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Formulating a New Model
of
College Choice and Persistence

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Introduction: Rethinking College Choice & Persistence

Few can argue with the assertion that today's college student is dramatically different than the college student of yesteryear (Levine & Cureton, 1998). The "traditional" 18- to 22-year-old middle- to upper-class residential student attending college seeking an integrated social and academic experience complete with a substantial emphasis on the liberal arts is rapidly disappearing as a primary feature of the higher education landscape.

Students today represent a wide range of ages, ethnicities, economic circumstances, and goals. More students than ever commute to school, work to finance their education and provide for dependents, take courses through nontraditional means, and pursue non-baccalaureate degrees and certifications in preparation for specific careers and occupations. Students delay enrollment to pursue employment and relationships, stop out periodically, and transfer from institution to institution with increasing frequency. Even the range of institutional types has expanded as public and private entities seek to meet the needs of an increasingly diverse student body.

Ironically, the prominent models of college choice and college persistence have not been substantially overhauled for some time. Practitioners and theorists continue to rely upon models of college student behavior that are twenty, thirty, even fifty years old. As students evolve ever more rapidly, the accuracy and utility of these models erode at an ever-increasing pace. The time has come for new ways of modeling college student choice and persistence behavior.

This paper seeks to formulate a general framework for conceptualizing college choice and persistence and suggests directions for future research in this area. In doing so, the author asserts that the processes of college choice and persistence, usually separated in the literature, are in fact manifestations of the same decision-making process. Any individual not currently

enrolled in postsecondary education periodically reevaluates the decision of whether to attend and, if so, where to attend; the currently-enrolled individual likewise is constantly deciding whether to continue attending and, if so, where to attend. As pointed out by G. A. Jackson in the context of college choice, individuals fall into three categories – the “whiches,” “whethers,” and “nots” (Jackson, 1978). Today’s students do not make these decisions only once in their academic careers; constantly changing personal and environmental factors lead to continuously revised personal choices, circular patterns of attendance, and attending multiple institutions either simultaneously or serially. Consequently, the study of persistence and retention is indeed the same as the study of college choice.

In addition to formulating a framework for these processes, several implications of such a model will be outlined in an effort to begin providing guidance to practitioners who struggle with recruiting and retaining today’s students. Because current recruitment, retention, and organizational strategies are based primarily on out-of-date models, they tend to favor traditional students and marginalize nontraditional students (Sissel, Hansman, & Kasworm, 2001); thus, key considerations and possible approaches to recruitment and retention based upon the new framework will be outlined briefly at the conclusion of this paper.

Types of College Choice & Persistence Models

The study of college choice and persistence enjoys a rich and lengthy history (Pascarella & Terenzini, 1991; Hossler & Gallagher, 1987; Tinto, 1975). While a detailed exposition of the evolution of these theories is beyond the scope of this paper, a brief discussion of the various lenses, or types of models, in currency will inform the creation of a new theoretical framework for investigating college choice and persistence. John M. Braxton, in the conclusion to his 2001

book *Reworking the Student Departure Puzzle* (pp. 257-266), provides a useful summary of these lenses which is used as the basis for the following sketch together with Vincent Tinto's summary in Chapter 4 of his book, *Leaving College* (1993, pp. 84-137).

Economic Models

Economic models focus on individual cost/benefit analysis in the college choice and persistence decision processes. According to this perspective, individual decisions about attendance are comparable to other economic decisions where scarce resources must be applied in the most beneficial way. Tinto's summary of economic models focuses on the work of Manski and Wise, Iwai and Churchill, Jensen, Voorhees, Stampen and Cabrera, Oosterbeek, and others in describing the role of financial resources in the decision-making process (Tinto, 1993, pp. 87-88). Braxton also points out the work of St. John, Cabrera, Nora, and Asker in his brief summary of economic theories (2000, p. 260). A more detailed consideration of economic factors can be found in a recent work edited by Carolyn M. Hoxby (2004) in which personal decision factors are explored in detail. Economic models can also include factors related to the utility maximization of other scarce resources such as time and mental/emotional energy.

Psychological Models

Psychological models emphasize the role of personal characteristics in the college choice and persistence processes. Personality, motivation, disposition, maturity and personal development, family background, individual response to the environmental demands, coping mechanisms, adaptability and other individual psychological factors influence the decision-making of students and potential students. In addition to the sources pointed out by Tinto (1993,

pp. 84-86), Braxton highlights a number of influential psychological theorists including Bean and Eaton, Astin, Chickering and Reisser, Perry, King and Kitchener, Baxter Magolda, Milem and Berger, Sullivan, Cope and Hannah, and others (Braxton, 2000, pp. 261-263).

