

Supporting Student Success with Admissions Modelling

A case study of Architectural Technology at Sheridan

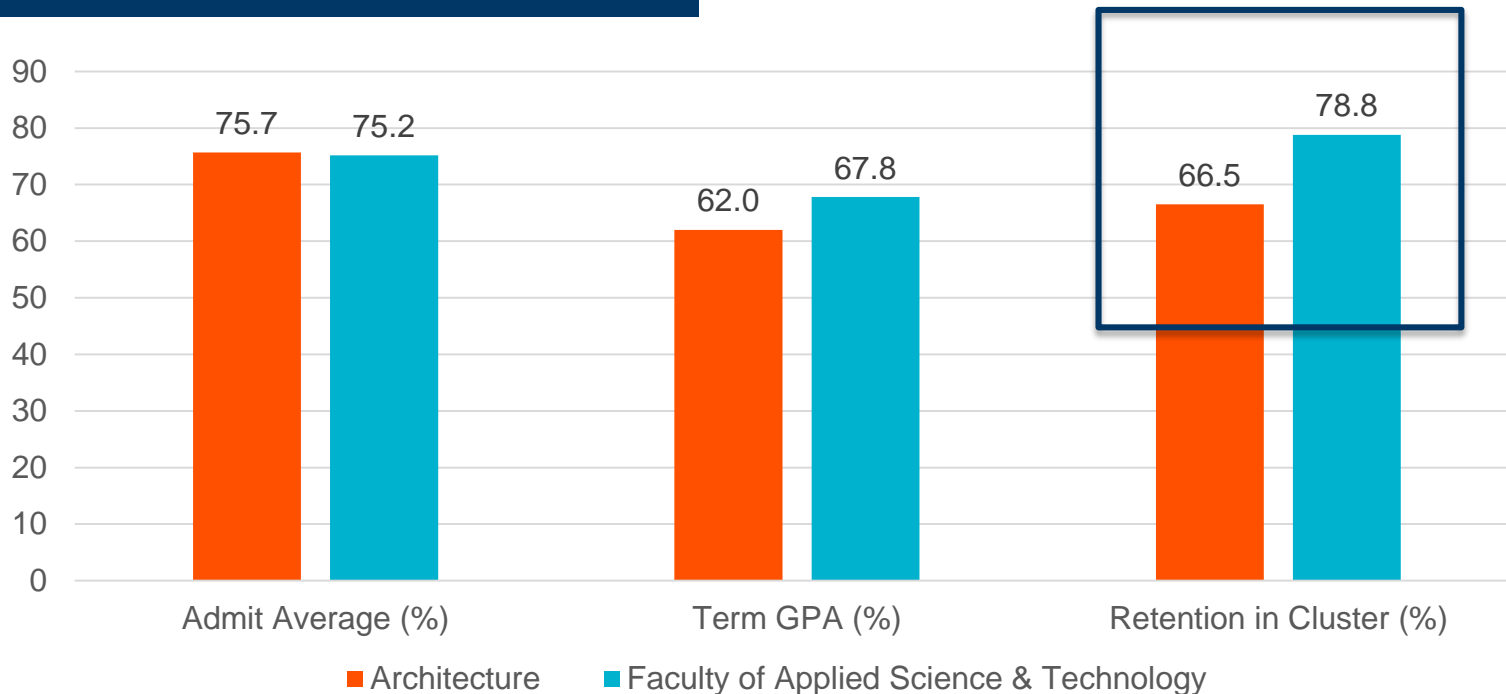
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Architectural Technology

