

# An Analysis of CAAT Transfer Students' Academic Performance at Trent University

Presented at:

2<sup>nd</sup> Annual Student Pathways in Higher Education Conference  
Toronto

February 27 – March 1, 2013

Torben Drewes, Karen Maki, Kris Lew, Michelle Willson, Kent Stringham  
Trent University

*Funding from the College-University Consortium Council is gratefully acknowledged. All opinions expressed in this report are those of the authors and are not necessarily shared by the CUCC.*

# The Issue

- As Ontario's transfer credit agenda moves forward, more empirical evidence is required on the performance of college students transferring to university programs.
- Over the past several years, approximately 15 percent of incoming students at Trent University came from Colleges of Applied Arts and Technology (CAATs).
- This report provides an assessment of their performance at Trent.
- The data refer to entrants from 2007-08 through 2011-12.

# Who Came to Trent?

- From the academic year 2007-08 through 2011-12, Trent admitted
  - 1,428 CAAT students,
  - 5,499 high school entrants,
  - 1,215 students from other universities, and
  - 1,242 others.

Table 1 CAAT Transfers through Articulation or University Transfer Programs

	2007	2008	2009	2010	2011
Articulation	n/a	68	62	83	62
UTProgram	12	24	19	32	16
Total CAAT	262	288	323	273	255
Total CAAT as % of All Registrants	14.8%	15.3%	16.8%	15.8%	13.3%

# How Many Credits?

- Trent's admissions standard for CAAT students:
  - Articulation Agreement transfers:
    - 3 years college (plus 2 years university)
    - 75% average to qualify
  - University Transfer Program:
    - 1 year purpose-designed Fleming program with 70% average
    - Earn 4 transfer credits
  - General Transfers
    - completed at least one year in a Canadian community college or Ontario CAAT with a cumulative average of at least 65 percent.
    - prior to 2011: two years of college required for transfer credit assessment

# How Many Credits?

- Eligibility for transfer credit consideration:
  - a minimum cumulative average of 70 percent.
  - outside of articulation agreements that specify blocks of credit transfers, college applicants are considered for transfer credits on a course-by-course basis.
  - generally, graduates of a “highly academic” two-year college program can expect to receive up to 5.0 transfer credits and graduates of three-year programs can expect to receive up to 7.5 credits.

Table 2 Credits Transferred by CAAT Registrants  
(All registration years pooled)

Number of Credits Transferred	Proportion of Registrants
0	33.8%
0.5 – 5.0	42.2
5.5 – 9.5	9.4
10	14.7
Total Registrants	1,428

# What Did CAAT Transfers Look Like?

Table 4: Age and Gender Comparisons

Type of Registrant	Age			Gender	First- Generation
	Mean	Std. Dev.	Median	% Female	%
CAAT	22.9	5.9	21	60.4%	4.8
High School	17.6	1.4	17	63.2	3.4
University Transfer	23.6	6.8	22	68.7	4.6
International	20.0	5.2	18	57.3	0.5
Continuing	26.0	8.3	23	68.7	1.0
Other	28.0	10.1	25	69.2	1.5

Descriptive statistics refer to pooled data from all entry cohorts.

# How Well Did They Do?

- What are the performance metrics?
  - Grade point average, drop-out rates
- What are the reference points?
  - Direct high school entrants or transfers from other universities?
- How do we compare apples with oranges?
  - Eg. CAAT transfer students are older than high school entrants.
    - Is it a “college effect” or an “age effect”?
  - We use multivariate analysis to control for observable differences that may be correlated with academic performance.
  - Data are severely limited – no controls for academic ability.

# How Well Did They Do? Grade Point Averages

Grades are end-of-term averages, averaged over terms at Trent.

