

Transfers From College to University: A Four-Year Outcome Study

Felice Martinello

Jo Stewart

Brock University



Financial support from CUCC is
gratefully acknowledged.

Background

- Relative lack of published research on Ontario transfer student success
- We examine progress/success of students who attended Brock University after attending College
- We use several different measures of students' success/progress

Sample Characteristics

- Data on individual students: 2008-09 to 2011-12
- 155 college transfer, 2,367 non-transfer students
- All transfer students received some transfer credit => they had completed a Certificate or Diploma at College
- All were first year students (zero prior Brock credits) in 2008-09
- All took a first-year Social Science course in 08-09
=> Sample is not representative of the student population at Brock, but it is not too far off

Persistence/Attrition

- Persistence if student attempted at least one course in an academic year given that they attempted at least one course in an earlier year
- Transfer students' persistence from Year 3 to Year 4 is lower, otherwise not much difference from non-transfer students

Persistence Rates (% persisting)

	Non-Transfer	College Transfer	<i>p</i> value for difference
Year 1 to Year 2	85.4	82.1	0.27
Year 2 to Year 3	89.1	89.3	0.96
Year 3 to Year 4	92.3	84.4 ^b	0.013
Year 1 to Year 3	77.2	74.3	0.42
Years 1 to Year 4	71.1	56.5 ^a	0.001

Number of Credits Earned at Brock

- College transfer students earn fewer credits in every year than non-transfer students.

Average Number of Credits Earned

	Non-Transfer	College Transfer	<i>p</i> value for difference
Year 1:	4.13	3.87 ^c	0.054
Year 2:	4.26	4.03 ^c	0.06
Year 3:	4.40	3.72 ^a	0.00
Year 4:	4.16	3.08 ^a	0.00

Why do College Transfer Students Earn Fewer University Credits?

- Not due to lower grades.
College transfer students do receive lower grades, but the difference is small.
- Transfer students less able to earn credits from course attempts in Year 1, but especially in Years 3 and 4. Due to:
 - higher withdrawal rates in Years 1 and 4.
 - higher rate of failed, repeated courses in Years 3, 4

Percentage of Course Attempts Converted Into Academic Credits

	Non- Transfer	College Transfer	<i>p</i> value for difference
Year 1:	84.4	83.2	0.6
Year 2:	86.6	87.1	0.81
Year 3:	90.7	86.4 ^c	0.098
Year 4:	92.1	82.5 ^b	0.018

Why do College Transfer Students Earn Fewer University Credits (continued)

- College transfer students enroll in (attempt) fewer credits.
- Transfer students are more likely to be part-time students. But this is not the sole reason.
- Among full-time students, college transfers attempt fewer courses:
 - 3.5-4.0 as opposed to the dominant choice of 5.0 for non-transfer students

Differences in Credit Attempts

	Non-Transfer	College Transfer	<i>p</i> value for difference
Year 1:	4.86	4.63 ^b	0.011
Year 2:	4.84	4.63 ^b	0.017
Year 3:	4.77	4.18 ^a	0.00
Year 4:	4.46	3.63 ^a	0.00

Differences in Graduation

- Too early to compare overall graduation rates.
 - Only four years. Only 36% of non-transfer and 46% of transfer students had graduated by spring of 2012. So results may change.
- College transfer students are more likely to:
 - graduate before non-transfer students.
 - graduate with a three-year (15 credit) rather than a four-year (20 credit) degree

Differences in Graduation Degrees

	Non-Transfer	College Transfer
Pass (15 credit) degree	30.8	50.7
Major (20 credit) degree	8.9	7.0
Honours (20 credit) degree	60.3	42.3
Total Number:	[842]	[71]
<i>p</i> value for difference in frequencies		0.003 ^a

General Discussion

- Competing demands on the older transfer students may cause the weaker performance, and graduation with lower-level degree.
- Transfer students do not differ from non-transfer students on rates of academic suspension, or GPA. Graduation rate (to date) is higher.
 - Encourage them to make the transfer.

General Discussion

- Transfer students had less success in Years 3 and 4 relative to non-transfer students, but they do seem to be able to accumulate sufficient credits and grades for graduation.
 - Tentative conclusion until further data about graduation rates can be collected over the next year or two.

General Discussion

- Able to complete degrees, but poorer performance in Years 3 and 4 suggests less opportunity to enroll in competitive graduate or professional programs upon graduation.

General Discussion

- Regression analysis adjusting for gender and major field of study give basically same results – see paper for details on differences.
- Self-selection concern: All students chose to attend university, so may be systematically different from other college students.

