Using Analytics to Precisely Target Students to Raise Retention & Graduation Rates and Unlock Performance-Based Funding

Dr. Paul Dosal
Vice President - Student Affairs & Student Success

Dr. Travis Thompson
Designer, Researcher, Instructor - Information Technology
The Student Success MOVEMENT at USF
Implemented policies, programs and practices, including:

- SMART Lab
- Living Learning Communities
- Extended Library Hours
- Career Services
- Peer Financial Consulting
- Tutoring & Writing Services
- Course Re-design
- Degree Tracking Software
- Academic Advocates
- Informational Campaigns
FTIC Retention Rate

*Source IPEDS: Data reported follows IPEDS methodology but are based on internal preliminary data.
6-Year Graduation Rate

*Source IPEDS: Data reported follows IPEDS methodology but are based on internal preliminary data.
4-Year Graduation Rate

**Source** IPEDS: Data reported follows IPEDS methodology but are based on internal preliminary data.
6-Year Graduation Rate: ETHNICITY & RACE

Source IPEDS: Data reported follows IPEDS methodology but are based on internal preliminary data.
6-Year Graduation Rate: PELL & NON-PELL

Source IPEDS: Data reported follows IPEDS methodology but are based on internal preliminary data.
6-Year Graduation Rate: GENDER

Source IPEDS: Data reported follows IPEDS methodology but are based on internal preliminary data.
We believe all students can and will succeed if given the opportunity to do so.

Dr. Paul Dosal
USF Vice President – Student Affairs & Student Success
The top performer, University of South Florida, receives very high marks for improving its graduation rate and good—but not great—scores across the other dimensions. That’s good work, but they won’t be satisfied with the results yet.
Moving off the PLATEAU

89% in 2012
From Plateau to PREEMINENCE

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average GPA and SAT Score</strong></td>
<td>4.1</td>
<td>4.0</td>
<td>4.05</td>
<td>4.075</td>
<td>4.10</td>
</tr>
<tr>
<td>for incoming freshman in Fall semester</td>
<td>1223</td>
<td>1220</td>
<td>1222</td>
<td>1224</td>
<td>1226</td>
</tr>
<tr>
<td><strong>Public University National Ranking</strong></td>
<td>Top 50</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>in more than one national ranking</td>
<td>2016</td>
<td>2017</td>
<td>2018</td>
<td>2019</td>
<td>2020</td>
</tr>
<tr>
<td><strong>Freshman Retention Rate</strong></td>
<td>90%</td>
<td>88%</td>
<td>90%</td>
<td>92%</td>
<td>93%</td>
</tr>
<tr>
<td><strong>6-year Graduation Rate</strong></td>
<td>70%</td>
<td>68%</td>
<td>70.0%</td>
<td>72.0%</td>
<td>74.0%</td>
</tr>
</tbody>
</table>
Turned to DATA for a Kick Start

- Adoption of Miller/Herreid Persistence Model (2012)
  - Pre-matriculation model identifies top 10% of new FTIC most at risk of not persisting
  - Student interventions coordinated through first-year course, RAs, and advisors

- Introduction of ‘Big Data’ (2014)
  - Civitas Predictive Analytics Platform purchased
  - Live data feed from SIS and LMS systems
  - Data ingestion completed spring 2016
Civitas Predictive Analytics Platform
Empowering Frontlines to Reach the Right Students
Created Persistence Committee (2016)

- Cross functional team who identifies and supports all at-risk students through timely and appropriate interventions
  - Academic Advocates (case managers)
  - Housing & Residential Education
  - Academic Foundations Instructors
  - Orientation Team Leaders
  - Career Counselors
  - Financial Aid
  - Academic Advisors
  - Cashier’s Office
  - Library

- Initial focus on 2015 cohort
- Receives list of at-risk students weekly and segments into groups based on risk level
Pushing Higher with a CASE MANAGEMENT Model
Objective:
Right SUPPORT, Right STUDENT, Right TIME

- Identify at-risk students before problems occur
- Refer students to the appropriate expert
- Transform passive support services into active outreach
- Create a dynamic network of service providers
- Share data and reports to create 360 view of students
- Use communications tool more effectively to expand capacity
Case Management Model

Risk Identification & Segmentation
Which students are at risk?

High Risk Students

Increasing Risk Students

Low Risk Students

Individualized Support Strategies
How do we use our resources strategically and efficiently to support the individual needs of these students?

