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*According to MacKinnon-Slaney(1994), 50 percent of the learning population in higher education consists of adult learners. Unfortunately, in various reports from independent companies such as Noel/Levitz, attrition rates for this segment of the student population are at an all time high. The retention theories and models used to understand this phenomenon are based on the experience of traditional age students at traditional institutions of higher education. Apply the ideas from the models of Tinto, Bean, and Austin to adult student retention. What would be the key elements of an adult retention model? What are some of the major ideas related in retention models given by Tinto, Bean, and Astin? What model can be designed to understand trends and improve retention rates for the adult learner?*

## Introduction

Over the years, colleges have spent a great deal of effort trying to improve retention and graduation rates. Unfortunately, in spite of all the time and money spent on these programs and services, retention and graduation rates have not improved over time. Allen (1993) related in her study that attrition rates as high as 60 to 70 percent is reported in state and federal statistics (Allen, 1993). That runs parallel with the fact that there are now more adult students in higher education than the traditional group of 18-24 year olds. Adult students must juggle competing demands on their time from study, family, work, and other commitments; their learning goals are often different from those of educational institutions and providers; and their needs and aspirations may change during the education process, sometimes as a result of it (Spanard, 1990, p. 312). Today's college-bound student populations are prompting institutions of higher learning to re-reconsider which strategies are most appropriate for improving retention and graduation rates for an increasingly nontraditional student body (Wonacott, 2001). For educational administrators, it is important to know the factors that contribute or detract from its institutional effectiveness (MacKinnon-Slaney, 1994, p. 270). For faculty and staff, it is

important to know what factors influence students' performance in class, contribute to a student's decision to leave campus, and how their role impact on this decision. For students, it is important to know what they can do to be "successful" and how to stay motivated and satisfied with the learning experience. Most educational institutions of higher learning tend to use retention models designed originally for younger students just out of high school to analyze drop out patterns. In order for educational-practitioners to gain an understanding of persistence patters in adult learners, they must first understand the unique characteristics of the adult learner and design plans that will take these characteristics into account. Understanding these characteristics, the learning process, and the needs of the adult learner will help yield a predictive model in identifying problems and assisting adult learners in accomplishing their educational goals.

This paper will examine some of the models used in understanding retention and illustrate why they do not foster a complete understanding of the adult learner experience. Using attributes from the Tinto, Bean, and Austin models the second section of the paper will construct a model to assist practitioners in understanding trends and in improving retention rates for the adult learner. It will be argued that any retention plan must recognize that student retention is not a one-dimensional phenomenon and that it requires a holistic framework.

## Definitions

### The Adult learner

When we normally look at the traditional college student we think of person just out of high school, moving away from home and living on campus. The concern for these younger students is of transition coupled with additional psychological concerns with academic and social adjustment, development of autonomy, and identity development (Rautopuro & Vaisanen, 2001). However, now it has been suggested that research on university students should focus its attention on the “new learners” in higher education, i.e., older students (Rautopuro & Vaisanen, 2001).

In the 1980s, the nontraditional student became the norm student populations in colleges and universities (Allen, 1993; Cross, 1981). Cross (1981) defined the adult student as an adult who returns to school full- or part-time while maintaining commitments in the areas of employment, family, and other adult obligations. These students also may be referred to as nontraditional students, re-entry students, returning students, and adult learners (pp. 53-54). While these older students share classroom space and educational experiences with the traditional-age students (18-24), their developmental needs, issues, and stressors differ considerably from those of their younger peers. In addition, men and women may vary somewhat in their motivations for returning to school, the pressures and challenges they face as adult students, and the types of student services desired. Because these factors differ considerably from the “traditional-aged” students, all aspects of the college environment must be reconsidered to respond to this growing student population (Benshoff, 1991).

Nontraditional learners can be best defined with the following attributes:

- 1) Age 25 or older;
- 2) Have a greater number of outside responsibilities than traditional age students, i.e., families, work;
- 3) They have been out of school for a number of years;
- 4) Is problem-centered rather than content-centered;
- 5) Permits and encourages active participation;
- 6) Encourages past experiences;
- 7) Is collaborative between the teacher-student and the learner-learner;
- 8) Incorporates experiential activities (Lawler, 1991, p. 2).

A number of factors characteristically separate nontraditional students from younger college students. Adult learners tend to be achievement oriented, highly motivated, and relatively independent with special needs for flexible schedules and instruction appropriate for their developmental level (Benshoff & Lewis, 1992). Financial and family concerns are two of the biggest considerations that impact on the adult student experience (Richter-Antion, 1986, p. 61). Additional factors that distinguish nontraditional students from traditional students include: 1) Stronger consumer orientation (education as an investment); 2) Multiple non-school-related commitments and responsibilities; 3) Lack of an age cohort; and 4) Limited social acceptability and support for their student status (operating outside of traditional adult roles) (Richter-Antion, 1986, p. 62).

Cross (1981) has indicated that there are also socioeconomic differences between the older and traditional age student. "Typically, degree-seeking adults have come

from working-class backgrounds and have been for the most part, first generation college students whose parents did not attend college” (p. 58).

Finally, adult students are also “lifelong” learners meaning given the changes in demands of changing career patterns, home, etc., adult are constantly adjusting and learning to keep up with the constant changes. The term denotes an overall scheme aimed both at restructuring the existing educational—in such that men and women become the agents of their own education (Cross, 1981). This definition will become vital when we look at adult learner and retention relationship.

### Student Retention

Student retention studies examine the flow of students through college over a discrete period of time. Four categories of student outcome are typically identified and discussed. They are:

- 1) Graduates, those students who complete a bachelor's degree;
- 2) Persisters, those students who are continuously enrolled sustain over a period of time;
- 3) Stop-outs those students who left and subsequently returned, and (Allen, 1993);
- 4) Drop-outs, those students who left and did not return.

Retention studies typically address degree completion versus non-completion. These approaches give somewhat different perspectives on the phenomenon and produce different results in some student subgroups. Retention research concentrates on

graduation rate analyses, examination of persistence patterns, investigation of student attrition behavior, historical analyses that lead to an understanding of past trends, and insight into the psychosocial dynamics associated with retention (Allen, 1993; Spanard, 1990; Towles & Spencer, 1993). Some studies argue that the academic and social realms of the campus experience heavily influence persistence rates (Astin, 1984; Tinto, 1993). The next section will examine the frameworks that have been used to explain the student persistence rates over the past thirty years.

### Learning Institutions

Columbia, Yale, Harvard, Georgetown, New York University, or many state schools like the University of Pittsburgh, the State University of New York at Buffalo and the University of Texas are often associated as traditional institutions. There are many, and depending on the region of the country a person is not far from a traditional university or college. Independent colleges and universities are private, nonprofit institutions. Many independent colleges and universities originated as church-related institutions, although a majority of these are no longer affiliated with religious groups. The most common independent colleges and universities include (1) liberal arts institutions that offer comprehensive undergraduate education, (2) technical or specialized institutions that prepare students in engineering, performing arts, music, nursing and other fields, and (3) large universities that include undergraduate programs in addition to graduate and professional schools.

