Searching For The "Right" Student: The Use of Broad-Based Admissions Criteria in the UBC Undergraduate Admission Decision

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Overview of Study

- Thesis for Master of Arts in Higher Education, UBC, 2014
- Students and Institutions – who chooses whom?
- Research Questions:
    - Does choice of admission-making decision model matter in terms of shaping a first-year class at a selective admission university? And if so, how?
    - How do these particular admissions models fit within the larger social discourses of access to higher education?
    - To what extent are students selected by one admission decision-making model different than students selected by another

Why Broad-Based Admissions?

1. Are you happy with the students you are enrolling? Or do you think some of the students you are turning away are more desirable?
2. Are you satisfied with you ability to control your enrolment?
3. Is your applicant pool deep enough to allow for BBA?

Broad-Based Admissions at UBC

- Adopted by Sauder School of Business in 2004
- Optional "on the margins" approach for some Vancouver faculties as of 2010
- Full adoption and integration into application form for all direct-entry programs in 2012 for Vancouver; in 2013 for Okanagan
- Three – five short answer questions designed to assess applicant characteristics / non-cognitive variables
- Scored holistically via established rubric and standardized scoring process
- Variation in rubrics and weighting by faculty
- In 2014, estimate just under 60,000 profiles read and scored

The Process

- Personal Profile received at point of application
- Triage reading priority based upon preliminary grades
- BBA administrator sends out profiles to readers:
    - Enrolment Services staff
    - Faculty advising office staff
    - Faculty
    - Alumni
- Once grades arrive, profile score is merged with academic average to generate a weighted “admission score”
- Student admitted, refused, or waitlisted
- Score also used to make major entrance scholarship decisions

Do Personal Characteristics Make A Difference In University Admissions?

- Admission average / GPA is the most important predictor of student success
- Limitations of previous studies on non-academic variables:
    - Dependence on hypothetical models
    - Focusing on small liberal arts institutions and/or low-to-moderate selectivity schools
    - Focused on specific programs
    - Focus on academic success only
    - Focused on diversity

Selected Literature Review: Do Personal Characteristics Make A Difference In University Admissions?

Carnevale, A. P., & Rose, S. J. (2003). *Socioeconomic status, race/ethnicity, and selective college admissions*. New York: Report for the Century Foundation.

Eva, K. W., Rosenfeld, J., Reiter, H. I., & Norman, G. R. (2004). An admissions OSCE: The multiple mini-interview. *Medical Education, 38*(3), 314-326.

Karabel, J. (2005). *Chosen: The hidden history of admission and exclusion at Harvard, Yale, and Princeton*. Boston: Houghton Mifflin.

King, P. M., & Bowman, N. A. (2006). Beyond the big test: Noncognitive assessment in higher education. [Review of the book *Beyond the big test: Noncognitive assessment in higher education,* by W. E. Sedlacek]. *Journal of Higher Education, 77*(6), 1104-1110.

Pollock, G., Bowman, R. J., Gendreau, P., & Gendreau, L. (1975). An investigation of selection criteria for admission to an Ontario university. *Canadian Journal of Higher Education*, *5*(3), 1-16.

Sedlacek, W. E. (2004a). *Beyond the big test: Noncognitive assessment in higher education*. San Francisco, CA: Jossey-Bass.

Sternberg, R. J. (2010). *College admissions for the 21st century*. Cambridge: Harvard University Press.

