Reverse Transfer Students and Postsecondary Outcomes:
A Potential Opportunity

Bachelor's
Completion

Community
College

American Educational Research Association

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What is a reverse transfer student?

A student who initially enrolls at a four-year college and subsequently transfers to a community college.

- More than one out of every five four-year starters met this distinction (21%)
  - Does not include summer enrollment
  - Does not include concurrent enrollment
  - Does not include post-bachelor's enrollment

Class of 2003 (N=115,677)

4-Year Starters
(N=37,165)

32.1%

20.7%

Reverse Transfer
(N=7,696)
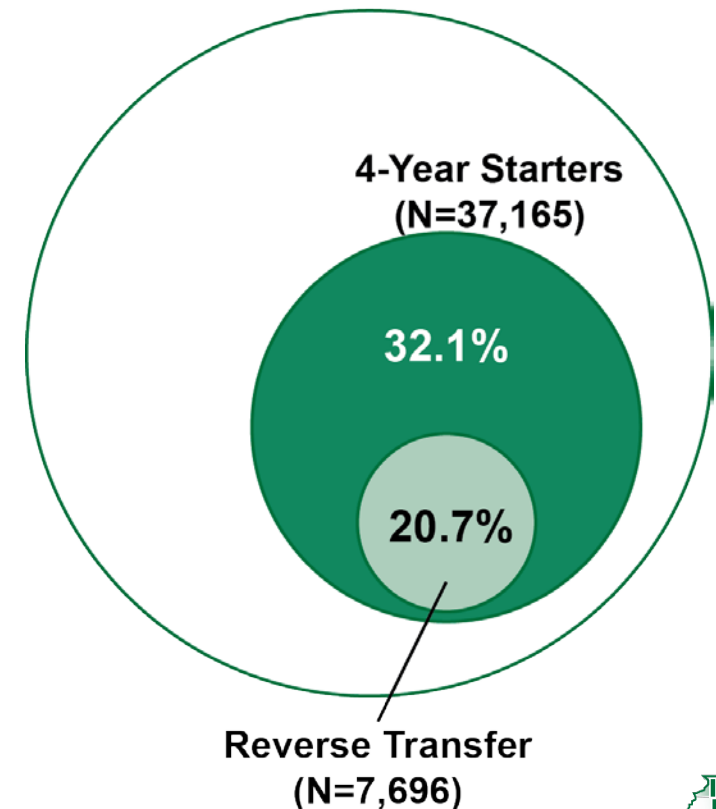
Why is this important?

- The low rate of bachelor's degree completion associated with reverse transferring makes it the form of student mobility most deserving of attention (Goldrick-Rab and Pfeffer, 2009).

    – Only half of reverse transfer students make it back to a four-year institution.

    – One-fifth of reverse transfer students eventually earn a bachelor's degree

- Only 15% of reverse transfer students earn a certificate or associate's degree during their stay at a community college.

- This information could help support policymakers as they develop strategies to move closer to achieving the goal of increasing the proportion of individuals with postsecondary credentials and/or degrees.

What is related to reverse transferring?

- More similar to community college entrants and 4-yr college drop-outs than to other 4-yr starters and bachelor's completers.

- Lower SES, lower parental education, more likely to be from the working class.

- Similar to other 4-yr starters in terms of the college saving behaviors of their parents and the discussions about college admissions with their parents.

- Academic difficulties during college
  - Traced back to high school preparation
  - In terms of academic preparedness they fall somewhere between other 4-yr starters and community college entrants.

Research Questions

1. What factors are related to an accelerated time to reverse transfer?

2. Among reverse transfer students, which outcomes were attained at the community college (e.g., associate's completion)?

3. Among reverse transfer students, what factors are related to an accelerated time to return to a four-year institution?

4. Among those returning, what factors are related to an accelerated time to bachelor's completion?

Main Sources of Data

- **ACT**-Prairie State Achievement Examination and the Student Interest Profiler

- **National Student Clearinghouse-**covers 92% of all postsecondary enrollment

Factors

Category	Variables
Student Characteristics	Gender & Race
Student Academic Characteristics	HS class rank, HS GPA, highest expected degree, HS program type, core curriculum, ACT subscale scores, AP participation, stated need for help
Ability to Pay/ Financial Aid	Parental income, number of siblings, expecting to receive financial aid, expecting to work while enrolled
High School Characteristics	Region, Mean HS Composite ACT, Distance to 1st Four-Year, Distance to CC, Distance to Four-Year of Return
Four-Year Characteristics	Sector, selectivity, state

Outcomes

Outcome	Description
Reverse Transfer	Dichotomous indicator of whether a 4-yr starter ever enrolled at a community college excluding summer enrollment, concurrent enrollment, and post-bachelor's enrollment.
Highest CC Degree	Ordinal measure of a student's highest level of degree attainment while enrolled at a community college. Ranked as follows: a) associate's; b) certificate; and c) no degree.
4-yr Return	Dichotomous indicator of whether a reverse transfer student ever returned to a 4-yr institution after their community college enrollment.
Bachelor's Completion	Dichotomous indicator of whether a returner earned a bachelor's degree by the end of the spring semester of 2010.

