

Why Undergraduate Students Leave Indiana State University

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Decades of retention research on college student departure reveals that the answer to the question, “Why do students leave?” belies a simple answer. The best models typically predict at most 30% of the variance in the dependent variable (i.e., leave or not). When pressed, scholars often suggest that the most important factors are those embedded in hard to measure aspects of the campus culture and climate and a general orientation that faculty and staff have toward their students. Very recent psychological research, for example, suggests that the degree to which a student feels they belong at a particular college, or believe that high achievement is possible through hard work vis-à-vis perceived fixed intelligence, may be among the most important factors associated with staying or departing (Dweck, Walton, & Cohen, 2014).

That said, the hundreds of research studies done to date, and close study of ISU students specifically, reveals the following themes of note as to why ISU students leave.

Underpreparation – At ISU, the mean HSGPA for Fall 2014 incoming freshmen was 3.07. The average SAT score was 918, approximately in the 35th percentile nationally¹. Figure 1 presents the retention outcome for the Fall 2013 cohort broken out in various ways that provides a window into underpreparation’s impact on retention.

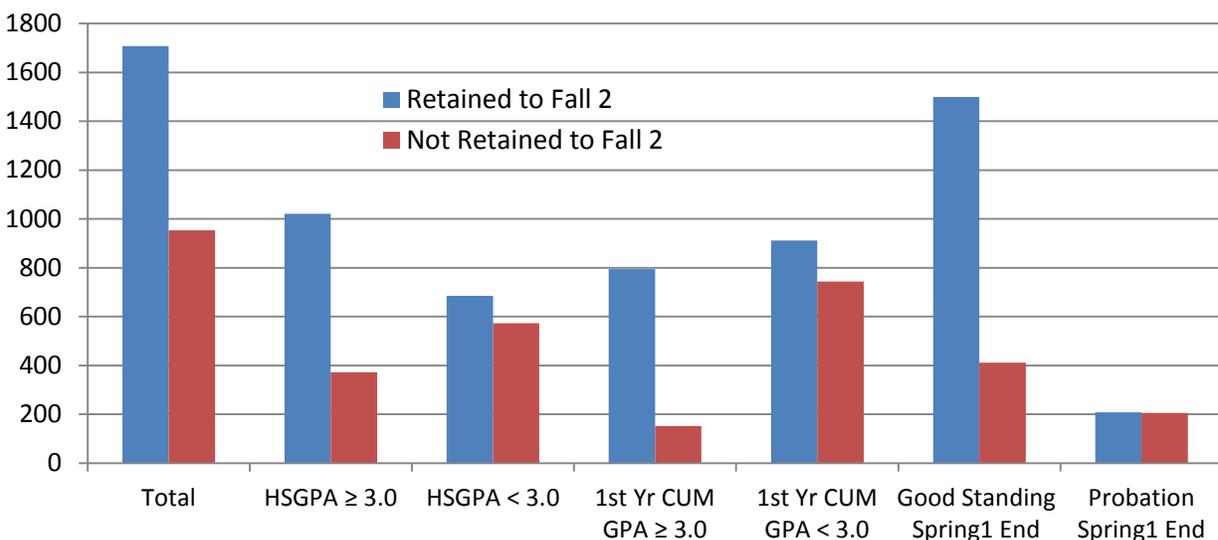


Figure 1. Fall 2014 Retention of 2013 First Time Freshmen Cohort.

The above results indicate that a much larger proportion of the students who did better academically in high school and/or in their first year of college were retained to the second year than their lower performing counterparts. Nevertheless, it is important to point out that nearly twice as many students in good standing were non-returners for the second year than those who were dismissed or on probation (see Figure 2).

¹ In other words, 65% of all test takers from the 2014 high school class scored above this level.