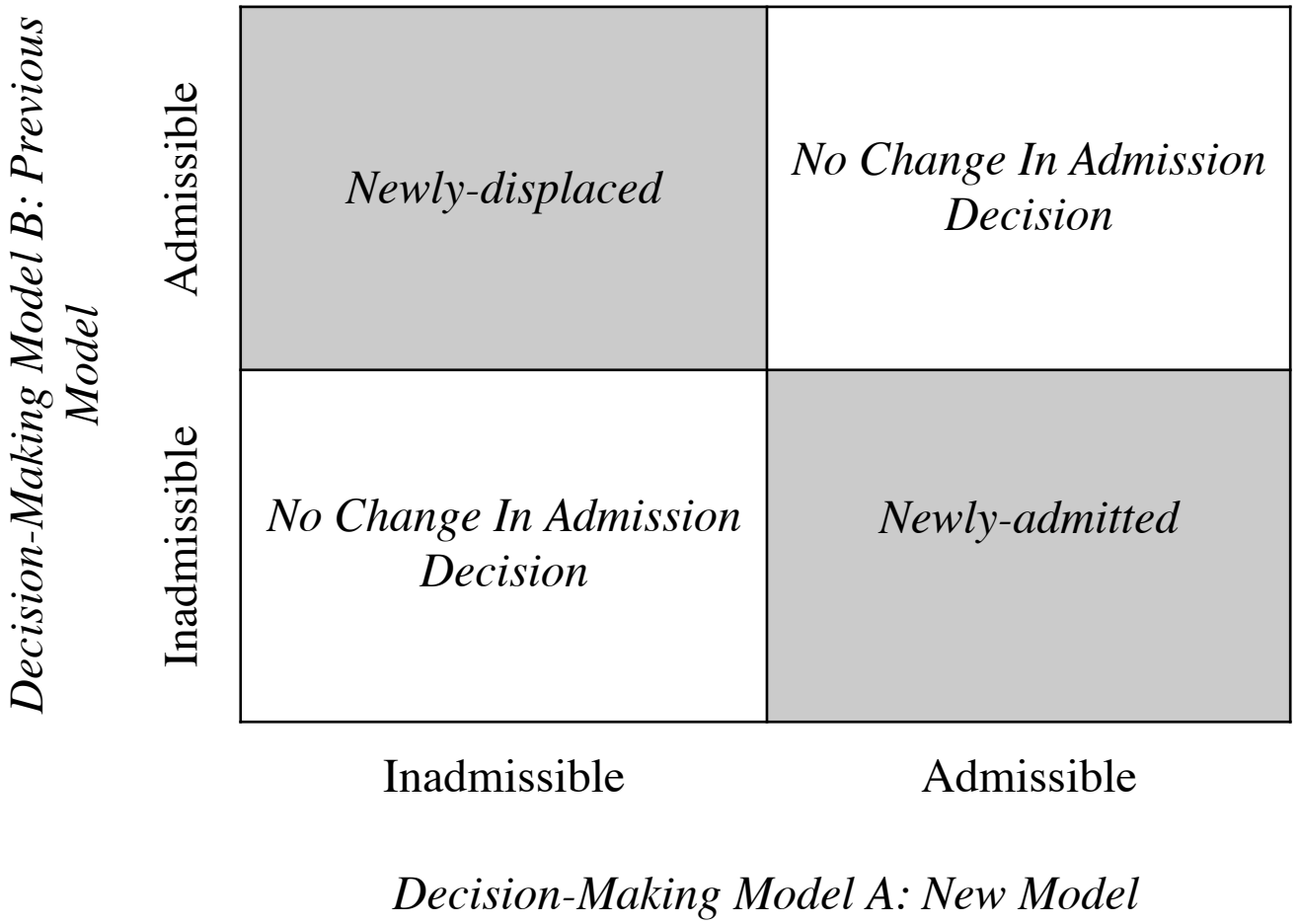
Tracey, T. J., & Sedlacek, W. E. (1988). A comparison of white and black student academic success using noncognitive variables: A LISREL analysis. *Research in Higher Education, 27*, 333-348.

Trapmann, S., Hell, B., Hirn, J. W., & Schuler, H. (2007). Meta-analysis of the relationship between the big five and academic success at university. *Zeitschrift Für Psychologie/Journal of Psychology, 215*(2), 132-151.

