Understanding Transfer Student Success
Revisited: Transfer Students – Who are They and How Successful are They?

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Earth City, Missouri
Background

- Follow up to 1997 study.
  Predictors: Transfer GPA, Minority, Transferred to UMR; First-time College students more successful when controlling for ability.

- Research Questions:
  1. What characteristics help explain a transfer student’s likelihood of graduating?
  2. Are transfer students more likely to graduate than first-time college, when controlling for ability and credit hours?

- Methodology:
  Logistic Regression and Comparisons to First-time college success, controlling for SCH and GPA.
University of Missouri System

- Large residential campus
- Engineering residential campus
- Two urban campuses
- Characteristics:
  - 43,000 Undergraduates
  - 2,700 Professional Students
  - 10,800 Graduate students
Importance of Transfers

- Over the past 10 years, transfers consistently were 38% to 45% of the new students.
- At the two urban campuses, transfers as a percent of the new students for the past 10 years ranged from 58% to 67% and 67% to 74%.
- Transfers are a significant part of enrollment management efforts.
Study Population

- **Overall Characteristics:**
  - Fall 1991 – Fall 1994 Transfers or First-time College
  - Full-time, Degree-seeking
  - Minimum of 24 credit hours

- **Transfers:**
  - N = 11,150

- **First-time College:**
  - N = 16,936
Study Population: Data Models

- **Transfer Student:**
  - Demographic data
  - Post-secondary school data
  - Transfer in GPA and credit hours
  - Degree completions data

- **First-time College:**
  - Demographic data
  - Third term credit hours (24 min) and GPA
Transfer Population

Demographics:

- 51% Male
- 7% African-American, 2% Hispanic
- Mean Age – 21.9
- 17% Had an AA Degree
- 50% transferred from 2-year institution; 37% 4-year
- 57% of transfers went to an urban campus (UMKC & UMSL)
- Mean Transfer GPA – 2.84
- Mean Transfer Hours – 56.2
Tracking Model

- Fall to Fall using EMSAS Data
- Graduation data part of institutional extract
- Six-year Graduation Rate used
- Records for first-time college students were examined at the end of their third term
Transfer Persistence

- **Persistence Patterns:**
  - 29% of transfers dropped out by the end of their 1\textsuperscript{st} year
  - Of those dropping out, 63% dropped by the end of their 1\textsuperscript{st} year
Transfer Graduation

- Graduation Data:
  - Six-year Graduation Rate – 54%
  - Mean Years to Graduation – 2.93
  - 66% Graduated within 3 years
  - Graduation data by ethnicity:
    - White, Non-Hispanic – 54%
    - Asian-American – 60%
    - Minority – 40%
Transfer Graduation: Transfer GPA

Chart 1: Graduation Rate by Transfer GPA

<table>
<thead>
<tr>
<th>Transfer GPA</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;2.5</td>
<td>43%</td>
</tr>
<tr>
<td>2.5 - 2.99</td>
<td>52%</td>
</tr>
<tr>
<td>3.0 - 3.49</td>
<td>60%</td>
</tr>
<tr>
<td>3.5 - 4.0</td>
<td>68%</td>
</tr>
</tbody>
</table>
Transfer Graduation: Transfer Hours

Chart 2: Graduation Rate by Transfer Hours

<table>
<thead>
<tr>
<th>% Graduating</th>
<th>24 - 35</th>
<th>36 - 47</th>
<th>48 - 59</th>
<th>60 +</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>49%</td>
<td>46%</td>
<td>53%</td>
<td>59%</td>
</tr>
</tbody>
</table>
Logistic Regression Findings

**Significant**
- Transferred to UMR
- Transfer GPA
- Transferred to UMC
- Female
- Transfer Hours
  - Post-Secondary Degree
  - Other Discipline
  - Transferred from a Missouri Institution
  - Science Discipline
  - Minority