Nontraditional institutions operate throughout the year, so classes can be taken continuously, although students may take breaks as needed. The practical thrust of the education is ideal for those who want to build careers in multinational corporations or family businesses. Attending classes with working adults, which, in many cases, are taught by working faculty, provides an opportunity to learn about business processes and techniques in the U.S. This also creates networking opportunities whereby students can develop friendships and build contacts with individuals who work in a variety of companies and organizations. These contacts can prove invaluable since many of these schools also place these students in employment upon graduation. Due to the maturity level of the students and the practical nature of the curriculum, there is considerable emphasis on developing critical thinking, report writing, and oral presentation skills.

While nontraditional institutions do not have the full range of social activities available as the traditional institutions, there are ample opportunities for social growth.

Enrollment in these institutions has increased as shown in Table 1.

<b>Table 1. Enrollment in For-Profit Degree-Granting Institutions (in thousands)</b>			
	<b>Public</b>	<b>Nonprofit Private</b>	<b>For-profit</b>
<b>1989</b>	10,578	2,731	291
<b>1998</b>	11,176	3,007	366
<b>Change</b>	6%	10%	59%

Source: [http://www.ncspe.org/publications\\_files/turner.pdf](http://www.ncspe.org/publications_files/turner.pdf)

To meet the ever-increasing population of both traditional and nontraditional students there has been a proliferation of nontraditional school (corporations) over the past thirty years.

Table 2 shows a sample of major nontraditional institutions in the United States.

<b>Table 2. For-profit schools (Nontraditional schools)</b>	
<i>Corporation and Institution</i>	<b>Description</b>
<b>Apollo Group, Inc.</b>	The Apollo Group Inc. operates the University of Phoenix, Institute for Professional Development, College for Financial Planning Institutes Corporation, Western International University, and Apollo Learning Group.
<b>University of Phoenix</b>	The university was established in 1976 in Phoenix, Arizona, and offers bachelor's, master's and doctoral degree programs. It is accredited by the North Central Association and holds programmatic accreditation from the National League for Nursing and the American Counseling Association.
<b>Corinthian Colleges, Inc.</b>	Corinthian Colleges Inc. operates three divisions – Corinthian Colleges, Rhodes Colleges, and Florida Metropolitan University – with 56 colleges in 19 states enrolling 23,000 students. The Corinthian Colleges group offers certificate and diploma programs at 10 colleges with 39 sites.
<b>Blair College</b>	Blair College is one of the eight institutions in the Rhodes Colleges group. It is located in Colorado Springs, Colorado, and is accredited by ACICS. The College enrolls over 400 students in associate degree programs in business, information technology, paralegal and medical office fields.
<b>Parks College</b>	Also a Rhodes College, Parks College has campuses in Denver and Aurora, Colorado. It is accredited by ACICS and offers associate degree programs in business, computer technology, criminal justice, legal assisting, medical office fields, travel, and tourism.
<b>Florida Metropolitan University (FMU)</b>	Florida Metropolitan University has nine campuses in Florida. FMU is accredited by ACICS and offers associate, bachelor's, and master's degrees. Degree programs are offered in business and management, computer information science, criminal justice, legal assisting, and office technologies; an industry certification program is also offered.
<b>DeVry University</b>	DeVry Inc. operates three groups of degree-granting institutions—DeVry Institutes of Technology, Denver Technical College and Keller Graduate School of Management—and Becker CPA Review. Keller provides MBA programs at 41 facilities in 14 states. DeVry has 21 institutes in 12 states and two provinces. The North Central Association of Colleges and Schools accredits both Keller and DeVry.
<b>DeVry Institute of Technology-Southern California</b>	Southern California DeVry Institutes of Technology are located in Long Beach, Pomona, and West Hills. In 1999, the Long Beach campus enrolled over 2,600 and the Pomona Campus enrolled about 3,500. Bachelor's and associate degree programs are provided in engineering, technology, and business.
<b>ITT Educational Services Inc.</b>	ITT Educational Services Inc. was established in 1966 and provides degree programs through 70 institutes in 28 states with enrollment over 27,000. The institutes offer technology-related programs at

<b>Table 2. For-profit schools (Nontraditional schools)</b>	
<b>Corporation and Institution</b>	<b>Description</b>
	the associate, bachelor's and master's levels. ITT Technical Institutes are accredited by ACCSCT.
<b>ITT Technical Institute-San Bernardino</b>	ITT Technical Institute of San Bernardino was established in 1966 and offers associate and bachelor's degree programs.
<b>ITT Technical Institute-Tampa</b>	ITT Technical Institute of Tampa was established in 1981 and offers associate and bachelor's degree programs.
<b>Whitman Education Group Inc.</b>	Whitman Education Group Inc. operates three subsidiaries – Ultrasound Technical Services Inc., Sanford Brown College and Colorado Technical University. Collectively, these organizations enroll 7,500 students with 23 campuses in 13 states. Ultrasound Technical Services and Sanford Brown College offer associate degrees and diploma, and certificate programs.
<b>Colorado Technical University (CTU)</b>	Established in 1965, Colorado Technical University now has campuses in Colorado Springs and Denver and in Sioux Falls, Iowa. It offers associate, bachelor's, master's and doctoral programs, primarily in computer science, engineering and business. In 1999, CTU enrolled over 2,000 students. It is regionally accredited by the North Central Association.

### Literature Review

The large body of research on college student retention points to the fact that there is not one simple explanation or solution in improving retention rates (Wetzel, O'Toole & Peterson, 1999, p. 47). Student retention is a multidimensional phenomenon, meaning that there are many factors both internal and external affecting student motivation, persistence, and drop out. Researchers have tested theoretical models that looked at academic and social integration of students on campus (Tinto, 1975, 1986, 1993, 2000), the importance of teaching, learning/study skills (Astin, 1977, 1984), use of resources and services, financial aid and family influences (Bean, 1982; Wetzel, O'Toole & Peterson, 1999 ). Over the last three decades a number of frameworks have been proposed to explain the student dropout phenomena based on student behavior. This review will look at the contributions of Astin, (1977, 1984), Bean (1982, 1985) and Tinto (1975, 1986, 1993, 2000) since their respected models are most popular in the literature and since each

model provides attributes that will be helpful in constructing a more comprehensive student retention model.

The literature provides a typical starting point Tinto's work on student integration model (Allen, 1993; Bean, 1982; Pascarella, Duby, & Iverson, 1983; Tinto, 1975, 1986; Towles & Spencer, 1993). The basis for Tinto's work is derived from studies of full-time residential students who recently graduated from high school. Tinto developed an integration model that focused on the degree of student-institutional fit since for him college played a critical role in student persistence (Tinto, 1986). According to Tinto intervention during the first semester is critical in saving the student (Tinto, 1986, p. 362). If a student persists or drops out is related to their degree of academic integration, and social integration. According to Tinto, five conditions are known to promote persistence. These are expectations, support, feedback, involvement, and learning.