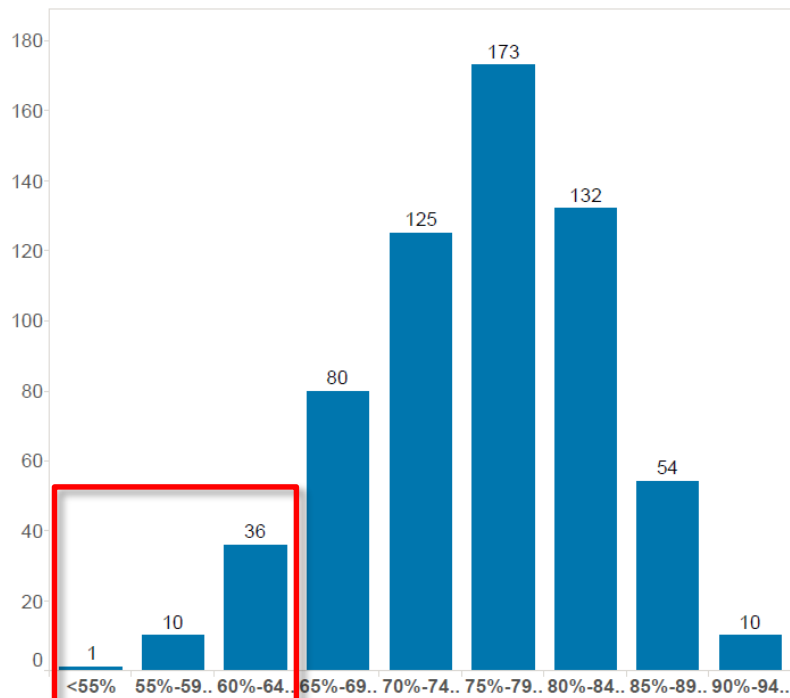
STUDENT PROFILE

PRIOR TO ADMISSION CHANGE



ADMIT GRADES

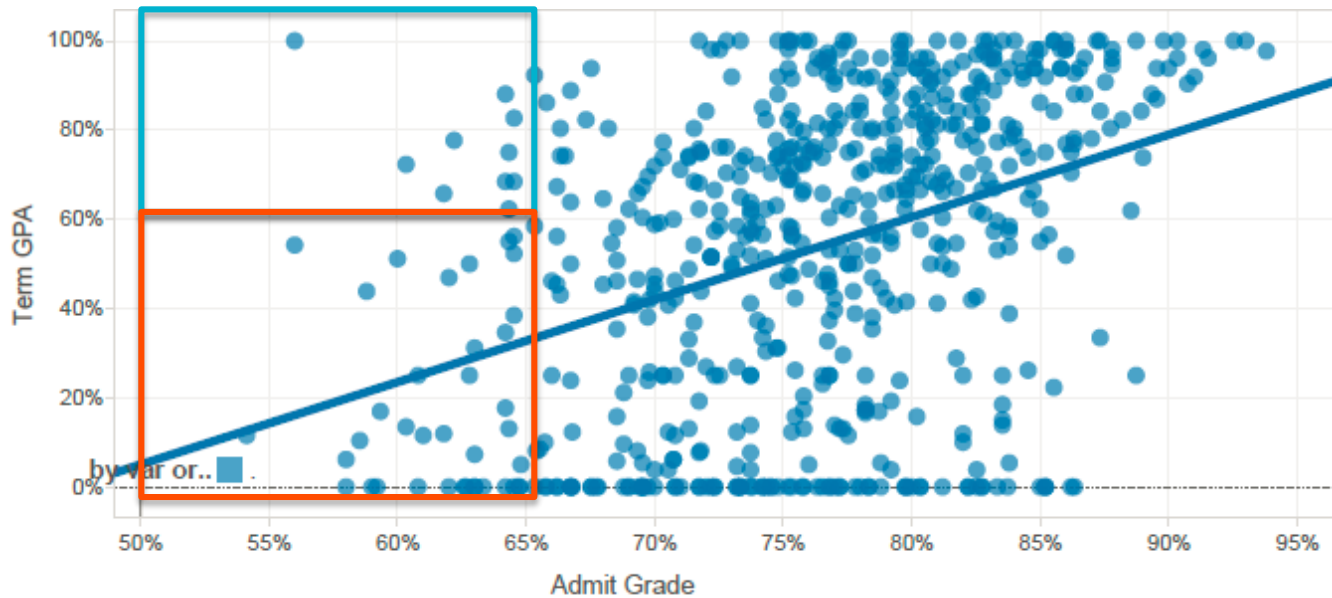
PRIOR TO ADMIT CHANGE



- The graph to the left shows count of students (vertical axis) grouped by admit grade (horizontal axis)
- The group of students with lowest grades identified as having least chance for successful progression.

