Research Brief: Academic and Social Factor Impacts on ISU Freshmen Retention Fall 2011 to Fall 2012 Office of Student Success



In fall 2011, 2,080 of the 2,521 FTFT-BDS Freshmen completed the MAP-Works survey (82.5% return rate, 93% of all on-campus freshmen) at week three. The 66-item survey asked students to respond to questions linked to factors that research has shown impacts student retention/success.

In this study, binary logistic regression was used to investigate the impact of academic and social factors on first to second year retention among fall

2011 FTFT-BDS new freshmen at Indiana State University. The variable factors were chosen as ones for which faculty and staff have a strong ability to affect.

Results

The results of the binary logistical regression analysis is shown in the table below.

Variables	Beta
Academic Factors	
Fall 2011 GPA	1.17***
Satisfied with the Academic Life	.06
Hours Studying per Week	.004
Confidence with Math	.19
Confidence with Writing	.05
Non-Attendance at >1 Class $(1/0)$.51*
Know My Academic Advisor (1/0)	.31**
Decided major of interest (1/0)	.42*
Social Factors	
Satisfied with the Social Life	.12**
Hours Socializing/Relaxing per Week	.02
Intention to Participate in a Student Org.	.07*
-2 Log Likelihood	1877.45
$Cox \& Snell R^2$.26
Nagelkerke R^2	.35
Percent Correct	76.5%

p*<.05; *p*<.01; ****p*<.001; ⁺*p*<.1; *n*=1,877 due to missing data.

Discussion

For the *academic factor* items, fall term performance was a highly significant positive predictor of retention to year two. Knowing one's academic advisor was also a positive predictor as was non-attendance at more than one class by week three of the semester and having decided a major of interest (not necessarily declared). Satisfaction with the academic life, hours studying per week, confidence in math, and confidence in writing were not significant. In regards to the *social factor* items, satisfaction with the social life was positively significant as was intention to participate in a student organization. Hours socializing/relaxing per week were not significant.

Implications and Recommendations

The results suggest on the academic side that classroom performance is especially important to not only student achievement, but student retention. While on one level this is intuitively obvious, it reminds how early struggle can escalate to the point where a student may feel

powerless to impact their course performance. Early messages by faculty that emphasize high expectations, but coupled with reinforcement that students were admitted to ISU because they have the tools/capacity to achieve at a high level, is important. Furthermore, making the requisite referrals to tutoring and supplemental instruction support when needed, but not from a deficit perspective, rather through an academic excellence orientation, is another mechanism to aid student achievement. Early assignments/assessments with low to moderate grade implications in which a balanced mix of positive feedback and constructive criticism is integrated, is another practice that reinforces student achievement and with strong support in the literature (Chickering & Gamson, 1987).

It is clear that class attendance is important. Once again, this is likely an intuitively obvious point to faculty, but nevertheless reminds that building in course attendance expectations, and holding students accountable for it, is important. While linking attendance to course points is one mechanism, it is not without its limitations in regards to incentivizing attendance versus learning. Having frequent and/or surprise quizzes/short reflection papers is another mechanism for encouraging attendance, as is testing on class material. Another approach is to integrate student engagement in class as part of the course grade. For helpful insights on other ways to encourage attendance, see this American Psychological Society website: http://www.psychologicalscience.org/observer/1101/tips.html.

Finally, the study results reinforce on the academic side the importance of early outreach by advisors to advisees on matters of their academic schedule, but also more broadly in the arena of developmental advising (i.e., helping students to explore their educational and profession goal interests and how courses of study can help them to get there). Of the 2,055 students who completed the question of whether or not they knew their academic advisor, 715 indicated that they did not, 35% of the sample. With the new University College, this gap in connection is on track to be addressed, but nonetheless reminds on the importance of this engagement activity. Furthermore, the finding that students who had a generally good idea what they wished to study were retained at a higher level suggests the value of early opportunities to explore major possibilities as well as career fields for undecided students, but likely all students.

In regards to the social aspect of campus life, it is clear that students benefit from that as well. Previous MAP-Works research, as well as other studies of the ISU student experience, suggests that social engagement at ISU is uneven and that a sizeable number of students have some difficulty finding a way to "fit-in" and connect with others that share their common interests. ISU also has an historical reputation as a campus that has comparatively limited evening and weekend activities to engage students in social opportunities vis-à-vis at least some ISU peers. Opportunities at small, medium, and large scales for engagement of this type would likely have a positive impact on student retention. Relatedly, it is important to note that students who indicated an intention to become involved in a student organization at week three was a positive predictor of retention an entire year later. That kind of statistical relationship reinforces the need to expand opportunities for student organization formation and pathways to involvement, an aspect of campus life that has strong support in the research (Astin, 1985).

References

Chickering, A. & Gamson, Z. (1987). Seven principles for good practice in undergraduate education. AAHE Bulletin, 39(7), 3-7.

Astin, A. (1985). Achieving academic excellence. San Francisco: Jossey-Bass.