” section of this chapter (page 61), and the research indicates that the improvement and development of the process is of particular importance for the retention of male students. Assuming that the research is correct, it lends further evidence of the necessity for St. Jude the Apostle to adopt the suggested ideas toward the improvement and development of the college-choice process for its students, as 55% of its total, student-body population is male.
Financial Counseling—Suggested ideas for the financial counseling of St. Jude the Apostle parents and students are well-outlined in the "Socioeconomics" section of this chapter (page 82), and the research indicates that the implementation of financial counseling during the application, choice and admission processes for parents and students is of particular importance for the retention of male students. Assuming that the research is correct, it lends further evidence of the necessity for St. Jude the Apostle to adopt the suggested ideas toward the financial counseling of parents and students engaged in these processes, as 55% of its total, student-body population is male.

Female-Specific Resources—A very simple and subtle method by which St. Jude the Apostle could improve the retention of its graduates within higher education is by making its female students aware of those prospective institutions of higher education that have policy initiatives, programs and resources that serve the unique needs of women. Examples of some of these policy initiatives, programs and resources include childcare and safety measures (i.e., security escorts and emergency phones around campus). As a co-educational institution, 45% of the total, student-body population at St. Jude the Apostle is female, and by providing those students with the awareness of policy initiatives, programs, and resources within higher education that may well serve their gender-specific needs, the overall retention of St. Jude the Apostle’s graduates within higher education would improve.

Scholarships—Suggested ideas for encouraging the pursuit of and increasing the availability of scholarships for St. Jude the Apostle students are well-outlined in the
“Socioeconomics” section of this chapter (page 84), and the research indicates that
the increased availability of and attainment of scholarships for students is of
particular importance for the retention of female students. Assuming that the research
is correct, it lends further evidence of the necessity for St. Jude the Apostle to adopt
the suggested ideas toward encouraging the pursuit of and increasing the availability
of scholarships for its students, as it is a co-educational institution with females
making up 45% of its total, student-body population.

Race/Ethnicity

Summary of St. Jude the Apostle’s Race/Ethnicity Data

- Of the 817 total students enrolled at St. Jude the Apostle at the time this data
  was collected: 682 were Caucasian (83%), 85 were African-American (10%),
  24 were Hispanic (3%), 6 were Asian (1%), 9 were African-American/Caucasian
  (1%), 3 were Caucasian/Hispanic (less than 1%), 3 were
  African-American/Asian (less than 1%), 2 were Caucasian/Indian (less than
  1%), 1 was Asian/Hispanic (less than 1%), 1 was African-American/Hispanic
  (less than 1%), and 1 was Asian/Caucasian (less than 1%).

- Of the total enrollment at St. Jude the Apostle, Caucasian males were the
  largest group, totaling 366 students (45% of the total enrollment).

- Of the 215 students enrolled in grade 9 at St. Jude the Apostle: 172 were
  Caucasian (80%), 31 were African-American (14%), 5 were Hispanic (2%), 2
  were Asian (1%), 4 were African-American/Caucasian (2%), and 1 was
  Caucasian/Indian (less than 1%).
• Of the total ninth-grade enrollment, Caucasian males were the largest group, totaling 96 students (45% of the ninth-grade enrollment).

• Of the 221 students enrolled in grade 10 at St. Jude the Apostle: 183 were Caucasian (83%), 19 were African-American (9%), 7 were Hispanic (3%), 3 were Asian (1%), 4 were African-American/Caucasian (2%), 3 were African-American/Asian (1%), 1 was Asian/Hispanic (less than 1%), and 1 was Caucasian/Indian (less than 1%).

• Of the total tenth-grade enrollment, Caucasian males were the largest group, totaling 102 students (46% of the tenth-grade enrollment).

• Of the 178 students enrolled in grade 11 at St. Jude the Apostle: 149 were Caucasian (84%), 19 were African-American (11%), 6 were Hispanic (3%), 1 was African-American/Caucasian (less than 1%), 2 were Caucasian/Hispanic (1%), and 1 was African-American/Hispanic (less than 1%).

