Foreign Students Charting Their Course to Graduation: Course-Taking Patterns and Other Factors that Enhance Foreign Student Baccalaureate Success

UCLA Office of Analysis and Information Management CAIR 2011

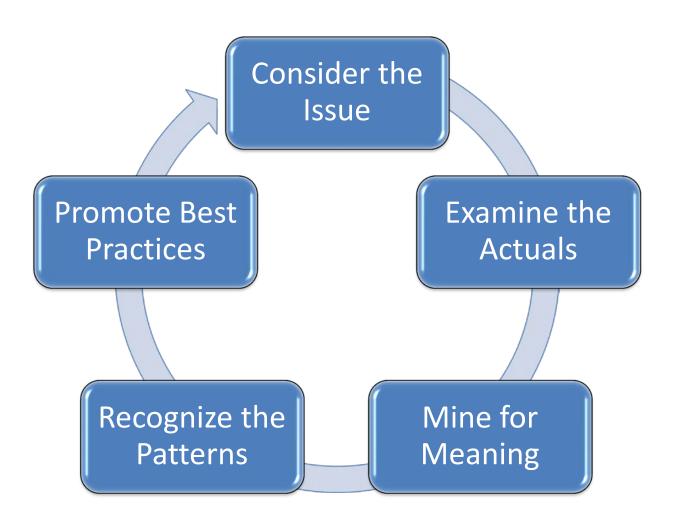
Enrollment Management

- Maintain or increase the number of California resident students studying at the undergraduate level at UCLA.
- Enhance campus internationalization.
- Increase the number of incoming non-resident undergraduate students who hold student visas.

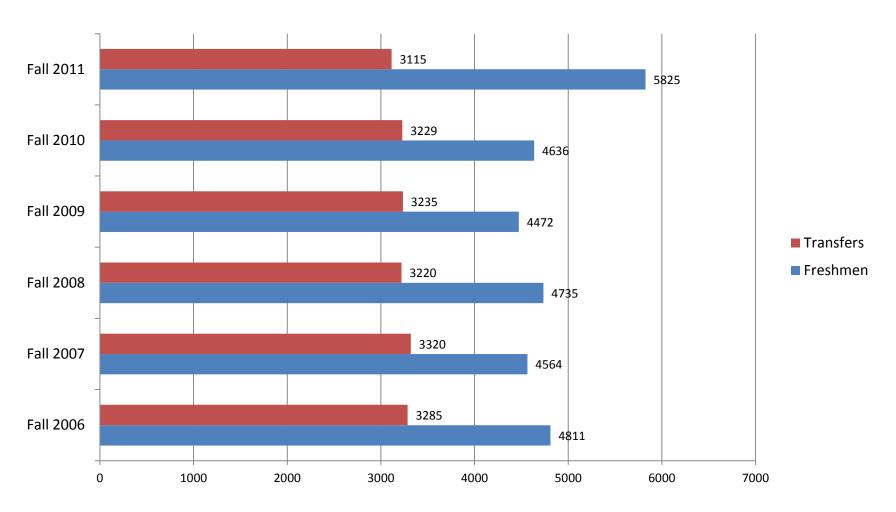
Objectives

- Promote the success of a growing student population on campus.
- Benefit the entire student population by reinforcing student success strategies.
- Leverage scarce resources:
 - to increase access through lower time-to-degree
 - to enrich students with diverse cohorts