Survival Analysis (Cox Regression)

- Traditionally used in medical and epidemiology research.

- Used to explore the relationship between a set of explanatory variables and a time-based event of interest (number of semesters until reverse transfer).

- Provides an estimate of the treatment effect (odds ratios) on survival after adjusting for the explanatory variables.

Predicting an Accelerated Time to Reverse Transfer

Factor	Comparison	Odds Ratio
Parental Income	Mid-High to High Mid-Low to High	1.16 1.20
Expecting to Work		1.24
HS GPA	2.5-2.9 to ≤2.4 3.0-3.4 to ≤2.4 ≥3.5 to ≤2.4	.882 .692 .403
Highest Expected Degree	Less than BA to BA+ BA to BA+	0.79 0.90
Selectivity	Most/Highly	0.70
Sector	(Public)	1.19
Study Skills		1.18

Outcomes for Reverse Transfers at Community Colleges

Highest Two Year Degree

■ **Associate's**   ■ **Certificate**   ■ **None**

16%

3%

81%
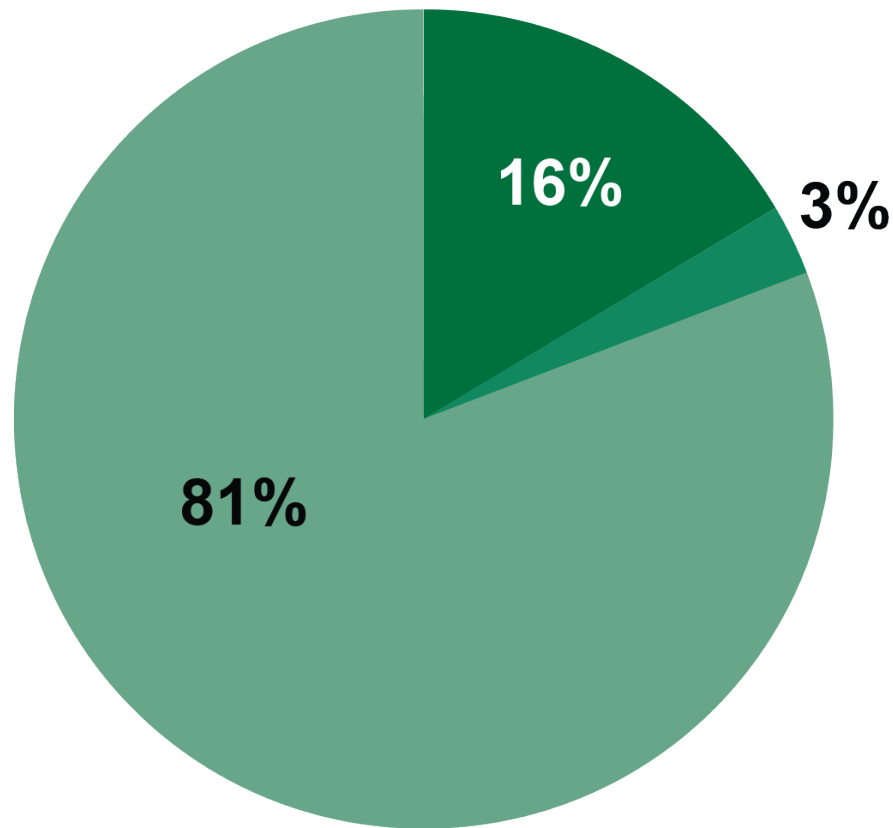
Predicting a Timely Return

Factor		Odds Ratio
Race	Black to White Asian to White	1.19 1.38
HS GPA	≥3.5 to ≤2.4	1.29
Highest Expected Degree	<BA to BA+	0.69
Distance HS to 4yr	>100 – ≤175 to ≤30 >175 to ≤30	1.19 1.14
Selectivity	Most/highly	1.29
Highest CC Degree	Cert. to No Degree Associate to No Degree	0.64 1.19