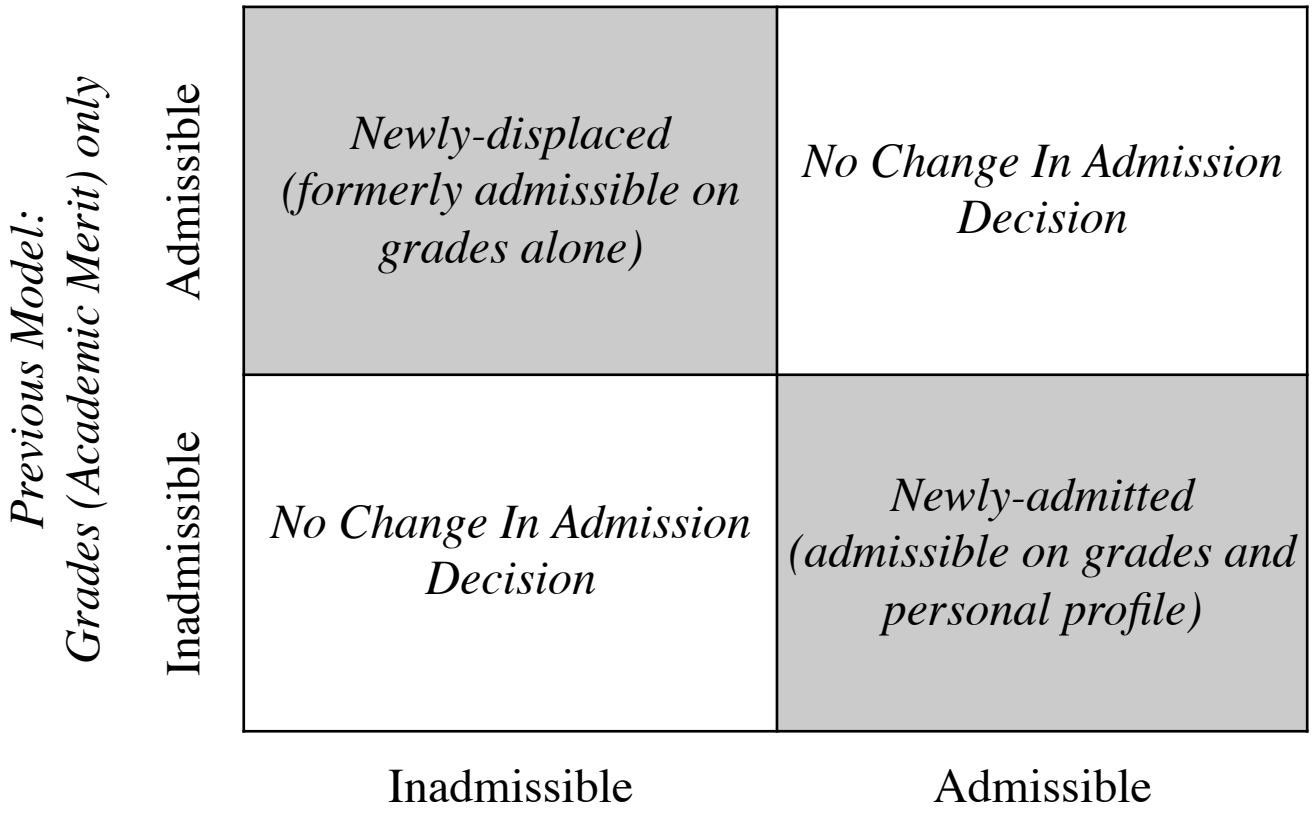
Willingham, W. W. (1986). *Success in college: The role of personal qualities and academic ability*. New York, NY: College Entrance Exam Board.

Wing Jr., C. W., & Wallach, M. A. (1971). *College admissions and the psychology of talent*. New York, NY: Holt, Rinehart and Winston Inc..

Admission Decision-Making Models: The Displacement Effect



The Broad-Based Admissions Model



Identifying Independent Variable Groups: Commerce (Full BBA)

Admit Avg (%)		Grades Alone
95 - 100		
94		
93		Admit
92		696 @ 91.5% (2010)
91		661 @ 90.5% (2011)
90		Refuse
89		
88		
87		
86		
85		
84		

Identifying Independent Variable Groups: Commerce (Full BBA)

Admit Avg (%)	Grades & PP	Grades Alone
95 - 100	↑	↑
94	↑	↑
93	Admit	Admit
92	696 (2010)	696 @ 91.5% (2010)
91	661 (2011)	661 @ 90.5% (2011)
90	on grades & PP	Refuse
89	down	Refuse
88	to	Refuse
87	84%	Refuse
86	↓	Refuse
85	↓	Refuse
84	↓	Refuse

Identifying Independent Variable Groups: Commerce (Full BBA)

Admit Avg (%)	Grades & PP	Grades Alone
95 - 100		
94		
93		Admit
92		696 @ 91.5% (10W)
91	Newly Displaced	661 @ 90.5% (11W)
90	Newly Admitted	
89		
88		Refuse
87		
86		
85		
84		

Identifying Independent Variable Groups: Engineering ("On-The-Margins" BBA)

Admit Avg (%)	Grades (2010)	Grades & PP (2011)
90 - 100		
89		Admit
88		*Consider*
87		*Consider*
86	Admit	*Consider*
85	Refuse	*Consider*
84		*Consider*
83		*Consider*
82		*Consider*
81		*Consider*
80		*Consider*

Identifying Independent Variable Groups: Engineering ("On-The-Margins" BBA)

Admit Avg (%)	Grades (2010)	Grades & PP (2011)
90 - 100		
89	Admit	Admit
88	Newly Displaced	Newly Admitted
87		
86		
85	Refuse	
84		
83		
82		
81		
80		