• Of the total eleventh-grade enrollment, Caucasian males were the largest group, totaling 77 students (43% of the eleventh-grade enrollment).

• Of the 203 students enrolled in grade 12 at St. Jude the Apostle: 178 were Caucasian (88%), 16 were African-American (8%), 6 were Hispanic (3%), 1 was Asian (less than 1%), 1 was Caucasian/Hispanic (less than 1%), and 1 was Asian/Caucasian (less than 1%).

• Of the total twelfth-grade enrollment, Caucasian males were the largest group, totaling 91 students (45% of the twelfth-grade enrollment).
• The most racially/ethnically diverse grade was grade 10 (8 different racial/ethnic groups represented), while grades 9, 11 and 12 were relatively equal in racial/ethnic diversity (6 different racial/ethnic groups represented in each grade).

Retention-Improving Findings for Race/Ethnicity-Specific Factors

• First-year academic programs improve the retention of students within higher education, particularly African-Americans.

• Social and academic involvement is of vital importance for the retention of African-American students within higher education.

• Meeting with instructors outside of class improves the retention of students within higher education, particularly African-Americans.

• Mentoring and support programs improve the retention of African-American students within higher education.

• Peer-related activities and participation in campus activities improves the retention of African-American students.

• A focus on financial counseling and academic remediation improves the retention of Hispanic students within higher education.

• The implementation of interventions that focus upon eating disorders, interpersonal values, substance abuse, and mentoring—particularly if they are implemented within the first year of matriculation—could improve the retention of Hispanic students within higher education.
• The development of initiatives to manage multiculturalism and diversity—such as special offices or programs—seems to be the most holistic, culturally sensitive, and potentially effective method by which to improve the retention of all racial/ethnic groups.

Suggested Action Plan for the Improved Retention of St. Jude the Apostle’s Graduates Based on Its Race/Ethnicity Data

Based on the above research findings and data collection, the retention of St. Jude the Apostle graduates within higher education would improve if the school developed a retention-improving program that, in part, focused on: (1) encouraging its students to attend higher education institutions with first-year academic programs (particularly African-American students), (2) developing programs for students attending St. Jude the Apostle that mimic first-year academic programs of higher education, (3) encouraging its students to attend institutions of higher education that offer varied opportunities for social and academic involvement (particularly African-American students), (4) encouraging its students to engage both socially and academically within St. Jude the Apostle, (5) encouraging its students to attend institutions of higher education that offer mentoring and support programs (particularly African-American and Hispanic students), (6) developing mentoring and support programs for students attending St. Jude the Apostle, (7) educating parents and students about the financial responsibilities of higher education as part of the application, choice and admission processes (particularly Hispanic parents and students), (8) encouraging its students to attend institutions of higher education that
offer academic remediation and programs/initiatives specific to interpersonal values, eating disorders and substance abuse (particularly Hispanic students), (9) developing academic remediation and programs/initiatives for students attending St. Jude the Apostle that are specific to interpersonal values, eating disorders and substance abuse programs, (10) encouraging its students to attend institutions of higher education that have developed programs/initiatives to manage multiculturalism and diversity, and (11) developing programs/initiatives for students attending St. Jude the Apostle that manage multiculturalism and diversity.

**First-Year Academic Programs**—The positive effect of first-year academic programs on the retention of students in their first year of higher education is evident in the research that has been presented, so it is an obvious suggestion for St. Jude the Apostle to encourage its students engaged in the college-choice process to continue their academic pursuits in higher education institutions that offer first-year academic programs. However, developing such a program within St. Jude the Apostle in order to be proactive in their approach to improving the retention of their graduates within higher education seems to be the next, logical step toward this end. Furthermore, as first-year academic programs are, by definition, designed to improve academic performance, retention and degree attainment through social and academic integration, and because the research indicates that social and academic involvement are crucial to the retention of students within higher education, there is further credence in (1) encouraging St. Jude the Apostle graduates to attend higher education
institutions with first-year academic programs and (2) implementing a pseudo-first-year academic program within St. Jude the Apostle.

