STUDENT RETENTION – A MOVING TARGET

BY

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OVERVIEW

Student retention, along with its inverse, student attrition, has become a preeminent performance indicator for universities in recent decades, perhaps more visibly south of the border, but increasingly in Canada as well. Madgett & Belanger (2008) identify retention as an attractive method for nations to ensure a steady supply of university graduates and alleviate skills imbalances and shortages. Universities might once have considered their *recruitment* efforts at the front of the pipeline to be more powerfully indicative of success (the size and quality of the pool, the selectivity of offers, the yield on those offers and the entering averages of the class). But the focus has moved down the pipeline to the *production of student success* during student matriculation (through student retention and earned postsecondary education credentials). Indeed, there are now thousands of articles, scores of books, and an entire scholarly journal devoted to student retention.

INTRODUCTION

How important is the problem of retention? Parkin and Baldwin (2009) note that somewhere between ten and twenty percent of postsecondary students do not complete their degree of study and many more take longer to complete their degree than expected. This is a lower percentage than previous believed. Grayson and Grayson (2003), looking at institution level data, noted that first year attrition rates were approximately twenty to twenty-five percent, with only sixty percent of students expected to finish their education. The difference in rates can be attributed to the shortcomings of institution specific studies. However, this sixty percent figure is misleading in that it does not account for students who take longer than anticipated to finish their

degrees. Therefore, it understates the number of post-secondary students who complete a degree.

Finnie and Qiu (2009) find that persistence rates differ across the type of postsecondary institution, with universities having higher persistence rates than colleges. They calculate that roughly 22.6 percent of college students drop out after the first year compared to 15.1 percent of university students. They also note that men leave universities at a higher rate than women, but the leaving rate is roughly identical at the college level. However, college students from single-parent families and from families whose parents have lower incomes are more likely to drop out, while these characteristics do not impact persistence among university students. A number of studies point to the importance of retention; however, the overall picture may be blurred. Meanwhile there are other policy and operational issues that need to be considered. This discussion paper will entertain two important questions and provide some suggestions for moving forward. They are:

- Should we consider a cost-benefit analysis of retention?

- Where does retention fit into quality agendas and performance benchmarks?

A. THE ENVIRONMENT

Universities have experienced several profound changes in their operating environment over the past several decades. Many authors have pointed to the many challenges in recent years:

- Moving from a service to the privileged in society to serving a much wider clientele.

- Moving from instructor-centered approaches to knowledge transfer to student-centered and participatory approaches to learning.

- Moving from low to high use of technologies.

- Moving from a largely Canadian student population to increasingly more international students.

In addition to these large shifts, we have seen a variety of new kinds of students entering

universities, such as those explained by David Foot (2001) and Don Tapscott (2009) in their descriptions of generational differences, younger students, more international students, a larger proportion of older students. With all of these changes, the notion of retention has also moved forward and the methods we have used in the past may no longer fit a changing environment.

University administrations invest heavily in those areas thought to have an impact on student academic success — preparation, transition programming, first year experience (FYE) programming, academic advising that can identify students-at-risk and intervene to help them, academic skills enrichment, and peer advising, to name a few — and the provision of integrated services, curricular and co-curricular, to treat/benefit the whole student. And yet, retention remains a summational index, one that attempts to respond in a very general way to the overall quality of the student experience and the world of possibilities offered up to students in a variety of ways including through:

- challenging and interesting courses

- appropriate counselling

- effective orientation

- engagement with faculty

- relationships with other students

- the quality of the physical environment

There are also a number of other factors in student lives that may affect retention such as the prevalence of dysfunctional and disruptive behaviours, financial and familial stressors, and so forth. *In other words, part of the attrition rate may be unlikely to move significantly with the introduction of targeted ameliorations and would take generations to be addressed in a significant way.* Indeed, most retention efforts ignore the diversity that characterizes attrition causality and aggregate the data in ways that may mask the complex challenges to retention.

