Unit Load Momentum: Indicator for Successful and Timely Graduation

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California State University, Los Angeles

CAIR Conference
November 2019
Fall 2019

PELL ELIGIBILITY

- Eligible: 61%
- Not Eligible: 39%

1ST GENERATION

- 1st Gen: 58%
- Not 1st Gen: 42%

ETHNICITY

- Latinx: 67%
- White: 26,361
- Unknown: Not shown
- Multi: Not shown
- African American: Not shown
- American Indian: Not shown
- International: Not shown
- Pacific Islander: Not shown
- Asian: Not shown

Office of Institutional Effectiveness, CAL STATE LA
## Graduation Initiative 2025: Cal State LA

<table>
<thead>
<tr>
<th>Metric</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2025 Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-yr Grad Rates: Freshman</td>
<td>45.8%</td>
<td>46.8%</td>
<td>48.6%</td>
<td>51.7%</td>
<td>55%</td>
</tr>
<tr>
<td>4-yr Grad Rates: Freshman</td>
<td>8.9%</td>
<td>8.1%</td>
<td>9.5%</td>
<td>11.0%</td>
<td>30%</td>
</tr>
<tr>
<td>4-yr Grad Rates: Transfer</td>
<td>69.7%</td>
<td>74.4%</td>
<td>74.4%</td>
<td>75.9%</td>
<td>81%</td>
</tr>
<tr>
<td>2-yr Grad Rates: Transfer</td>
<td>33.8%</td>
<td>25.7%</td>
<td>29.9%</td>
<td>38.3%</td>
<td>36%</td>
</tr>
<tr>
<td>Gap – URM</td>
<td>9.5%</td>
<td>11.3%</td>
<td>10.1%</td>
<td>10.6%</td>
<td>0</td>
</tr>
<tr>
<td>Gap – Pell</td>
<td>6.2%</td>
<td>0.4%</td>
<td>6.3%</td>
<td>4.0%</td>
<td>0</td>
</tr>
</tbody>
</table>
Graduation Initiative 2025: Cal State LA

Graduation Rates for Fall Freshmen Cohort

6-Year Grad Rates

4-Year Grad Rates

Goal at 2025

30%

55%

Goal at 2025

Graduation Rates for Fall Freshmen Cohort

6-Year Grad Rates

4-Year Grad Rates

Goal at 2025

30%

55%
Graduation Initiative 2025: Cal State LA

Graduation Rates for Fall Transfer Cohort

4-Year Grad Rates

2-Year Grad Rates

Goal at 2025

Exceeded Goal!
Opportunities for Improvement!!

4-Year Graduation Rates

URM Gap
Opportunities for Improvement!!

4-Year Graduation Rates

National Trend for Public University

State Policy

Efficiency

Funding

Access
30 Units Takers: URM vs. Non-URM
First-Time Freshmen 2011-2013 Cohort

4-Year Grad Rates

15 Units / Term

30 Units / Year
Effects of Freshmen Full Load (>= 15 Units) in 1st Term and 1st Year

(1) 4-Year Graduation Rates
(2) 1-Year Retention Rates
(3) Completion Rates
  (Units Passed / Units Attempted)
Concern #1. Freshmen with Low High School GPA?

15 Units in 1st Term

4-Year Grad Rates x HSGPA

- >= 15 Units
- < 15 Units

HSGPA Range

- < 2.5
- 2.5 ~ 3.0
- 3.0 ~ 3.49
- 3.5 ~ 3.99
- >= 4.0
Concern #1. Freshmen with Low High School GPA?

30 Units in 1st Year

4-Year Grad Rates x HSGPA

- >= 15 Units
- < 15 Units

HSGPA Range:
- < 2.5
- 2.5~3.0
- 3.0~3.49
- 3.5~3.99
- >= 4.0
Concern #2. Underrepresented Students?

15 Units in 1st Term

4-Year Grad Rates x Ethnicity

Ethnicity

- Asian
- AfrAm
- Latinx
- Int'l
- Multi
- White
- Unkn

Rates

0%
5%
10%
15%
20%
25%
30%
Concern #2. Underrepresented Students?