First-year academic programs, as well as social and academic involvement, have been shown to increase the retention of students, regardless of their race or ethnicity. However, their particular benefit on the retention of African-American students should be of importance to any college-preparatory or higher education institution that has a large population of African-American students, which includes St. Jude the Apostle (12% of the total, student-body population). Although it is unclear how many African-American graduates of St. Jude the Apostle are either retained or withdraw from higher education institutions, a movement toward encouraging these students to attend higher education institutions with first-year academic programs and integrate themselves both academically and socially within these institutions would certainly improve their retention within higher education.

A pseudo-first-year academic program within St. Jude the Apostle or any college-preparatory institution could have the following characteristics:

- The mandatory participation of all students engaged in the college-choice process (i.e., juniors and seniors)
- The mandatory participation in at least one extracurricular activity—social, academic, or athletic
- Mandatory study time during each school day; whereas, students can meet with instructors outside of the classroom, use the school’s library resources, work individually, or participate in study groups
The rationale behind implementing such a program for St. Jude the Apostle students are to: (1) familiarize the students with the benefits of participating in such a program (i.e., academic, social, personal, etc.), (2) encourage their future participation in similar programs within higher education, and, thereby, (3) improve the retention of St. Jude the Apostle graduates within higher education (particularly African-American students).

**Mentoring and Support Programs**—Similar to the apparent and positive effect of first-year academic programs on the retention of students within higher education, mentoring and support programs for these students have yielded increased retention rates, and, like first-year academic programs, these mentoring and support programs yield the most significant and positive results for African-American and Hispanic students. These benefits are often felt by both the mentors and protégés involved in these programs. Encouraging St. Jude the Apostle students—particularly African-American and Hispanic students—to attend higher education institutions that offer mentoring and support programs is an easily-implemented intervention toward increasing the retention rates of St. Jude the Apostle graduates within higher education, but, again, similar to the development of a pseudo-first-year academic program within St. Jude the Apostle, it would behoove the school to develop a mentoring and support program for its own students if it wishes to increase its graduates’ retention within higher education.

A mentoring and support program within St. Jude the Apostle or any college-preparatory institution could have the following characteristics:
• The pairing or grouping of upperclassmen with underclassmen from similar cultural backgrounds

• The scheduling of time both during and outside of the school day for mentors and their protégés to meet in order to discuss issues pertinent to the continued growth and development of the students (i.e., academics, socialization, vocation, family, finances, etc.)

The rationale behind implementing such a program for St. Jude the Apostle students are, again, similar to the rationale for the implementation of first-year academic programs. Students are: (1) exposed to the mutual benefits (for both mentor and protégé) of participating in such a program, (2) more likely to attend higher education institutions that offer mentoring and support programs, (3) more likely to participate in those programs upon entry into higher education, and, thereby, (4) more likely to be retained within higher education (particularly African-American and Hispanic students).

Financial Counseling—Suggested ideas for the financial counseling of St. Jude the Apostle parents and students are well-outlined in the “Socioeconomics” section of this chapter (page 82), and the research indicates that the implementation of financial counseling during the application, choice and admission processes for parents and students is of particular importance for the retention of Hispanic students. Assuming that the research is correct, it lends further evidence of the necessity for St. Jude the Apostle to adopt the suggested ideas toward the financial counseling of parents and
students engaged in these processes, as 4% of its total, student-body population is of Hispanic descent.

**Academic Remediation and Intrapersonal Growth**—The research indicates that academic remediation and programs/initiatives that focus on intrapersonal growth (i.e., value identification and development, counseling for various addictions, etc.) have a significant, positive effect on the retention of students within higher education (particularly Hispanic students). Most higher education institutions offer some form of academic remediation for its students, but fewer offer programs/initiatives specific to the intrapersonal growth of students—that is, aside from basic, holistic counseling services. Furthermore, secondary schools and other college-preparatory institutions are also likely to offer academic remediation, but there is even a lesser prevalence of programs/initiatives for the intrapersonal growth of students in these institutions.

Most secondary schools and other college-preparatory institutions are limited in their provision of these types of services to a single school psychologist or social worker or, merely, the school’s Guidance Department.

Encouraging St. Jude the Apostle graduates to attend higher education institutions that offer both academic remediation and intrapersonal growth services would certainly improve the retention of these graduates, but, like the development of first-year academic programs and mentoring and support programs, St. Jude the Apostle would improve the retention of its graduates within higher education by improving the academic remediation and intrapersonal growth services that are currently provided for its own students. The further development of the academic
remediation and intrapersonal growth programs within St. Jude the Apostle or any college-preparatory institution could have the following characteristics:

- An increase in the number of specialized instructors employed by the school (i.e., Special Education teachers, Literacy teachers, etc.)
- The development of a peer-tutoring program
- The individualizing of instruction for students with special needs
- The scheduling of time both during and outside of the school day for students to meet with instructors outside of the classroom, use the school’s library resources, work individually, or participate in study groups
- An increase in the number of specialized, health professionals employed by the school (i.e., school psychologists, mental health counselors, social workers, addiction therapists, etc.)
- The implementation of issues specific to intrapersonal growth and development within the curriculum
- The scheduling of time both during and outside of the school day for students to meet with health professionals, both individually and in peer-group settings

The rationale behind implementing such programs for St. Jude the Apostle students are to: (1) improve students’ academic performance and familiarize them with available, academic resources, (2) encourage students to engage in and familiarize them with health services that promote their intrapersonal development and growth, (3) encourage students’ future participation in similar programs within higher
education, and, thereby, (4) improve the retention of St. Jude the Apostle graduates within higher education (particularly Hispanic students).

Multiculturalism and Diversity—The current research identifies the creation and development of initiatives to manage multiculturalism and diversity as the most holistic, culturally sensitive, and potentially effective method by which to improve the retention of all racial/ethnic groups within higher education. As all the programs and initiatives outlined in this section, St. Jude the Apostle would do its students a service and promote their future retention within higher education by encouraging their attendance at higher education institutions that currently have such initiatives in place and by creating and developing their own initiative toward managing multiculturalism and diversity within St. Jude the Apostle. An initiative that manages multiculturalism and diversity within St. Jude the Apostle or any college-preparatory institution could have the following characteristics:

- The development of a club, society, office or program (including students, parents and school representatives), which seeks to increase awareness of issues that are specific to multiculturalism and diversity and particular to the school’s respective population of students
- The endeavoring to ensure that the school provides an equal opportunity for the cultural expression of all students
- The endeavoring to monitor, promote and support a spirit of inclusion throughout the school community
• The endeavoring to consciously nurture attempts by all members of the community to create a more diverse and respectful environment in which members of the community can thrive, regardless of their cultural background.

The rationale behind implementing such an initiative for St. Jude the Apostle students are to: (1) increase students' awareness of issues specific to multiculturalism and diversity, (2) increase students' sense of community within the school setting, (3) encourage students to interact with fellow students of various cultural backgrounds, (4) encourage students' future participation in similar initiatives within higher education, and, thereby, (5) improve the retention of St. Jude the Apostle graduates within higher education.

**Socioeconomics**

**Summary of St. Jude the Apostle’s Socioeconomics Data**

• Of the 817 total students enrolled at St. Jude the Apostle at the time this data was collected: 226 were living in an urban setting (28%), 561 were living in a suburban setting (69%), and the remaining 30 were living in a rural setting (4%).

• Of the 215 students enrolled in grade 9 at St. Jude the Apostle: 62 were living in an urban setting (29%), 142 were living in a suburban setting (66%), and 11 were living in a rural setting (5%).

• Of the 221 students enrolled in grade 10 at St. Jude the Apostle: 54 were living in an urban setting (24%), 160 were living in a suburban setting (72%), and 7 were living in a rural setting (3%).
• Of the 178 students enrolled in grade 11 at St. Jude the Apostle: 51 were living in an urban setting (29%), 119 were living in a suburban setting (67%), and 8 were living in a rural setting (4%).