B. RETENTION DEFINED

Parkin and Baldwin (p 65, 2009) define persistence as "*the ability of students to continue their postsecondary studies from one year to the next and ultimately to proceed to the completion of the program*". Student integration theory in Tinto's (1975) work argues that academic integration, social integration and institutional commitment are the main factors affecting retention. Tinto stated that a student's integration results from being positively matched, which is to say an overall connection to the institution. Other researchers found that students were reluctant to leave an institution once they had become an active organizational member (Gasser, 2006; Rivas, Sauer, Glynn, & Miller, 2007). Bean (1981) and Pascarella (1985), in the early to mid-1980s, added to Tinto's model with discussions about the impact of external factors such as environmental conditions and student characteristics. Among these factors were causal effects including pre-university characteristics (peers, advisory services, campus visits, etc.), grade point average, the student's perception of the quality of education, and institutional support services (Sauer & O'Donnell, 2006). These models allowed institutions to develop a more holistic view of the problems at the time and were largely complementary.

Although the Bean and Tinto models still form a large portion of what we understand today about retention, many other factors have been added, lending more complexity to the situation. For example, Cabrera et al. (1992) and later Strauss & Volkwein (2004), added intellectual development, encouragement from significant others, financial aid, social integration, as well as pre-entrance academic performance and college (university) grade-point average to the model.

Retention itself is also changing as a result of environmental factors and generational differences. For example, transfer students may have different needs and may be slightly older with more life experience. International students are growing in numbers and may have different needs relating to integration, language, and cultural understandings. As a result of government and institutional efforts, we have begun to perceive a relatively homogenous group of students as a more multicultural population, with wider age groupings and different

experience levels who have had a significant impact on retention strategies.

Despite an improvement in our understanding of the factors that affect retention, we are still lacking a "real" definition of student success. For example, should increased retention always be considered a success factor? Are there not times when retention could be viewed negatively? For example, are retention efforts forcing some individuals to follow a path they are not ready for, or being pulled away from a more appropriate career? Parkin and Baldwin (2009) note that poor persistence is not necessarily a bad outcome as there are several valid reasons whereby discontinuing studies is the most appropriate action for a student. However, for individuals in a developed economy, lower educational attainment generally results in lower income and perhaps a lower quality of life. For institutions, poor persistence is often viewed as a misuse of resources. If the term 'structural retention' could be used to measure the expected percentage of attrition (which may be regional rather than system-wide based on differences in predominant occupations), it may be possible to come closer to understanding the real measure of the problem. This topic is considered further in the cost-benefit section below.

Definitions of retention must also include timeframes. Is the measurement short or long term? If retention were measured in a wider timeframe, it might yield quite different results. For example, some students might return better prepared, more motivated and focused after years of absence. A longer view of retention may also allow us to follow the path of students so that registration at other postsecondary institutions, whether within the province or elsewhere, could be determined and featured in our evaluation of student success. The shorter timeframe, which dominates current discussions on the topic, leads us to question whether retention is an adequate measure of success since it does not take into consideration the movements as well as the different perceptions of newer generations in terms of achievement and time.

The above-noted descriptions of retention also neglect to consider measurement of attrition in different phases of the process for students. For example, should we also be evaluating retention before a student enters the university such as taking

into account factors that retain students from the application process, to acceptance, to registration, and initial enrolment? The statistics, as presented today, are strictly concerned with enrolled students (generally late fall of first semester) and misrepresent the overall picture in that they may not include the value and outcome of efforts spent in earlier stages of the post-secondary recruitment process.

C. RETENTION – WHO IS RESPONSIBLE?

The job of retention has moved from an institutional responsibility to a 'community' responsibility. Encouragement from family members and friends, involvement in work placements are examples of community-related activities. Further supporting this argument, Finnie and Qiu (2009) note that older students are less likely to switch programs in university, but more likely to quit without completing a degree, and they ponder whether increased family and other responsibilities put different pressures on older students. Bar-Telford et al. (2003) note that financial constraints are not the key reasons why students drop out of postsecondary education, but rather the lack of motivation or interest in either their programs or postsecondary education in general. Research is starting to show that retention is a wider responsibility.