SCATTERPLOT #1

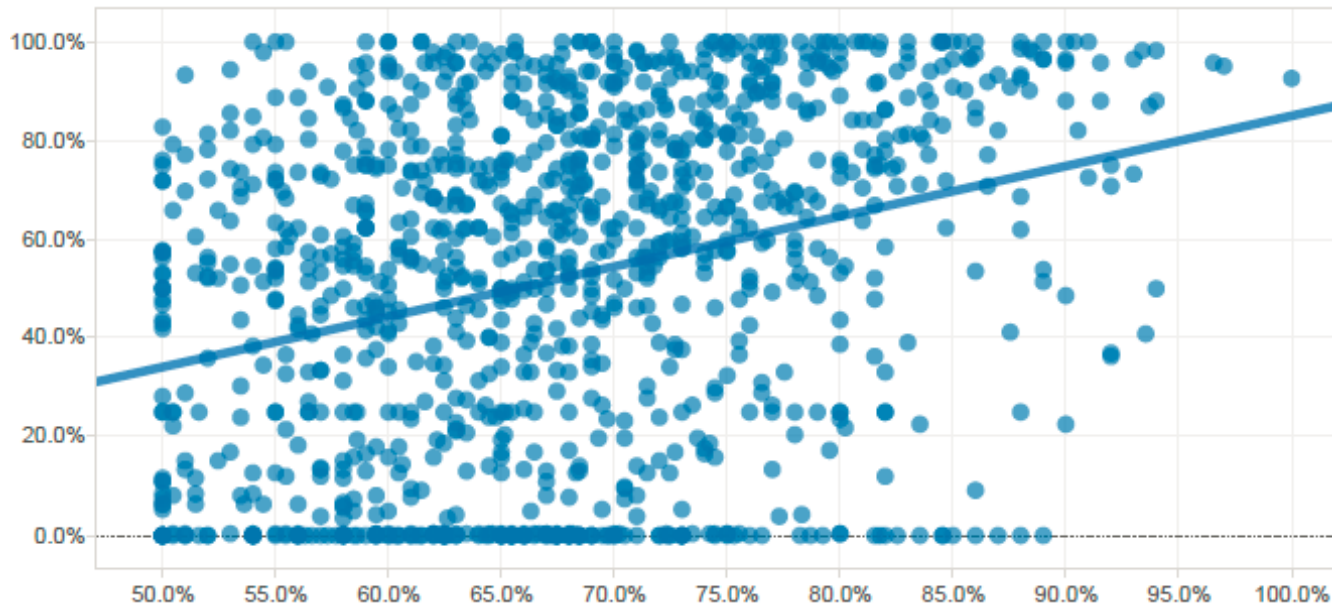
ADMIT GRADE/ TERM GPA



Term GPA =
- 0.87 + 1.85
admit grade
($R^2 = 0.16$)

SCATTERPLOT #2

S.SCHOOL MATH / TERM GPA



Term GPA = $-0.17 + 1.01 * \text{HS math grade}$
($R^2 = 0.09$)
Admit grade has a stronger relationship to term GPA than high school math (1.85 v. 1.01), and explains more variance (0.16 v. 0.09)

ADMISSIONS CHANGE

NEW 2012

Ontario Secondary School Diploma or equivalent, including these required courses:

- One English, Grade 12 (ENG4C or ENG4U) **plus**
- Grade 12 Mathematics (C or U) or Grade 11 Functions (MCF3M) or Grade 11 Functions and Relations (MCR3U)
- Minimum 65% overall average

Applicant Selection

Eligible applicants will be selected on the basis of their previous academic achievement (the average of their six highest senior-level credits, including required courses), and/or results of pre-admission testing.