30 Units in 1st Year

4-Year Grad Rates x Ethnicity
Effects of Freshmen Full Load (>= 15 Units) in 1st Term and 1st Year

(1) 4-Year Graduation Rates
(2) 1-Year Retention Rates
(3) Completion Rates
(Units Passed / Units Attempted)
Effects of Freshmen Full Load (>= 15 Units) in 1st Term and 1st Year

(1) 4-Year Graduation Rates
(2) 1-Year Retention Rates
(3) Completion Rates
   (Units Passed / Units Attempted)
## Logistic Regression on 4-Year Graduation Rates

Eligibility Index > 30-Units in 1st Year > Gender > Pell

<table>
<thead>
<tr>
<th>IVs</th>
<th>B</th>
<th>Wald</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EI_NEW</td>
<td>0.002</td>
<td>341.96</td>
<td>0.00</td>
<td>1.002</td>
</tr>
<tr>
<td>URM</td>
<td>-0.203</td>
<td>6.06</td>
<td>0.01</td>
<td>0.816</td>
</tr>
<tr>
<td>FULLLOAD (30 units)</td>
<td>0.991</td>
<td>88.00</td>
<td>0.00</td>
<td>2.693</td>
</tr>
<tr>
<td>MEN</td>
<td>-0.523</td>
<td>64.32</td>
<td>0.00</td>
<td>0.593</td>
</tr>
<tr>
<td>PELL_REC</td>
<td>-0.287</td>
<td>17.00</td>
<td>0.00</td>
<td>0.750</td>
</tr>
<tr>
<td>FIRSTGEN</td>
<td>-0.124</td>
<td>3.57</td>
<td>0.06</td>
<td>0.883</td>
</tr>
<tr>
<td>URM by FULLLOAD</td>
<td>0.259</td>
<td>3.61</td>
<td>0.06</td>
<td>1.295</td>
</tr>
</tbody>
</table>

Nagelkerke R Square = 14%
Higher Education Research Literature

- Academic **Momentum** Theory
  The speed with which undergraduates initially progress in college significantly affects their likelihood of completing a degree

- Early Credit **Momentum**
  15 credits in their first term graduates at significantly higher rates

- Academic **Intensity** Theory
  Levels of academic intensity (high units) in the first year of higher education contributes eventual success
SUCCESS IS LIKE A SNOWBALL ... IT TAKES MOMENTUM TO BUILD AND THE MORE YOU ROLL IN THE RIGHT DIRECTION THE BIGGER IT GETS.

Steve Ferrante
Opportunities for Improvement!!

2 Major Efforts / Achievements at Cal State LA

- Increase in Full Loaders (>= 15 units per semester)
- Increase in B4 (GE Math/QR) Completion
% of Full Loaders ( >= 15 Units) : **First-Time Freshmen Cohort**

- Fall 13: 0%
- Fall 14: 10%
- Fall 15: 20%
- Fall 16: 30%
- Fall 17: 43%
- Fall 18: 68%
- Fall 2019: 71%
# Units Completed by the end of 1st year by cohort: fa16, fa17, fa18

<table>
<thead>
<tr>
<th>Term</th>
<th>Cohort</th>
<th>Avg. Total Units Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>2169</td>
<td>3,830</td>
<td>24.93</td>
</tr>
<tr>
<td>2179</td>
<td>3,556</td>
<td>25.95</td>
</tr>
<tr>
<td>2189</td>
<td>3,862</td>
<td>27.76</td>
</tr>
</tbody>
</table>
First-Time Freshmen Cohort
Quantitative Reasoning (B4) Completion

- Fall 2016: 45%
- Fall 2017: 54%
- Fall 2018: 76%

First-Time Freshmen Cohort
URM Gap: Quantitative Reasoning (B4) Completion

URM:
- Fall 2016: 44%
- Fall 2017: 53%
- Fall 2018: 73%

Non URM:
- Fall 2016: 57%
- Fall 2017: 70%
- Fall 2018: 80%
### Who graduated in 4-Years? (Fa11 thru Fa15 cohort)