While universities are responsible for dealing with retention issues within their own institution, an argument could be made that responsibility for ensuring adequate academic skills are present in incoming students lies within the entire provincial education system. In this context, universities are the recipients of students, the majority of whom have graduated from Ontario high schools that have ostensibly provided adequate academic preparation for study at university. However, many students entering university clearly have difficulty with basic literacy and numeracy skills. These difficulties undoubtedly affect their ability to remain in postsecondary education. Moreover, once students have entered university, it is challenging to provide remedial training in basic reading, writing, and mathematical skills. Although university faculty consider that deficiencies in these basic skills have a major impact on some students' success in university, most estimates of the prevalence of this problem are based on hearsay and anecdotal

evidence. Another factor that will play an increasing role in how academic preparation affects retention is the potential for increased numbers of international students, some of whom may have limited language skills.

Universities themselves have a limited range of options to address deficiencies in academic preparation. One strategy is to admit only students with the highest grades, thereby reducing the need for remedial support (which would be appealing to faculty) but also limiting the ability of the universities to take in additional students and associated provincial funding (which may not be appealing to university management). The other strategy is to admit students with a wide range of academic preparation and use some of the funding from these additional students to support remediation services for those with limited academic preparation. The second strategy carries a high cost: the probability that students with limited academic preparation will take longer to graduate, as well as having a higher probability of leaving their program before completion.

Each institution has assigned someone or a whole department to coordinate retention activities; but since it is really everyone's job given the wide-ranging factors discussed by theorists, this is not an easy task. Retention is a strategy whose execution should be ingrained into the regular discussions by stakeholders and made into an output measure to measure progress. It means empowering teams to generate discussions and roundtables on the topic, and charging each faculty and department with the responsibility of improving retention rates.

At the teaching level, quality indicators measure the time spent by professors on students, the number of students participating in research and faculty activities. But are we measuring progress made on teaching approaches that meet the needs of newer generations of students, and and a wider range of international students? As discussed in an earlier paper on participatory approaches in the classroom (Albert & Campbell, 2008), today's students are 'digital natives' who expect wider uses of technologies and also more participatory approaches to learning. International students may be expecting better integration measures. These may all be features of the retention agenda that need to fit into an overall strategy execution plan. Faculty members

need ongoing, solution-driven discussions about how to meet differing student needs.

At the student level, we need advice and active support to promote a better integrated environment that could include mentorship, better social programming, and activities that improve the sense of belonging and pride in the student's institution. A sense of stewardship should be cultivated, and more outreach is needed. In a period of budgetary cutbacks, it can be difficult to continue to promote soft activities; however, if a cost-benefit approach can demonstrate positive returns, then the investment is warranted. It could mean decentralizing the production system on retention (spreading responsibility more widely through the organization with faculty-led activities) and providing more stakeholders the means necessary to engage students.

Institutional efforts are quite wide ranging and involve many departments including those that offer introductory workshops, visits to the university and/or faculty, departments that offer 'how to' sessions, support services and counselling and so forth. The next section will discuss the need for evaluating the efficiency of these activities as too little attention is paid to the real benefit derived from each activity.

D. RETENTION – COST BENEFIT

Is there a structural attrition rate that cannot or perhaps should not be reduced through social-academic "engineering" of the sort discussed above? Is there a law of diminishing returns that applies to this area? It has been suggested that we consider a structural attrition rate similar to structural unemployment figures (a percentage considered a normal rate which takes into consideration movement between institutions and perhaps other factors). Some students may typically feel that the experience is not for them, according to a Statistics Canada "Youth In Transition Survey" study completed by Ross Finnie using national data (based on as many as thirty percent of students responding to a national longitudinal survey on why they had left their post-secondary education). The maritime study employed PSIS administrative data and was a census carried over four years. The study identified that students may return at some time in

the future once they are ready, but the switch or pause rate was unexpectedly high.