• Of the 203 students enrolled in grade 12 at St. Jude the Apostle: 59 were living in an urban setting (29%), 140 were living in a suburban setting (69%), and 4 were living in a rural setting (2%).

• Of the 817 total students enrolled in St. Jude the Apostle at the time this data was collected, 395 students (48% of the total student population) were receiving financial aid from the school in order to assist the students’ families in financing the $7,900 yearly tuition per student.

• The average financial aid package for the 395 students receiving financial aid was $1,790.36.

• The average household income for the 395 students receiving financial aid was $51,553.72.

• Of the 395 students receiving financial aid from St. Jude the Apostle, 114 lived in an urban area, and the average financial aid package for these students was $4,537.

• Of the 395 students receiving financial aid from St. Jude the Apostle, 244 lived in a suburban area, and the average financial aid package for these students was $1,588.
• Of the 395 students receiving financial aid from St. Jude the Apostle, 37 lived in a rural area, and the average financial aid package for these students was $1,679.41.

• The largest, average financial aid package was for those students in grade 12 ($1,950.74).

• The greatest numbers of students receiving financial aid were those students in grade 9 (115 of the 395 students receiving financial aid).

• Of the 817 total students enrolled in St. Jude the Apostle at the time this data was collected, 99 students (12% of the total student population) lived in a household whose income was $30,000 or less.

Retention-Improving Findings for Socioeconomics-Specific Factors

• If higher education institutions invested in initiatives that communicate the varied aspects of managing the costs of higher education to prospective higher education students and their caretakers—such as financial counseling—the risk of attrition would decrease.

• Scholarships, institutional grants, and other forms of financial aid have significant, beneficial effects on retention.

• The availability of Access Funds allocated for financial assistance at institutions of higher education is, almost invariably, inadequate to the need of the students within those institutions.
• If higher education institutions worked toward providing adequate and appropriate financial aid packages to their respective populations of students, retention of students within higher education would increase.

• There is a strong, positive correlation between higher education institutions’ student-centered expenditures and the retention of students within higher education.

• If state, local and higher education officials developed strategies to encourage the higher education participation of students from working-class backgrounds and assisted those potential students with the financial responsibilities of higher education, the retention of students within higher education would increase.

• If state and local officials focused on making sure that potential higher education students from rural areas have a community college or other higher-education opportunity nearby and made further efforts to improve the economies of rural areas, the retention of students within higher education would increase.

• If state, local and higher education officials did more to increase access into higher education, make higher education more affordable, and close the participation gap between students from working-class and upper-class backgrounds, the retention of students within higher education would increase.
• The development of learning centers within higher education institutions to help students from working-class backgrounds deal with the competing demands of work, family, peers, culture and schoolwork would increase the retention of students within higher education.

• The development of learning banks within institutions of higher education to provide students with more flexibility and options as to how they wish to spend their financial aid would increase the retention of students within higher education.

_Suggested Action Plan for the Improved Retention of St. Jude the Apostle’s Graduates Based on Its Socioeconomics Data_

Based on the above research findings and data collection, the retention of St. Jude the Apostle graduates within higher education would improve if the school developed a retention-improving program that, in part, focused on: (1) financial counseling for students engaged in the college-choice process, (2) increasing the opportunities for scholarships, institutional grants and other forms of financial aid for students engaged in the college-choice process, (3) encouraging students to attend higher education institutions that focus on student-centered expenditures, (4) working with local, state and higher education officials to encourage the attendance of and increase opportunities for working-class students within higher education, and (5) encouraging students to attend higher education institutions that have developed programs specific to assisting working-class students in the management of competing demands and finances.
Financial Counseling—Higher education can be viewed as an investment. Students pay higher education institutions a fee in exchange for an education that, theoretically, will lead to a job or career that will, at some point in the future, be as valuable as or more valuable than the invested fee. When viewing higher education in this manner, it becomes very important for the investors, or students, to be able to manage their finances in such a way as to ensure that they will be able to continue to finance their education, finish their degree program and obtain a degree and/or certification; lest their investment fail. Furthermore, due to the rising costs of higher education, students are faced with an even riskier investment. Financial counseling is an intervention that can assist students toward ensuring that their investment will not fail.