Sociological and Environmental Models

Sociological and environmental (or societal) models focus on the influence of social pressures related to social and socioeconomic status, race, opportunity, institutional prestige, opportunity structures, and other social phenomena on the decision-making processes of individuals. Tinto points out two perspectives prominent in the societal literature – the conflict perspective and the structural-functional perspective – that theorists use to describe social reproduction, and he points out that societal models typically focus on issues transcending individuals and institutions (1993, pp. 87-88). In comparison, Braxton discusses personal factors related to the sociological perspective – such as cultural capital, peer group interaction, and social integration into the campus community – that influence student choice and persistence and cites the work of Tinto, Bourdieu, Kuh, Newcomb, and others in outlining these factors (Braxton, 2000, pp. 263-266).

Organizational and Interactional Models

Organizational characteristics influence student decisions. In contrast to environmental models, which focus on the environment as a whole, organizational models focus on the impact of an institution's characteristics on individual choices of where to attend and whether to stay. More specifically, an individual's interaction with the organization plays a key role in college choice and persistence. Tinto points to the broader organizational work of Kamens, Bean, Price

and Mueller, and Braxton and Brier before turning to a more specific exploration of interactional theories based on Van Gennep, Durkheim, Stage, and many others (1993, pp. 90-137). In his summary of organizational models, Braxton also includes the work of Berger and Braxton, Astin and Scherrei, and Birnbaum (2000, pp. 260-261). While organizational theories have less utility in describing individual decision-making, interactional models that compare individual characteristics and organizational characteristics have received a great deal of attention in the literature.

Combined Models

While they are discussed as separate theoretical bodies above, theoretical frameworks of college choice and persistence can rarely be classified into a single category. More frequently a single model has features of two or more of the above classifications. In addition, each type of model described above has specific kinds of shortcomings when studying the complex processes of college choice and persistence (Tinto, 1993; Braxton, 2000). Some theorists, such as Hossler and Gallagher (1987), have chosen to combine many of the most useful aspects of each framework to provide a more complete picture of student decision-making behavior. The framework developed in this paper attempts to combine factors from a variety of theoretical lenses in an effort to more fully understand college choice and persistence.

Current Prominent Models & Critiques

This section gives an overview of three theoretical frameworks for college choice and persistence that have become almost paradigmatic in current research and practice. Hossler and

Gallagher's (1987) model of college choice will be discussed first, followed by the work of Tinto (1975; 1993; 1998) and Astin (1985) in the areas of persistence and retention.

Models of College Choice

Hossler and Gallagher's (1987) definitive work on student college choice is essentially a review of literature in which the authors synthesize the work of a number of their contemporaries, including D. Chapman, R. Chapman, Jackson, and Litten, and formulate a three-stage model of college choice based upon their synthesis.

According to Hossler and Gallagher (1987), students move toward an increased understanding of their educational options and are influenced by individual and organizational factors as they progress through a series of phases. These phases are outlined as follows:

1. Predisposition (Phase One) – In this phase, students determine whether they want to pursue postsecondary schooling. A student's background characteristics, significant others, educational activities, and other factors combine with institutional characteristics to formulate in the student a desire to pursue further education.
2. Search (Phase Two) – Once a student has formed a desire to pursue additional schooling, he or she gathers information about various institutions and forms a "choice set" of institutions that match his or her criteria and values. The search process is influenced by a student's preliminary values, his or her search activities, and the search activities of an institution of higher education.
3. Choice (Phase Three) – After identifying a set of possible institutions, the student decides which institution he or she will actually attend. The final choice is influenced

not only by the student's choice set, but also by the courting activities of potential institutions.

Hossler and Gallagher conclude that the best time for institutions to influence potential students is during the choice phase. They recommend that institutions take an active role in distributing information about academic programs, cost, financial aid, and other factors important to students in the search phase. By so doing, institutions will use their scarce recruiting resources to their fullest advantage.