"A student who leaves a particular postsecondary education program or institution is not necessarily a loss to the post-secondary education system as a whole, and may well go on to continue and complete a post-secondary education program elsewhere," indicated Dr. Richard Dominic Wiggers of the Higher Education Quality Council of Ontario (HEQCO) in a presentation to COU's Academic Colleagues in February 2010. An institution should not be penalized because a student transferred elsewhere or because an individual student made a poor initial selection or was not prepared for the transition into postsecondary education.

Finnie and Qiu (2009) note that tracking of persistence for public policy use requires a large database of information on individual students including demographic characteristics, parental income, education levels and attitudes that might impact persistence (do students like school, why are they in school, do they or their parents value postsecondary education). This needs to be matched to the specifics of each student's post-secondary education experience – school attended, level of study, major selected, and school performance. We contend that without this full database, it is difficult to define the underlying reasons for poor persistence and therefore identify tools through which to improve the persistence of at-risk students. However, current data suggests that the use of a one-size-fits-all program to improve retention rates is bound to fail mainly because the reasons why students leave post-secondary education are complex.

Our efforts may be better spent identifying where the line is that separates good student-success initiatives from academically-unpalatable "retention at all costs" strategies and determining how we will know if a university crosses that line. For example, we should considering asking ourselves:

- How valuable is the aggregated first-to-second year retention rate as a university performance indicator?

- Does it capture academically brilliant students bored with the classroom along with the "less academically prepared" students who are not ready for university life?

- Is it helpful to have students experiencing severe emotional and mental distress statistically bundled with those disinterested in academic achievement or unsure of what (or whether) to study?

- Do we need to disaggregate the data and look at the attrition rate and students-at-risk as more variegated phenomena?

- What role do factors entirely external to the PSE institution itself – such as urban vs. rural environments or the current recession – play in shifting retention rates?

As mentioned earlier, more attention should be paid to what we are measuring and when. Otherwise, the statistics do not provide enough valuable information to make the right strategic decisions in terms of retention investments.

If we consider a cost-benefit approach to retention, we need to ask ourselves questions about values that need to be measured and also the likelihood of succeeding in our retention plan. We should also consider what success truly means. Pausing or dropping out altogether may be in the best interest of the student. In addition to the questions above, universities may also want to consider:

- The direct resources required of the university to impact certain variables in the retention model (or the activities that the model undertakes beyond the classroom to retain students).

- The real impact that some interventions may have on retention. For example, university 101 courses that teach critical thinking as well as study, research and library skills and critical thinking may have limited impact on overall retention among 'at risk' groups (as evidenced by recent Nipissing and Carleton studies funded by HEQCO). General remedies for all students are not really sufficient to help 'at risk' students. Special remedies are required. While universities have not historically forced students into taking these kinds of courses or other types of assistance programs, some COU Academic Colleagues have suggested that an identification system and some compulsory forms of assistance ("compulsory" in terms of continuing in the

student's program) could work, although evidence would need to be collected.

- The ability that each university has to affect a major cultural change within the institution toward practices that support retention (given the collaborative rather than managerial nature of the relationship between management and faculty) may also be a challenge. For example, according to Tapscott (2009), students are asking for more participatory approaches in the classroom, but this cannot be dictated to faculty. Although desirable, participatory approaches are also negatively affected by ongoing increases in class size. There are a number of changes facing our universities, from generational differences to an increasingly larger proportion of international students. Each shift brings about its own change requirements, and without change there may be attrition.

- How to affect enough of a change so as to lead to a comprehensive and sustainable outcome. For example, on the question of student engagement, can the practices of one professor or program unravel the combined work of many others?