Dependent Variables

Academic Outcomes

First-year academic performance
Retention to second year

Engagement Outcomes – Previous Behaviours

History of engagement in school and community
History of engagement in recreational activities
History of political/social activism

Engagement Outcomes - Intended Behaviours

Intention to engage in enriched educational experiences

Engagement Outcomes – First-Year Behaviours

Engagement to expand / change personal perspective
Engagement on assignments / schoolwork
Engagement with faculty
Engagement in conversation with diverse peers
Engagement with peers in relation to schoolwork

Data Analysis

Multiple Regression

Step 1: Admission Decision-Making Model

Step 2: Course load in first year, gender, whether the student enrolled in first-year Math or English, and program of study.

Step 1 identifies what we can use in the admission decision (practical / operational)

Step 2 identifies the effect (behavioural)

Academic Outcomes

Program	Total (n)		Academic (n)		Admit Avg ($\bar{x}$)		Yr1 Avg *y1* ($\bar{x}$)		Retention	
	Newly Admit	Newly Displ.	Newly Admit	Newly Displ.	Newly Admit	Newly Displ.	Newly Admit	Newly Displ.	Newly Admit	Newly Displ.
Arts	268	358	257	342	82.9	85.5	67.3	67.2	91%	91%
Engineering	163	172	163	172	86.7	87.4	64.0	65.1	94%	84%
Commerce	197	109	192	107	88.6	92.6	68.2	73.2	94%	94%
Total	628	639	612	621	85.7	87.2	66.7	67.7	93%	89%

Survey Responses

	Total (n)		New to UBC				NSSE			
			Response Rate		Mar. of Err (+/-)		Response Rate		Mar. of Err (+/-)	
Program	Newly Admit	Newly Displ.	Newly Admit	Newly Displ.	Newly Admit	Newly Displ.	Newly Admit	Newly Displ.	Newly Admit	Newly Displ.
Arts	268	358	29%	19%	7.93%	9.07%	28%	21%	8.15%	8.53%
Engineer	163	172	39%	40%	8.04%	7.78%	36%	26%	9.31%	10.73%
Comm	197	109	36%	33%	7.91%	11.27%	12%	26%	16.16%	13.46%
Total	628	639	34%	27%	4.62%	5.39%	25%	23%	5.71%	5.98%

Outcomes of introducing BBA in the decision-making model

Academic Performance

- **Newly-admitted** students using grades and a personal profiles are significantly more likely to have a lower first-year average (66.7%) than then newly-displaced (67.7%) (step 1: R^2 <.01, p <.05).
- Heavily influenced by Commerce students: 73.2% vs. 68.2% (step 1: R^2= .076, p <.001).

Student Retention

- **Newly-admitted** students using grades and a personal profiles are significantly more likely to be retained to second year (93%) than newly-displaced (89%) (step 1: R^2 <.01, p <.05).
- Heavily influenced by Engineers (step 1: R^2= .026, p <.001)

Outcomes of introducing BBA in the decision-making model

Newly Admitted significantly more likely to show:

- History Of Political/Social Activism (Step 2: R^2= .055, P <.10)
- Engagement To Expand/Change Personal Perspective (Step 2: R^2= .007, P <.10)
- Engagement With Peers In Relation To Schoolwork (Step 1: R^2= .017, P <.05)

Outcomes of introducing BBA in the Decision-making model

Newly Displaced significantly more likely to show:

- History of engagement in recreational activities (step 1: R^2= .060, p<.01)
- Engagement on assignments/schoolwork (step 1: R^2= .031, p<.01)

Outcomes Of Introducing BBA In The Decision-making Model

No difference in:

- History of engagement in school and community
- Intention to engage in enriched educational experiences
- Engagement with faculty
- Engagement in conversation with diverse peers

Outcomes Of Introducing BBA In The Decision-Making Model

Analysis **specific to Commerce** also found:

- Newly admitted have greater history of engagement in school and community (step 1: R^2 = .062, p<.10) .
- Newly admitted had greater levels of engagement in conversation with diverse peers in first year (step 1: R^2 = . 133, p<.01).

Observations

- When we remove students for whom the change in admission model had no effect, the impact of personal profiles is small, even in the full BBA model.
- Are small differences important?
- Commerce showed more instances of difference between newly-admitted and newly-displaced;
  - The longevity factor
  - The “all-in” model vs. the “on-the-margins” model
  - The selectivity factor
- Are there benefits beyond selecting a class?
- Further research…

Questions and Discussion