While Hossler and Gallagher's model represents an excellent amalgamation of then-current research in the field, it has a number of shortcomings. First, almost all of the research upon which they build their model is based upon studies of traditional college-bound high school students. Hossler and Gallagher implicitly assume that such represent the primary audience of recruitment activities in postsecondary (read "college and university") settings. According to many sources (Bash, 2003; Sissel, Hansman & Kasworm, 2001; NCES, 2005), today's postsecondary population is increasingly nontraditional; matriculation into a college or university immediately following high school can no longer be assumed. Consequently, while the three phases they present are general enough to apply to most potential students, individual characteristics in the predisposition phase and interactions with institutions in all three phases take on a different nature. For instance, predisposition among nontraditional students may be influenced by marital status, dependents, work status, and a variety of other factors. Geographic proximity in the search phase may be far more important than previously assumed, and a student's eventual choice of an institution may have far less to do with rational choice among many options and far more to do with constraints imposed by limited time and financial means.

A second shortcoming involves the oversight of critical psychological factors such as those outlined in Bourdieu's (1973) work on cultural capital and habitus. Hossler and Gallagher fail to discuss the impact of race and socioeconomic status in depth, probably due to the limited populations on which their literature review is based. Psychological factors dramatically influence both the predisposition and choice set of potential students by dictating what types of schooling and institutions are appropriate for an individual of their background and characteristics.

Finally, Hossler and Gallagher overlook several key points in the student retention literature that are related to college choice. For example, personal goals and aspirations comprise a major driving force among some students. Individuals that might otherwise lack the necessary predisposition to pursue higher education may choose to do so based solely upon their personal goals.

In summary, reliance on the model of college choice forwarded by Hossler and Gallagher may lead institutions to make inappropriate assumptions about potential students and thereby fail to recruit and retain them effectively.

Models of College Persistence/Attrition

Of all recent models of student persistence behavior, perhaps none is more influential than the model first proposed in 1975 by Vincent Tinto. Tinto's model conceptualizes student persistence as being affected heavily by an institution's efforts to socially and academically integrate students into the institutional environment. In an application of the work of social anthropologist Van Gennep, he proposes that college attendance functions as a rite of passage that may be either friendly or hostile to an individual student, based upon his or her cultural and

socioeconomic background. He also calls upon the work of Emile Durkheim, one of the founding fathers of sociology, to compare student attrition to social “suicide” in an attempt to investigate the various patterns of student attrition. While influenced by pre-college characteristics, a student’s choice to persist at an institution is heavily predicated upon his or her experiences on campus with various social and institutional actors (Tinto, 1993). Alexander Astin (1985), another influential college retention writer, further asserts that student involvement, both academic and social, is a key determinant of student persistence. Student integration into the campus academic and social environment is seen as the key goal in implementing retention strategies at higher education institutions. Astin’s model focuses on inputs, or individual background characteristics; environment, or the interaction between the individual and the institutional environment; and outcomes based upon this interaction (Astin, 1985).

The models of both Tinto and Astin have received an increasing amount of criticism among researchers studying college student behavior in recent years. Originally developed based upon studies of traditional college students (white, middle-class, 18 to 22-year-olds) attending Midwestern residential universities, Tinto’s model has come under fire for its apparent failure to account for persistence behavior among contemporary college students who can no longer be neatly classified in the aggregate (Tierney, 1992). Increasing numbers of older students, students of color, and students of varied socioeconomic backgrounds interact with institutions of higher education in increasingly complex ways not adequately explained by Tinto’s model. Similarly, Astin’s model has been critiqued for its lack of attention to the increasing diversity of today’s students and their experiences.

A number of revisions to the traditional retention models have been suggested, each in an attempt to account for variance in students' college experiences. For instance, John Weidman (1989) has proposed a refinement of Tinto's models which more heavily accounts for influences of normative groups (parents, peers, community members) outside the college environment. He further describes institutional normalization processes that seek to acculturate students of diverse backgrounds into institutional norms and patterns of behavior. Frances Stage (1989) adds that the relationship between academic and social integration may be reciprocal.

Other theorists diverge more widely from the classic models of Tinto and Astin. Some, such as Pritchard and Wilson (2003), study student attrition from a psychological standpoint, while others, such as William Tierney (1992), adopt a more anthropological approach. Nevertheless, these models of student persistence continue to be a strong and often-cited force in guiding the actions of higher education decision makers.

College Students in the 21st Century

In 1998, Arthur Levine and Jeannette S. Cureton published a book entitled, *When Hope and Fear Collide: A Portrait of Today's College Student*. The primary point of this book was to highlight ways in which today's students differ from those of the past. In their book, Levine and Cureton discuss the changing social, political, and economic landscapes of the United States and the world and explore through interviews the impact these changes have had on the attitudes, outlooks, dispositions, goals, and motivations of contemporary college students.