- Will efforts to increase retention be truly beneficial? For example, if the student is not ready and needs time to consider his/her options (travel, work, etc.), or going back to another postsecondary education program, will our intervention have a negative effect? Is it possible that we could be impeding a positive change for the student and for society in general? Eid and Neil (2008) examine the decisions of students who have left a program or institution but have continued their postsecondary education either at another institution or in a different program at their initial institution. They first make the observation that switching between academic programs is costly with respect to future earnings, if it delays graduation. They note that switching is generally beneficial to students. Students switch to better align their desired career opportunities with their field of studies. Attending postsecondary studies benefits information acquisition that allows them to make these choices. If this rationale

can be extended to students that leave postsecondary education, then it could be argued that leaving postsecondary education is the "right" choice.

Industry has long utilized cost-benefit methodologies to make decisions on portfolios. Governments have recently begun to move toward these types of approaches, looking to the systemic model utilized by information technology departments in the hope of arriving at a similar method for making sound, comparable, efficient decisions that will not adversely impact other aspects of the organizational environment. A number of examples are available demonstrating how senior officials in organizations are improving controls and processes for making decisions such as using a cost-benefit model, looking at investments in a portfolio approach with expectations around proving the value of projects, having proposals demonstrate sound execution plans before investments are made, vetting change decisions through an investment body, and placing resources into change management expertise to facilitate adoption. Without expectations around success rates or project outcomes, it is not possible to properly monitor and evaluate programs and more difficult to achieve results.

E. MOVING FORWARD; CONCLUSION AND RECOMMENDATIONS

In an environment where growth is an important government agenda, retention as a key performance indicator may be counterproductive. Growth objectives are correlated to attrition in that universities who openly welcome students are negatively affected by key performance indicators (KPIs) pegged to retention. We need the right measurements but we also need to make sure that we do not cannibalize our efforts in one direction or another. Tying university budgets to student retention will have the effect of encouraging universities to "hang on" to students to increase funding. However this will come at a cost to flexibility of student choices and overall accessibility to the system, where accessibility is defined to be movement across different post-secondary institutions over a student's career. Making it difficult for students to transfer credits to other post-secondary institutions, for example, is one way for an institution to increase retention levels. This is

obviously at odds with other mandates of the provincial government.

Put simply, it may be time to reconsider the investments in retention and our use of retention statistics in university rankings and comparisons. Among the suggestions for further evaluation are:

- Universities need to become more strategic in their investments around retention. This would entail measurement of current practices with a minimum return on investment if a tool or practice around retention is to be retained. There will be many challenges – for example, overlapping interventions in institutions may blur the measurement of any real impact of individual initiatives.

- If retention is to be positioned as a student success quality indicator, careful thought should be given to the retention variables that relate to quality and how these will be measured. For example, leaving an institution to accept a job offer is not the same as leaving an institution because it is overcrowded with too many students in a classroom. As a result, we need to be careful about the proportion of the attrition that is allocated to quality measures (even assuming that a metric such as class size is an adequate proxy for quality).

- Retention is a moving target, affected by changes in the environment including economic conditions, social and cultural issues, technologies, and competitive environments. The topic of retention should be approached by each university in view of external environmental conditions on a regular basis, and by more stakeholders with a view to changing the tools utilised for retention to better fit environmental conditions.

- Retention statistics should not be tied to government key performance indicators because it would affect student access. The correlation between retention and access would encourage institutions to erect barriers to entry so that retention ratios could be improved. As a result, it would negatively

impact the government's strategic vision of expanding student access.

- It may be time to invest in an Ontario retention evaluation system that would track students over time as was done by the recent efforts of the Maritime post-secondary education institutions. It would allow Ontario universities to better assess students who return, entering programs in colleges, and moving across institutions. The introduction of Postsecondary Student Information Systems (PSIS) and Ontario Education Number (OEN) will facilitate this process; however, a comprehensive strategy around tracking would be needed to move this along.

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