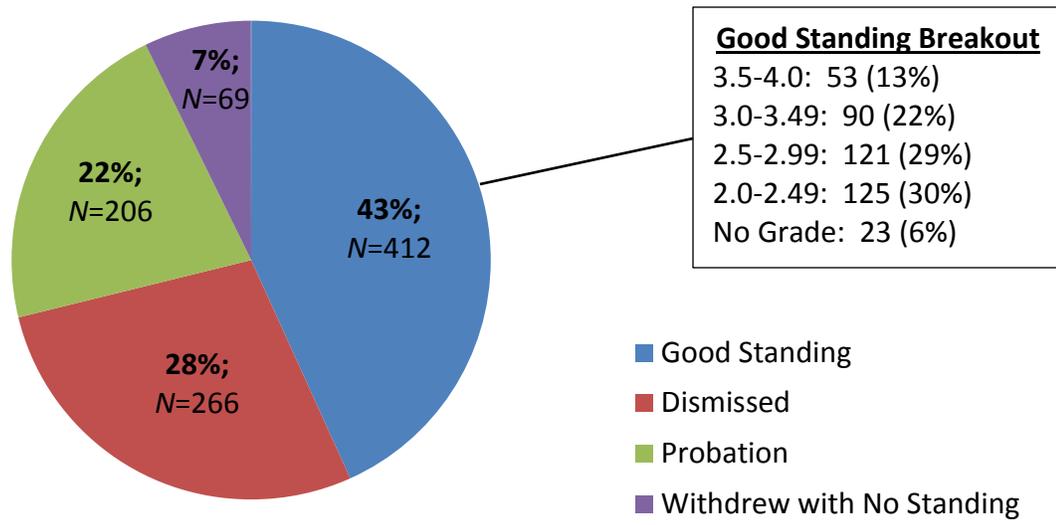


Figure 2. Fall 2013 Cohort Non-Returners Fall 2014.

Recent inferential research conducted by the ISU Student Success Council revealed that for every 1 point increase in high school GPA, students were 1.7 time more likely to return the second semester ($p < .01$) and 1.3 time more likely to graduate in four years ($p < .05$). There was no significant relationship with six-year graduation, inferring that low performance in high school appears to have a time bounded impact on completion. With respect to first-year academic performance, for every 1 point increase in first term GPA, students were 5.6 times more likely to be retained to the second semester ($p < .001$). It was not predictive of four-year graduation. It was negatively associated with graduation between four and six years ($p < .01$) however, inferring that students who do less well academically in the first year are more likely to graduate between four and six years. Another study by the Office of Institutional Research examined the academic performance of 4,881 students from the 2006-2008 cohorts and noted that underprepared students to ISU reinvent to do well roughly at the same percentage as students who do well in high school and underperform in college (Figure 3)². Reinventors also graduated at a much higher rate than underperformers (51% versus 27%), with the truly underprepared graduating at the lowest rate of all (17%).

