Retention Matters

New Retention Predictive Model & FA16 Class

For other retention information, go to our web site at http://castle.eiu.edu/~core

Want to contact us? Send us an email at **core@eiu.edu**

This past spring, Josh Norman, Director of Enrollment Management Data A&R, developed a new retention predictive model matching work previously done by Noel Levitz. This new model was based on incoming freshmen from 2012, 2013, and 2014 and their retention behavior at 10th day their second year. This model included 3,428 students and over 200 data points for each student from Banner.

The top eight factors that contributed to student attrition will be the focus of CORE's work in the next couple of years. These factors will be discussed below in the order of risk from most to least.

The top risk factor was a **need gap** of $7,000 or more between a student's financial aid package and the expected family contribution. This factor was also in the first retention model, but the risk began at $9,000, so the amount at which student need contributes to students leaving has gotten lower. 16.9% of the FA16 freshman class had this indicator (n=131). The chart below shows retention percentages by need gap for the three cohorts in the model. The freshman class numbers used by CORE include students who were new freshmen in Summer 2016 and Fall 2016.

The second at-risk factor is also financial; the **percentage of need met** indicates what percentage a family needs to send a student to college that is met by their aid package. The risk is at 60% or less of need met; the original model also included this risk factor at 43%, so again, the percentage at which attrition is likely to occur has gotten greater. In the FA16 freshmen cohort, 36% or 280 students have this financial risk factor.
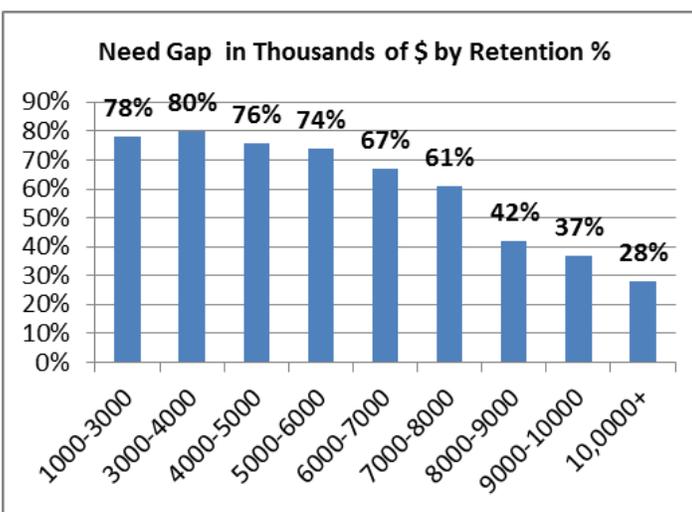
In the FA16 freshman class, 92 students have both the need gap risk factor and the percentage of need met risk factor, so these students have a great financial burdens that may interfere with their ability to afford college. This is 12% of the freshman class.

The third factor is another financial variable—**financial aid verification**. This variable was not one of the risk factors in the first model. This risk factor indicates that students who are chosen for verification by the federal government based on their FAFSA and who fail to complete that verification had a 43% freshman to sophomore retention rate compared to those chosen who did complete; the latter group had a 79% retention rate.

Since this new risk factor was uncovered in May before summer orientation, New Student Programs worked with Financial Aid to identify these students and help them and their families complete verification while they were on campus in the summer. Before orientation, there were 204 students on this list; 129 completed before orientation started, and only 18 students remained on the list at 10th day in the fall so this strategy was very successful over the

### Need Gap in Thousands of $ by Retention %

Need Gap ($)	Retention %
1000-3000	78%
3000-4000	80%
4000-5000	76%
5000-6000	74%
6000-7000	67%
7000-8000	61%
8000-9000	42%
9000-10000	37%
10,000+	28%

Enrollment data cont.

summer.

The next risk factor is **academic index**, which is a combination calculation of a student's high school gpa and composite ACT score. Students are placed into five levels. The fall 2016 class has

Academic Index & Retention %

Level 1: 90%
Level 2: 87%
Level 3: 80%
Level 4: 68%
Level 5: 66%
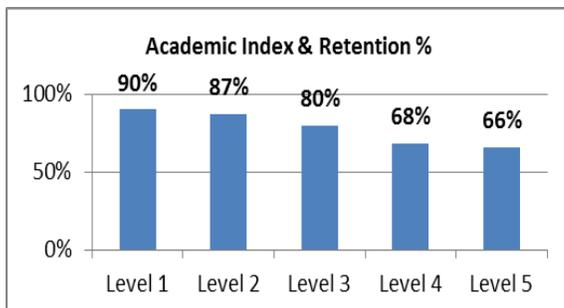
322 students (41.7%) at level 4 or 5. The table below shows the academic index level by retention percentage.

