Stayers, Swirlers, and Re-Enrollers: Understanding the Trajectory of College Students

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AAC&U
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HOUSTON, TX
Introduction

- Obama’s 2010 “American Graduation Initiative”
- Current State of Degree Attainment – DOE
- HERI’s Current Degree Completion Projects
- Purpose: Provide data and discussion directed at ensuring student retention and degree attainment
- Limitations: 6 yr data coming, 2yr starters DLE only
## Data Sources

<table>
<thead>
<tr>
<th>Diverse Learning Environments Pilot Survey (DLE)</th>
<th>The CIRP Freshman Survey with National Clearinghouse (DARCU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 2010</td>
<td>• 2004-2008</td>
</tr>
<tr>
<td>• N = 5,010</td>
<td>• n = 276,234*</td>
</tr>
<tr>
<td>• 68.3% Female</td>
<td>• 53.7% Female</td>
</tr>
<tr>
<td>• 58.4% Students of Color</td>
<td>• 26.6% Students of Color</td>
</tr>
<tr>
<td>• 33.6% Age 25+</td>
<td>• 0.2% Age 25+</td>
</tr>
<tr>
<td>• 39.7% Currently at 2-yr</td>
<td>• 0% Started at 2-yr</td>
</tr>
</tbody>
</table>
4-Year Degree Completion and Retention Rates at Original 4-Year Institution by Race/Ethnicity, 2004-2008

- American Indian
- African American
- Latina/o
- Multiracial
- White
- Asian American

Legend:
- 4-Year Grad
- 4-Year Retained
Predicting 4-Year “Stayers”

4-YEAR DEGREE COMPLETION
AT ORIGINAL INSTITUTION
(POSSIBLE MOBILITY)
4-Year Degree Completion “Stayers”

- Public University
- Private University
- Public 4-Year College
- Private 4-Year College
- Catholic 4-Year College
- Other Religious 4-Year College
- All Institutions
## Predicting 4-Year Degree Completion at Original Institution

<table>
<thead>
<tr>
<th>Activities in the Last Year of High School</th>
<th>African American</th>
<th>Latino/a</th>
<th>Asian American</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used Internet for Research/Homework</td>
<td>+</td>
<td></td>
<td></td>
<td>+</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reasons for Attending Particular College</th>
<th>African American</th>
<th>Latino/a</th>
<th>Asian American</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS Guidance Counselor Advised Me</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Pvt Guidance Counselor Advised Me</td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Wanted to Live Near Home</td>
<td>+</td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Graduates Get Good Jobs</td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Rankings in National Magazine</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Information from Website</td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
</tbody>
</table>
## Predicting 4-Year Degree Completion at Original Institution

<table>
<thead>
<tr>
<th>Major: Undecided</th>
<th>African American</th>
<th>Latino/a</th>
<th>Asian American</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major: Bio Sciences</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major: Physical Sciences</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Major: Social Sciences</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Major: Business</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

### Possible Future Activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>African American</th>
<th>Latino/a</th>
<th>Asian American</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participate in Student Government</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participate in Community Service</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participate in Study Abroad Program</td>
<td>+</td>
<td>-</td>
<td></td>
<td>+</td>
</tr>
</tbody>
</table>
HERI Retention Calculator

Predicting 4-Year Degree Completion at Original Institution

<table>
<thead>
<tr>
<th>Student-Level Variables</th>
<th>Logistic Regression Coefficients**</th>
<th>Institutional Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Without Institutional Factors</td>
<td>With Institutional Factors</td>
</tr>
<tr>
<td>Average High School GPA</td>
<td>.052</td>
<td>.050</td>
</tr>
<tr>
<td>SAT Comp. Scores</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Gender: Female</td>
<td>.095</td>
<td>.097</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td></td>
<td>.032</td>
</tr>
<tr>
<td>African American</td>
<td></td>
<td>.040</td>
</tr>
<tr>
<td>Latino/a</td>
<td>-.036</td>
<td>-.040</td>
</tr>
<tr>
<td>Other Race/Ethnicity</td>
<td>-.060</td>
<td>-.052</td>
</tr>
<tr>
<td>Multi-Race/Ethnicity</td>
<td>-.054</td>
<td>-.052</td>
</tr>
<tr>
<td>Religion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catholic</td>
<td>.101</td>
<td>.083</td>
</tr>
<tr>
<td>Jewish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Religion</td>
<td>-.031</td>
<td></td>
</tr>
<tr>
<td>Institutional Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutional Selectivity</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>Institutional Type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public university</td>
<td>-.062</td>
<td></td>
</tr>
<tr>
<td>Public four-year college</td>
<td>.075</td>
<td></td>
</tr>
<tr>
<td>Private university</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonsectarian 4-year College</td>
<td>.099</td>
<td></td>
</tr>
<tr>
<td>Catholic 4-year College</td>
<td>.056</td>
<td></td>
</tr>
</tbody>
</table>