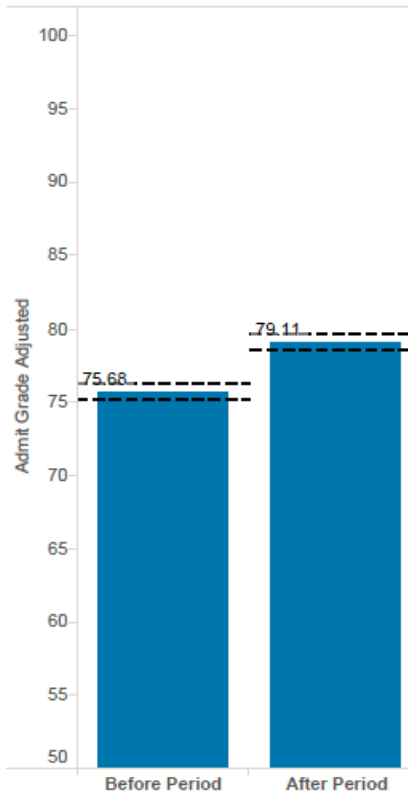
ADMIT AVG & TERM GPA

BEFORE / AFTER

After implementing the admit average cut-off, admit averages rose by **3.53** percentage points
Term GPA also rose by **0.17** grade points (**4.25** percentage points)

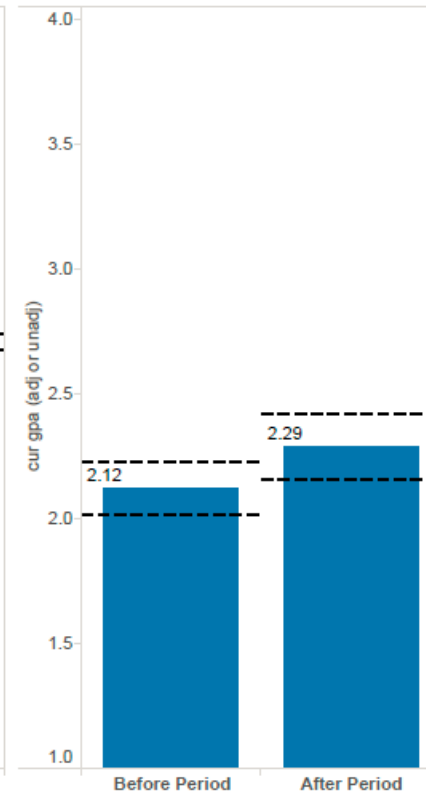
Admit Average

Unadjusted for Fixed Differences Between Programs



Term GPA

Unadjusted for Fixed Differences Between Programs



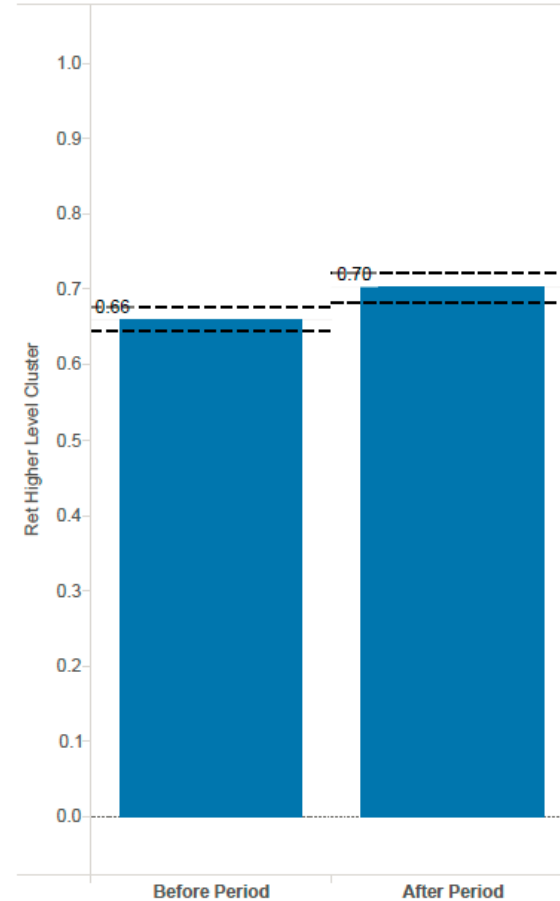
CLUSTER RETENTION

BEFORE / AFTER

- Students were more likely to be retained in the period after the admissions change (difference in retention is significant)