While Levine and Cureton's book does much to highlight the differences between current and past postsecondary students, it fails to explore in detail the demographic shifts that have occurred in higher education. Increases in the number of older students enrolled, changes in the

ethnic and racial composition of student bodies, rising numbers of students working full- and part-time, increases in the number of students with dependents, and a broad range of other demographic changes are influencing the face of the postsecondary student.

For a more comprehensive look at the changing demographics of higher education, the author turned to the literature on adult postsecondary students. Investigators of adult students have long pointed out the changing nature of the postsecondary demographic. A quick survey of the literature on adult students (Bash, 2003; NCES, 2005; Hensley & Kinser, 2001; Sissel, Hansman, & Kasworm, 2001; Wilson & Hayes, 2000) points out a number of interesting trends:

- Adult learners (often defined as over 24 years of age) constitute about 40% of enrollees in degree-granting institutions. If other types of institutions are also considered, including trade schools, technical institutes, corporate universities, and others, the percentage of adult students climbs dramatically (some estimates go as high as 75%).
- If one includes 22 to 24-year-olds under the category of “adult learners,” the proportion of nontraditional-aged students rises to nearly 60% in degree-granting institutions.
- Enrollment rates of individuals 25 to 29 years of age have quadrupled since 1950.
- Enrollment rates of individuals 30 to 34 years of age have grown six-fold since 1950.
- Approximately 70% of all adult learners are female.
- Nearly half of all adult learners (25+ years) in degree-granting institutions are at least 35 years old.
- Undergraduate enrollment status is strongly related to age, with percentage of full-time enrollees diminishing with each successive age bracket.
- Almost 80% of adult learners are employed.
- In excess of 65% of adult students are married.

- Students today are far more likely to attend multiple institutions, including 2-year, private, and online institutions in an effort to maximize scheduling flexibility and minimize cost of attendance.

In addition to the changing demographic profile of higher education, Bash (2003) and others point out that 18 to 22-year-old students, typically identified as “traditional,” are also adopting patterns of attendance and decision-making usually associated with older students, including part-time attendance, full-time work, dependents, etc.

In summary, the majority of today’s postsecondary students, rather than exhibiting the characteristics of “traditional” students, are characterized by the following descriptors normally reserved for so-called “nontraditional” students:

- Over 22 years of age.
- No financial support from family.
- Part-time attendance.
- Full-time or substantial part-time work.
- Spouse and/or dependents.
- Substantial off-campus obligations.
- Delayed or sporadic enrollment.
- Lack a high school diploma.
- Cyclical patterns of enrollment.
- Already possess a bachelor’s degree or other credentials.
- Will likely attend several institutions during their studies.
- Acquire and apply knowledge differently than “traditional” students.

Even traditional-aged students are exhibiting more and more of the characteristics once only assigned to the adult student population with regard to enrollment patterns, outside obligations, and other key factors (Bash, 2003).

A New Model for College Choice & Persistence

The challenge of accounting for all of the elements that influence an individual's choice to participate in post-secondary education is daunting. On the one hand, the goal is to explain such behavior in the greatest possible detail, while on the other hand, one must strive for parsimony. Detailed models for elements of the college choice and persistence process for nontraditional students exist, such as an excellent study by Bean & Metzger (1985); however, there are none which seek to give a conceptual framework for the entire process.

The following model seeks to establish a simple conceptual framework highlighting the essential decision points in the college choice and persistence process that is relevant to all forms of post-secondary education, not just colleges and universities (see Figure 1). The general features of this model are not particularly startling; they are meant merely to describe the overall process of participation in postsecondary education and training (see Table 1). The three primary decision points correspond with the major steps in the college choice and persistence process: the decision of whether to participate, the decision of when and where to participate, and the continually-reevaluated decision of whether to continue participating.

The model begins to have some explanatory or predictive power when we drill down to the factors influencing an individual at each decision stage. For each decision, a set of factors will influence an individual to varying degrees. In this model, the author has chosen to refer to each of these factors as "vectors" (no connection with Chickering's (1969) vectors of individual

psychological development) in reference to the fact that each has both a magnitude and a direction – positive or negative. As in simple mathematical vector addition, subcomponents can be added algebraically to yield a resultant vector that also possesses both magnitude and direction. In addition, component vectors can be scaled by multiplying by a constant to reflect the relative importance of each factor in the overall decision. In other words, the total combination of all influencing factors results in a positive decision or negative decision depending upon the relative magnitudes, directions, and degrees of influence of each contributing factor. Factor and path analyses can be conducted to determine the relative degrees of influence each factor exerts and how the factors influence one another.