Expected Four-Year Degree Completion Rate without Institutional Variables: 46.7%
Expected Four-Year Degree Completion Rate with Institutional Variables: 52.9%

Notes:
* Partial 2011 HERI retention calculator, based on preliminary results.
** Only results for the first 11 variables are shown. Coefficients are calculated, based on the full analytic model and logistic regression results.
*** Data to be inserted by the institution.
### Degree Completion Calculator Examples

<table>
<thead>
<tr>
<th>Private University</th>
<th>Public College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium Selectivity</td>
<td>Medium Selectivity</td>
</tr>
</tbody>
</table>

- **54%** expected degree completion for African American students
- **55%** expected degree completion for White Students

- **33%** expected degree completion for African American students
- **28%** expected degree completion for White Students
Swirlers and Re-Enrollers

COLLEGE STUDENT ENROLLMENT MOBILITY
Enrollment Mobility: Definitions

- **Traditional Enrollment:** Continuous enrollment at only one institution (Goldrick-Rab, 2006)
- **Fluid Movement:** Continual enrollment between two or more institutions (Goldrick-Rab, 2006)
- **Interrupted Enrollment:** Discontinuous enrollment (stop-out) from only one institution (Goldrick-Rab, 2006)
- **Interrupted Movement:** Discontinuous enrollment (stop-out) between two or more institutions (Goldrick-Rab, 2006)
## Transfer Mobility: Definitions

- **Vertical Transfer**: Begins at a 2-yr institution and subsequently enrolls in a 4-yr institution (Cohen & Brawer, 2008)

- **Reverse Transfer**: Begins at a 4-yr institution and subsequently enrolls in at least one two-year institution (see Townsend, 1999)

- **Horizontal Transfer**: Begins at one type of institution and enrolls in at least one additional same-type institution during a regular term
  - 2 to 2 Year
  - 4 to 4 Year (see Li, 2010)
Select High and Low Enrollment Mobility by Racial Groups in DLE and DARCU Data Sets

- **Traditional Enrollment**
  - White students highest (~50%)

- **Two or More Institutions**
  - White students lowest (~36%)

- **Any Type of Stop-Out**
  - African American students highest (~40%)

- **Interrupted Enrollment**
  - African American highest (~17%)
  - White students lowest (~11%)

- **Vertical Transfer**
  - Asian American students highest (~9%)
  - Latina/os lowest (~6%)

- **4-to-4 yr Transfer**
  - Latina/os lowest (~11%)
## Proportion of Students Displaying Enrollment Mobility Patterns & By 4-Year Degree Completion

<table>
<thead>
<tr>
<th>Enrollment Type</th>
<th>DLE</th>
<th>DARCU</th>
<th>4yr Degree %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall %</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any Type of Movement</td>
<td>40.6%</td>
<td>36.5%</td>
<td>12.0%***</td>
</tr>
<tr>
<td>Any Type of Interruption</td>
<td>28.5%</td>
<td>36.1%</td>
<td>7.4%***</td>
</tr>
<tr>
<td>Traditional Enrollment</td>
<td>51.7%</td>
<td>42.2%</td>
<td>21.9%***</td>
</tr>
<tr>
<td>Fluid Movement</td>
<td>19.8%</td>
<td>16.9%</td>
<td>7.1%***</td>
</tr>
<tr>
<td>Interrupted Enrollment</td>
<td>7.7%</td>
<td>18.5%</td>
<td>4.4%***</td>
</tr>
<tr>
<td>Interrupted Movement</td>
<td>20.8%</td>
<td>17.6%</td>
<td>3.0%***</td>
</tr>
<tr>
<td>Vertical Transfer</td>
<td>8.0%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Reverse Transfer</td>
<td>15.6%</td>
<td>9.0%</td>
<td>1.0%***</td>
</tr>
<tr>
<td>4-to-4 Yr Transfer</td>
<td>10.9%</td>
<td>19.4%</td>
<td>9.3%***</td>
</tr>
</tbody>
</table>

*** p < .001
Campus Perspectives on Retention and Mobility

SAN JOSE STATE UNIVERSITY
AND
SANTA ANA COLLEGE
San Jose State University

SJSU Student Mobility: 6-Year Student Tracking – Fall 2003 Cohort

- Fall 2003: First-time Freshmen (n=2,768)
  - 80% retained
  - 20% left

  - 86% (n=1,897) Retained/Stopped out
  - 14% (n=315) stayed out
  - 19% (n=106) stayed out
  - 81% (n=450) Stopped out