First, students are more likely to persist and graduate in settings that expect them to succeed. High expectations are a condition for student success, or as is sometimes noted, "No one rises to low expectations" (Tinto, 1993). Students, especially those who have been historically excluded from higher education, are affected by the campus climate and by their perceptions of the expectations of faculty and staff holds for their individual performance (Fleming, 1984; Rendon, 1994; Hurtado and Carter, 1996).

Second, students are more likely to persist and graduate in settings that provide academic, social, and personal support. Most students, especially those in their first year of college, require some form of support. Some may require academic assistance, while others may need social or personal support. Support may be provided in structured forms such as in summer bridge programs, mentor programs, and student clubs or it may arise

in the everyday workings of the institution such as in student contact with faculty and staff advisor.

Third, students are more likely to persist and graduate in settings that provide frequent and early feedback about their performance as they are trying to learn and persist. The use of early warning systems, classroom assessment techniques, and frequent mini-exams all have the impact of providing students much needed information about their performance so that they can adjust their performance in order to persist.

Fourth, students are more likely to persist and graduate in settings that involve them as valued members of the institution (Astin, 1984; Tinto, 1993). The frequency and quality of contact with faculty, staff, and other students is an important independent predictor of student persistence. In confirming Tinto's findings, Turnbull (1986) states that student retention increase in direct proportion to student involvement and students stay in college because of two factors: academic competence and college commitment (Tinto, 1975; Turnbull, 1986). This has been shown to hold for large and small, rural and urban, public and private, and two- and four-year colleges and universities.

Fifth, and most importantly, students are more likely to persist and graduate in settings that foster learning (Tinto, 2000). Learning has always been the key to student retention. Students who learn are students who stay. Institutions that are successful in building settings that educate their students are successful in retaining their students. Again, involvement seems to be the key. Students who are actively involved in learning, that is who spend more time on task especially with others, are more likely to learn and, in turn, more likely to stay (Bean, 1982; Tinto, 2000).

Bean makes an enhancement to Tinto's student model by looking at the importance of external variables such as finances, family responsibility and support for nontraditional students. Bean's (1980, 1982) model as the student attrition model, is based on casual models of organizational turnover (Ishitani & Snider, 2004). Bean (1980) used the models of organizational turnover since he believed "that worker turnover is analogous to students leaving school" (p. 130). Bean's model emphasizes how a number of student and institutional factors affect student's satisfaction with college and intention to leave, the latter being a direct precursor to dropping out of college. Bean believed that students who successfully integrate into the college community tend to persist in college. Bean's model was expanded to include nontraditional students, relating that the social integration of nontraditional students was not a significant predictor of persistence (Bean & Metzner, 1985).

Organizational theories of student departure see attrition as reflecting the impact that the organization has on the socialization and satisfaction of students. This is very true in large nontraditional educational institutions also known as corporate educational institutions such as DeVry University, the University of Phoenix, Career Education Corporation, and others. Examples of variables studies within these theories are structure, size, faculty-student ratios, and institutional resources and goals. These schools treat the student as a customer and as such cater their resources toward the student since high drop out rates take away from the organizations "bottom line."

Austin's (1984) theory suggests that a student's tendency to drop out of college is related to the degree of direct involvement in the academic and social life of the institution. "A highly involved student is one who...devotes considerable energy to

studying, spends much time on campus, participates actively in student organizations, and interacts frequently with faculty members and other students” (Astin, 1984, p. 297). How much a student learns and develops as a result of any educational program is “directly proportional to the quality and quantity of student involvement in that program” (Astin, 1984, p. 305).

There are several practical applications resulting from this theory, but Astin (1984) states “that the most important aspect to retention is teaching. Astin states that the intended end of institutional and pedagogical practices is to achieve maximum student involvement and learning; to do that instructors cannot focus solely on technique but must also be aware of how motivated students are and how much time and energy they are devoting to the learning process’ (Astin, 1984, p. 305).

According to Astin, involvement has an advantage over traditional pedagogical approaches because it focuses on the motivation and behavior of the student. Therefore all institutional policies and practices can be judged by the degree of involvement they foster in the student. Also, all faculty, from instructors to counselors, can work with the same goal in mind, unifying their energies into making the students more involved in the college environment and therefore better learners (Astin, 1984, p. 307). According to Allen (1993) “Support services for the nontraditional student should be maintained to provide the nurturance necessary for academic achievement. Strong student support services are important to the nontraditional student.” Furthermore, “University administration and faculty should avail themselves of research on college adjustment as a tool in reviewing policies and procedures on admissions, financial aid, orientation

programs, academic advising, learning assistance programs, teaching and learning process, career planning and counseling, and student activities” (Allen, 1993).

The three paradigms discussed provide important ideas in constructing a comprehensive model in understanding adult student retention. The next section analyzes the three models as a way to take aspects that best fit the adult learner experience.

### Analysis and Application

Marginality is a central concept of one of the primary models of student retention. Tinto's (1986) theory emphasizes that important predictors of persistence are academic integration (academic performance) and social integration (participation in college life). Recently, researchers have begun to apply this model to adult, nontraditional populations, with mixed results (Asher & Skenes, 1993; Metzner & Bean, 1985; Towles, et al., 1993; Walleri & Peglow-Hoch, 1988). Walleri and Peglow-Hoch (1988) cite a number of studies that found inconsistencies in Tinto's model when applied to nontraditional populations, suggesting that persistence is independent of integration into campus life. In particular, Bean (1987) found that nontraditional students do not attend for socialization purposes; instead, their model shows dropout most affected by grade point average, commitment as indicated by number of credit hours taken, and utility to future employment. This suggests that adult learners are more focused, career driven and self-directed than traditional learners. However, Walleri and Peglow-Hoch (1988) propose that the inconsistencies are due to the diversity of adult students as well as to the way student progress is tracked. Their investigation of a guided studies program for

academically under-prepared adults indicates that successful students had close relationships with faculty, access to counseling, shared values and good relationships with other students, and specific career goals. This would support that adult learners are more interested in having mentors, direct partnership in learning (facilitator-mentor) and alternative methods of learning such as collaborative approaches.

Tinto defines dropping out as the failure to complete a given course of action or attain a desire goal but all returning students have, by this definition dropped out of higher education (Spanard, 1990, p. 333). But all adults who actually do return to complete their degree are back on their course of action toward attaining their desire goals (Spanard, 1990, p. 333). This illustrates a clear problem with the definition since it does not consider the affects of “stop-outs” in the drop out population.

Due perhaps to this focus on traditional students, adult education practitioners may view the Tinto model as placing excessive emphasis on social interaction with too little stress on the incoming characteristics of the students themselves. A strong goal orientation is a characteristic that often distinguishes adult students from those in residential programs (Thomas, 1991) as described by Tinto. Family responsibilities are another point of distinction between the two groups, with adults showing greater concern for their families. Pascarella, Duby, and Iverson (1983) also note that the Tinto model fails to account sufficiently for the background characteristics that commuting students may bring to the program. Given this, the Tinto model might use some modification to reflect more clearly retention patterns in adult and distance learning programs.

