Accommodating the Contemporary Student in an Antiquated System: Revisiting and Re-envisioning Models of Higher Education Transitions

Dr. Dennis Sharpe, Professor, Faculty of Education, Memorial University
Melanie Jennifer Greene, Doctoral Candidate, Faculty of Education, Memorial University


Session: Understanding Access and Retention in Canadian Higher Education

Session Organizers:
Scott Davies, McMaster University
Johanne J. Jean-Pierre, McMaster University

Introduction

The educational pathways of students in higher education have received considerable attention in the academic literature and numerous models have been developed that address these pathways with regards to adult transitions including access to, and persistence through, college or university (Bean, 1980; Breen & Jonsson, 2000; Tinto, 1975; Titus, 2004). However, the landscape of higher education has changed considerably in recent years. Students enter higher education programs at very different life and career stages, which has led to an increasingly diverse demographic and often non-linear transition pathways.

Models of student integration and attrition have typically been based on students who would historically be classified as ‘traditional’, as opposed to ‘non-traditional’ students, who constitute a significant portion of students in today’s higher education system. Due to very different life situations and experiences, non-traditional students have very different needs than traditional students, and expect a certain level of flexibility from a university program, particularly with regards to access and persistence. Offerman (2011) notes that while the literature addressing the challenges faced by non-traditional
students is quite extensive, very little research has explored the usefulness or applicability of models of student transitions in exploring issues facing nontraditional students which may affect their access to, and retention through, higher education. Furthermore, models examining higher education attrition developed specifically with nontraditional students in mind are sparse (Bean & Metzner, 1985; Metzner & Bean, 1987; Wylie, 2005).

Through a review of the extant literature on access, retention and student demographics, this paper considers pre-existing transition models of student integration and attrition, focusing particularly on non-traditional students, with the intent of exploring ways in which such models may be utilized and modified to enhance our understanding of patterns in higher education accessibility and retention. Focus is drawn to the contemporary university student and the unique barriers and challenges that these learners may face.

**Changing Demographics in Higher Education**

Existing literature on traditional and non-traditional students provide some insight into envisioning a profile of the contemporary higher education student. Gilardi and Guglielmetti (2011) describe the traditional undergraduate student as 19 years old, recently graduated from high school, and from medium-high socio-cultural status. While no standard definition of non-traditional students exists; several can be found in the existing literature on the subject. Characteristics of the non-traditional student may include factors such as age, being a first generation student, commuting to campus, engagement in family and/or work life, being financially independent, studying part-time, from a lower socio-economic background, and being a member of an ethnic minority (Bean & Metzner, 1985; Gilardi & Guglielmetti, 2011; Rendon, Jalomo & Nora, 2000).
If we consider the demographics of current university students, many would be said to have the characteristics of a non-traditional student. It can be argued that the current university system does not seem to be equipped to meet the needs of this expanding group of non-traditional students, but continues to maintain a system designed for the traditional student (Gilardi & Guglielmetti, 2011).

A concern in considering existing models of traditional and non-traditional student integration and attrition is that the definitions for and the understanding of what constitutes these types of students has changed considerably. It is perhaps also safe to assume that many of the factors identified as being influential in non-traditional students’ persistence decision-making process may no longer be applicable or valid assumptions. Future research would do well to re-define the boundaries of ‘non-traditional student’ status, and to test whether the factors identified in previously developed models still apply to the contemporary student, while acknowledging other factors that may be at play.

Models of Higher Education Transitions

Breen and Jonsson (2000) note that sociological analyses of educational pathways have long been studied as sequential transitions between grades or levels of education; Mare (1980) popularized this type of model. They do note a limitation of this model, however, in that it assumes that students progress through the educational system in a unilinear sequential path, while in fact, many school systems have “parallel branches of study” (Breen & Jonsson, 2000, p.754). Indeed, education can be viewed as a complex, non-linear process. Breen and Jonsson’s (2000) research extends on Mare’s model; finds
that the pathway a student takes through the school system influences the probability of making subsequent educational transitions.

**Post-Secondary Decision-Making**

For students considering their career options, the decision-making process of whether to study at the post-secondary level is a product of their social class, values, culture, and identity (Greene & Kirby, forthcoming). According to Bourdieu (1979, 1986), social capital facilitates the transaction and transmission of information among individuals through their relationships and increases one’s ability to advance her or his interests. Individuals who have access to information about post-secondary education through their social networks are at an advantage when making decisions about post-secondary options. There is evidence to show that parents and peers contribute to an individuals’ attainment of social capital, which may in turn influence their educational expectations (Wells, Seifert, Padgett, Park, and Umbach, 2011).