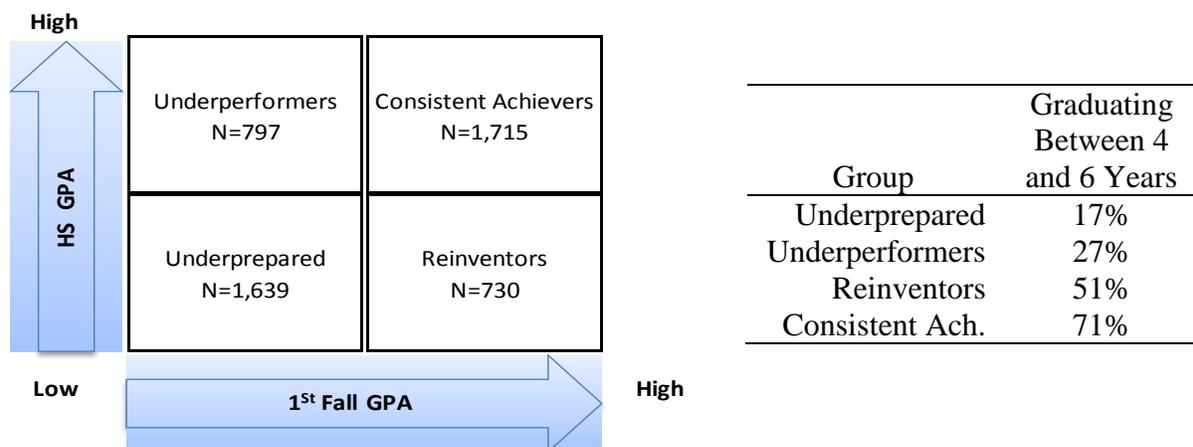


Figure 3. Matrix of First-Year Performance.

² Median HS GPA of 3.0 and median 1st Year GPA of 2.9 were used to denote the groups.

Financial Challenge – Numerous national news stories and studies have noted the rising cost of college and the fact that lower income students are especially vulnerable to the challenge of paying for college and remaining enrolled. Here at ISU, average unmet need grew nearly 17% between 2010 and 2012 (\$3,229 to \$3,765). However, average unmet need is disproportionately felt by students with HS GPAs below 3.0 versus those above 3.0 (\$4,662 versus \$2,992), in part because ISU mainly provides institutional aid in the form of merit and to students above 3.0. Figure 4 shows the effect on retention. The data reveal that students with lower levels of unmet

| | Average Unmet Need | Average Inst. Aid |
|-------------------|--------------------|-------------------|
| Retained to Yr. 2 | \$2,292 | \$8,404 |
| Not Retained | \$5,443 | \$6,632 |

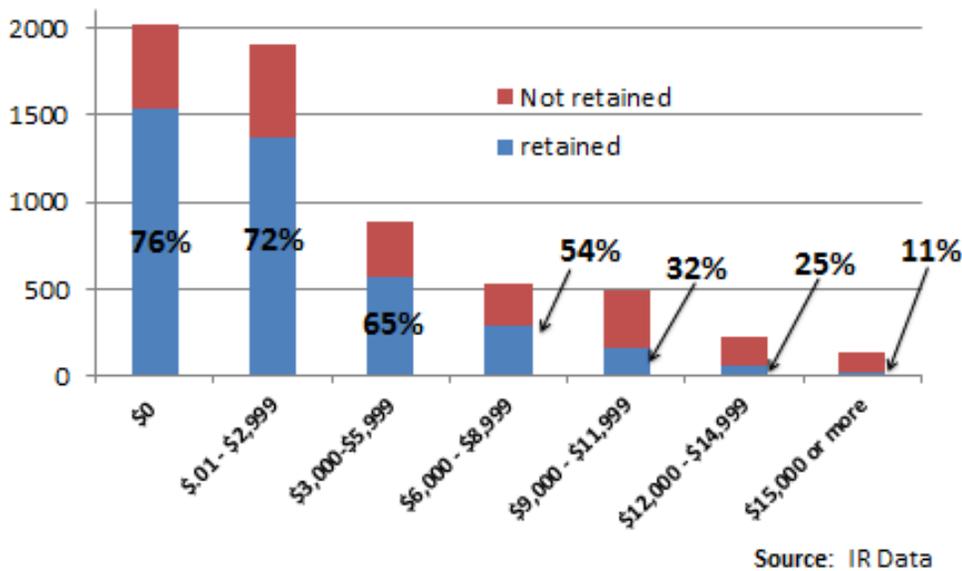


Figure 4. Unmet Need's Effect on Retention: 2010-2012 Cohorts.

need are more likely to be retained than their counterparts with higher levels of unmet need. Furthermore, some students (216 this past year) sought the ability to use the next term's aid to pay off the previous term's bill, a practice that has been ended to ensure compliance with federal regulations.