- Fall 2009: Retained and Stopped-out (n=2,347)
  - 48% (n=1,121) Graduated
  - 17% (n=398) Still enrolled, no degree
  - 35% (n=828) Transferred out
  - 23% (n=188) 4-year
  - 77% (n=640) Community College
  - 5% UC Campuses
  - 62% CSU Campuses
  - 33% Out of State, Others
  - 97% CCC
  - 3% Out of State, Others

% of Entire 1st Freshmen Cohort
- 41% Graduated
- 30% Transferred out
  - 0.3% UC Campuses
  - 4.2% CSU Campuses
  - 22.4% CCC
- 14% Still enrolled, no degree
- 15% Stayed out

Source: SJSU Institutional Research and Nat’l Student Clearinghouse
San Jose State's Delivery Chain (Adapted from CSU Chico's Delivery Chain model)

**Goal:** Increase 6-year graduation rates by 9% for first time frosh and by 6% for transfers;

1. **Outreach/Recruit/Admit**
   - Outreach: Interact with high quality & high potential prospects
   - Recruit: Interact with students most likely to succeed at SJSU
   - Admit: Messaging through MySJSU
   - Financial Aid Scholarships:

2. **Orient**
   - Orientation introduces student to academic & student services; academic programs, elements of student success.
   - SJSU Convocation: get connected; introduction to SJSU community

3. **Instruct**
   - General Education and Lower Division Major Courses
   - First-Year Experience

4. **Instruct**
   - Major &/or Minor Degree Programs
   - Degree Programs: Structure/Scheduling, Achieving Program Outcomes

5. **Support**
   - (Academic & Student Services)
   - Communicate Academic & Student Service Infrastructure -> identify and promote support systems to ensure communication and cooperation -> focus on academic and social integration -> focus on student needs from perspective of student experience

6. **Support**
   - (Academic & Student Services)
   - Promote electronic service delivery

7. **Graduate & Place**
   - Placement of Graduates:
     - *Post-baccalaureate studies*
     - *Professional Studies*
     - *Graduate Studies*
     - *Careers*

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**Junior High School & Beyond**

**Delivery Chain Elements**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outreach: Interact with high quality &amp; high potential prospects.</td>
<td>Orientation introduces student to academic &amp; student services; academic programs, elements of student success.</td>
</tr>
<tr>
<td>Recruit: Interact with students most likely to succeed at SJSU.</td>
<td>First-Year Experience</td>
</tr>
<tr>
<td>Admit: Messaging through MySJSU.</td>
<td>SJSU Convocation: get connected; introduction to SJSU community</td>
</tr>
<tr>
<td>Financial Aid Scholarships.</td>
<td></td>
</tr>
</tbody>
</table>

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**Milestones and Leading Indicators: Disaggregated by FTF and Transfers; By URM and Non-URM**

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Leading Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of FTF and new Transfers completing registration during summer orientation.</td>
<td>% of students completing remediation at the end of the first year</td>
</tr>
<tr>
<td>% of FTF and new Transfers who enroll (census).</td>
<td>Grade distribution in first semester remedial courses; pass/fail rates</td>
</tr>
<tr>
<td>Grade distribution in first year remedial courses; pass/fail rates.</td>
<td>% of students retained from the first to second semester</td>
</tr>
<tr>
<td>Measures of student engagement/involvement, including work on/off campus; time allocation; enriching experiences (NSSE Survey); GPA; Academic Standing.</td>
<td></td>
</tr>
</tbody>
</table>

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**Collect Data & Identify Problems**

**Take Corrective Action**

**Learn**

**Improve**
Santa Ana College

Degree Attainment (AA, AS, Certificate)
High School
Professional/ Personal Development
Continuing Education
4 Yr. University
Reverse Transfer
Adult Learner
Other 2 Yr. College
Returning Learner
Stop Out
For Profit
Job Placement
Returning Learner
Reverse Transfer
Adult Learner
Other 2 Yr. College
4 Yr. University
Continuing Education
High School
Degree Attainment (AA, AS, Certificate)
• Latina/o - high personal self-concept, low academic self-concept compared to Latinos in PWI
• Need for more counseling and tutoring
• DLE data will influence practice, hiring, funding allocation for services that support student success
• Economic challenges & family responsibilities persist
• Lessons learned: Can’t take compositional diversity for granted, need to facilitate conversations for development and success
Conclusion

- Shifting national conversation to broad access and diverse institutions
- Research tools to assess and improve retention and graduation
- Value-added models
Questions/Discussion

Contact Information

Higher Education Research Institute
www.heri.ucla.edu

Diverse Learning Environments
www.heri.ucla.edu/dle