Coordinate High-Touch Care
Work closely with students and manage interactions with support offices/services.

Monitor and Intervene
Use analytics to uncover problems before they escalate.

Enable Self-Direction
Use electronic tools to nudge and advise, freeing staff to focus on higher risk students.

Efficient Scalable Care

Ownership & Accountability
Who owns student success?

Student Success Leadership
• Oversee efforts
• Organize resources & incentives
• Track & report metrics

Advisors
• Responsible for assigned student population success
• Accountable to student outcomes
• Use technology for proactive management
Powering with TECHNOLOGY
Pillars for Archivum Insights

- Assembles data from multiple sources to create a clear view of the current and future state of USF and our students
- Lifeblood of our student support ecosystem
- Personalized connection with each student we serve
- Shines a bright light on policies, practices and initiatives so we can precisely allocate our time and resources to do the most good
Process: Design Thinking + Agile/Scrum

Needfinding in Sprint 0

- 2 week sprint to explore, refine, and plan product delivery

Collaborative Charter and business value measures

Personas

Story Map

Architectural Prototypes

Mockups & Functional Prototypes

Delivery Sprints

2 week sprints to **iteratively** and **incrementally** develop and deliver releases comprised of the most valuable features

- Design team
- Team backlog
- Sprint 1, Sprint 2, Sprint 3, Sprint 4...
- Pre-production Releases
- Production release

USF University of South Florida
My Student Profile Snapshot

Includes Academic Success Factors & Self-Service Hub

Select an attribute to view more details.

<table>
<thead>
<tr>
<th>Standing</th>
<th>Registered?</th>
<th>GPA</th>
<th>Holds?</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PR</td>
<td>Yes</td>
<td>0</td>
<td>No</td>
<td>Breakdown</td>
</tr>
</tbody>
</table>

Self-Service Hub

I need help with

- Classes

Specifically

- Assignments/Research

Relevant Links

- Library Services for Students
- Research Consultation Request

Get Personalized Help

Please select which care team member(s) you would like to message. Only members relevant to your question/issue are displayed.

<table>
<thead>
<tr>
<th>Advisor Type</th>
<th>Advisor</th>
<th>Term Effective</th>
<th>Phone Number</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library Professional Staff</td>
<td>David Hogeboom</td>
<td>Fall 2017</td>
<td></td>
<td><a href="mailto:applan_test@example.com">applan_test@example.com</a></td>
</tr>
</tbody>
</table>

My Tasks

All tasks currently assigned to this person.

<table>
<thead>
<tr>
<th>Name</th>
<th>Status</th>
<th>Assigned On</th>
</tr>
</thead>
<tbody>
<tr>
<td>Download Document</td>
<td></td>
<td>5/31/2017 12:20 PM EDT</td>
</tr>
</tbody>
</table>
### Student Success Factors

Select an attribute to view more details:

<table>
<thead>
<tr>
<th>Standing</th>
<th>Registered?</th>
<th>GPA</th>
<th>Holds?</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good Standing</td>
<td>Yes</td>
<td>3.66</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

#### Credit Hours

- **Attempted/Earned Credit Hours**: 1.26

**Hours to Excess**: This student is more than 30 hours away from excess. Take 15!

- **Registered Hours**: These are in-progress hours you have registered for the current or future term.
- **Attempted Hours**: These are registered hours that were not earned due to F, W, or IF grades. Any credits attempted and not earned could result in excess credit hour surcharges.
- **Earned Hours**: These are registered hours for which credit was earned. These credits may or may not count towards your graduation requirements. Any credits earned that do not count towards graduation requirements could result in excess credit hour surcharges.
Personal Profile

Provides context on students prior to advising meetings

- **Preferences**
  - Preferred Name: Jane
  - Preferred Communication Method
    - Phone: 555-555-5555
    - Skype ID: janejohnson123

- **Shape your Path**
  - Narrative Bio:
    - I am a driven and capable student eager to earn my degree.
    - What are your current extracurricular activities? Are there any that you would like to participate in?
    - I am currently involved with the Center for Leadership and Civic Engagement.
    - What are your career plans for your major?
    - I hope to use my study of marketing to promote the consumption of clean and renewable products.
    - Describe your current employment status
      - I am currently employed part-time with USF IT fixing computers.
Student Success Dashboard

Showing “My Corral” of each advisor’s assigned students and access to other functions

Enter search terms below to filter your Corral. Filtering your Corral down to a result of 200 rows or less will allow you to export to Excel.