Bean’s focus on the importance of external variables such as finances, family responsibility and support for nontraditional students is a positive step toward

understanding the realities facing the adult student. But from experience the focus on organizational behavior, may not always provide answers to help us understand adult student retention. For example corporate educational institution such as DeVry University have a different approach toward younger students compare to older students? Are the persistence rates different for the two groups? The theory talks more about the organizational culture of large traditional colleges and nontraditional learners, yet nontraditional schools have a large percentage of the adult market and face the same issues regarding retention rates.

Finally, as a theory of student departure, however, organizational theories such as Bean's (1982) lack in explanatory power in that they do not enable us to understand how organizational attributes eventually impact on student decisions to stay or leave because these theories normally do not point out the intervening factors, such as student subcultures and patterns of student-faculty interaction, that serve to transmit the effect of the organization to student behaviors. Nor do they enable us to understand why it is that different types of students may take on different types of leaving behaviors within the institution. In this regard, these theories implicitly assume that all leavings arise from the same sources—an assumption we know not to be correct (Tinto, 1986).

Adult student reasons for attending college, motivations, personal concerns, learning styles, and relation to educational organizations are different from traditional aged students. Adult students' participation and persistence in educational activities ranging from adult literacy to doctoral programs is a complex phenomenon involving an array of factors. Adults are often affected by situational factors beyond their control—job, health problems, financial problems, legal problems, or personal or family problems

(Belzer, 1998). Likewise, dispositional factors such as expectations, self-esteem, level of family support, and past educational experience, can be barriers to participation (Allen, 1993, Hubble 2000, Wonacott, 2001). Institutional factors such as red tape, program fees, scheduling, and procedures can either help or hinder participation (Quigley, 1998). In fact, adult students who drop out are often actually “stopping out”—that is, interrupting their studies but planning to return (Frank and Gaye, 1997)—or attending other institutions (Hoffman and Elias, 1999). Nevertheless, there are aspects of each of the models that help us to understand the persistence patterns of adult learners. These aspects can be used to construct a plan to help educators to understand patterns and improve trends.

### Designing a plan

Because educators have limited training in administration policies and delivery methods with adult learners they have very little foundation to build a plan. Schlossberg, Lynch, and Chickering (1989) claim that educational institutions are "out of sync" with adult students. They recommend that educators and student services personnel adopt the attitude of Schoen's reflective practitioner (1987), changing the way they view adult learners and educational environments (Schoen inside Schlossberg, Lynch, and Chickering (1989).

Pappas and Loring (1985) categorize adult students as degree seekers, problem solvers, and enrichment seekers. Although persistence is usually viewed longitudinally as in Ishitani & Snider's recent 2004 study, they suggest that this perspective applies only to degree seekers. They propose a cross-sectional perspective that considers retention

successful if students achieve their objectives for participating (Pappas and Loring, 1985). Murray and Uhl (1988) suggest that educators and administrators should analyze adult, nontraditional students' enrollment patterns differently, including reentry points that take into account “stopping out” (temporary withdrawal from school), short-term study, and similar adult participation modes. Ackell (1982) identifies three approaches: the “laissez faire” stage involves no organized services or efforts for adults; the “separatist” approach has a clearly segregated adult or evening unit with low status, separate faculty, and little integration with “regular” campus life; the “equity” stage includes active recruitment of adults, appropriate delivery systems, integrated curriculum and faculty, flexible services—in short, adult programs that are in the mainstream of the institution.

The adult learner is different from the younger traditional learner in many ways. And such uniqueness requires a plan that is comprehensive where there is an integration of both academic and social factors. Traditional colleges and universities with a surplus of applicants may not see attrition as a major problem, since there is a waiting pool of applicants and transfer students to fill any position that may become open. Retention may be an issue at those schools to the extent that a particular college or university is trying to expand the diversity of a student body. Colleges and universities with a more open admissions policy and without a substantial waiting list of first-time applicants or transfers may find that attrition is a more serious issue, since the overall enrollment numbers drives financial support from state and federal funds. For these institutional types, retention is a critical issue to ensure their enrollment numbers in financial viability.

Given this, a plan must be design that clearly identifies the learner and other stakeholders, implement services, and create curriculum and delivery methods that will foster adult student retention.

Nontraditional schools have enhanced success in planning and implementing institutional retention plans that keep adult learners in school. The reason for this is that many nontraditional schools have incorporated retention of adult learners as a major tenet of their mission statement. Educational corporations like Apollo, Career Education Corporation, and DeVry have incorporated retention as part of their operation plans as shown in the following statement to Career Education Corporation shareholders:

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**Table 3: Career Education Corporation—Mission to shareholders**

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Superior execution in marketing, student retention and delivery of high-quality, career-focused educational programs;

Transplanting 12-15 successful curricular programs annually—from their originating campus to others throughout the CEC network—to leverage investments in curriculum development, education, and marketing costs;

Developing two start-up campuses annually in high-growth markets, to leverage the brand equity of current schools; and

Partnering with other leading firms to strengthen CEC's curricular programs, marketing initiatives, financial aid programs and technological capabilities.

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Taken from: Career Education Corporation's Web site <http://www.careered.com/leaders.aspx>.

These schools, as part of their recruiting efforts and bottom line, have created institutional retention plans that take into account the needs and challenges of the adult learner. These institutions have embraced Tinto's model of social and academic integration into their respected operational models by combining personal issues (values, goals, interpersonal competence, mastery of life transition), academic issues (ability, learning styles), and social/environmental issues, based on the assumption that adult participation is a complicated response to a series of issues (MacKinnon-Staney, 1994).

But the difference in their use of the model is that these institutions benchmark the characteristics of the adult learner in their institutional retention plans. Since adult student retention is a multidimensional phenomenon these nontraditional institutions have developed a plan that is comprehensive.

In any plan the school must be committed to improving student retention. That means that adult education retention must be part of the college's overall mission and goals. It is one thing to recruit nontraditional students as mentioned in mission statements in schools such as DeVry University or Career Education Corporation but is also a need to include a statement of commitment on persistence patterns.

#### Incorporation of Student Retention into Strategic Enrollment

Many nontraditional schools have developed a process of integrating enrollment management into their administrative structure (Noel, 1985, 1993). Often times, these institutions have started the process by developing committees, creating and integrating prototype programs and retention committees into a permanent structure for housing retention activities and assigning this function to a senior administrator much the same way the admissions and financial aid departments are structure. Nontraditional schools have adapted a theory that structure follows strategy and that retention is an important part of such a strategy and hence, deserves a location within the structure on par with other comparable functions within the area of enrollment management.

