Fiscal Benefits of Student Retention and First-Year Retention Initiatives

Student recruitment efforts require substantial institutional expenditures (e.g., hiring of staff, travel funding, and marketing costs). In contrast, retention initiatives designed to manage student enrollment are estimated to be 3-5 times more cost-effective than recruitment efforts, i.e., it takes 3-5 times as much money to recruit a new student than it does to retain an already enrolled student (Noel, Levitz, & Saluri, 1985; Rosenberg & Czepiel, 1983; Tinto, 1975). Bean and Hossler (1990) report that a student who is retained at an institution for four years will generate the same income as four new students who leave after one year.

One Canadian university factored in its average cost to recruiting a new student, and calculated that it loses \$4,230 for each recruited student that is not retained to the second year (Okanagan University College, cited in Grayson & Grayson, 2003). At the University of St. Louis, each 1% increase in first-year retention rate was found to generate approximately \$500,000 in revenue by the time these first-year students eventually graduate (Nicholl & Sutton, in Grayson & Grasyon, 2003).

Schuh (2005) offers two scenarios to illustrate the costs/benefit analysis of recruitment and retention:

Suppose, hypothetically, that the admissions budget for College A is \$1 million and the college enrolls 500 new students per year. The cost of recruitment, simply calculated by dividing the budget by the number of new students, is \$2,000. But, if the students persist to graduation and, on average, finish in four years, then the cost per student per year is reduced to \$500. To replace each student who drops out, the college must spend \$2,000, based on the preceding figure. So, the institutional cost of students dropping out is substantial when calculated on a per student basis.

Suppose that College A's persistence rate is 80 percent. If the entering first-year class consists of 400 students, an 80 percent persistence rate means that eighty students will leave after the first year. In gross terms, then, the college will have spent \$160,000 on the recruitment of these eighty students, but will have received only one year's worth of income from them. The net loss is substantial (pp. 288-289).

Besides tuition loss, postsecondary institutions lose other sources of revenue when students withdraw before graduation. For example, suppose "College A charges \$7,000 per year for room and board. If 95 percent of the eighty students who left lived in campus housing, then the amount of gross revenue lost is \$532,000" (Schuh, 2005, p. 290).

Another fiscal disadvantage associated with student attrition is that students who withdraw are much more likely to default on their student loans than students are retained to graduation—due, in large measure, to the fact that graduates are more likely to find gainful employment (Seaks, cited in Levitz, 1993). It's roughly estimated that students who withdraw from college are more

than five times likely to default on existing college loans than those who are retained through graduation (Volkwein & Cabrera, 1998).

Yet another potential source of lost revenue related to student attrition stems from the fact that students who are not retained to graduation are less likely to recommend prospective students to the institution. Also, since they are not benefactors of the institution, they are unlikely to be future donors—of either money or time to their alma mater (Schuh, 2005).

Institutional interventions designed to promote student success that use student retention as an outcome measure of success should be assessed by testing their fiscal significance as well as their statistical significance. Although the results of a retention intervention may not prove to be statistically significant, it may still be *fiscally* significant. For instance, a first-year seminar that results in a very modest 5% increase in student retention may generate a gain in the total number of re-enrolling students that does not reach a level of statistical significance (e.g., p<.05 or p<.01); however, the revenue gained from this modest increase in tuition-paying and feegenerating students may contribute significantly to the institutional budget, particularly at institutions whose operational budgets are heavily tuition dependent, such as private postsecondary institutions. Moreover, public colleges and universities are becoming more tuition dependent because of cutbacks in state support due to budgetary cutbacks (Heller, 2001). For instance, in 2002, institutional revenue generated from tuition and student fees was 26.7% for baccalaureate degree-granting institutions, 21.9% for master's degree-granting institutions, and 16.1% for research-intensive institutions (U.S. Department of Education, 2003).

An interesting test of the fiscal significance of first-year programming was once conducted by Seton Hall University. The cost/benefit ratio of its freshman studies program was evaluated by means of two statistical techniques that are commonly used in business to evaluate the economic benefits of alternative courses of action: "break-even analysis' (Larimore, 1974), and "elasticity coefficient" (Hoffman, 1986). Two faculty from the university's department of economics used these procedures to assess whether the total revenue generated by its freshman studies program equaled or exceeded the total costs incurred by the program. They found that the financial breakeven point for an entering class of approximately 1,000 students who participated in Seton Hall's freshman studies program was 21 students, which represented an increased retention rate of only about two percent. This means that if implementation of the program leads to the retention of 21 additional students who would otherwise have withdrawn from the college, the program will have paid for itself. The architects of this campus-specific study concluded that Seton Hall's freshman studies program was "cost efficient [and] will more than pay for itself in economic terms alone without taking into account the quality benefits that accrue to the university and the retained students" (Ketkar & Bennet, 1989, p. 43). These findings are consistent with early costeffectiveness research on the first-year seminar (University 101) conducted at the University of South Carolina, whose Office of Finance reported that for every \$1.00 used to support its seminar, the program generated \$5.36 in return (Gardner, 1981).

These findings suggest that one consideration that should be kept in mind when using tests to analyze the statistical significance of first-year programs' impact on student retention is that if the results do not reach a level of statistical significance, they may still be *fiscally* significant to the institution. For instance, a first-year seminar that results in a very modest 5% increase in student retention may generate a gain in the total number of re-enrolling students that does not

reach a level of statistical significance (e.g., p<.05 or p<.01); however, the revenue gained from this modest increase in additional tuition-paying and fee-generating students may contribute significantly to the institutional budget, particularly at institutions whose operational budgets are heavily tuition dependent, such as private colleges and universities. However, even public postsecondary institutions are becoming increasing more tuition dependent because of declining federal and state funding for higher education (Hossler & Anderson, 2005; Schuh, 2005). With less taxpayer dollars to rely on, public institutions must rely more on retaining students (and their tuition dollars) to maintain fiscal stability. Thus, comprehensive assessment of the impact of the first-year programming should include assessing its fiscal impact on institutional revenue as well as its statistical impact on student retention. (To this end, Noel-Levitz provides a free "retention revenue estimator," which may be accessed at the following website: www.noelleviz/com/Papers+and+Research/Retention+Calculator/)

Astin (1975) artfully captures the cost effectiveness and the educational significance of focusing on student retention as an enrollment management strategy, rather then focusing exclusively on new-student recruitment:

In four-year institutions, any change that deters students from dropping out can affect three classes of students at once, whereas any change in recruiting practices can affect only one class in a given year. From this viewpoint, investing resources to prevent dropping out may be more cost effective than applying the same resources to more vigorous recruitment. More important from an educational standpoint, changes that help students complete college, represent a real service to them, whereas successful recruiting efforts may simply change students' [initial] choice of institutions (p. 2).

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