**Not Significant**
- All other disciplines
  - Agriculture
  - Business
  - Education
  - Engineering
  - Liberal Arts
  - Social Sciences
- UM Transfer
- Transferred to UMKC or UMSL
- All Other Ethnicities
Logistic Regression Findings
(Continued)

Table. Logistic Regression Results, Fall 1991 - 1994 Transfer Success (Graduation)

<table>
<thead>
<tr>
<th></th>
<th>95% Wald</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Point Estimate</td>
<td>Confidence Limits</td>
<td>Effect</td>
<td></td>
</tr>
<tr>
<td>Transferred to UMR</td>
<td>2.762</td>
<td>2.355 - 3.240</td>
<td>Positive</td>
<td></td>
</tr>
<tr>
<td>Transfer GPA</td>
<td>1.399</td>
<td>1.322 - 1.482</td>
<td>Positive</td>
<td></td>
</tr>
<tr>
<td>Transferred to UMC</td>
<td>1.295</td>
<td>1.190 - 1.409</td>
<td>Positive</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.260</td>
<td>1.640 - 1.364</td>
<td>Positive</td>
<td></td>
</tr>
<tr>
<td>Transfer Hours</td>
<td>1.006</td>
<td>1.004 - 1.008</td>
<td>Positive</td>
<td></td>
</tr>
<tr>
<td>Post-Secondary Degree</td>
<td>0.872</td>
<td>0.784 - 0.971</td>
<td>Negative</td>
<td></td>
</tr>
<tr>
<td>Other Discipline</td>
<td>0.860</td>
<td>0.790 - 0.936</td>
<td>Negative</td>
<td></td>
</tr>
<tr>
<td>Transferred from a Missouri Institution</td>
<td>0.750</td>
<td>0.691 - 0.814</td>
<td>Negative</td>
<td></td>
</tr>
<tr>
<td>Science Discipline</td>
<td>0.602</td>
<td>0.527 - 0.687</td>
<td>Negative</td>
<td></td>
</tr>
<tr>
<td>Minority</td>
<td>0.591</td>
<td>0.517 - 0.676</td>
<td>Negative</td>
<td></td>
</tr>
</tbody>
</table>

* p < .01

Source: Institutional data files.

IRP: 09/25/01
Logistic Regression Findings
(Continued)

- **Significant Explanatory Variables:**
  - **Transfer GPA**
    - Odds of graduating increased by 3.9% for each .10 increase in GPA.
  - **Transfer credit hours**
    - Odds of graduating increased by 6% for each increase of 10 transfer credit hours.
  - **Gender**
    - Females were 26% more likely to graduate.
  - **UMR Transfers**
    - UMR transfers were almost twice as likely to graduate.
# Graduation: Native vs. Transfer

## Table: Fall 1991 and 1994 Native and Transfer Student Comparisons, Graduation Rates by Credit Hours and GPA

<table>
<thead>
<tr>
<th>Credit Hours:</th>
<th>Less than 2.50</th>
<th>2.50 - 2.99</th>
<th>3.00 - 3.49</th>
<th>3.50 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Native Students</td>
<td>Transfer Students</td>
<td>Native Students</td>
<td>Transfer Students</td>
</tr>
<tr>
<td>24-35</td>
<td>35%</td>
<td>60%</td>
<td>74%</td>
<td>89%</td>
</tr>
<tr>
<td>36-47</td>
<td>48%</td>
<td>74%</td>
<td>82%</td>
<td>90%</td>
</tr>
<tr>
<td>48-59</td>
<td>56%</td>
<td>80%</td>
<td>88%</td>
<td>92%</td>
</tr>
<tr>
<td>Over 60</td>
<td>70%</td>
<td>84%</td>
<td>92%</td>
<td>94%</td>
</tr>
</tbody>
</table>

Source: Institutional data files.

IRP: 09/08/01
Discussion and Implications

- Most transfers likely to drop out after 1st year.
- Transfer Assimilation.
- Importance of transfer GPA and hours.
- Native students more likely to graduate.
- Strength of Model.
Conclusions

- For additional information:
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