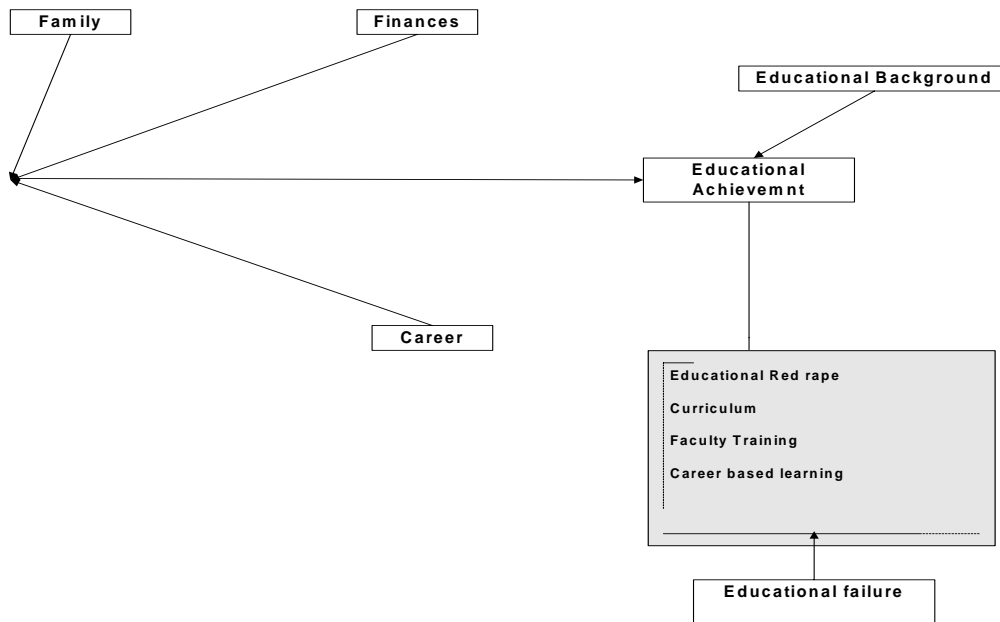
As discussed earlier the adult learner is often affected by multiple barriers in their participation in education. These barriers can be categorized into three factors:

Situational factors, dispositional factors, and institutional factors. Situational factors beyond their control—career/job, health problems, financial problems, legal problems, personal or family problems (Belzer, 1998). These factors are external and when a learner leave school “stop-out” they often return once the situational concern is under control. Dispositional factors such as expectations, self-esteem, level of family support, and past educational experience, can also be potential barriers to participation (Hubble, 2000). These factors relate to the motivational aspect of the learner’s experience. Balancing student roles and non-student roles is a constant problem for the adult learner. Institutional factors refer to red tape, program fees, scheduling of classes, and procedures that can hinder participation. Schlossberg, Lynch, and Chickering (1989) believe that educational institutions are out of sync with adult students. They recommend that educators and student services departments adopt the Schoen’s reflective practitioner approach and change they way they view adult learners and educational learning environments (Schlossberg, Lynch, and Chickering, 1989; Schoen, 1987). With the continued growth of adult learners in both traditional and nontraditional areas of education, it is critical for institutions to take that reality into account when designing a institutional plan on improving retention levels.

There are many areas that influence or impact a student’s journey in school. Current theories on retention and attrition, including Tinto, Austin, and Bean focus on the student’s environment, the institutional organization and structures, and the sociological impact of integrating into a new type of community (Spanard, 1990, p. 330). These theories may not be applicable for adult students. First, adult students normally live on campus and second, adult students enter, or reenter, and withdraw from college for

reasons differing from those of traditional students (Spanard, 1990, p. 331). Given this administrators must plan for not so much drop outs but for “stop outs.” Family, career, and finances are difficult obstacles and educational administrators need to be aware of these conditions but in creating a retention plan educators can only developed upon the institutional aspects of the plan such: curriculum, mentoring, integrating the student in the school’s learning community.

Figure 1



A total comprehensive retention plan cannot take all of the factors affecting the adult learner's participation into account but it can create a model that takes the institutional and dispositional into consideration.

#### Institutional factors

- 1) Relevant or career based curriculum
- 2) Advisement
- 3) Flexible schedule
- 4) Collaborative approaches to learning
- 5) Alternative means of course delivery
- 6) Student services (evening hours)
- 7) Opportunities for student to create networks

#### Dispositional factors

- 1) Self-esteem
- 2) Academic background
- 3) Experience
- 4) Support and encouragement from family
- 5) Assessment versus grading
- 6) Strategy that encourage a high percentage of resusers

These are just some examples of institutional and dispositional factors. A more comprehensive model would incorporate these concerns. Further, the plan must redefine the concept of retention to reflect the adult learner experience. The next section using the

successful retention planning approach provided by Noel-Levitz, Inc, will create a plan to address adult student retention in both traditional and nontraditional institutions.

### Creating an institutional retention plan

Before creating a plan the institution must understand the nature of the learner. Statistics will show trends and patterns but understanding the characteristics and patterns of the learner is critical in any plan. The approach provided by Noel-Levitz provides a five-step approach in successful planning: setting the stage for student retention; setting retention priorities; integration of goals with existing programs and services; evaluation of outcomes; creating realistic timelines; and recognition of accomplishments (Low, 2000).

#### Creation of a retention committee

In setting the stage for student retention is creating a committee given the charge and freedom to create a plan that includes:

- 1) Mission statement;
- 2) Institutional commitment;
- 3) Philosophy of student success;
- 4) Three-year persistence data; and
- 5) Campus assessment data (Low, 2000).

Critical in this first planning of step is understanding the characteristics of the learner. Studies investigating retention and attrition of students in community colleges gather data on student demographics in order to discover the typology of students who are likely to remain in school and those who are at risk of dropping out. Many studies in this area attempt to discover and pinpoint the characteristics of persisters and non-persisters. Moore (1995) and Windham (1994) found that full-time attendance at the college is the most prevalent characteristic of persisters. Interestingly, the most prevalent characteristic among studies of non-persisters is part-time attendance (Feldman, 1993; Price, 1993). San Juan College in Mexico found that in 1991 and 1992, fall-to-fall persistence rates for part-time degree seeking students were 42 percent and 35 percent as compared to 59 percent and 46 percent for full-timers (Moore, 1995).

Age as a defining characteristic shows conflicting reports in the research. Typically, studies report persisters to be younger students and conversely non-persisters to be older students (Windham, 1994; Price, 1993). However, an investigation of pre-enrollment variables as predictors of one-year retention of 1,140 first-time students at one community college found the risk of dropping out was associated with young students between 20-24 years old (Feldman, 1993).

Many schools talk about retention outside of their mission and institutional goals. The increase in the number of adult learners placed traditional centers of learning is a critical situation. The traditional institutions were not prepared to work with the adult learner both socially and academically. Tinto's model proposes that retention is related to how well students are socially and academically integrated into the institution (Tinto, 1987). Traditional schools have been challenged to do this. First, support services such

as advisement, financial aid, etc, which designed to help integrate students into school are more focused on younger learners. Second, professors are not trained to work with adult learners. Professors in traditional schools tend to focus on research interests and look at teaching as a secondary segment of their job. The motivation and commitment to stay in school is place solely on the student. Training teachers on platform skills helps in academic interaction of the adult learner. Also such training helps give the teacher appreciation and ownership of retaining students (Towles & Spencer, 1993).

