



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

Presentation by:

Robert Mullen, Ast Director of Institutional Research & Planning

Mardy Eimers, Director of Institutional Research & Planning

Celebrating 20 Years of MIDAIR

2001 MidAIR Fall Conference

October, 2001

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 1st year
- Of those dropping out, 63% dropped by the end of their 1st year



Transfer Graduation

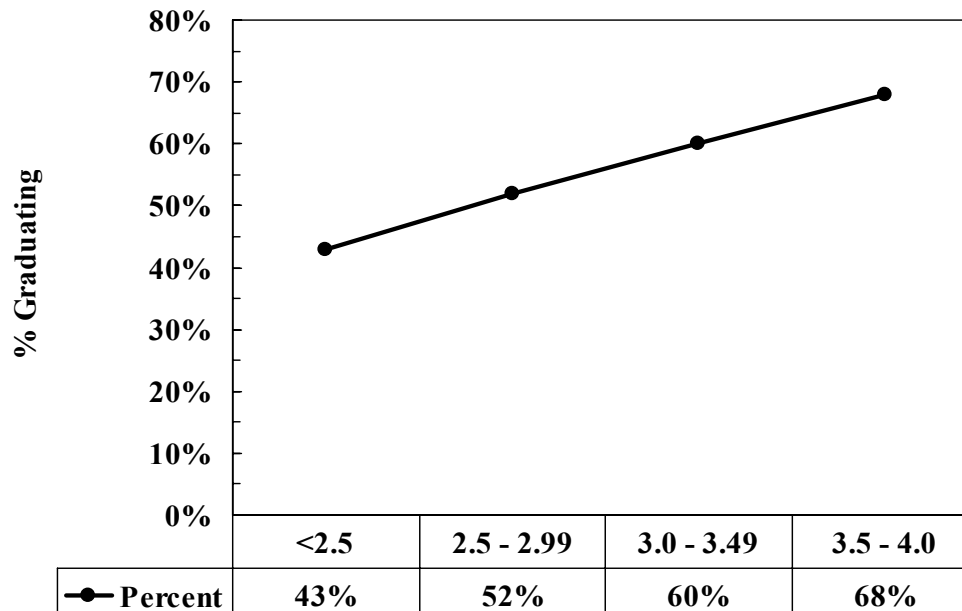
◆ Graduation Data:

- 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

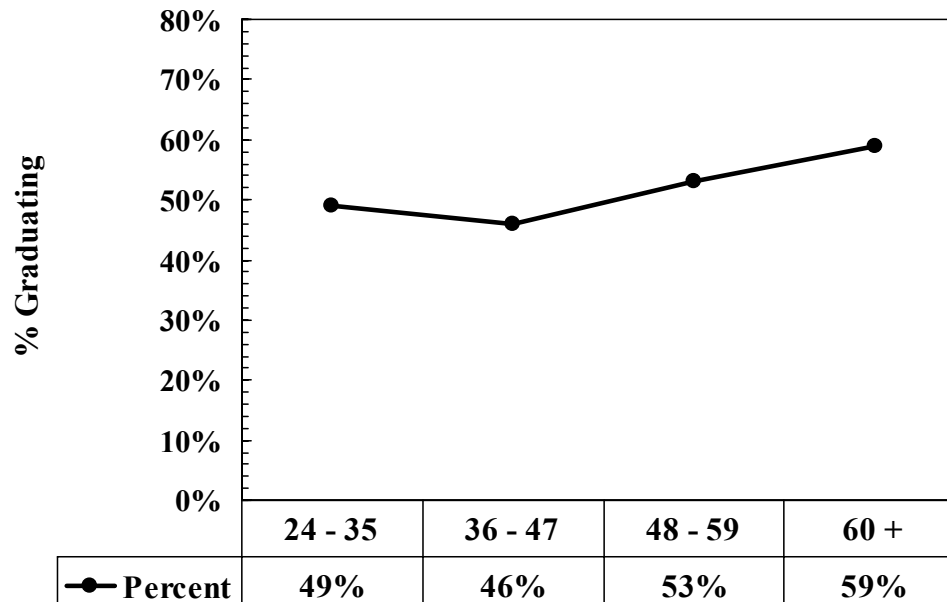
Chart 1: Graduation Rate by Transfer GPA





Transfer Graduation: Transfer Hours

Chart 2: Graduation Rate by Transfer Hours





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)

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

		Student GPA:							
		Less than 2.50		2.50 - 2.99		3.00 - 3.49		3.50 or more	
		Native	Transfer	Native	Transfer	Native	Transfer	Native	Transfer
Credit Hours:		Students	Students	Students	Students	Students	Students	Students	Students
24-35		35%	37%	60%	48%	74%	58%	89%	62%
36-47		48%	37%	74%	38%	82%	54%	90%	66%
48-59		56%	45%	80%	54%	88%	57%	92%	68%
Over 60		70%	49%	84%	57%	92%	64%	94%	74%

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:

Office of Institutional Research and Planning
721 Lewis Hall
University of Missouri System
Columbia, Missouri 65211
(573) 882-2778
(573) 884-5545 (fax)

URL: <http://www.system.missouri.edu/planning/>

Mardy Eimers: eimersm@umsystem.edu

Robert Mullen: mullenrw@umsystem.edu