

A decorative graphic on the left side of the slide consisting of white lines and circles on a blue gradient background, resembling a circuit board or data flow diagram.

PREDICTIVE ANALYTICS

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WHAT IS PREDICTIVE ANALYTICS

- Predictive analytics is a set of technologies that uncovers relationships and patterns within large volumes of data that can be used to:
 - Predict behavior
 - Barriers to student success
 - Uncover academic achievement gaps
 - Provide recommendations for classes

QUESTION

- What do you think is holding students back from graduation?

WHAT'S THE USE OF THIS PROGRAM?

- We should develop a predictive analysis strategy for Housatonic because we could:
 - increase our graduation and retention rate
 - Improve our advising program
 - Promote our institution

GRAD AND RETENTION RATE

- “Students who use the predictive analytics program on average earn a 1/3 grade higher” (Teaster)

GRADUATION & RETENTION RATE

- Georgia State University
 - Four year grad rate increased by 5 percentage points to 27%
 - Six year grad increased by 6 percentage points to 54%

GRADUATION & RETENTION RATE

- Middle Tennessee State (Fall 2014)
 - 5 percentage point retention increase to 76% in years 2 years
 - How?
 - Doubled its advising staff to 78
 - Expanded free tutoring to 200 subjects from 20
 - Redesigned 27 foundation courses

IMPROVE OUR ADVISING PROGRAM

- Academic Interventions
 - Students take up to 20% more “filler classes” than necessary for graduation
- Out-of-School issues that affect a students ability to success

IMPROVE OUR ADVISING PROGRAM

- Ethical Dilemma
 - Temptation – “Drown the bunnies” – Simon Newman, Pres. Of Mount St. Mary’s University
 - “Bribing” at-risk students to withdraw from the school
 - To improve school’s ranking/retention rate
 - Exposing student information
 - Promote stereotypes – could cause discouragement

IMPROVE OUR ADVISING PROGRAM

- Solution(s)
 - When following the digital algorithm, the average educational achievement gap for race and low-income students can be cut in half
 - Student information can be protected to ensure data integrity and security