

Suggested Higher Education Modeling Variables

Here is a list of suggested variables to consider using when building a predictive model for use in higher education.

Prospect

- ProspectID
- Inquiry Source (event/channel)
- Expected Entry Term
- Gender
- PreAdmitDate (to calculate days since pre-admit)
- # Times Checked App Status
- State
- In-state Flag
- County
- Zip (used to calculate distance from campus)
- International Student Flag
- High School code (used to calculate # applicants and # enrolled from each person's high school)
- HS Type (if you have it)
- Applied flag (indicating whether the prospect applied for that term)
- Any other demographic or academic information available

Applicant Enrollment Probability (in addition to information already listed above)

- App ID
- HS GPA
- Standardized test scores (SAT Math, SAT Verbal, ACT)
- Convert ACT scores to SAT equivalent using concordance tables
- Gender
- Application date
- Age or Birth date
- Prospect Status
- Applicant type (online app, regular, etc...)
- Program (major applied for)
- Legacy student flag
- Visited campus flag (multiple flags if tracking individual event attendance)
- Expected Financial Contribution
- Financial Aid offered
- Scholarship amount offered
- Application Fee Waiver Request
- Accepted Flag (0/1 telling if the applicant was accepted, unless already in Prospect Status)
- Any other demographic, academic or financial information available

Retention Analysis (in addition to information already listed above)

- Previous semester Term GPA (if predicting for current students)
- Degree hours completed
- Degree hours attempted
- Taking developmental courses?
- Student Residential Status (living on campus, off campus, commuter)
- Major
- Multiple flag fields identifying participation in various campus activities, campus life
- Student employed flag
- Receiving financial aid
- Retention Flag (0/1 telling us if the student was lost or not)
- Any other demographic, academic or financial information available

Online Student Retention Analysis (in addition to information already listed above)

- **Student-Demographic**
 - Pell eligibility (indicator of socio-economic status)
 - Fee reduction/waiver requested
 - First generation status
 - Minority status
 - Traditional (18-24), or non-traditional age?
 - Military background?
 - Have children?
- **Student- Academic /Online History**
 - Registered for classes online vs. in-person
 - Ever attended a class on-campus
 - Whether online learner plans to attend both online and on-campus classes
 - Whether online learner is a transfer
 - Degree program applied for
 - Program changes
 - Number of previous online courses taken
- **Course-Related**
 - Amount of text vs. interactive content in the course
 - Lessons with immediate feedback?
 - Teacher interaction with students
 - Peer-to-peer forum?
- **Institution-Related**
 - Program level (Associate vs. Bachelors)
 - Student orientation required?
 - Student support services (enrollment/admission counseling) available?
 - Tutoring/training process?
 - Registered for classes online or in person?
 - Ever attended a class on-campus?
 - Plans to attend both online and on-campus classes?