Teaching adult learners requires more advanced teaching skills than teaching traditional students. Adult learners often begin courses feeling anxious, isolated, and out of place yet, these learners are motivated and self-directed (Merriam & Caffarella, 1999, p. 163). This is one of the reasons why adults are opting to attend non-traditional colleges. In most cases adult learners attend nontraditional colleges because they are unlike any educational experience in his or her past (Spanard, 1990, p. 328). Also curriculum is designed that is focused, career orientated and, in many cases, allow for life credit. This gives the adult learner a sense that their experience is apart of the learning process.

Several studies have found that the interaction between faculty and students is one of the most important determinants of retention for adult learners (Allen, 1993). Teachers should be involved with students, recognize their progress in class, and know when they are absent from class. Adults interested in learning want courses that inform; that meet their work or family schedules; that are readily available, practical, realistic, and without the flavor of traditional education (Allen, 1993). Further, the student role for adult students is secondary to family or occupational responsibilities (Allen, 1993).

Adults are usually self-directed learners who do not want to spend time in what they consider meaningless learning experiences (Allen, 1993). Austin (1977) reports that this relationship is the strongest of any factor in the overall satisfaction with the college experience (p. 142).

Nontraditional institutions have analyzed this dichotomy and incorporated it in their retention plans.

The second stage in planning is the establishment of retention priorities which includes:

- 1) Institutional goals;
- 2) Recruitment goals;
- 3) Persistence goals;
- 4) Student outcome goals;
- 5) Course goals; and
- 6) Student satisfaction goals.

This stage focuses on the institutions' ability to change and adjust enrollment, recruitment and persistence trends. In their study of nontraditional undergraduate student attrition, Metzner and Bean (1985) developed a model conceptualizing student persistence as dependent on 1) four sets of variables, including: (a) a student's background, (b) academic variables, (c) environmental variables such as employment and finances, and (d) "intent to leave" factor, and 2) two sets of outcomes, which are: (a) academic—college GPA and (b) psychological—utility, satisfaction, goal commitment, and stress (p. 63). All these variables, in turn, affect intent to leave. The primary variable

predicting dropout was the lack of institutional fit in their study. Given this the institutional, recruitment, persistence, student outcome, course, and student satisfaction goals must be in sync with that of the adult learner. Attribution rates is difficult to account for with out repeated evaluations of programs and examinations of patterns over time (Hossler, 1991, p. 97).

Step three in the planning approach requires an integration of retention goals with existing programs and services including:

- 1) Orientation programs;
- 2) Mentoring programs;
- 3) Curriculum development;
- 4) Program length;
- 5) Intake services;
- 6) Faculty training and development;
- 7) Assessment and evaluation of work;
- 8) Academic and student support services;
- 9) Career advisement; and
- 10) Encouraging restarts.

#### Orientation programs

These types of programs are one of the most common intervention strategies. This program not just informs the student of available services but it can serve as a motivation start in their journey.

#### Mentoring programs

Another strategy in improving persistence rates is monitoring performance. Mentoring helps establish relationships of acceptance, motivation, and learning. Faculty-student mentoring requires that change in the relationship of the faculty and student. The relationship change from a teacher centered learning model to a facilitator-learner model is critical aspect to promoting higher retention rates. According to Astin, true involvement requires the investment of energy in academic relationships and activities related to the campus and the amount of energy investment will vary greatly depending on the student's interests and goals as well as the student's other commitments (Astin, 1984, p. 303). Perhaps attrition has increased because more learners are now at widely varying stages of the life cycle compared to the traditional 18- to 22-year-old cohort. Among those elaborating on Tinto's model, MacKinnon-Slaney (1994) developed the Adult Persistence in Learning Mode that combines personal issues (values, goals, interpersonal competence, mastery of life transitions), academic issues (ability, learning style, study skills), and social/environmental issues (environmental compatibility), based on the assumption that adult participation is a complicated response to a series of issues. This model provides a checklist for counseling, development of comprehensive services, and staff development to deal with retention.

### Curriculum Development

Given the diversity of part-time adult learners, there are many more considerations our institutions need to address in particular curriculum. A major difference between curricula for the part-time adult student and the traditional student

results from the fact that the former, by and large, are voluntary students with specific learning objectives in mind (Conrad, 1993). If their objectives are to be met, it is important that those objectives be identified and that adult students be consulted in the development of their own curricula. Active, problem-solving, goal-oriented, and collaborative learning are among the more successful teaching strategies. The adult learner is generally less tolerant of the more passive lecture format and eager to take responsibility for learning. Curriculum should be design to focus on career orientated and, in many cases, allow for life credit. This gives the adult learner a sense that their experience is a part of the learning process.

#### Program length

The length at many nontraditional schools for a bachelor's degree is three years as opposed to four at a traditional school for master's degree eighteen months as opposed to two years. This is a positive aspect for many reasons, but the major aspect for retention is that students can complete their academic programs at a shorter time. That is a strong motivating factor.

#### Faculty Training

Faculty development is another critical aspect of student retention. Faculty development is more than attending workshops and conferences it is a full program designed to trained teachers in the fundamentals of adult learners. These sessions help faculty to understand how to keep adult learners motivated and interested in achieving their academic and career goals. This is not as common in traditional schools.

Traditional colleges and universities show an increasing disparity between faculty and students, between teacher and learning. What suffers as a consequence is the learning process itself. Unfortunately, the natural differences in learning patterns exhibited by new students are often interpreted by faculty as deficiencies. The reality here is that there is a fundamental "mismatch" between the preferred styles of faculty and those of students.

In many ways, the contrast between the learner and the teacher characterizes the kinds of frustrations experienced between many students and teachers; and it may be that this basic incongruence is the root of the dilemma in today's college and university classrooms. Most faculty, often create classroom environments that are rewarding to us and to students like us, but these settings can be extremely frustrating for the new students.

#### Assessment and evaluation of work

Although many adult learning activities do not require formal evaluation procedures, adult learners need to learn how to identify and evaluate their own resources, abilities, and knowledge realistically. When formal evaluation is required, "[e]valuation strategies for adults are most effective when traditional authority roles are de-emphasized, and the learner's role as an autonomous, responsible adult is emphasized" (Kopp, 1987). Adults should be involved not only in determining what they learn but also in identifying and establishing their own evaluation techniques.

Kopp suggests the following three collaborative approaches that can be used in establishing a basis for evaluation: 1) group decision making in which class members participate jointly in identifying and selecting evaluation strategies to be used; 2) learning

contracts that help learners clarify their objectives, document their learning and evaluation plans, and commit themselves to the work they have contracted to do; 3) grading contracts that provide learners with options in the relative weight of evaluation activities and in the amount of work they will perform.

