According to the Organization for Economic Cooperation and Development's Education at a Glance 2013 report, the United States is failing to keep pace with other advanced nations in college graduation rates (OECD, 2013). In 2000, 38% of Americans between the age of 25 and 34 held a degree from a community college or four-year institution, putting the U.S. in fourth place amongst its twenty-three peers. By 2011, the U.S. had slipped to 11th place with a graduation rate of 43%. The U.S. ranks seventh in the percentage of students matriculating to a four-year college at 70%, but falls to 22nd place in terms of graduating those who matriculate (Porter, 2013).

In 2011, Harvard's Graduate School of Education released the findings from their "Pathways to Prosperity" study which examined the challenges of preparing young Americans for the 21st century. Their report states that each year, one million students drop out before earning a high school degree and only half of those that choose to pursue post-secondary education actually earn a degree. The main reasons cited for why students drop out are: under-preparation for the required academic work, financial pressures, competing demands of family and/or jobs, and their inability to see a clear, transparent connection between their program of study and tangible opportunities in the labor market (Harvard, 2011).

Purdue's four-year and six-year graduation rates for the 2007 cohort are 42% and 70%, placing us twelfth out of thirteen amongst our Big Ten peers.

An analysis of the retention of all undergraduate students who started at Purdue in the fall of 2009 was performed to see what factors or behaviors influence student success outcomes (Zehner, 2014). This group consists of not only the first time full-time cohort, but also includes those students who transferred to Purdue in the fall of 2009. After one academic year, 13% of this cohort had left Purdue (7% had transferred to another institution and 6% had dropped out completely). This 13% drop is the largest single loss of students from this cohort across four years, but accounts for only half of their total attrition. By the end of their fourth year, 24% of these students had left Purdue with 13% quitting college entirely.

Although overall persistence rates are similar, there is a marked difference in graduation outcomes between male and female students. Female students graduate in four years at a rate of 52% while male students' graduation rate is 39%. The lower performance of male students is even more critical when you consider that they make up 57% of this cohort. Male students represent the largest category of underperforming students at Purdue when you look at factors like gender, ethnicity, and residency. Any serious effort to improve retention and on-time graduation rates at Purdue in a substantial way must focus attention on this group.

Of the 711 students who transferred to another institution, only 25% earned a degree.
What student behaviors indicate better four year outcomes? Forty-seven percent of this cohort changed colleges (CODO) at least once during their first four years at Purdue. Students who CODO have longer times to degree on average (4.67 years for CODO students, 4.29 years for non-CODO), but the attrition rate of those who CODO once is only half that of students who never CODO.

Some students believe that taking a "lighter load" will allow them to focus more on the courses they are taking and get better grades and better outcomes, but the data does not support this assumption. Of those students who consistently take less than 15 credits each semester, less than 20% of them remain at Purdue after four years and only 1% of them graduated within four years. Those who consistently take more than 15 credits are retained at the same rate as the overall cohort, but have a graduation rate 20 percentage points higher than their peers.

In terms of retention, the best results are seen for those students who participate in the university's Cooperative Education programs or who take at least one summer school course from Purdue. Both have combined four-year retention and graduation rates of over 90%. While participating in Co-op defers academics for the sake of practical learning in the workplace, the four year graduation rate of these students is only seven percentage points lower than the overall cohort. Summer coursework presents an even stronger behavior associated with graduation rate. Of students who took at least one Purdue summer course, 54% of them graduated in four years.

A regression model was used to investigate which characteristics or behaviors are associated more with four-year graduation rate. The characteristics and behaviors that had the strongest negative association are "took less than 15 credits each semester" and "academic probation at any time." All of the remaining behaviors had a positive association with four-year graduation rate with "always took 15 or more credits" and "took any summer courses" having the strongest association of those measured in this study.

These behaviors and characteristics also affect male and female students differently. Six of the seven behaviors are statistically significant for women, while only five are significant for men. There are also differences in how much each behavior is associated with four-year graduation rate of women versus men. Overall, when considering all the variables in conjunction, women exhibited a greater relationship between taking more than 15 hours and summer courses than men.

For this cohort, raising the four-year graduation rate to 50% would equate to approximately 300 additional students. As this data shows, those students who take 15 credits or more or take one summer school class are more likely to graduate within four years. Encouraging this behavior can pay large dividends for students.

Aβ

References: