Looking for Leading Indicators of Graduation: The Retention Milestone Report at CSUCI

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Outlines

- Introduction of CSUCI
- Purposes of Retention Milestone Report
- Identified Milestones Events
- Summary of Student Performance
- From Data to Practice
- Actions in the Future
Introduction of CSUCI

- Youngest campus among CSU system
- First cohort of FTF enrolled in Fall 2003
- Average first-year retention since Fall 2003
  - FTF – 77%
  - New UDT – 82%
- Six-year graduation rates
  - 2003 cohort: FTF – 50%; UDT – 71%
  - 2004 cohort: FTF – 57%; UDT – 80%
Retention Milestone Report

• CSUCI participation in Graduation Initiative
  ○ One-year retention rate goal - 90%

• Purposes of Retention Milestone Report
  ○ Tracking student performance
  ○ Identifying students who failed to complete milestone events
  ○ Examining student performance
  ○ Assessing intervention programs
  ○ Looking for leading indicators of retention and graduation
Milestones in the Report

**Milestone Y1**
- Complete 24 credits and maintain 2.0+ GPA
- Complete remedial courses

**Milestone Y2**
- Complete Gen Ed requirements
- Complete 48 credits and maintain 2.0+ GPA
- Declare a major

**Milestone Y3-6**
- Complete major pre-requisites
- Complete major requirements
- Complete 40+ UD Units
- Complete 120+ credit and maintain 2.0+ GPA

**Final Step**
- Apply for graduation
Process of Building this Report

1. Track student performance of FTF & new UDT by semester
2. Identify students failed to complete milestone events
3. Build a performance database
4. Implement interventions and continue to track performance
5. Analyze performance and identify leading factors and useful interventions
Fall 2008 FTF

Entry # = 559

% took UNIV 100 = 43.1%
Avg. GPA = 2.8;  Avg. Tot_Units = 13.2
% of Early Warning = 7%;
% of Good Standing = 85%
# Eligible to persist = 552

2nd term = 516

Cum. Retention % = 92.3%
Term Eligible Retention % = 93.5%
Avg. GPA = 2.8;  Avg. Tot_Units = 27.5
% of Early Warning = 7%;
% of Good Standing = 88.6%
# Eligible to persist = 500

3rd term = 443

Cum. Retention % = 79.2%
Term Eligible Retention % = 88.6%
Avg. GPA = 2.9;  Avg. Tot_Units = 42.2
% of Early Warning = 5.4%;
% of Good Standing = 93%
# Eligible to persist = 434

4th term = 424

Cum. Retention % = 75.8%
Term Eligible Retention % = 97.7%
Avg. GPA = 2.9;  Avg. Tot_Units = 56.1
% of Early Warning = 5.4%;
% of Good Standing = 93%
# Eligible to persist = 417

2nd Year Milestones:
% complete 48 units = 91%
% declare a major = 66%
% complete GE requirement=72%

1st Year Milestones:
% complete 24 units = 86%
% complete remediation=83%
### FTF Performance - Fall 09 cohort

#### Fall 2009 FTF

**Entry #** = 499

- % took UNIV 100 = 46.3%
- Avg. GPA = 2.7; Avg. Tot_Units = 12.1
- % of Early Warning = 7%
- % of Good Standing = 78%
- # Eligible to persist = 491

**2nd term** = 453

- Avg. GPA = 2.7; Avg. Tot_Units = 25.6
- % of Early Warning = 6%
- % of Good Standing = 81.4%
- # Eligible to persist = 416

**1st Year Milestones:**
- % complete 24 units = 78%
- % complete remediation = 79%
UDT Performance - Fall 08 cohort

Fall 2008 UDT

Entry # = 475

Avg. GPA = 3.2; Avg. Tot_Units = 11.2
% of Early Warning = 3.6%
% of Good Standing = 89.9%
# Eligible to persist = 471

3rd term = 411
Cum. Retention % = 86.6%
Term Eligible Retention % = 96.5%
Avg. GPA = 3.1; Avg. Tot_Units = 37.2
% of Early Warning = 0.6%
% of Good Standing = 95.4%
# Eligible to persist = 399

4th term = 374
Cum. Retention % = 78.7%
Term Eligible Retention % = 93.7%
Avg. GPA = 3.2; Avg. Tot_Units = 49.6
% of Early Warning = 0.4%
% of Good Standing = 96.6%
# Eligible to persist = 356

2nd term = 445
Cum. Retention % = 93.7%
Term Eligible Retention % = 94.5%
Avg. GPA = 3.1; Avg. Tot_Units = 23.6
% of Early Warning = 2.3%
% of Good Standing = 93.6%
# Eligible to persist = 426

% graduated = 21%
## UDT Performance - Fall 09 cohort

### Fall 2009 UDT

<table>
<thead>
<tr>
<th>Entry #</th>
<th>2nd term</th>
</tr>
</thead>
<tbody>
<tr>
<td>608</td>
<td>567</td>
</tr>
</tbody>
</table>

- **Avg. GPA** = 3.1; **Avg. Tot_Units** = 12
- **% of Early Warning** = 5.1%
- **% of Good Standing** = 89.6%
- **# Eligible to persist** = 605

- **Avg. GPA** = 3.1; **Avg. Tot_Units** = 24.7
- **% of Early Warning** = 1.6%
- **% of Good Standing** = 92.6%
- **# Eligible to persist** = 552

- **Cum. Retention %** = 93.2%
- **Term Eligible Retention %** = 93.7%
FTF Y1 Milestone Completion Risk-Factors

Milestone Not Completed by Gender

- Unit<24: Male 33.8%, Female 27.1%
- GPA<2.0: Male 17.7%, Female 15.5%
- Remediation Not Completed: Male 9.4%, Female 11.1%
- Milestone Not Completed: Male 36.8%, Female 32.2%
FTF Y1 Milestone Completion Risk-Factors

Milestone Not Completed by URM

- Unit<24: 37.4% URM, 24.5% Non-URM
- GPA<2.0: 21.0% URM, 13.1% Non-URM
- Remediation Not Completed: 14.4% URM, 8.2% Non-URM
- Milestone Not Completed: 42.8% URM, 28.3% Non-URM
FTF Y1 Milestone Completion Risk-Factors

Milestone Not Completed by First-Generation

<table>
<thead>
<tr>
<th>Category</th>
<th>FG</th>
<th>Non-FG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit &lt; 24</td>
<td>32.0%</td>
<td>28.2%</td>
</tr>
<tr>
<td>GPA &lt; 2.0</td>
<td>24.9%</td>
<td>14.4%</td>
</tr>
<tr>
<td>Remediation Not Completed</td>
<td>16.6%</td>
<td>9.4%</td>
</tr>
<tr>
<td>Milestone Not Completed</td>
<td>38.5%</td>
<td>32.9%</td>
</tr>
</tbody>
</table>
Milestone Not Completed by PELL-Eligibility

- **Unit<24**
  - PELL-Eligible: 31.0%
  - PELL-Not-Eligible: 28.8%

- **GPA<2.0**
  - PELL-Eligible: 20.7%
  - PELL-Not-Eligible: 14.8%

- **Remediation Not Completed**
  - PELL-Eligible: 12.9%
  - PELL-Not-Eligible: 9.9%

- **Milestone Not Completed**
  - PELL-Eligible: 37.5%
  - PELL-Not-Eligible: 32.7%
**Logistic Regression of Milestone-Not-Completed on FTF Characteristics**

<table>
<thead>
<tr>
<th></th>
<th>Coefficient</th>
<th>Odds-Ratio</th>
<th>Delta-p</th>
</tr>
</thead>
<tbody>
<tr>
<td>URM</td>
<td>0.613***</td>
<td>1.85</td>
<td>64.9%</td>
</tr>
<tr>
<td>Age</td>
<td>0.386***</td>
<td>1.47</td>
<td>59.5%</td>
</tr>
<tr>
<td>HS_GPA_4.0</td>
<td>-0.417***</td>
<td>0.66</td>
<td>-39.7%</td>
</tr>
</tbody>
</table>