Recent research has explored the effects of such factors as social and cultural capital, institutional and class habitus, and individual decision-making on educational expectations (Reay, Ball, & David, 2005; Wells, Seifert, Padgett, Park, and Umbach, 2011). Research exploring the opportunities and challenges that affect access to, and participation in, higher education from the perspectives of class, gender, and ethnicity is also now quite extensive (Brooks, 2008; Jackson, Malcolm, & Thomas, 2011; Reay, Ball & David, 2005).

**Student Choice Models**

Several models have been created to account for student’s post-secondary decision-making process. The conceptual (choice) model developed by Hossler and
Gallagher (1987) suggests that young peoples’ decisions to participate in post-secondary education are the result of a 3-stage process consisting of predisposition, search and choice. Perna’s (2006) conceptual model of students’ situated context integrates aspects of the economic theory of human capital and sociological notions of social and cultural capital. It recognizes that multiple layers of context influence an individual’s post-secondary decision making.

Ross (2010), building on these earlier models, developed a conceptual model of post-secondary education choice, providing a framework in which to envision the complex process of deciding whether to go, where to go, and has implications for university retention. The framework takes into consideration the context in which the student lives, recognizing the various pathways to post-secondary participation based on differences in culture, family resources, local school and community structures and supports, economic and social conditions, and public policies. As such, there is potential for student choice models to be expanded and applied to non-traditional students.

**Integration and Attrition**

Titus (2004) acknowledges that higher education persistence and retention research has generally been framed within one of two theoretical models: Tinto’s (1975) student interactionalist theory and Bean’s (1980) student attrition model. Using Spady’s (1970) application of Durkheim’s (1951) theory of suicide to college dropout, Tinto (1975) hypothesizes that a lack of social interaction with others and “insufficient congruency” with the values of the institution will lead students to have a low commitment to the social system of higher education, thus increasing the chance of withdrawal.
In Bean’s (1980) causal model of student attrition, dropout is the dependent variable; the intervening, or independent variables are satisfaction and institutional commitment; organizational determinants; background variables. While this research indicates that men and women drop out of university for different reasons, institutional commitment was found to be the most influential factor in explaining dropout for both sexes.

Cabrera, Castaneda, Nora, and Hengstler (1992) conducted a three stage analysis to test the convergent validity between Tinto’s (1975) and Bean’s (1980) theories; it was found that both “are correct in presuming that college persistence is the product of a complex set of interactions among personal and institutional factors as well as in presuming that Intent to Persist is the outcome of the successful match between the student and the institution” (p.158).

**Non-Traditional Student Models of Attrition**

The Conceptual Model of Non-Traditional Student Attrition (Bean & Metzner, 1985; Metzner & Bean, 1987) proposes that attrition occurs primarily as a result of the effects of specific interactions between variables in the model, with less emphasis on the institutional integration of the student, and more focus on the interaction of academic and environmental factors (Wylie, 2005). Social integration variables are expected to have less of an effect on retention; external influences are thought to play a bigger role than social integration variables. Other environmental variables, such as family responsibilities, must also be considered in the attrition process for non-traditional students (Bean & Metzner, 1985). In a later estimation of their model, Metzner and Bean (1987) found that non-traditional students appeared to drop out of college for either
academic reasons or as a result of a lack of institutional commitment; reasons for leaving were unrelated to social factors at school.

Wylie (2005) presents a theoretical model of non-traditional student attrition in higher education that expands on previous models of integration and attrition, referencing features of Tinto’s model (1975) and the work of Bean (1980); Bean and Metzner (1985). The Theoretical Model of Non-Traditional Student Attrition seeks to explain and test non-persistence decisions for the non-traditional mature age and part-time student specifically, envisioning a short-term cyclic process, in which a student’s lack of adjustment in academic and social self-worth leads to a re-evaluation of, disengagement from, and even departure from the university. The focus in this model is on the first semester of a new student’s program of study, deviating from previous longitudinal model designs. It is proposed that the challenge of adapting to the university environment that necessitates high standards of academic ability and interpersonal interaction are likely contributing factors in withdrawal decisions made by mature-age students.

Factors Influencing Access and Retention

Many non-traditional students may be at a disadvantage with regards to accessing and persisting through higher education. It has been well established in the literature that post-secondary choices have been linked to parental educational attainment and family income levels; lower parental educational attainment levels and family incomes are known to reduce the probability of university attendance (Bell & Anisef, 2005; Brooks, 2008; Educational Policy Institute, 2008). Research has further shown that non-traditional students are more at risk and have a higher rate of attrition than traditional students (Bean & Metzner, 1985; Gilardi & Guglielmetti, 2011). Non-traditional students face the
challenge of finding a balance between their academic (institutional) and external commitments that allows them to sustain a sufficient level of engagement; it has been found that the most important variables in the retention of non-traditional students are an increased use of learning support services and higher levels of perceived social integration (Gilardi & Guglielmetti, 2011). These and other factors, and their influence on persistence, need to be explored further and examined in more detail.