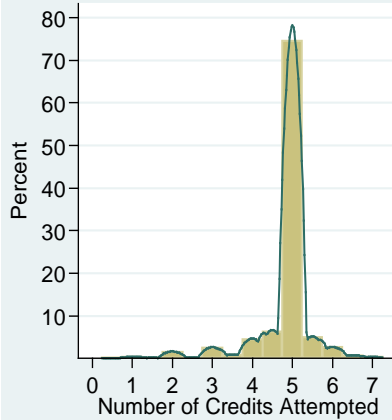
Policy Implications

- Further research into graduation rates is required.
- Support programs: Most focus on Years 1 and 2 when transfer students seem to have fewer academic challenges
- Investigation into the types of supports required is needed.
 - Socio-economic support, family support, intrusive advising, learning skills programs with more emphasis on higher-level skills (vs high school remediation)

Figure 1. Distributions of Credits Attempted

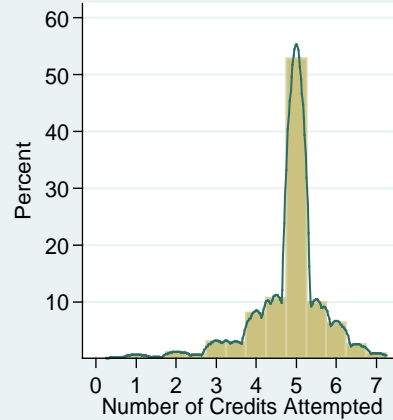
Year 1: 2008/09

Non-transfers



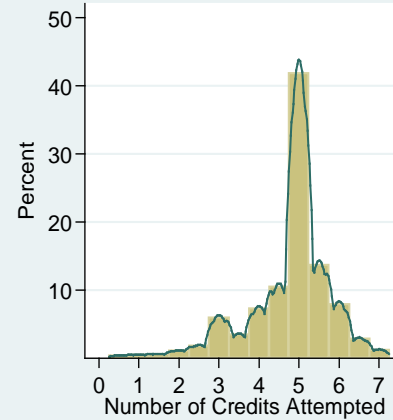
Year 2: 2009/10

Non-transfers