Involving adults in evaluating their own learning activities helps them become more independent and self-directed in their learning endeavors.

### Student Services

Support services for the nontraditional student should be maintained to provide the nurturance necessary for academic achievement (Allen, 1993). Traditional schools have created services with staff members who are trained in dealing with adult learners. In addition to having the necessary staffs these schools have extended hours to make themselves available at night since a large percentage of adult learners attend classes in the evening. This makes the adult learner feel that they are appreciated and not just a number in the student body.

### Placement and Career Advisement

Unlike traditional students, adult learners usually do not live on campus, many have families, and most work full time. Most adult learners have very little social interaction at college; instead, they have social links to organizations outside of the college community. Therefore, it is important for schools to integrate students into on-campus career based activities. Allen (1993) believes that career planning methods should be a high priority service for college administration. Persistence in college is

related to a strong career planning program (Noel, 1985). Students should not be pressured to continue in programs where they do not achieve satisfaction. Interventions with career counseling or other college programs should be initiated before the student makes the decision to drop from school. The primary objectives of programs offered by nontraditional schools were to prepare students for jobs and place them in appropriate positions or to enhance career advancement. Most campuses offering entry-level programs reported job placement rates for graduates of 85 percent to 95 percent (ACICS Statistics). These schools also placed emphasis on employers as customers. In most cases, the focus was on a broad industry or occupational field and not necessarily local employers in the communities where campuses were located. The campuses had little flexibility to change or introduce programs in response to local needs, although most could make minor adjustments or develop a limited number of electives.

Step five in the planning process is evaluation of retention outcomes. This stage includes:

- 1) Student satisfaction studies’;
- 2) Institutional priorities;
- 3) Exit interviews;
- 4) Program audits and reviews;
- 5) Academic standards review; and
- 6) Retention/attrition studies.

The total picture should be that the “Students Are the Reason for a University’s Existence” (Low, 2000). Noel-Levitz believes that reading results from surveys should be in context that:

- 1) Retention does not mean lowering standards.
- 2) Retention begins and ends with a focus on the individual student.
- 3) Retention is not the goal—it is the direct result of student success.
- 4) Retention is a campus-wide responsibility.
- 5) Sound retention interventions will result in the persistence of more students.
- 6) The higher the expectations of students, the higher the institution's retention rates.
- 7) The higher the student retention rate, the easier recruitment becomes.

### Conclusion

Retention is a result of a combination of circumstances, student characteristics, and the institutional environment. Traditional models used to understand persistence rates are helpful in providing a foundation to start from but they do not go to the heart of the uniqueness of the adult learner and why they leave school. Adults attend school for different reasons than the traditional aged college student and because of that, educational practitioners must create institutional plans to accommodate such reasons.

Traditional schools are now adopting the planning steps used by nontraditional institutions in improving retention rates. This adaptation also requires these institutions to redefine student retention since adult students often leave school but later return and complete their program of study.

Finally, retention plans can not include all factors preventing adult students from staying in school but such plans can focus on dispositional and institutional factors. Any plan must look at its resources and adjust to meet the needs of the student population. Further, research on individual institutional plans and retention statistics would enhance our understanding on the effectiveness of such comprehensive planning.

## References

- Ackell, E. F. (1982) "Adapting the university to adult students: A developmental perspective." *Continuum*, (2), 30-35. (ERIC No. EJ 259 002), Retrieved May 10, 2004, <http://ericir.syr.edu/plweb-cgi>.
- Accrediting Council for Independent Colleges and Schools (2002) Summary of key operating statistics. Washington, DC Retrieved March 18, 2004.  
<http://www.acics.org/library/KOS02.pdf>
- Allen, B. A. (1993). The student in higher education: nontraditional student retention. *Catalyst eJournal*, 23(4), Retrieved April 5, 2004,  
<http://scholar.lib.vt.edu/ejournals/Catalyst/V23N4/towles.html>.
- Asher, H. & Skenes, R. (1993). Can Tinto's student departure model be applied to nontraditional students? *Adult Education Quarterly*, 43 (2), 90-100.
- Astin, A.W. (1984). Student Involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25, 297-308.
- Astin, A.W. (1977). *Preventing students from dropping out*. San Francisco: Jossey-Bass.
- Bean, J. P. (1980). Dropouts and turnover: the synthesis and test of a causal model of student attrition. *Research in Higher Education*, 6(1), 129-148.
- Bean, J.P. (1982). Conceptual models of student attrition: How theory can help the institutional researcher. In E.T. Pascarella, (Ed.), *Studying student attrition, New directions in institutional research*, 36. San Francisco: Jossey-Bass.

- Bean, J. P. (1985). Interaction effects based on class level in an exploratory model of college student dropout syndrome. *American Educational Research Journal*, 22(1): 35-64.
- Belzer, A.(1988) "Stopping Out, Not Dropping Out." Focus on Basics 2A (ED 431 868)  
Retrieved on August 1, 2004 from  
<http://www.gse.harvard.edu/~ncsall/fob/1998/belzer.htm>
- Benshoff, J. M. (1991). Nontraditional college students: A developmental look at the needs of women and men returning to school. *Journal of Young Adulthood and Middle Age*, 3: 47-61.
- Benshoff, J. & Lewis, H. (1992). Nontraditional College Students. ERIC Clearinghouse on Counseling and Personnel Services. Ann Arbor, MI (ERIC Document  
Reproduction Service No. ED 347483). [On-line] Retrieved on August 5, 2004,  
from [http://www.ed.gov/databases/ERIC\\_Digests/ed347483.html](http://www.ed.gov/databases/ERIC_Digests/ed347483.html).
- Conrad, J. (1993). Educating part-time adult learners in transition. ERIC # ED360946  
Retrieved on August 5, 2004 from  
[http://www.ericfacility.net/databases/ERIC\\_Digests/ed360946.html](http://www.ericfacility.net/databases/ERIC_Digests/ed360946.html).
- Cross, K. P. (1981). *Adults as learners: Increasing participation and facilitating learning*. San Francisco: Jossey-Bass Publishers.
- Feldman, M. (1993) Factors Associated with One-Year Retention in a Community College. *Research in Higher Education*, 34(4), 503-12.
- Fleming, J. (1985). *Blacks in College*. San Francisco: Jossey-Bass.
- Frank, F., and Gaye, H. (1997). "When Life Gets in the Way." *Adults Learning*. 8( 9):  
244-245.