Cluster retention

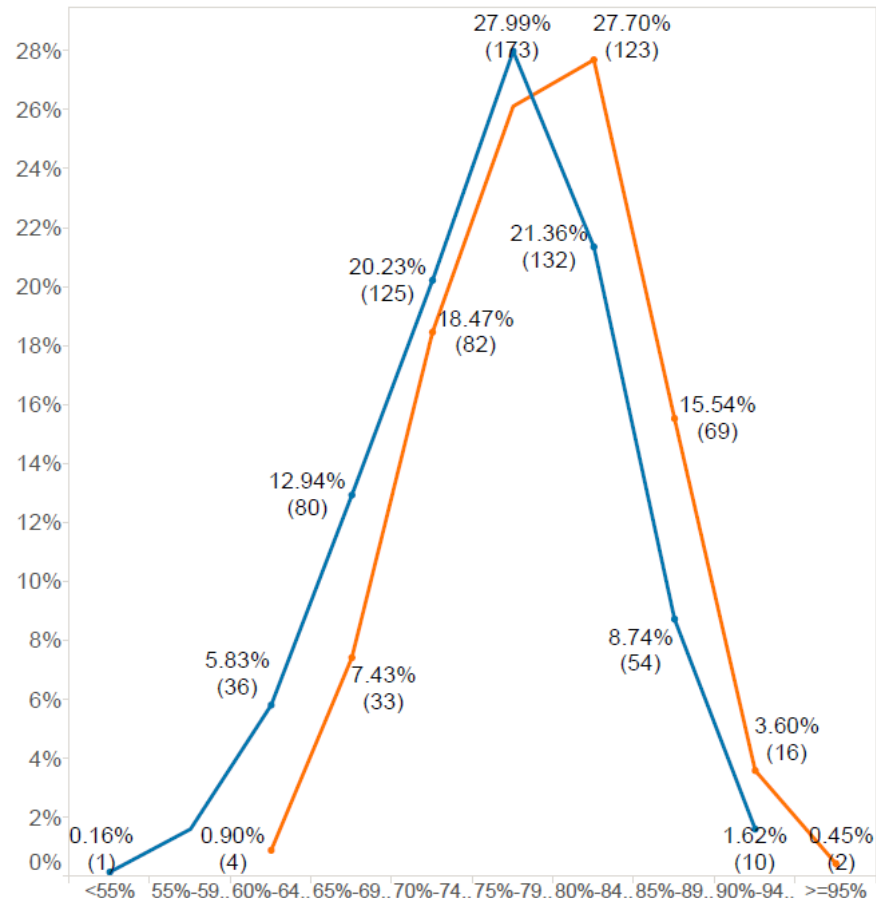
Unadjusted for Fixed Differences Between Programs