Table 5 Term Averages

Registrant Type	Average
CAAT Transfer – Non-articulation	69.6
CAAT Transfer – Articulation	74.1
CAAT Transfer – Univ. Transfer Prog.	66.2
High School	67.2
University Transfer	72.6

Table 6 Multivariate Estimates of Mean Difference in Grade  
(compared to High School Entrants)

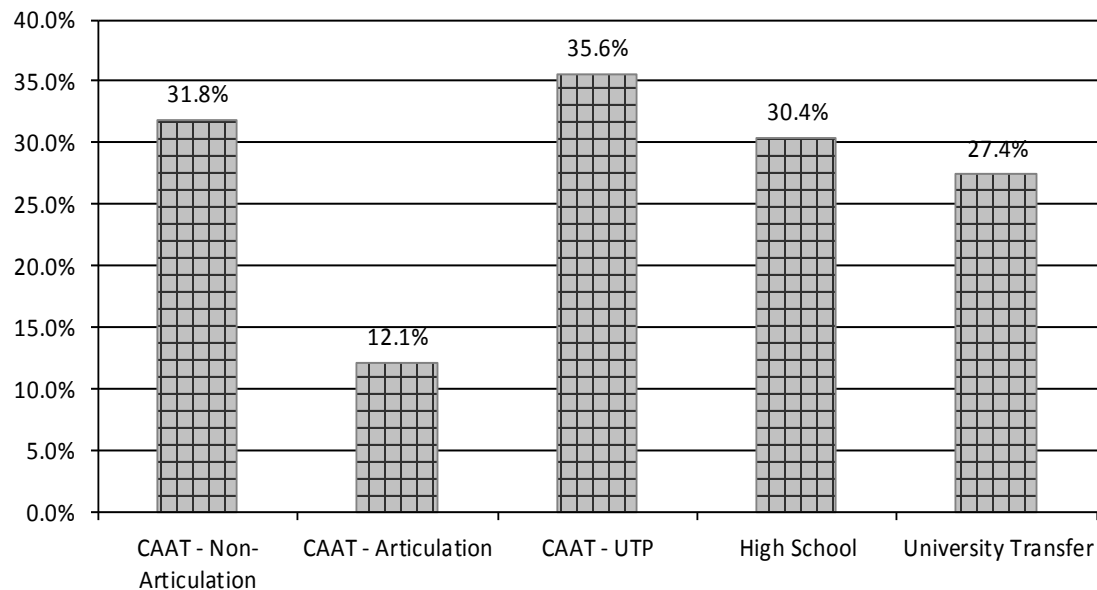
	No controls	Controls for Demographics	Controls for Program and Demographics
CAAT – Non-Articulation	2.39*	1.07*	0.65
CAAT – Articulation	6.74*	6.18*	5.80*
CAAT – Univ. Transfer Prog.	-1.59	-1.81	-1.63
University Transfers	5.39*	3.74*	3.36*

\* indicates significance at the 5% level



# How Well Did They Do? Drop-out Rates

Figure 4: Drop-Out Status at April 2011



# How Well Did They Do? Drop-out Rates

- We need to control for group differences that are correlated with retention: age, time to completion, etc.
- Preferred model: survival analysis.

Table 8 Probit Estimates of Drop-out Probability  
(compared to High School Entrants)

	Model (1) Controls for Program and Demographics	Model (2) Restricted to More Than 5 Accumulated Credits**
CAAT – Non-Articulation	-0.014	-0.007
CAAT – Articulation	-0.183*	-0.129*
CAAT – Univ. Transfer Prog.	-0.008	0.039
University Transfers	-0.051*	-0.054*

\* indicates significance at the 5% level

\*\* accumulated credits includes both transfer credits and those earned at Trent.

Full model results are reported in Appendix 2

# Conclusions

- CAAT students who have come to Trent have performed at least as well as those entering from high schools.
  - Their grades are as high as, and in the case of CAAT students entering through one of Trent's articulation agreements, significantly higher than direct high school entrants.
  - Drop-out rates among the latter group are also lower than those of high school entrants while the rates of CAAT entrants coming from outside of these agreements or from Fleming Colleges University Transfer Program are the same.
- These results provide support for Trent's past efforts to build partnerships with and pathways from the college system.
- They cannot be used to support a wholesale increase in the flow of students from CAATs to universities.
  - No study in Ontario has compared CAAT students moving to universities with CAAT students not moving to universities.
  - Difficult data issues arise. Need to link university and college administrative data.

Thank you