Another window into the effect of finances on retention, and persistence to degree, are financial holds. If a student cannot pay off their term bill by the deadline, a hold is put on their account that prevents their registering for the subsequent semester. If it remains unpaid into the next term, the bill is transferred to collections. Table 1 shows the number and percentage impact on retention of students from the 1st year, 2nd year, 3rd year, and 4th year cohorts who were enrolled Spring 2015 and otherwise appear eligible to enroll³ for Fall 2015. As of August 17, however, they had a financial hold that prevents it. As can be seen, these numbers are not inconsequential and range from a one percentage reduction in retention to a three percentage point retention

³ No other holds and not dismissed from ISU.

reduction impact. A total of 227 students were in this circumstance, a number that is likely undercounted since some students who were not enrolled this past spring, but had a hold, might also have sought to enroll if they could.

Table 1

Number and Percentage Impact on Retention of Financial Holds of Students Who Otherwise Appear Eligible to Enroll (as of 8/17/2015)

| Cohort | Number of Financial Holds | Approx. Impact on Retention |
|--|---------------------------|-----------------------------|
| 1 st Years (Fall 2014 Cohort) | 87 | -3.0% |
| 2 nd Years (Fall 2013 Cohort) | 39 | -1.2% |
| 3 rd Years (Fall 2012 Cohort) | 28 | -1.0% |
| 4 th Years (Fall 2011 Cohort) | 73 | -2.5% |
| Total | 227 | |

Time to Complete – For at least the past 15 years, the four-year completion rate has hovered around 20% and the six-year rate around 40%. What is less well known, is the credit hour accumulation patterns that are behind graduation rates. At present, from among the 2010 Cohort that has graduated within 4 years, the average accumulation was 132 credit hours. For the 2008 Cohort, students that graduated within 6 years had accumulated an average of 140 credit hours. Although the reasons students take more than 120 credit hours is multifaceted, it nevertheless represents thousands of dollars of investment on the part of government, families, and the students themselves beyond what a bachelor’s degree is supposed to be in credit hours. From a time perspective, assuming the student is enrolled full time, it represents 1-2 additional semesters of coursework beyond 120. The opportunity cost of each additional semester of schooling can be upwards of \$25,000, inclusive of school expenses and unearned wages. Such choices are especially difficult ones for low income students, particularly with aid programs that are increasingly running out after four years and likely why so many of the seniors that withdraw from ISU indicate financial difficulty as the reason for doing so.

Additional analyses of the 2008 starting cohort revealed that two-thirds of the four-year graduates kept the same major for their entire time at ISU. For those that graduated in five or since years, approximately one-half changed majors to a completely different department.

Transfer to Another Institution – Data from the National Student Clearinghouse shows that among the ISU students that transfer to another institution, approximately 64% transfer to a community college, 50% alone to Ivy Tech. This phenomenon is known as reverse transfer. Among those that transfer to a four-year institution, the most common choice is IUPUI (5%), IU-Bloomington (4%), Purdue-West Lafayette (3%) Ball State (3%), and the University of Southern Indiana (2%). The rest of the transfers do so to an amalgam of institutions primarily in the Midwest. A 2013 study of students who withdraw from ISU indicated that for freshmen, transferring is the second most common reason for leaving (18% of all responses) behind academic dismissal (19%). For sophomores, transfer is the top reason for leaving (24%). For juniors, transfer falls to 4th (11%). Because financial difficulty is in the top two to four reasons for withdrawal for all class years, this issue is likely a factor explaining why so many student transfer to a community college, including 42% of the students who transfer in good standing.

MAP-Works data also provides a window into transfer, namely that some ISU students start here with the intent of transferring later, sometimes because they could not get in elsewhere and need to get their grades up to be admitted. Given that MAP-Works data also indicates that the commitment students feel to ISU is somewhat below the average among all institutions that participate in MAP-Works surveys, this is further evidence for why students may seek to transfer.