ADMIT GRADE DISTRIBUTION

BEFORE / AFTER

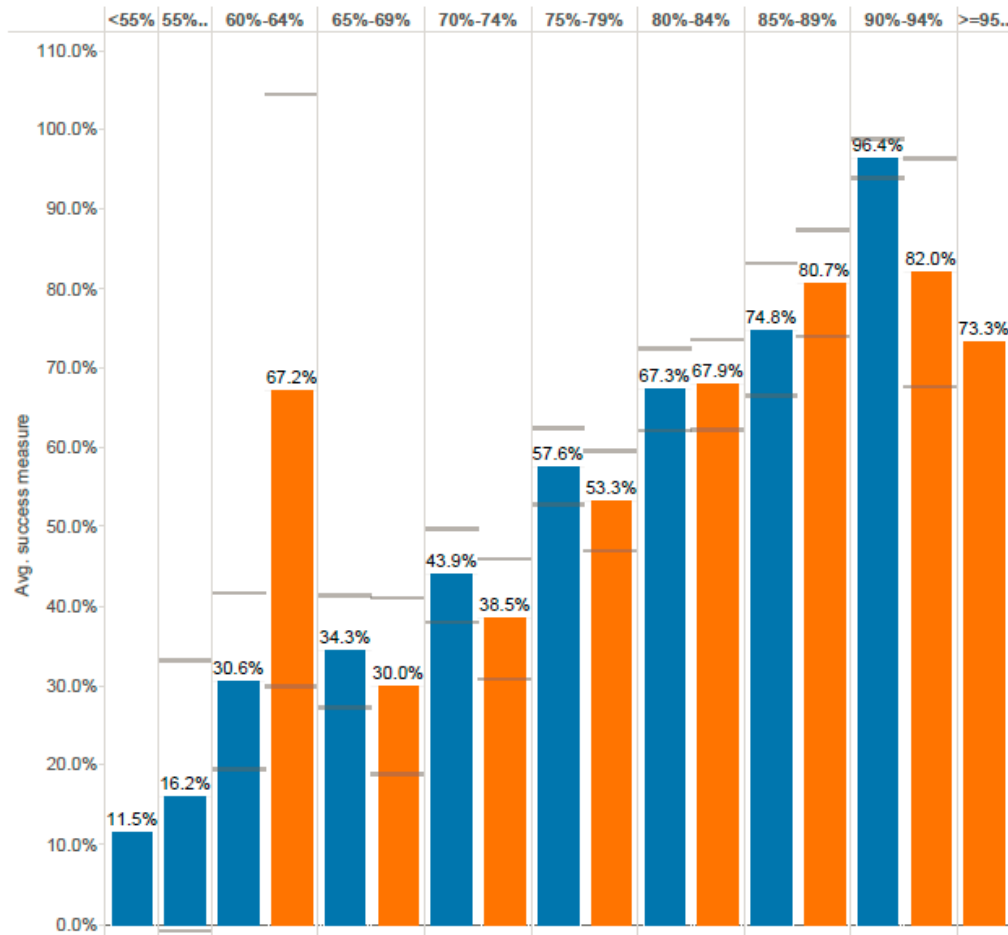
- Before change represented by blue, after change represented by orange
- Clear shift in admit average
- No longer students at the bottom of the distribution
- Greater proportion of students in the middle and high ends of the distribution



PERFORMANCE

CONTROLLED FOR ADMIT

- Within grade bins, no statistically significant change in averages



STUDENTS BY ADMIT GRADE

- After the admit grade minimum cut-off, only 7.5% of the student population in Architecture has an admit grade of under 70%
- 46.8% of the students now have an admit grade over 80% (compared with 35.8% before the change)

Grade range	Before change (%)	GPA (2008-2011)	After change (%)	GPA (2012-present)
Under 55%	<1%	0.46	0%	-
55% - 59%	1.6%	1.15	0%	-
60% - 64%	5.8%	1.25	<1%	2.69
65% - 69%	12.9%	1.36	7.4%	1.19
70% - 74%	20.1%	1.77	18.4%	1.55
75% - 79%	27.9%	2.29	26.1%	2.14
80% - 84%	21.3%	2.68	27.6%	2.67
85% - 89%	8.7%	2.99	15.5%	3.27
90% - 94%	5.8%	3.85	3.6%	3.33
95% & over	0%	-	<1%	2.93
Overall	100%	2.16	100%	2.33

ADMISSION LEVELS

Academic year

Count of students*

2008-2009

176

2009-2010

175

2010-2011

227

2011-2012

213

2012-2013

207

2013-2014

164

2014-2015

153

2015-2016

183

--- CHANGE YEAR

Thanks!

To Sheridan Institutional Research:

Mark Neuman

Jane Logan

For statistically significant analysis
and graphic contribution