- Hoffman, H. F., and Elias, J. L. "Technical Nontraditional Student College Attrition: The Student's Perspective." In Proceedings of the Pennsylvania Adult and Continuing Education Research Conference, edited by K. P. King and T. R. Ferro, pp. 73-78. Pennsylvania Adult and Continuing Education Association, 1999. (ED 427 262)
- Hossler, D. (1991). Evaluating recruitment and retention programs. *New Directions for Institutional Research*, 70: 95-99.
- Hubble, J. H. "Intake Procedures as a Factor in Identifying and Addressing Barriers to Attendance of Adult Education Students." MA Thesis, Southwest Texas State University, 2000. (ED 443 982).
- Hurtado, S. & Carter, D., (1996) Latino students' sense of belonging in the college community: Rethinking the concept of integration on campus. *In College students: The evolving nature of research*. Needham Heights, MA: Simon & Schuster Publishers.
- Ishitani, T.T., & Snider, K.G. (2004) Longitudinal effects of college preparation programs on college retention. Association for Institutional Research. Retrieved on June 26, 2004, from [http://irt2.indstate.edu/home/stats/briefs/2004/TI\\_AIR2004.pdf](http://irt2.indstate.edu/home/stats/briefs/2004/TI_AIR2004.pdf).
- Jensen, J; Haleman, D.; Goldstein, B.; and Anderman, E. Reasonable Choices: Understanding Why Under-Educated Individuals Choose Not to Participate in Adult Education. Lexington: University of Kentucky, 2000. (ED 444 025)
- Kember, D. (1989). A longitudinal-process model of dropout from distance education. *Journal of Higher Education*. 60:278-301.

- Kopp, K. "Evaluate the Performance of Adults." Module N-6 of Category N. (ERIC Document Reproduction Service No. ED 289 969).
- Lawler, P.A. (1991). *The keys to adult learning: theory and Practical strategies*. Philadelphia: Research for Better Schools.
- Low, L. (1999). Successful retention planning: A step-by-step approach. Fourth annual national enrollment management institute. Noel-Levitz. Retrieved on August 12, 2004, from [http://www.noellevitz.com/pdfs/Monograph\\_1.pdf](http://www.noellevitz.com/pdfs/Monograph_1.pdf).
- MacKinnon-Slaney, F. (1994). The adult persistence in learning model. *The Journal of Counseling and Development*, 72(3):268-275.
- Merriam, S.B., & Caffarella, R.S. (1999). *Learning in adulthood: a comprehensive guide*. 2<sup>nd</sup> edition. San Francisco: Jossey-Bass Publishers.
- Metzner, B. S. & Bean, J. P. (1987). The estimation of a conceptual model of nontraditional undergraduate student attrition. *Research in Higher Education*, 27(1): 15-38.
- Murray, J. A. & Uhl, N. P. (1987). Using SAS to track both traditional and nontraditional patterns of enrollment. Paper presented at the Association for Institutional Research Annual Forum.
- Noel, L., Levitz, R., Saluri, D. (1985). *Increasing student retention: effective programs and practices for reducing the dropout rate*. San Francisco, CA: Jossey-Bass.
- Noel, P., (Ed). (1993). *Retention management system: coordinator's manual*. Iowa City: Noel-Levitz National Center for Student Retention, Inc.

- Pappas, J.P. and Loring, R.K. (1985). Returning learners. In *Increasing student retention*, edited by Noel, L., Levitz, R., & Saluri, D. San Francisco: Jossey-Bass.
- Pascarella, E., Duby, P., & Iverson, B. (1983). A test and reconceptualization of a theoretical model of college withdrawal in a commuter institution setting. *Sociology of Education*, 56: 88-100.
- Price, L. A. (1993). *Characteristics of Early Student Dropouts at Allegany Community College and Recommendations for Early Intervention*. Cumberland, MD: Allegany Community College, 1993. (ED 361 051)
- Quigley, B. A. (1998) "The First Three Weeks: A Critical Time for Motivation." Focus on Basics 2A. (ED 431 868) Retrieved on August 1, 2004, from <http://www.gse.harvard.edu/~ncsall/fob/1998/quigley.htm>
- Rautopuro, J. & Vaisanen, P. (2001). Nontraditional students at university: a follow-up study of young and adult students' orientations, satisfaction, and learning outcomes. Retrieved March 18, 2004, <http://leeds.ac.uk/educol/dounments/00001880.htm>.
- Rendon, L. I. (1994) Validating culturally diverse students: Toward a new model of learning and student development. *Innovative Higher Education*, 19(1): 23-32.
- Richter-Antion, D. (1986). Qualitative differences between adult and younger students. *NASPA Journal*, 23, 58-62.
- Schlossberg, N. K., Lynch, A. Q., Chickering, A. W. (1989). *Improving higher education environments for adults: responsive programs and services from entry to departure*. San Francisco, CA: Jossey-Bass.
- Schoen, D. (1987). *Educating the reflective practitioner*. London: Jossey Bass.

Spanard, J. A. (1990). Beyond intent: Reentering college to complete the degree. *Review of Educational Research*. 60 (3):309-344.

Thomas, A.M. (1991). *Beyond education: A new perspective on society's management of learning*. San Francisco: Jossey-Bass.

Towles, D.E., & Ellis, J.R. (1992). Dropout survey results. Unpublished report.

Lynchburg, VA: School of Lifelong Learning: Inside Towles, D. E. & Spencer, J.

(1993). The Tinto model as a guide to adult education retention policy, 23(4), 18-22. Retrieved on March 18, 2004,

<http://scholar.lib.vt.edu/ejournals/CATALYST/V23N4/towles.html>

Towles, D. E. & Spencer, J. (1993). The Tinto model as a guide to adult education retention policy, *Catalyst* 23(4), 18-22. Retrieved on March 2, 2004,

<http://scholar.lib.vt.edu/ejournals/CATALYST/V23N4/towles.html>

Tinto, V. (1975). Dropout from higher education: a theoretical synthesis of recent research. *Review of Educational Research*, (45): 89-127.

Tinto, V. (1986). *Leaving College*. Chicago: University of Chicago Press.

Tinto, V. (1993). *Leaving College: Rethinking the Causes and Cures of Student Attrition*.

2nd Edition, Chicago: University of Chicago Press

Tinto, V. (2000). Linking learning and leaving: Exploring the role of the college classroom in student departure. In J. Braxton (ed.) *Reworking the student departure puzzle*. Nashville: Vanderbilt University Press.

- Turnbull, W.W. (1986). Involvement: The key to retention. *Journal of Developmental Education*, 20: 6-11.
- Walleri, R. D. & Peglow-Hoch, M. (1988). Case studies of nontraditional high risk students. Paper presented at the Association for Institutional Research Annual Forum, May 1988. (ERIC Document Reproduction Service No. ED 298 861).
- Wetzel, J. N., O'Toole, D. O., & Peterson, S. (1999). Factors affecting student retention: A case study. *Journal of Economics and Finance*. 23 (1): 45-55.
- Windham, P. (1994). The Relative Importance of Selected Factors to Attrition at Public Community Colleges. Paper presented at the 23rd Annual Conference of the Southeastern Association for Community Colleges, August 1-3, 1994, Savannah, Georgia. (ED 373 833)
- Wonacott, M.E. (2001). Adult students: Recruitment and retention. Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 00027). Retrieved on August 1, 2004 from <http://www.cete.org/acve/docs/pab00027.pdf>