Determining decision vectors

The number and variety of potential decision vectors is nearly infinite. To yield a relatively limited set of factors, the author considered several classifications of possible influencing factors:

- Predisposition/Personal Background – Models of both college choice (Hossler & Gallagher, 1987) and persistence (Astin, 1985; Tinto, 1993; Bean & Metzger, 1985; Walpole, 2003; Bergerson, 2001; Tierney, 1992) place great emphasis on background characteristics leading to college attendance.
- Personal Goals – Goal commitment is an important feature of traditional models of student persistence (Tinto, 1993; Weidman, 1989). Personal growth goals, financial goals, social aspirations, and career goals are all important contributing factors (Bean & Metzger, 1985; Pascarella & Terenzini, 1991; Hossler, Schmitt, & Vesper, 1999;

Hoxby, 2004; Tinto, 1975) and are treated somewhat separately in the model because they can vary independently of one another.

- Perceptions of Self – An individual’s perception of self, including self-efficacy and locus of control, strongly influence his or her participation in postsecondary education (Bean & Eaton, 2000; Pritchard & Wilson, 2003).
- Compelling Circumstances – For nontraditional students, compelling personal circumstances, financial and otherwise, play a primary role in motivating postsecondary education (Bash, 2003).
- Means – A wide variety of factors can be described as means: personal financial means and access to financial aid (Hoxby, 2004; Jackson, 1978), the need to work (Hey, Caldron, & Seabert, 2003), availability of personal time, personal habitus and social capital (Berger, 2001; Bourdieu, 1973), access to correct information, and other key elements comprise an individual’s postsecondary “means.”
- Enabling Circumstances – Support of family and spouses, encouragement of peers and employers, ability to arrange personal obligations, and other factors influence an individual’s postsecondary attendance (Hensley & Kinser, 2001; Hossler, Schmidt, & Vesper, 1999; Hey, Caldron, & Seabert, 2003; Meehan & Negy, 2003).
- Institutional Fit / Institutional Treatment of Nontraditional Students – A match between an individual student’s characteristics and an institution’s characteristics is critical in the decision of whether, when, and where to attend (Astin, 1985; Tinto, 1993; Braxton, 2001; Pascarella & Terenzini, 1991; Sissel, Hansman, & Kasworm, 2001; Titus, 2004).

- Academic and Social Experiences – An individual’s experience within and outside of the classroom shape his or her decisions on numerous levels (Tinto, 1993; Weidman, 1989; Skahill, 2002; Stage, 1989; Sissel, Hansman, & Kasworm, 2001). Adult or nontraditional students have different learning patterns and different social patterns than traditional students (Brookfield, 1986; Knowles, 1980; Kasworm, 2003).

A great many more factors might be added, as highlighted by Bean & Metzger (1985), Pascarella & Terenzini (1991), and others who have written prolifically on the subject.

However, for the sake of manageability, only these categories are explored in detail. Vectors and their subcomponents influencing each decision stage in the college choice and persistence model are outlined following a general description of the model itself (see Table 2, Table 3, and Table 4).

Figure 1. A Model of Adult College Choice and Persistence.