<table>
<thead>
<tr>
<th>4-Year Graduation</th>
<th>4-Year Graduation Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Female</td>
</tr>
<tr>
<td>Asian</td>
<td>16.1%</td>
</tr>
<tr>
<td>AfrAm</td>
<td>10.7%</td>
</tr>
<tr>
<td>Latinx</td>
<td>8.4%</td>
</tr>
<tr>
<td>Int'l</td>
<td>14.7%</td>
</tr>
<tr>
<td>White</td>
<td>20.2%</td>
</tr>
<tr>
<td>Cohort Total</td>
<td>10.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4-Year Graduation</th>
<th>Pell</th>
<th>1st Gen</th>
<th>Total</th>
<th>HS GPA</th>
<th>SAT Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduated</td>
<td>815</td>
<td>689</td>
<td>1360</td>
<td>3.35</td>
<td>962</td>
</tr>
<tr>
<td>Cohort Total</td>
<td>11250</td>
<td>9536</td>
<td>15494</td>
<td>3.17</td>
<td>885</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>College at Entry</th>
<th>Graduated in 4yrs</th>
<th>4-year grad rates (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL</td>
<td>224</td>
<td>12.0%</td>
<td>1859</td>
</tr>
<tr>
<td>BE</td>
<td>201</td>
<td>11.9%</td>
<td>1689</td>
</tr>
<tr>
<td>ED</td>
<td>5</td>
<td>6.5%</td>
<td>77</td>
</tr>
<tr>
<td>ET</td>
<td>85</td>
<td>4.2%</td>
<td>2032</td>
</tr>
<tr>
<td>HHS</td>
<td>357</td>
<td>8.8%</td>
<td>4052</td>
</tr>
<tr>
<td>NSS</td>
<td>318</td>
<td>9.8%</td>
<td>3260</td>
</tr>
</tbody>
</table>
### Who graduated in 4-Years?
(Fa11 thru Fa15 cohort)

<table>
<thead>
<tr>
<th>Total Units to Degree</th>
<th>128.26</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AP Credits / Transfer Units at Freshmen Entry</strong></td>
<td></td>
</tr>
<tr>
<td>Ave Units Earned</td>
<td>4.30</td>
</tr>
<tr>
<td><strong>Summer/Intersession Course Taking</strong></td>
<td></td>
</tr>
<tr>
<td>Graduated in 4-Years</td>
<td></td>
</tr>
<tr>
<td>Average Units Earned in Summer / Intersession</td>
<td>6.50</td>
</tr>
<tr>
<td># of takers in Summer / Intersession</td>
<td>917</td>
</tr>
<tr>
<td># of Cohort</td>
<td>1360</td>
</tr>
<tr>
<td><strong>Total Units to Degree</strong></td>
<td>120-124</td>
</tr>
<tr>
<td># of Students</td>
<td>723</td>
</tr>
<tr>
<td>125-129</td>
<td>237</td>
</tr>
<tr>
<td>130-134</td>
<td>127</td>
</tr>
<tr>
<td>135 or higher</td>
<td>273</td>
</tr>
</tbody>
</table>
Opportunities for Improvement

Sense of Belonging

- Learning Community
- Well-Being and Healthy Mind
- Post-Bac Outcomes
- Faculty Development
- Year-2 Planning for Math / QR:
  (Latinx students)
- Collaborative Pedagogy

URM Gap
Student Characteristics

Collectivistic Culture @ Home

Culturally-Responsive Educational Practices @ School

Collaborative Pedagogy

Learning Outcomes
Successful Graduation

Cultural Factors

Sense of Belonging / Engagement
**Redefined Ethnic Composition:**

**Multiracial Dashboard**

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Darker color on a bar graph represents multiracial/ethnic students who gave any two responses when selecting their race, including applicants who stated they are of Hispanic or Latino background. As such, multiracial/ethnic students may be counted in multiple categories and a total percentage, across all groups, will not add up to 100%.

The CSU application started collecting multiracial/ethnic information as of Summer 2009.
Q & A