***p<0.01
FTF Y1 Milestone-Not-Completion Regression Results

ZIP Regression of

# Milestones-Not-Completed on FTF Characteristics

Considering URM, Age, and HS_GPA as zero-inflation factors:

<table>
<thead>
<tr>
<th>First_Gen</th>
<th>Coefficient</th>
<th>Odds-Ratio</th>
<th>Delta-p</th>
</tr>
</thead>
<tbody>
<tr>
<td>First_Gen</td>
<td>0.222*</td>
<td>1.25</td>
<td>55.5%</td>
</tr>
</tbody>
</table>

*p<0.1
From Data to Practice - Interventions

- UNIV 100
- Advising Center
- Summer and Special Sessions
- 1st and 2nd Year Experience
- Retain students who fail to complete pre-requisite of Nursing
- Email communication with students who did not complete a milestone and provide resources and recommendations specific to the milestone not completed
- Follow-up surveys to leavers
Descriptive Assessment of Interventions on FA09 Cohort

**Milestone Not Completed by Taking UNIV 100**

- **Unit<24**: 31.5% (Taken) vs. 40.9% (Not Taken)
- **GPA<2.0**: 18.8% (Taken) vs. 19.7% (Not Taken)
- **Remediation Not Completed**: 15.5% (Taken) vs. 9.3% (Not Taken)
- **Milestone Not Completed**: 37.1% (Taken) vs. 44.2% (Not Taken)
Descriptive Assessment of Interventions on FA09 Cohort

Milestone Not Completed by Accessing Advising

- Advising_Accessed
- Advising_Not_Accessed

- Unit<24: 26.9%
- GPA<2.0: 14.3%
- Remediation Not Completed: 11.3% 12.3%
- Milestone Not Completed: 54.3%
Questions: Why did students leave? Where did they go?

- National Student Clearinghouse (NSLC) data is used to follow up students who are eligible but not continuously enrolled at CSUCI and identify transfer-outs and drop-outs.
- Transfer-outs: 85% FTF and 74% UDT transferred to Two-year colleges
- Leavers (transfer- and drop-outs): Those leavers are invited to complete a semi-structured survey of their reasons to withdraw from CSUCI.
Leavers’ Response – Transfer-outs

- Most important reason to transfer out
  - Did not enjoy the social environment at CI (30%)
  - Could not get into the course needed (20%)
  - Intended major is not offered at CI (20%)
  - CI is too expensive for me right now (10%)
  - To transfer to another college is the first intention (10%)
  - Others (10%)

- Their recommendations
  - Improve campus service, such as recreation center, dining, housing, parking, etc.
  - More social events to involve diverse student groups
  - Provide more major options
Leavers’ Response – Drop-outs

- Most important reason to drop out
  - Could not get into the courses needed (30%)
  - Family/personal issues require full attention (20%)
  - CSUCI is too expensive (20%)
  - Did not enjoy social environment (5%)
  - Did not receive enough help to success (5%)
  - Others (20%)

- Their recommendations
  - More course options to accommodate students working full-time
  - Better financial aid package
  - Stronger support from and easy access to advisors and faculty members
Future Actions

- **Continue to record performance** of existing cohort students and include new cohorts to the report
- **Use accumulating student database to identify the “choking milestone”**
- **Further assessment** of intervention programs and find out successful assistance means
- **Integrate student performance and assessment of intervention programs to find out early signals** of student withdrawal and not moving forward
- **Convert student recommendations to change on campus**

- This milestone and intervention reporting is the basis for creating a Retention Management System so that CSUCI can be proactive in supporting student success at key progress points along their path.
Thank You!
Questions and Comments?

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