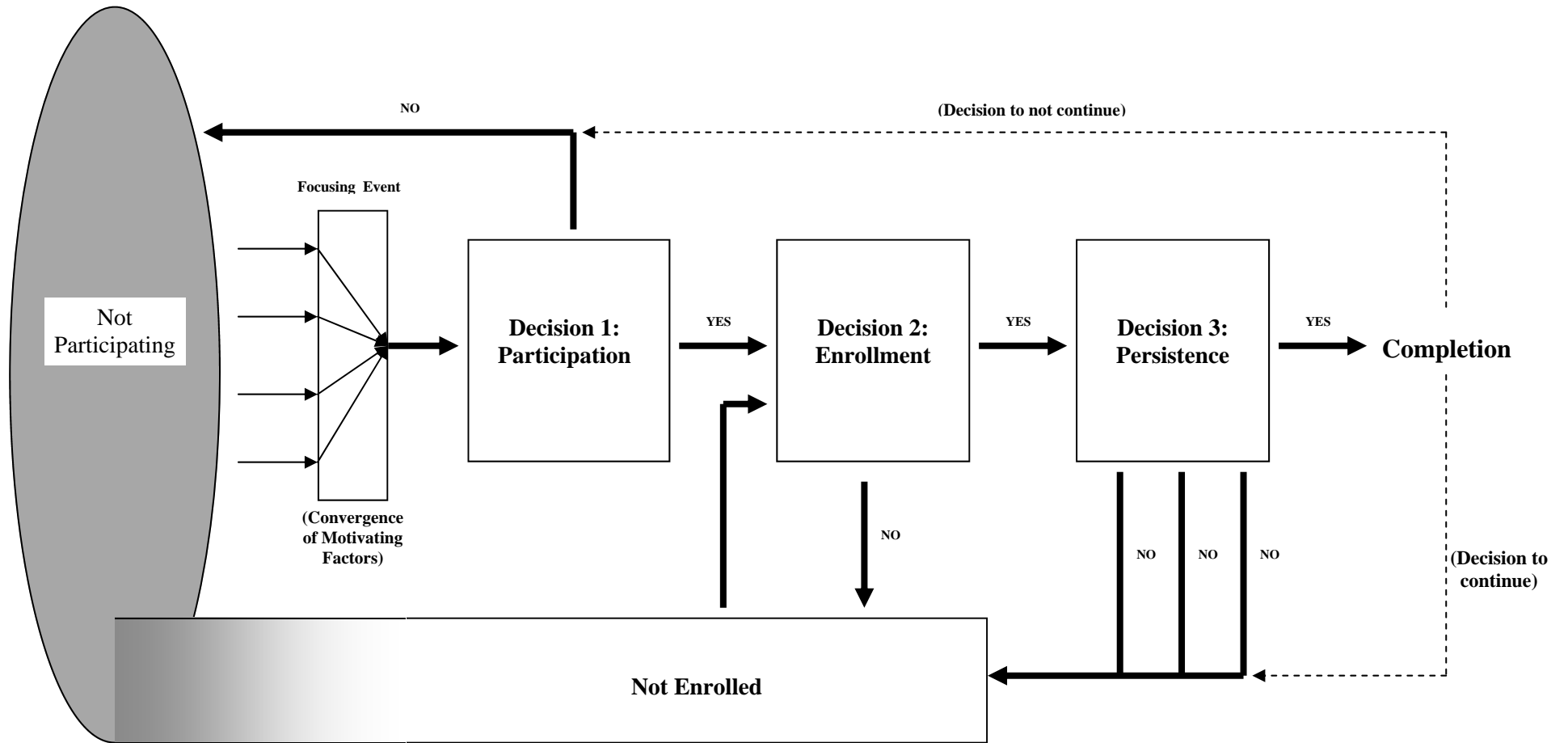


Table 1

General Features of Model for College Choice & Persistence

Element	Description
Circular nature of student participation	The closed-loop nature of this model is intended to represent the circular nature of student participation in post-secondary education.
Not Participating	The general population of potential students who currently have no strong intent to enroll in post-secondary education.
Not Enrolled	While not currently enrolled, this population has an active intent to enroll in the near future. As time passes without enrollment, individuals in this population lose their motivation to participate and gradually migrate to the “Not Participating” population. At any point, individuals who are still committed to participation may reenter the Enrollment stage.
Focusing Event	Typically, some event or series of events causes various motivating factors (represented by parallel arrows) to converge and produce sufficient impulse to consider participation in post-secondary education.
Decision Vectors	Each decision stage is influenced by a multitude of factors (see Tables 2 – 4). These factors are characterized as “vectors” because they can have both a magnitude and a direction (negative or positive). In accordance with basic vector mathematics, these vector components can be added together to yield a decision vector at each of the three stages which will also vary in magnitude and direction. The threshold positive magnitude of a decision vector leading to a “YES” decision at each stage can be determined empirically once the various component vectors are properly operationalized.
Decision 1: Participation	Each potential student must decide whether to participate in post-secondary education. Whether this decision occurs at a specific point in time or over a period of time, the specific combination of the individual’s circumstances will move the individual to decide to participate (“YES”) or return to the “Not Participating” pool (“NO”).
Decision 2: Enrollment	Once an individual has decided to participate, he or she must decide whether to enroll immediately, and, if so, where to enroll. A decision to not enroll immediately moves the individual to the “Not Enrolled” category.
Decision 3: Persistence	An enrolled individual must constantly assess whether it is worthwhile to persist. Various factors, represented by the possible vectors associated with this decision, can increase or decrease in magnitude and direction over time. The multiple “NO” arrows at this stage represent multiple points of departure.
Completion	Many students, researchers, and practitioners view completion (degree or certificate attainment) as the endpoint of a student’s schooling. However, learners may decide either to continue or not continue their schooling.