Bachelor's Completion among Reverse Transfer Students
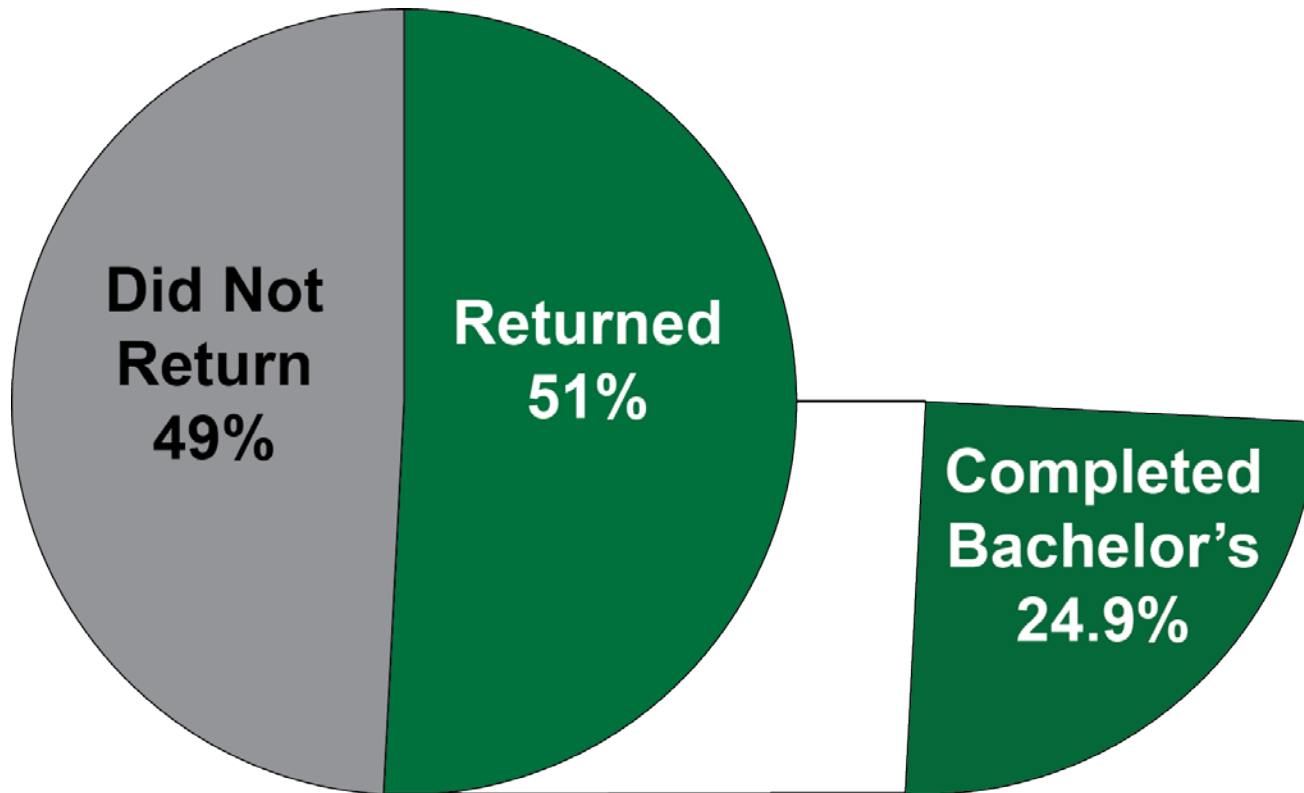
Predicting a Timely Bachelor's Completion

Factor	Comparison	Odds Ratio
Gender	Male	0.80
Race	Black to White	0.66
Region	SW to Chicago	0.56
Highest CC Degree	Cert. to No Degree	0.56
	Associate's to No Degree	1.30
Returned to Same 4yr		1.26
Selectivity Alignment	Equal to Less	1.29
State	Illinois	1.28
Selectivity	Most or Highly	1.33

Reverse Transfer and End of Study Status

		Bachelor's Degree or Higher	Non-Completers			Total
End of Study Status						
			Still Enrolled at 4-yr	Still Enrolled at 2-yr	No Longer Enrolled	
Reverse Transfer Students	Row %	24.9%	12.1%	12.4%	50.6%	100.0%
	Column %	7.2%	54.9%	100.0%	50.2%	20.7%
Other Four-Year Starters	Row %	84.3%	2.6%	0.0%	13.1%	100.0%
	Column %	92.8%	45.1%	0.0%	49.8%	79.3%
Total	Row %	72.0%	4.6%	2.6%	20.9%	100.0%
	Column %	100.0%	100.0%	100.0%	100.0%	100.0%

Discussion/Conclusions

- The factors related to academic preparation and financial aid had relatively strong effect sizes in terms of reverse transferring.

- The importance of the factors related to financial aid and academic preparation faded as the outcome measures advanced. Institutional characteristics became more important.

- Associate's degree completion was positively and significantly related to both a timely return and a timely completion of a bachelor's degree.

Policy Implications

- Reverse transferring of credit to the community college along with the student

  – Active reverse articulation of credit from initial four-year institution to community college

- Statewide Longitudinal Data Systems

  – Need to be cross-sector

  – Early monitoring systems