This fall 34.8% of the freshman class have an ACT composite of 20 or lower. While many of these students are in the Gateway program and receive additional support to help them succeed, not all students with this ACT profile receive additional help. Eleven percent of the class had a high school gpa below 2.5, and 16.6% had a gpa between 2.5 and 2.7. These students are likely to have less academic preparation and less -honed study skills than students with higher ACT scores, so we are reaching out through their academic advisors and University Foundations instructors to guide them to the support services that can help them succeed academically in a university setting.

A **high school gpa** of 2.9 or lower is the next risk factor, and 308 (39.8%) students in the freshman class fall into this category of risk. The table at the right shows the gpa range and retention percentage average of the three cohort classes in the model. The chart shows an 8% difference between the 3.0 and 2.9 gpa.

Admit month is the next factor on the high risk list. Students admitted to the University in March or later are much less likely to persist than those admitted prior to March (see table to the left for retention by admit month). 18.4% of the freshman class were admitted March or later this year.

Ethnicity was a factor on the first retention prediction model and it remains a retention risk in the new model as well. This model, however, includes Hispanic students, African-American students, international students, and students who indicated they were of multiple ethnicities. The FA16 freshman cohort has 44.1% of the class with this risk factor. See the chart on p.3 for the retention data by ethnicity.

The final top 8 risk factor is graduating from the **Chicago Public School system**. Students from CPS had a 61% retention rate compared to non-CPS schools at 78%. CORE knows that the other risk factors may be contributing to this percentage difference and has plans to examine this cohort by financial and academic risk factors and demographics. There are 102 students (13.2%) from CPS schools in Eastern's freshman class.

Based on these new risk factors, CORE has established three subcommittees working on strategies to help various populations succeed. These work groups are special populations, which is focused on

Admit Month & Retention %		
Month	**Retention %**	**# Students**
Aug.	88%	42
Sept.	88%	304
Oct.	84%	613
Nov.	81%	671
Dec.	76%	498
Jan.	74%	457
Feb.	70%	323
Mar.	67%	209
Apr.	58%	132
May	69%	125
June	61%	62
July	67%	43
Aug.	67%	30

minority and first-generation students; financial strategies, targeting ways to educate students on college finances and budgeting; and academic strategies, looking at institutional structures to aid students in academic success.

The academic strategies work group is preparing additional retention data to share with departments whose majors have a lower retention rate than the University average to discuss strategies to involve the major departments. This work group is also examining high D, F, W courses and the impact gateway courses may have on retention.

See the story on the following page for more information on the special populations' data and work plan for this year.

17.5% of the FA16 freshmen have no risk factor; 21.86% have only one, and 22.3% possess two risk factors. CORE is focusing its efforts on students with 3 or more risk factors, which is 38% of the freshman class. To date, we have found no easy answer to increasing retention through a model other than the more individual encounters students have with caring, concerned people faculty and staff, the more likely they are to stay.

HS GPA & Retention %		
HS GPA	**Retention %**	**# Students**
2.0-2.4	57%	343
2.5-2.59	64%	233
2.6-2.69	69%	275
2.7-2.79	72%	232
2.8-2.89	72%	247
2.9-2.99	73%	237
3.0-3.49	81%	1149
3.5-3.99	87%	688
4.00	95%	132

Retaining First-Generation & Minority Students

Nationally, first-generation and minority college students are retained and graduated at lower rates than other student groups. The national six-year graduation average for master's granting institutions is 43.5% (2015 ACT datafile).

The six-year graduation rate for minority students at EIU is 46% compared to 57% for all students, which shows an 11% difference. First-generation students have a 55% graduation rate. These percentages are for the 2010 cohort. So, while Eastern's minority students graduate at a level above the national average for all students attending college, the difference between our minority students' and all students' graduation rates is troubling.

In order to try to improve our students' graduation rate, CORE seeks to increase their freshman to sophomore retention. The chart below provides the retention prediction model averages for EIU freshmen for the admitting classes of 2012, 2013, and 2014 (the overall University freshman to sophomore retention rate was 76%).

Retention by Ethnicity—FA12, FA13, FA14		
Ethnicity	**Retention %**	**# Students**
International	59%	39
African-American	67%	858
Multi-racial	67%	83%
Hispanic	70%	238
White	81%	2248
Asian	79%	29
Unknown	77%	44

CORE is in the process of analyzing this year's freshman minority and first-generation students in light of their risk factors for attrition. Fifty-six percent of the Chicago Public School students are special admits and have a high school gpa below 2.9 indicating they will need additional support to succeed academically; 29.9% of these students are also minority students and 18.3% are first-generation, so many of them have

additional factors that put them at-risk of attrition.

An examination of this year's freshman class and the risk factors shows that 19% of the minority students and 19.5% of the first-generation students have the need gap risk factor; this percentage is on par with the entire freshman class. Twenty-three percent of the minority students have the percentage of need met factor compared to 32.5% of the freshman class as a whole and 32.4% of the first-generation students.