In general, financial counseling assists individuals in maximizing the use of their financial assets and achieving specific, economic objectives. The specific, economic objective being addressed here is the financing of a higher education degree and/or certification. Furthermore, being that nearly 50% of the total, student-body population at St. Jude the Apostle is receiving financial assistance from the school for the school’s $7,900 yearly tuition, financial counseling seems almost a necessity, as the yearly tuition of nearly any four-year, baccalaureate-granting institution will at least double St. Jude the Apostle’s yearly tuition.

The implementation of a financial counseling initiative within St. Jude the Apostle or any college-preparatory institution could have the following characteristics:
• The implementation of financial counseling seminars for parents and students
• The recruitment and/or hiring of financial advisors to assist students and parents in the planning of financing students’ higher education
• The training of school officials in the requisition of financial aid services and resources for higher education

The rationale behind implementing such an initiative for St. Jude the Apostle students are to (1) better prepare students and their parents for the financial responsibilities involved in pursuing higher education and, thereby, (2) improve the retention of St. Jude the Apostle graduates within higher education.

Scholarships, Grants, and Other Financial Aid—When looking at higher education as an investment, the receipt of any and all financial assistance—usually taking the form of scholarships (both academic and athletic), grants and loans (both student and parent)—is usually welcome, and this would seem to be particularly true for St. Jude the Apostle parents and students. Two important statements, which were mentioned in the previous paragraphs of this section, lend credence to this truth. First, the costs of higher education continues to rise, and, second, nearly 50% of St. Jude the Apostle students are currently receiving financial assistance from the school in order to pay for the school’s $7,900 yearly tuition. These facts, in conjunction with the facts that (1) the average household income of financial aid recipients at St. Jude the Apostle is $51,553.72 and (2) more than one in ten St. Jude the Apostle students have household incomes of $30,000 or less, indicate that St. Jude the Apostle students
and their families would benefit from and are in need of financial assistance for higher education.

The implementation of a financial-assistance-granting initiative within St. Jude the Apostle or any college-preparatory institution could have the following characteristics:

- The training of school officials in the requisition of financial aid services and resources for higher education
- The allocating of current funding and petitioning for more funding toward scholarships and grants for St. Jude the Apostle graduates' higher education pursuits
- The creation of a databank of local, state, and national scholarship opportunities of which St. Jude the Apostle students can take advantage

The rationale behind implementing such an initiative for St. Jude the Apostle students are to (1) better prepare students and their parents for the financial responsibilities involved with pursuing higher education and, thereby, (2) improve the retention of St. Jude the Apostle graduates within higher education.

**Student-Centered Expenditures**—Encouraging St. Jude the Apostle students to attend higher education institutions that focus on student-centered expenditures is a very simple method by which to improve the retention of its graduates within higher education. Student-centered expenditures refer to the allocation of institutional funds toward programs, policies and initiatives such as: financial aid, classroom and library resources and extracurricular activities (i.e., student clubs and organizations, athletics,
etc.), and these types of expenditures have been shown to have a significant, positive
effect of the retention of students within higher education. By providing St. Jude the
Apostle students with the awareness of those higher education institutions that focus
their spending on student-centered programs, policies and initiatives and encouraging
these students to attend those institutions, the overall retention of St. Jude the
Apostle’s graduates within higher education would improve.

**Political Lobbying**—Considering the growing gap between the higher education
participation of working-class and upper-class students and the large number of
students from working-class families attending St. Jude the Apostle, the school would
greatly benefit its students and their retention within higher education by participating
in political lobbying for the development of strategies to: (1) encourage the higher
education participation of working-class students, (2) assist working-class students
with the financial responsibilities of higher education, (3) create more educational
opportunities (i.e., community colleges, trade schools, etc.) for students from
working-class backgrounds, and (4) bolster rural economies. Of the students
attending St. Jude the Apostle, nearly one in three students lives in either an urban or
rural area; whereas, the average financial assistance package for those students’
$7,900 yearly tuition is $4,537 (urban) and $1,679 (rural), respectively.