First Name
Last Name
UID
Cohort • —Select a Value—
Standing • —Select a Value—
Registered Next Term? □ Yes □ No

SEARCH CLEAR SEARCH

There are no students in your Corral that meet the provided search criteria.
### My Cases and Referrals

**Ability to filter and search cases and referrals**

#### Manage My Cases and Referrals

- **Role**: Creator, Participant
- **Type**: Cases, Referrals
- **Priority**: Low, Medium, High

<table>
<thead>
<tr>
<th>Type</th>
<th>Status</th>
<th>Subject</th>
<th>Student</th>
<th>Deadline</th>
<th>Created By</th>
<th>Updated On</th>
<th>Priority</th>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Recess</td>
<td>Open</td>
<td>Jane Johnson</td>
<td>Claudia Aguado Loi</td>
<td>6/19/2017</td>
<td>6/6/2017</td>
<td></td>
<td>↓</td>
<td>↓</td>
</tr>
<tr>
<td>test</td>
<td>Closed</td>
<td>Jane Johnson</td>
<td>Amy Alman</td>
<td>6/2/2017</td>
<td>6/2/2017</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
</tr>
<tr>
<td>test</td>
<td>Closed</td>
<td>Jane Johnson</td>
<td>Claudia Aguado Loi</td>
<td>5/26/2017</td>
<td>5/26/2017</td>
<td></td>
<td>↓</td>
<td>↓</td>
</tr>
<tr>
<td>Test Case</td>
<td>Open</td>
<td>Jane Johnson</td>
<td>Claudia Aguado Loi</td>
<td>5/25/2017</td>
<td>5/17/2017</td>
<td></td>
<td>↓</td>
<td>↓</td>
</tr>
</tbody>
</table>
Care Team view of Academic Profile
Student Success Factors integrated from multiple systems

Jane Johnson

Student Success Factors
Select an attribute to view more details.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Good Standing</td>
<td>Yes</td>
<td>3.42</td>
<td>No</td>
<td>Not Flagged</td>
<td>Not Flagged</td>
<td>Yes</td>
<td>Breakdown</td>
<td>Very High</td>
</tr>
</tbody>
</table>

Civitas Details
Civitas Continuation Predictions

Inspire Link https://civitaslearning.com/inspire/deeplink-to-student-record
Create Referral for Jane Johnson

Student Information

Referral Details

Subject *
Internship Opportunities

Deadline *
12/01/2017

Priority *
- High
- Medium
- Low

Severity *
- High
- Medium
- Low

Requested Action *
Sit down with student to discuss internship opportunities

Assignee *
Erik Tandberg

Reason(s) for Referral Creation

Academic Related

Housing Related

Show Student's Care Team
Finish In Four
Care Team coordination toward on-time student graduation

**Finish in Four**

- **Cohort(s)**: 1415FTIC, 1415FTICFT, FIF2014
- **Active Status**: Yes
- **FIF Grad Plan**: Yes
- **Degree(s)**: 3
- **Potential Years to Graduate**: 3
- **Student Indicated Not Returning**: No
- **Registered Next Term**: No
- **Has Graduated**: N/A
- **Number of Hours to Graduate**: 7
- **Anticipated Graduation Term**: Fall 2017
- **Pre-Certification Status**: FIF Planner prior to graduation term
- **Scholarship Status**: --Select a Value--

**Change(s) History**

Contains a tracking history of changes to a student's Finish in Four indicators.

<table>
<thead>
<tr>
<th>Change By</th>
<th>Description</th>
<th>Change On</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travis Thompson</td>
<td>Updated Number of Hours to Graduate based on student's new academic plan for Spring.</td>
<td>10/11/2017</td>
</tr>
</tbody>
</table>
Like healthcare, we are poised to significantly change things in higher education. It’s likely we will look back in 10 years and make the argument that we never want to go back to our dark ages.

Dr. Mark David Milliron
Co-founder & Chief Learning Officer - Civitas Learning
Next Steps

- Enhance and expand the case management approach
- Expand the use of predictive analytics
- Close the gender gap
- Transform student support from passive to active
- Design “reports” with strong information-action pairings