Fifty-four percent of the minority students had a high school gpa below 2.9 compared to 39.8% of all freshmen and 47% of first-generation students; in addition, 61.5% of minority students have an academic index placing them at-risk of attrition, which is 20% higher than all freshmen. Fifty percent of first-generation students possess this factor.

Major selection or being undeclared can also be a risk factor, and 54.8% of minority students and 57.7% of first-generation students chose departments who retention rates were below the University average.

As these factors indicate, minority students and those who are the first generation in their families to attend college, will often have multiple risk factors that inhibit their successful attendance at college.

Helping students make connections on our campus will encourage retention and success. These connections may be peer to peer, faculty to student, or staff member to student. See the sidebar for ways to build relationships with students in your classroom or office in order to help us retain our students and increase our graduation rates.

Making Connections with Students

♦ Learn their names and something personal about them.

♦ Use their names to call on them in class.

♦ Be available in office hours and invite students to come. Be encouraging and helpful when they make the effort. Meet with small groups of students to cut down on the intimidation of meeting with the professor.

♦ First-generation students may be especially hesitant to just "show up" so make appointments for conferences to break the ice.

♦ Interact personally with students before and after class. Greet them as they come in and chat about topics to show your own interests and humanity.

♦ Look for ways to recognize student achievement and efforts inside and outside of the class. An example is thanking a student for posing a pertinent question in class or praising a student for an athletic achievement. This can help validate such actions—especially for under-represented groups.

♦ Foster active learning in class by asking students to think critically and reflectively. Use the one-minute paper to see if students understand difficult concepts and invite questions in a safe environment.

♦ Refer minority men to the STRONG Mentoring group. Contact James Griffin in TRiO.

♦ Share ways to get involved in co-curricular organizations related to student majors and interests. Tell them if you are an advisor to an organization and how to get involved.

The FA15 to FA16 Retention Story

Overall the retention rate for FA15 to FA16 was 71%, which shows a 4% decrease from the previous year's rate of 75%. While some of this attrition can be attributed to the state budget impasse and student fears over the availability of MAP funding and the future of our campus, CORE has also looked at the retention data to see any trends in student types and risk factors.

This issue's cover story outlines the new retention prediction model, but the FA15 incoming freshmen were under different at-risk factors, one of which was the Hispanic Ethnic Flag. Encouragingly, FA15 Hispanic freshmen were retained at 76.2%, 5% above the rest of the freshman class and 6% above the average for this population.

The other risk factor whose retention rate was higher than the class average was the percentage of need met. Students with this financial factor were retained at 74.68% for the FA15 cohort.

The news about the other risk factors is more sobering. For the past three years, CORE has worked with advisors in the Academic Advising Center and University Foundations instructors on strategies to help students with multiple risk factors. These strategies included one-on-one meetings, referrals to support services such as career services and financial aid, presentations on study skills and money management, and class discussions on connecting to campus and where to get help when struggling academically, financially, or personally. Not surprisingly, the more individual "touches" a student had, the more likely they were to stay, underscoring the need to make personal connections with our students, which is the hallmark of an Eastern education.

Students with an expected family contribution of zero were retained at 65.7%, and those with a financial aid gap of $9000 or more had a 67.6% retention rate. These rates show that financial difficulties continue to halt many of our students path to degree attainment.

Students who did not attend EIU Reads were retained at 62.89%; this factor is a predictor of student motivation and attitudes toward education.

Students with a high school gpa below 2.84 were retained at 61.6%, indicating the need for more work related to academic success and providing students with the academic tool kit to succeed in a college environment. Honors students saw an 87.8% retention rate, showing the impact of college readiness on retention.

The other at-risk indicator related to academics is major department. Students who were undeclared or whose major department was below the class average retention rate were retained at 69.7%. This year CORE plans to continue its departmental meetings and data analysis by departments to help programs determine ways to help retain their majors.

In the FA15 cohort, several majors whose retention rates were below the class average in the previous retention model experienced gains to rates above the class average. Communication Studies and Biological Sciences saw a 72% retention rate while Art soared to 88.4%. Physics retained its majors at 78.2% and Health Studies majors saw an 80% rate. Congratulations to these departments!

Standard admits continue to outpace provisional admit students in retention with 75.7% retention compared to 55% for Gateway and 61.7% for Summer Institute students. First-generation students in this cohort had a 67.8% retention rate, so they are no longer keeping pace with the class average.

Everyone can join the work to help retain our students. Every contact with students in the classroom or office can help a student feel valued. Anyone can refer students to support services on campus or suggest a student struggling financially look for scholarships using Eastern's scholarship search. Think about how your interactions with students in your job can contribute to building that personal relationship for which Eastern is known.

Want to help with recruiting, retention, and student success?
SAVE the DATE!
Wednesday, February 8, 2017; 1:00-4:30 p.m.
for the annual
Enrollment Management Forum: Fostering Relationships
MLK, Jr. University Union