Table 2

Participation: Possible Decision Vectors

Vector	Possible contributing factors
<i>Predisposition</i>	<ul style="list-style-type: none"> • Family educational background • Social class (self and family) • Peer education level • Family work history • Peer work history • Personal habitus / social capital • Personal educational history
<i>Compelling Circumstances</i>	<ul style="list-style-type: none"> • Dramatic alteration of life circumstances (loss of current employment for self or spouse, death or disablement of spouse, divorce, retirement, “empty nest,” disabling injury, etc.) • Urgent need for additional income to support family needs (children’s higher education, medical expenses, etc.)
<i>Career / Financial Aspirations</i>	<ul style="list-style-type: none"> • Potential for workplace advancement without additional schooling • Potential for workplace advancement with additional schooling • Financial position of peers with additional schooling • Financial position of peers without additional schooling • Desire for change of career
<i>Social Aspirations</i>	<ul style="list-style-type: none"> • Social position / class of peers • Perception of personal social position • Perception of potential for social advancement through additional education • Perception of ideal social status acquired from peers, media, family, etc.
<i>Personal Goals</i>	<ul style="list-style-type: none"> • Desire for personal betterment • Desire to acquire new knowledge, skills, or awareness • Desire for personal prestige
<i>Perceptions of Self</i>	<ul style="list-style-type: none"> • Self-efficacy • Locus of control
<i>Means</i>	<ul style="list-style-type: none"> • Personal financial means • Access to financial aid / assistance • Availability of personal time • Family support / encouragement of significant persons • Access to correct information • Availability of educational programs • Personal habitus / social capital • Personal educational skills

Table 3

Enrollment: Possible Decision Vectors

Vector	Possible contributing factors
<i>Predisposition</i>	<ul style="list-style-type: none"> • Family educational background • Social class (self and family) • Peer educational history • Personal habitus / social capital • Personal educational history
<i>Perceived Institutional Fit</i>	<ul style="list-style-type: none"> • Institutional type (public / private; vocational / two-year / four year; teaching vs. research; comprehensive vs. specialized; corporate; etc.) • Institutional mission (manifest and latent mission and values) • Nature of students at institution (traditional vs. nontraditional; residential vs. commuter; social class and background; educational aspirations; diversity) • Sensitivity to nontraditional students (scheduling flexibility; provision of services; specific programs) • Student-centered faculty and policies • Characteristics of campus social climate • Cost of attendance • Geographic location (proximity) • Desired program of study offered • Reputation of institution (among desired social and workplace associates) • Alignment between institutional characteristics and personal goals
<i>Perceptions of Self</i>	<ul style="list-style-type: none"> • Self-efficacy • Locus of control • Perceived fit with institution
<i>Means</i>	<ul style="list-style-type: none"> • Personal financial means • Access to financial aid / assistance • Availability of personal time • Access to correct information • Availability of educational programs • Personal habitus / social capital • Personal educational skills
<i>Goal Commitment</i>	<ul style="list-style-type: none"> • Strength of goal commitment • Urgency of goal commitment • Complexity of goal commitment (mix of vocational, social, and/or educational aspirations)
<i>Enabling Circumstances</i>	<ul style="list-style-type: none"> • Family support / encouragement of significant persons • Encouragement of peers and/or employer • Willingness of family / peers / employers to provide time and resources for school attendance • Ability to arrange for fulfillment of personal obligations