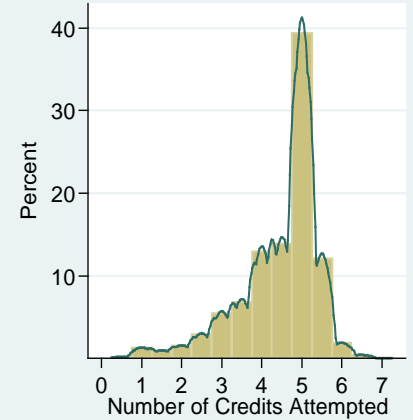
Year 3: 2010/11

Non-transfers

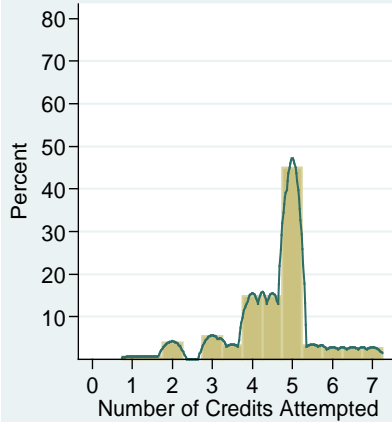


Year 4: 2011/12

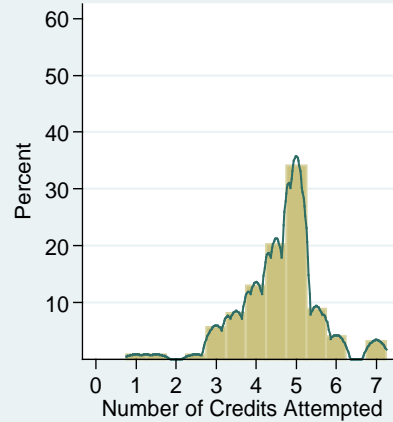
Non-transfers



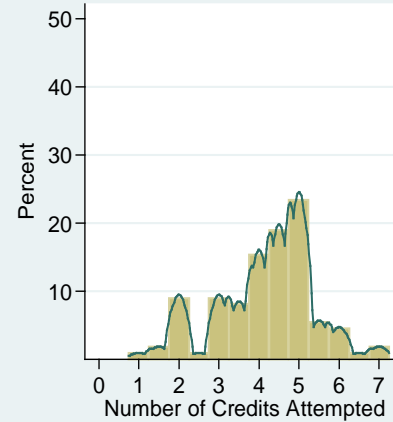
College Transfers



College Transfers



College Transfers



College Transfers

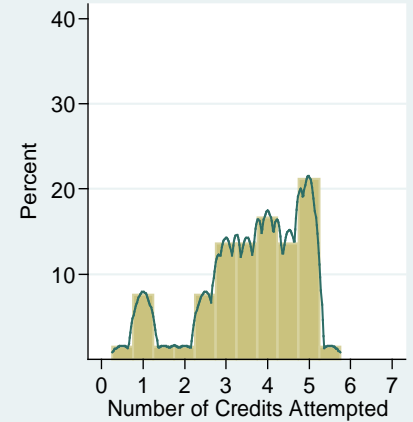
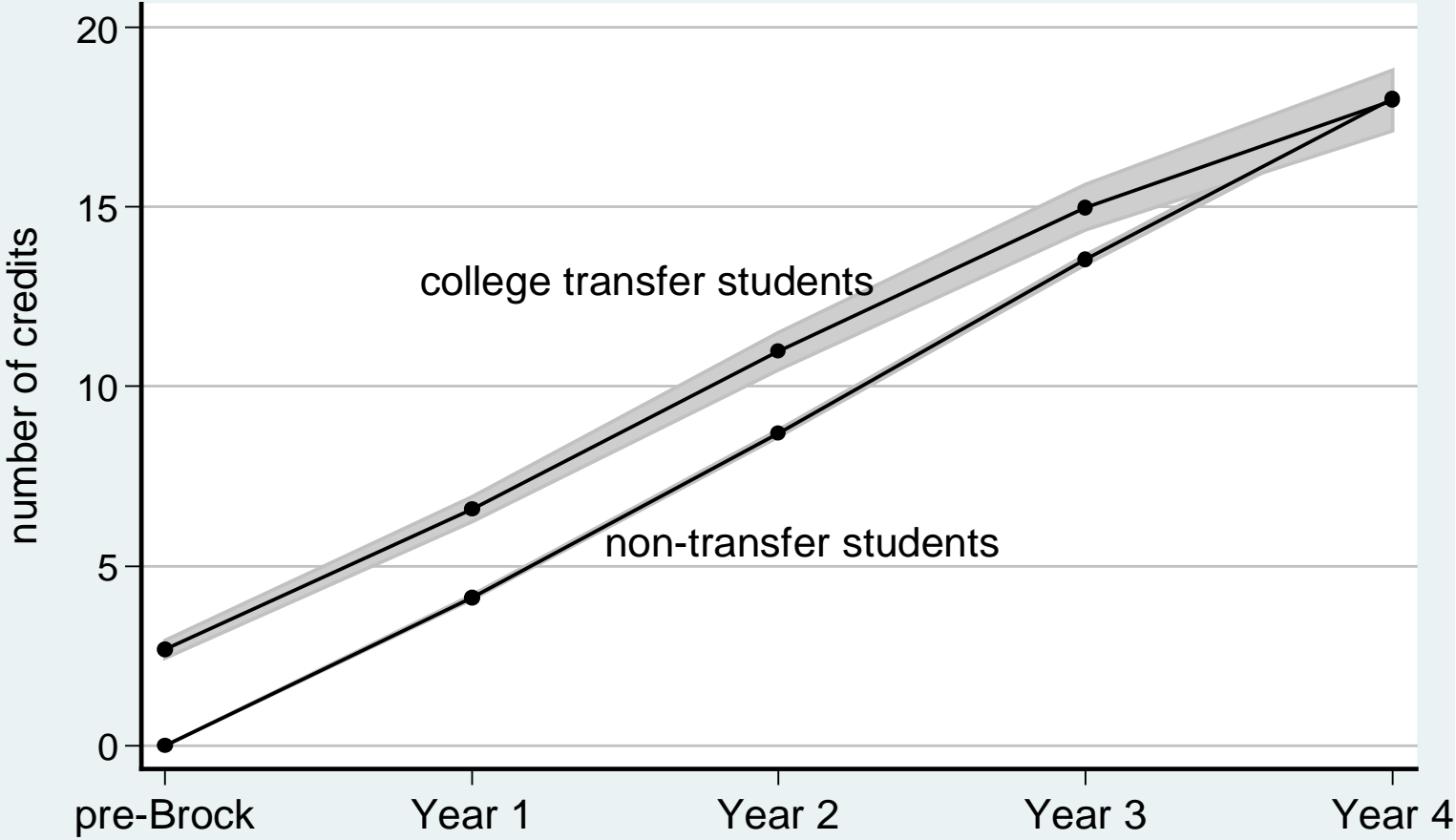


Figure 2. Average accumulated credits, including transfer credits
95% confidence interval is shaded



Cumulative Grade Averages

	Non-Transfer	College Transfer	<i>p</i> value for difference
Year 2:	68.5	67.4	0.19
Year 3:	70.7	68.9 ^b	0.03
Year 4:	72.1	70.7	0.15