Ntiri (2001) discusses access to higher education for non-traditional and minority students- those who are married, single parents, financially independent, or first-generation students. Focusing on “reentry women”, adult women who attend college while working full-time in technical, business, or professional fields, Ntiri acknowledges that many institutions do not adequately address these students’ struggles of meeting multiple and often conflicting demands of family, work, and school, while noting how the use of technology has widened access.

In a study examining the non-traditional students’ engagement styles and the impact on attrition, Gilardi & Guglielmetti (2011) found that a significant majority of participants were first-generation students, meaning that neither their parents nor siblings had a university degree. Lehmann (2007) found that first-generation students are more likely to leave university early, often despite performing well academically. Pascarella, Pierson, Wolniak, and Terenzini (2004) write that research seems to indicate that first-generation students are more likely to leave a four-year institution at the end of the first year. Reasons for leaving university without graduating appear to influenced by a class-cultural mismatch, such as not fitting in and feeling out of place and unable to relate to other students. These findings support previous research that shows integration is
influenced by socio-cultural variables. As more and more first-generation students enter university, there is a need to consider these variables in further detail, as they are mostly absent from existing models of student integration and attrition.

According to Corak, Lipps, and Zhao (2003) and Hoy, Christofides, and Cirello (2001), those from higher income families are more likely to attend university, but this gap has narrowed in recent years. Post secondary participation rates are higher for those students with more highly educated parents; it has also been found that youth from two-parent families are more likely to attend post secondary than youth from single-parent families (Finnie, Laporte & Lascelles, 2004; Finnie, Lascelles & Sweetman, 2005; Rahman, Situ & Jimmo, 2005). High school grades have also been found to influence access, and have been linked to family background and parent’s education (Finnie, Lascelles & Sweetman, 2005; Frenette, 2007; McElvoy, 2008). In their model of nontraditional student attrition, Bean and Metzner (1985) posit that high school performance has an indirect effect on attrition though its influence on college GPA.

Age may play a role in non-traditional students’ access to higher education indirectly through high school performance. Bean (1980) cites several studies showing lower high school averages for this group than traditional aged students. Bean and Metzner (1985) note that although commuter and older students are quite a heterogeneous group, they have typically been depicted in the literature as first-generation students, from a lower-socio-economic background and lower levels of parental educational attainment; more so than their traditional counterparts.

Gender has emerged as an important characteristic to consider in re-classifying the non-traditional student. Whereas historically, women were under-represented at the
highest levels of education; the larger percentage of students both entering and completing post-secondary programs are female (Canadian Association of University Teachers, 2011). Indeed, Davies and Guppy (2006) note that “Gender differences in access to university have eroded, and now reversed, but access to all fields of study has not become equal” (p.112). This statement is reiterated by Wells, Seifert, Padgett, and Umbach (2011). Bean and Metzner (1985) predict that gender is likely to have an indirect effect on attrition through family responsibilities (positive effects for women) and the opportunity to transfer to another institution (negative effects for women). Further research on the effects of gender in the contemporary university context is needed, with a shift in focus to males, who are now under-represented at most levels of higher education.

Ethnic minorities also continue to be under-represented at the highest levels of education. Studies examining the relationship between undergraduate student’s ethnicity and persistence is mixed (Bean and Metzner, 1985); it is thought that ethnicity may have an indirect effect on persistence through a negative influence on GPA as a result of the comparatively poorer education provided for minority students at the secondary level.

Tinto (1975) draws attention to the difference between part time and full time students, and the extent to which one is able to be involved in the academic and social life of university. Likewise, Bean and Metzner (1985) include enrolment status in their model of non-traditional student attrition to refer to the number of academic credits for which a student is enrolled; which is used to define a student as having part-time or full-time status. Gilardi and Guglielmetti (2011) found that being employed significantly increased students’ chances of dropping out of university by the end of the first year. It is acknowledged that unlike students who are not employed, those who have a job
experience a transitional phase of their life, characterized by turning points and changes.

Bean and Metzner (1985) look at educational goals as a background variable in their model of non-traditional student attrition, noting that at the time of enrolment, these goals may include the highest level of education sought, the amount of importance ascribed to obtaining college education, and the likelihood of completing an educational goal at the current institution (what Tinto calls institutional commitment).

Tinto (1975) examines an individual’s educational ‘goal commitment’ in his model of college dropout, noting that the degree of commitment to an educational goal is directly related to persistence. Several models of student attrition have included goal commitments as a variable (Bean, 1980; Cabrera et al., 1992; Cabrera et al., 1993). In these models, goal commitments have referred to the completion of an academic program and the attainment of a degree.