Table 4

Persistence: Possible Decision Vectors

Vector	Possible contributing factors
<i>Actual Institutional Fit</i>	<ul style="list-style-type: none"> • Manifest and latent institutional norms and values • Nature of students at institution (traditional vs. nontraditional; residential vs. commuter; social class and background; educational aspirations; diversity) • Characteristics of campus social climate • Alignment between institutional characteristics and personal goals
<i>Institutional Treatment of Nontraditional Students</i>	<ul style="list-style-type: none"> • Sensitivity to nontraditional students (scheduling flexibility; provision of services; specific programs) • Allocation of resources (personnel and programs) to nontraditional students • Student-centered faculty and policies
<i>Classroom Experiences</i>	<ul style="list-style-type: none"> • Sensitivity of faculty to needs of adult students • Ability of faculty to meet adult student needs • Appropriateness of course and cognitive structures for adult learners • Nature of student-student, student-faculty, and faculty-student interactions • Perceived relevance of new knowledge, skills, or awareness
<i>Interpersonal Connections</i>	<ul style="list-style-type: none"> • Meaningful connections with faculty and staff • Meaningful connections with other students •
<i>Perceptions of Self</i>	<ul style="list-style-type: none"> • Self-efficacy • Locus of control • Ability to complete course requirements
<i>Means</i>	<ul style="list-style-type: none"> • Personal financial means • Access to financial aid / assistance • Availability of personal time • Personal habitus / social capital • Personal educational skills
<i>Goal Commitment</i>	<ul style="list-style-type: none"> • Specificity and appropriateness of goal • Strength of goal commitment • Urgency of goal commitment • Complexity of goal commitment (mix of vocational, social, and/or educational aspirations)
<i>Enabling Circumstances</i>	<ul style="list-style-type: none"> • Family support / encouragement of significant persons • Encouragement of peers and/or employer • Willingness of family / peers / employers to provide additional time and resources • Ability to arrange for fulfillment of personal obligations

Suggestions for Further Study

The model outlined above is simply a beginning. It outlines general features characterizing the participation of so-called “nontraditional” students in postsecondary education and suggests some factors that might influence the decision of whether to participate at various stages of the process.

Additional research may involve the following:

- Validating the above-suggested vectors and suggesting new ones through the review of additional literature on both traditional and nontraditional students.
- Operationalizing each of the vectors and determining appropriate measures for each.
- Determining the relative degree of influence each vector asserts on the overall decision of whether to participate at each decision stage (in other words, determining the scaling constants for each vector).
- Determining interrelationships among vectors, including covariance.
- Determining threshold levels of magnitude at each decision stage resulting in positive and negative decisions to participate.
- Determining how immediate the effects of a change in any given vector are with respect to the decision of whether to participate.
- Studying the relative constancy of various vectors over time to determine which are most likely to change and how rapidly.
- Developing an instrument to assist institutions in determining how likely an individual is to attend and persist given scores on the various factors.

As our understanding of nontraditional students continues to increase, our ability to mitigate negative influences will increase thereby promoting access, equity, completion, and other desirable goals.

Implications for Institutions

While this model needs to be investigated in much greater detail, a number of implications are immediately apparent (see also Hadfield, 2003). For institutions to successfully meet the needs of the increasingly “nontraditional” postsecondary student population, they must move in new directions:

- Expect cyclical patterns of attendance and facilitate the transfer of academic credentials both into and out of the institution.
- Recruit new students from among alumni and working professionals.
- Offer key student support services during non-traditional hours to accommodate students attending night courses.
- Provide child care during non-traditional hours.
- Offer support services for spouses and children of students.
- Create student programs, organizations, and events catering to nontraditional students and their families; hold core campus events during evening rather than daytime hours.
- Incorporate workplace activities by providing credit for internships and structured on-the-job learning experiences.
- Encourage faculty to engage in teaching and mentoring activities during non-traditional hours.
- Encourage faculty to become skilled in andragogy.

- Encourage departments to offer courses during non-traditional hours.
- Establish a center for commuter students that provides information on transportation, housing, off-campus jobs and creates a setting for socializing.
- Create community-based student support groups and clubs that meet off campus during evening or weekend hours.
- Constantly educate faculty and staff about the actual student population served by your institution and its demographic characteristics.
- Incorporate programs for nontraditional students into the core mission and functions of your institution rather than relegating them to the periphery.
- Locate core student services near campus commuter hubs (parking lots, bus stops, etc.).
- Offer greater flexibility in course scheduling, duration, and delivery modes.

Summary

Students today are much different than they were 30, 20, or even 10 years ago. Not only is the student demographic shifting dramatically to include greater numbers of students previously classified as nontraditional, but typically traditional students are behaving in increasingly nontraditional ways. The time has come to shift our thinking to the new “traditional” student of the 21st Century – the student who is likely over 22 years old, has substantial off-campus obligations including dependents, spouses, and jobs, attends multiple institutions, and stops out from time to time. Only by understanding the characteristics of the students we serve can we effectively study them and design interventions to promote their success.

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