Academic and Social Engagement – Numerous studies note the criticality of students feeling academically and socially engaged in college given its effect on a range of outcomes including retention and completion (Pascarella & Terenzini, 2005). Among the academic factors research on ISU students has shown are significant predictors of retention are having decided a major of interest (although not necessarily having declared), knowing one’s advisor, and attending class. The social factors that were significant predictors included satisfaction with social life and intention to participate in a student organization. These collective findings came from an inferential study using MAP-Works data. Other data from the National Survey of Student Engagement (NSSE) indicates that for freshmen, effective teaching practices and reflective and integrative learning are rated below the average for our our peers while for seniors, collaborative learning is rated below the average of our peers.

What Can Be Done

Although there are other factors associated with why students leave, these are the ones that have been particularly evident. At the institutional level, specific actions have been taken in recent years to address some of these issues including the establishment of University College, innovations in summer bridge programs and academic year supports for at-risk students, investment in student activities to counter suitcase campus perceptions, and most recently, plans that are underway to provide more institutional need based aid. While retention gains have been realized in the last few years, even despite falling average SAT scores, overcoming challenges to a student’s sense of belonging and of substantial underpreparation over many years of student pre-college experience is not realized quickly. Yet, in the latter case anyway, the data do evidence that the effect of pre-college academic achievement declines with time and is not even predictive of completion after four-years.

Nevertheless, more students are coming to college underprepared for it. Institutions that are most effective at improving such students’ success rates are emerging as the most important institutions to the nation’s future. An intrusive commitment to students early in their college careers, reinforced with a strong dose of messaging of high standards and belief in their ability to achieve, is showing up in the research as being optimal for the majority kind of students coming to ISU. Moving them gradually, and developmentally, to a place of independence over time helps them to overcome what may be strong naiveté about how to be successful in college, to ask for help, and to recognize that reward comes through hard work.

Academic departments play a crucial role in the student success vision for ISU. Here are ten action step examples intended to spur ideas, although not prescribe, that previous research shows has positive student impact and that align directly or indirectly with the points made above:

1. Do you examine D/F/drop rates of classes annually and talk collectively about how to improve them through high standards coupled with innovative teaching methods?

2. Have you recently, or ever, examined the effects of your curriculum on students who change their major to something else or who transfer into your major? Can pre-requisites be made more universal?
3. Do an audit of students when they reach 60 and 90 credit hours. Should they remain in your major? Are they making sufficient forward progress, and if not, what are the stumbling blocks?
4. Are you a partner in a residential learning community, or have linked classes in your curriculum for particular cohorts of students. If not, why not?
5. Who handles advising in your department and how is it handled? Is that the optimal way or simply an artifact of convenience or habit?
6. Where might your strongest students be deployed as wrap around support to those experiencing more struggle (e.g., embedded tutors or supplemental instructors)? Can they earn course credit for doing it if paying them is not an option?
7. How might the Career Center be better integrated into your major(s) and sequencing of courses to degree?
8. Have a conversation with the faculty in other departments who teach gateway courses for students in your program. Are your needs, and theirs, optimally integrated?
9. Have you examined your student learning outcomes lately and your assessment of them to know that they are being achieved to your satisfaction?
10. Do you know where to find examples of innovation in departments like yours at other colleges and universities and have you considered visiting them or inviting them to visit you?

Resources

The research referenced in this report, as well as others, can be found in the following website locations:

The Office of Student Success (Research Briefs):

<http://www2.indstate.edu/studentssuccess/researchbriefs.htm>

University College (MAP-Works Reports):

<http://www.indstate.edu/uc/map-works/map-works-reports>

Office of Institutional Research (NSSE/FSSE/BCSSE Reports):

<http://irt2.indstate.edu/cms/ir/surveys/nsse-fsse-and-bcsse-reports/>

Office of Institutional Research (Strategic Enrollment Management Reports):

<http://irt2.indstate.edu/ir/index.cfm/sem/index>

Data at the college and department levels can also easily be mined from Blue Reports:

<http://irt2.indstate.edu/cms/ir/blue-reports/>