The participation of St. Jude the Apostle or any other college-preparatory
institutions in political lobbying could have the following characteristics:

- The establishment of letter-writing campaigns to local, state and national
  agencies/organizations invested in Education
• The establishment of marketing campaigns to establish the school’s presence within the educational community

• The inviting of representatives from local, state and national agencies/organizations invested in Education to visit the school and become familiar with its community members, facilities and mission

• The development of more intimate relationships with local, state and national agencies/organizations invested in Education

The rationale behind implementing such an initiative for St. Jude the Apostle students are to: (1) increase the school’s influence on decisions within the educational community, (2) create more opportunities for the success of students from working-class backgrounds, and, thereby, (3) improve the retention of St. Jude the Apostle graduates within higher education.

**Working-Class-Student Programs**—Programs specifically geared toward supporting working-class students in their academic endeavors within higher education have been shown to elicit significant, positive results toward the retention of these students within higher education. Again, a simple intervention strategy for improving the retention of St. Jude the Apostle students presents itself in the encouraging of its graduates to attend those higher education institutions that offer institutionally-based programs, specific to supporting the continued matriculation of working-class students. Two such programs are learning centers and learning banks.

These two programs are designed to assist working-class students in different ways, but their aim is the same—creating more flexibility and manageability for
working-class students as they work toward the completion of their higher education. Whereas learning centers help working-class students manage work, family, peers, culture and schoolwork, learning banks are educationally-based accounts that students can add money to or subtract money from very easily and flexibly in order to help them manage the same competing demands that learning centers purport to manage. By providing St. Jude the Apostle students with the awareness of those higher education institutions that offer these types of programs and encouraging these students to attend those institutions, the overall retention of St. Jude the Apostle’s graduates within higher education would improve.
Chapter IV

Conclusions and Recommendations
Conclusions

The end result and true value of this work is the creation of an exemplar of how information that is readily at the disposal for most, if not all, secondary schools and other college-preparatory institutions—the demographic information of a school’s student body population—can be used to immediately develop a program to improve the retention rates of these schools’ graduates within higher education. Secondary to this, this thesis seeks to redefine what it means to be (1) a college-preparatory institution and (2) prepared for college. Toward the accomplishment of these goals, the hope was for all who read this written work to be inspired to reflect on the primary purpose of secondary schools and other college-preparatory institutions and whether or not these institutions are doing all that they can to ensure the future success of their respective graduates. In sum, this thesis is meant to (1) challenge the current thinking and generally-accepted ideas about what preparing students for higher education means, (2) encourage secondary schools and other college-preparatory institutions to reflect on, redefine and improve their current missions and practices toward the preparation of their respective students for higher education, (3) present an example of how readily-available information can be utilized toward the improvement of students’ retention rates within higher education, and, thereby, (4) improve the overall retention rates of students within higher education.

The ideas and suggestions presented throughout this thesis toward encouraging secondary schools and other college-preparatory institutions to be more
thoughtful and proactive in their approach to preparing their respective students for higher education are meant to be simple, practical and easily implemented. In this way, these schools may be more inclined to entertain the presented ideas and suggestions and, inevitably, develop a similar, retention-improving program to the one outlined in Chapter 3 of this thesis, but reflective of the demographic characteristics of schools’ respective student body populations. In light of the pervasive problem of attrition from higher education, any contribution that this thesis may make toward secondary schools and other college-preparatory institutions developing retention-improving programs and, thereby, improving the overall retention rates within higher education will be a step toward improving the current and future states of secondary and higher education.

