

Research Brief:
MAP-Works: What Do We Know About Our Freshmen at Week Three?
Prepared by the Office of Student Success

MAP-Works Overview



ISU utilizes MAP-Works, a tool for early identification of undergraduate students at potential risk for poor academic performance or leaving the institution. MAP-Works is utilized by more than 1,500 colleges and universities in the United States. Here at ISU, it is used extensively by residence life and student affairs staff as a source of real time information that builds to student risk factor levels and the opportunity for intervention. It is also used by a number of academic advisors and faculty to track advisees as well as students enrolled in one's classes. In brief, MAP-Works provides enormous insight about one's students, information populated in part by ISU central data and in part by observational data from residence life and student affairs staff, faculty and advisors, and the students themselves. At the three week mark in the fall semester, we launch the Freshmen survey. It is launching this week (week of Sept. 3). This year we have added sophomore, junior, and senior modules. The sophomore module will be launching a bit later this semester.

Descriptive Findings from the Fall 2011 Freshmen Survey

In fall 2011, 2,080 of the 2,521 new Fall Freshmen completed the MAP-Works survey (82.5% return rate, 93% of all on-campus freshmen). The core of the survey was a set of 60 7-point rating scale questions (1=very poor/not at all/not at all certain to 7=excellent/extremely/always) plus 6 focused questions related to living on or off-campus in the following 20 arenas that research has shown to be factors in student retention/success:

Commitment to the Institution	Homesickness – Separation
Communication Skills	Homesickness - Distressed
Analytical Skills	Academic Integration
Self-Discipline	Social Integration
Time Management	On-Campus Living – Social Aspects
Financial Means Confidence	On-Campus Living - Environment
Basic Academic Behaviors	On-Campus Living – Roommate Relations
Advanced Academic Behaviors	Off Campus Living - Environment
Academic Self-Efficacy	Test Anxiety
Peer Connections	Satisfaction with the Institution

Among the noted descriptive findings, the five arenas with the lowest average ratings (i.e., on the greater concern for retention and success side of the scale) included:

Homesickness-Separation (*Mean*=3.53; *S.D.*=1.56)
Test Anxiety (*Mean*=3.99; *S.D.*=1.68)
Financial Means Confidence (*Mean*=4.69; *S.D.*=1.67)
Analytical Skills (*Mean*=4.81; *S.D.*=1.25)
Communication Skills (*Mean*=4.87; *S.D.*=1.13)

Inferential Findings

When compared to other institutional users of MAP-Works, including subsets in our Carnegie Class, ISU students were significantly less likely to rate items as highly in the arenas of:

Commitment to the Institution (ISU rating: 6.12)	Basic Academic Behaviors (ISU rating: 5.86)
Communication Skills (ISU rating: 4.87)	Academic Self-Efficacy (ISU rating: 5.14)
Analytical Skills (ISU rating: 4.81)	Homesickness-Distressed (ISU rating: 5.33)
Time Management (ISU rating: 5.43)	Satisfaction with the Institution (ISU rating: 5.43)
Financial Means Confidence (ISU rating: 4.69)	On-Campus Living-Environment (ISU rating: 5.65)
On-Campus Living-Roommate Relationship (ISU Rating: 6.08)	

In addition to comparisons with other institutions, a regression analysis was performed in which the 20 factors were regressed against Satisfaction with the Institution¹. The four factors shown to be significantly associated with satisfaction with ISU in order of their contribution to the model (Model $R^2 = .40$)² were:

Commitment to the Institution (contributed 22% of the model explanation)
Peer Connections (contributed 12% of the model explanation)
Advanced Academic Behaviors (contributed 3.7% of the model explanation)
Time Management³ (contributed 2.4% of the model explanation)

Implications

The results of the MAP-Works Freshmen Survey suggests that interventions in the arena of homesickness and academic and time management skill support would provide positive benefits for freshmen. Furthermore, facilitating opportunities for peer connection, both within and outside of the classroom, likely would benefit freshmen. Finally, given the extent of financial challenge that is characteristic of the ISU student body, there is an opportunity/need to devote focused attention to the packaging of need versus merit aid and gap resources that can be made available at the appropriate moments such as for the purchase of books or purchase/rental of laptops.⁴

Three examples of quick-hit opportunities in the academic domain include:

- Integration of *Khan Academy*: <http://www.khanacademy.org> or *How to Get the Most Out of Studying* video modules: <http://www.samford.edu/how-to-study> produced by Stephen Chew, Carnegie Professor of the Year, into a course.
- Facilitate a mock exam experience with the students working on the sample questions in groups and then presenting to the larger class how they would have answered them.
- Offer to join your students for dinner in one of the residence halls.

Three examples of quick-hit opportunities in the co-curricular domain include:

- Targeted residence hall floor programs on the above topics;
- Active APA and RA engagement with their assigned students on support resources;
- Campus scavenger hunts that make resource units feel more accessible.

¹ Research shows that the level of satisfaction with an activity plays a role in the degree to which an individual chooses to continue to engage in that activity. By extension, level of student satisfaction at week three provides a window into a possible downstream decision choice of a student to stay at the institution or their level of motivation to overcome challenge.

² Meaning that the model explained 40% of the variance in satisfaction with ISU, inferring that 60% of the satisfaction variance was explained by things not measured.

³ This was the one factor with a negative relationship, inferring that the stronger the time management skills of a student, the less satisfied they were with ISU.

⁴ Anecdotal evidence suggests that there are a number of students who have yet to purchase their books this semester and/or do not have a laptop.