**Institutional context**

Titus (2004) examined the role of institutional context in the persistence of first-time, full-time undergraduates attending 4-year colleges and universities. Combining elements of several models, such as those developed by Berger and Milem (2000) and Bean (1990), support was found for Bean’s assertion that persistence is likely to be affected by a student’s academic background and performance, involvement, and institutional commitment. It is suggested that dissimilarities across universities may not be as important as differences between students in terms of educational goals, college experiences, and institutional commitment in forecasting the likelihood of persistence.

The influence of peers has been emphasized in the extant literature exploring differences between institutions in student persistence (Astin, 1993; Berger & Milem,
According to research conducted by Thomas (2000), peers seem to have an indirect influence on persistence through measures of integration. Berger and Milem (2000) consider how institutional characteristics such as size, control (private vs. public), selectivity, institution type, and location (rural vs. urban) may impact student outcomes (Titus, 2004). Their model suggests that student experiences (including degree of integration), background characteristics, and peer influences directly influence student outcomes through persistence. Gilardi and Guglielmetti (2011) note that while previous research does not find support to suggest that social integration has any effect on the institutional commitment of older students at the undergraduate level (Braxton & Hirschy, 2004), their own study shows that for non-traditional students, a greater use of learning support services and higher levels of perceived social integration are essential contributing factors in retention. Future research should explore further the role of social integration in the persistence of non-traditional students.

In addressing the role of incongruence in the voluntary withdrawal of undergraduate students, Tinto (1993) writes that incongruence results from the student’s perception of not fitting in or of being at odds with the social and intellectual foundation of academic life. Social and academic integration, then, do appear to be critical factors in an analysis of student persistence. Similarly, Bean (2005) discusses institutional fit and institutional commitment, or loyalty, as factors to consider in understanding retention at the undergraduate level. The former refers to a sense of fitting in with others, and the latter refers to a commitment to the institution. Students who experience incongruence, or a lack of institutional commitment, may choose to transfer to another program or institution, and technically are not considered to be ‘drop-outs’ in the traditional sense.
Nonetheless, it is important to know the reasons why students choose to ‘switch’ as opposed to withdraw.

**External Influences**

Astin (1984) notes that increased rates of undergraduate program completion may be attributed to increased levels of student involvement. It is clear that students also belong to other “external communities”, such as family and work; this is especially true for non-traditional students. Student may not be their dominant identity. These external influences may affect integration and can play a role in a student’s decision to either stay enrolled in university or dropout (Tinto, 1993). This is particularly true for non-traditional students. Students must thus learn to negotiate role conflicts. External commitments place demands on students that may result in limited involvement in communities of the institution and department.

Referencing Bean (1983; 1990), Titus (2004) devotes a discussion to what he calls environmental pull variables, such as a lack of financial resources, relationships, opportunities for transfer, employment and family responsibilities, acknowledging that these may affect a student’s decision to leave college. These variables may have a particular influence for non-traditional students, who seem to be more affected by the external environment than by a lack of social integration, which is known to affect traditional student attrition (Bean & Metzner, 1985).

In their conceptual model of non-traditional student attrition, Bean and Metzner (1985) note that psychological outcomes (utility, satisfaction, goal commitment, and stress) are most directly influenced by academic and environmental (described here as external) variables, as well as by background and defining variables. They draw a
possible link to social integration. These factors are highly influential in students’
decision-making process of whether to persist or to withdraw.

Summary

Models of higher education pathways and transitions have historically been
developed with the traditional student in mind and framed in an institutional context that
has changed considerably over the past several decades. It has been argued in this paper,
however, that there is value in re-visiting these models to further our understanding of
university access and retention. Research focusing on the contemporary student is
needed, in which factors believed to be influential from the extant literature are tested,
and new models are conceptualized, with considerations given to what constitutes a non-
traditional’ student in the modern university. Further research should also explore the role
institutional context plays in promoting and/or inhibiting student access and retention,
given the increasing use of the virtual’ classroom in higher education.

A re-envisioning of student attrition and integration models, incorporating current
literature on access, retention and both the traditional and non-traditional learner, may
prove beneficial in uncovering some of the underlying reasons for varying participation
and completion rates among different student groups, and may be of interest to
policymakers and educational administrators as they seek ways to widen access and
promote success among those who pursue higher education.
References


Greene, M., & Kirby, D. (Forthcoming). The impact of tuition fees on access and student migration: Lessons from Canada's Atlantic coast. *Journal of Widening Participation and Lifelong Learning*.


Reworking the student departure puzzle (pp.127-156). Nashville, TN: Vanderbilt University Press.