**Recommendations**

Based on the research and data collection presented within this thesis, the potential success of the ideas and suggestions for the development of a retention-improving program—based on the demographic characteristics of the school’s student-body population—for St. Jude the Apostle (or any other secondary school or college-preparatory institution) is apparent. However, potentiality does necessitate actuality or practicality; only if the school adopts the suggested, retention-improving program will the program’s utility and success be measurable. The current plan is to present the retention-improving program to St. Jude the Apostle and encourage those school officials invested in the success of its graduates to lobby for its immediate implementation. If the school decides to implement the program and track the
program's successes and shortcomings, the school has the potential to: (1) quickly and measurably improve the retention of its own students within higher education (both now and in the future), (2) hone the program for its respective student-body population—based on its effectiveness—and (3) be a catalyst for an educational movement toward other secondary schools and college-preparatory institutions to be more earnest and proactive in their approach to preparing their respective students for success in higher education.

In addition to the potential implementation, honing and modeling of the current, retention-improving program being suggested for St. Jude the Apostle, there is a further necessity for an expanded and more comprehensive, retention-improving program to be developed for all secondary schools and other college-preparatory institutions. As is indicated in Chapter 1 of this thesis, demographic characteristics is only one of six categories of factors that lead to attrition from higher education. While the success of the currently-presented program toward the improvement of retention within higher education is likely, a program that includes all six categories of attrition-related factors would be ideal toward combating the insidious problem of attrition within higher education. Until such a comprehensive, retention-improving program is developed, the overall benefits any other retention-improving program—such as the one presented here—will be specific in scope and modest in effectiveness, as compared to the potentially generalized and substantial outcomes of a comprehensive, retention-improving program.
Chapter V
Appendix
### Retention and Attrition Totals for 2006 Graduates (177 of 186 reporting)

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A1: Retention and Attrition Statistics for St. Jude the Apostle's 2006 Graduating Class

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# Retention and Attrition Totals for 2007 Graduates (167 of 176 reporting)

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## A2: Retention and Attrition Statistics for St. Jude the Apostle's 2007 Graduating Class

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### B1: Gender and Race/Ethnicity Statistics for St. Jude the Apostle’s Student Population

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<td>Average Household Income of Financial Aid Recipients</td>
<td>Number of Household Incomes Between $10,001 and $20,000 and Percentage of Student Population</td>
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### C2: St. Jude the Apostle's Financial Aid Award Grid

1. Number of Children Dependents Living at Home
2. Number of Children Attending K-12 Catholic School(s)
3. Number of Children attending

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<td>$55-59,999</td>
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<tr>
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<td>$100-104,999</td>
<td>$0</td>
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<tr>
<td>&lt;$110,000</td>
<td>$0</td>
</tr>
</tbody>
</table>

**Notes:**
1. The Financial Aid awards above are for new students enrolled for the 2007/2008 year.
2. Families with Dependent Points in excess of 10 should contact the school for clarification.
3. Financial Aid will be awarded after all applications and proof of income is provided to the school.
<table>
<thead>
<tr>
<th>Class</th>
<th>Residential Setting and Percentage of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Freshmen</strong></td>
<td>Students Living in an Urban Setting &amp; Percentage of Freshman Population</td>
</tr>
<tr>
<td>Total Freshman Population: 215</td>
<td>62 (28.84)</td>
</tr>
<tr>
<td><strong>Sophomores</strong></td>
<td>Students Living in an Urban Setting &amp; Percentage of Sophomore Population</td>
</tr>
<tr>
<td>Total Sophomore Population: 221</td>
<td>54 (24.43)</td>
</tr>
<tr>
<td><strong>Juniors</strong></td>
<td>Students Living in an Urban Setting &amp; Percentage of Junior Population</td>
</tr>
<tr>
<td>Total Junior Population: 178</td>
<td>51 (28.65)</td>
</tr>
<tr>
<td><strong>Seniors</strong></td>
<td>Students Living in an Urban Setting &amp; Percentage of Senior Population</td>
</tr>
<tr>
<td>Total Senior Population: 203</td>
<td>59 (29.06)</td>
</tr>
<tr>
<td><strong>Student Body</strong></td>
<td>Students Living in an Urban Setting &amp; Percentage of Student Body Population</td>
</tr>
<tr>
<td>Total Student Body Population: 817</td>
<td>226 (27.66)</td>
</tr>
</tbody>
</table>