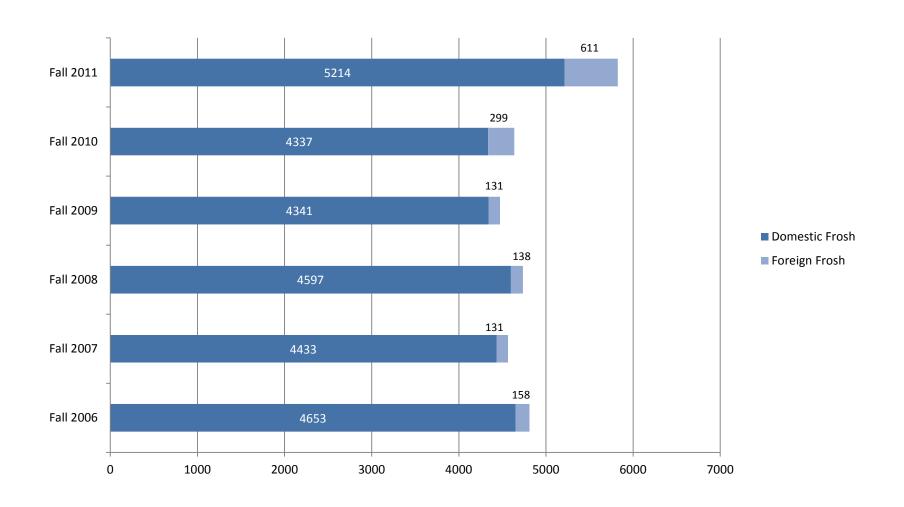
The Study



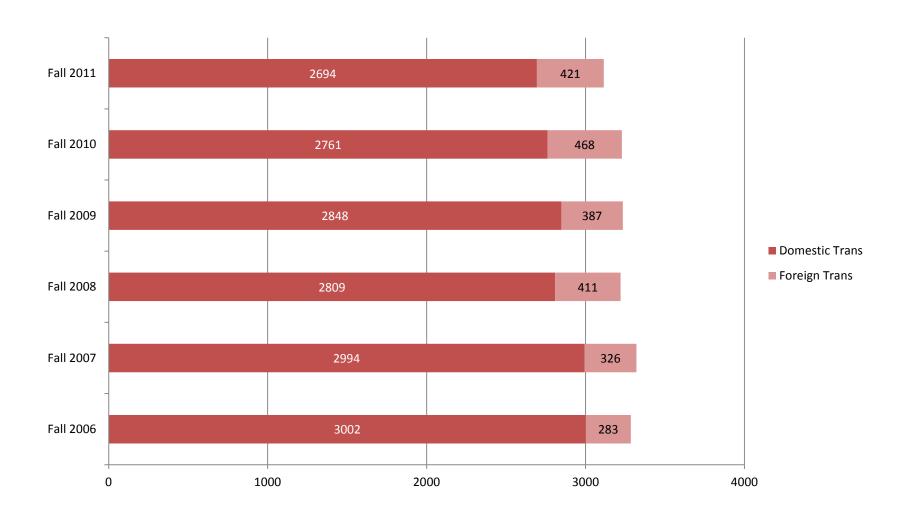
Composition of Entering Undergraduates



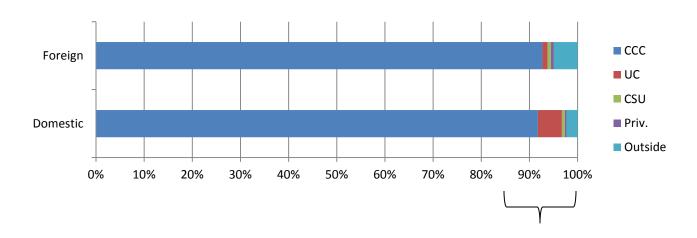
Domestic and Foreign Freshmen

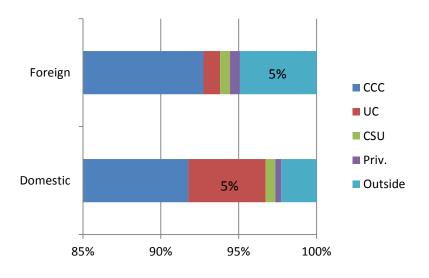


Domestic and Foreign Transfers

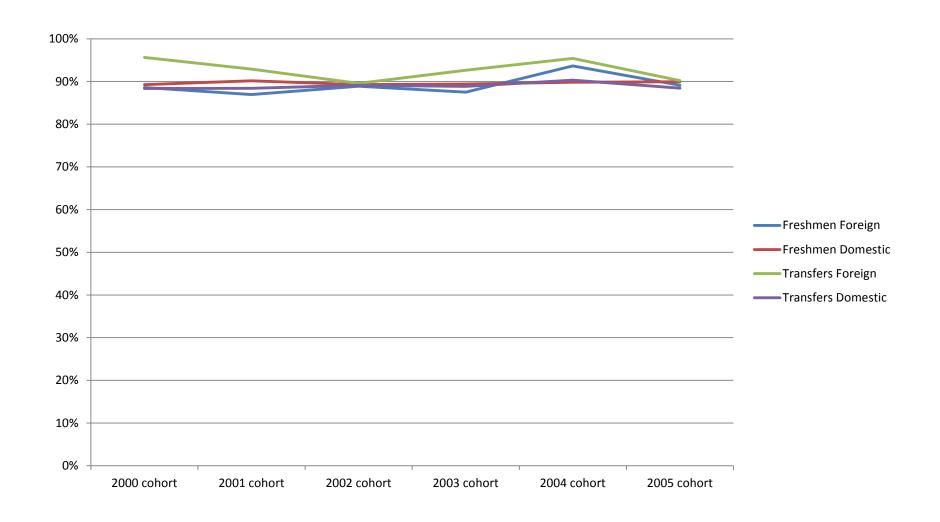


Sources of Transfers

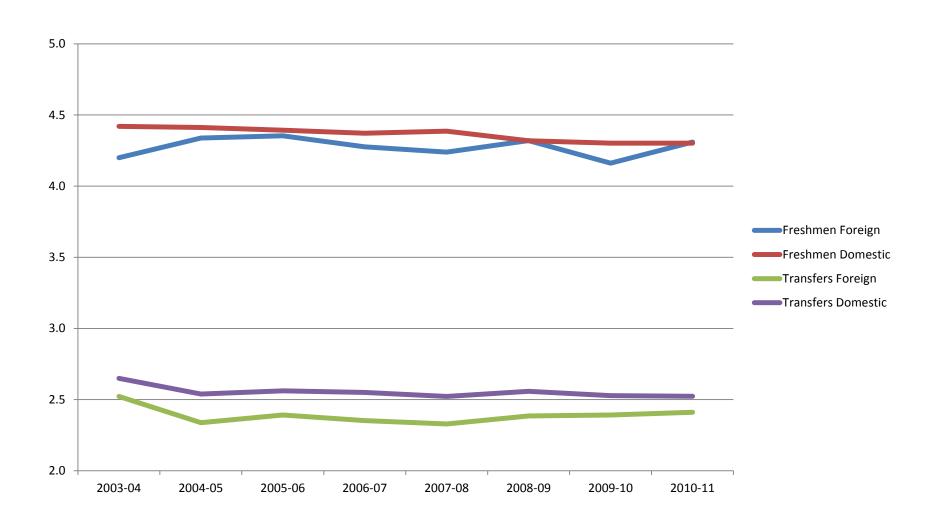




Graduation Rates



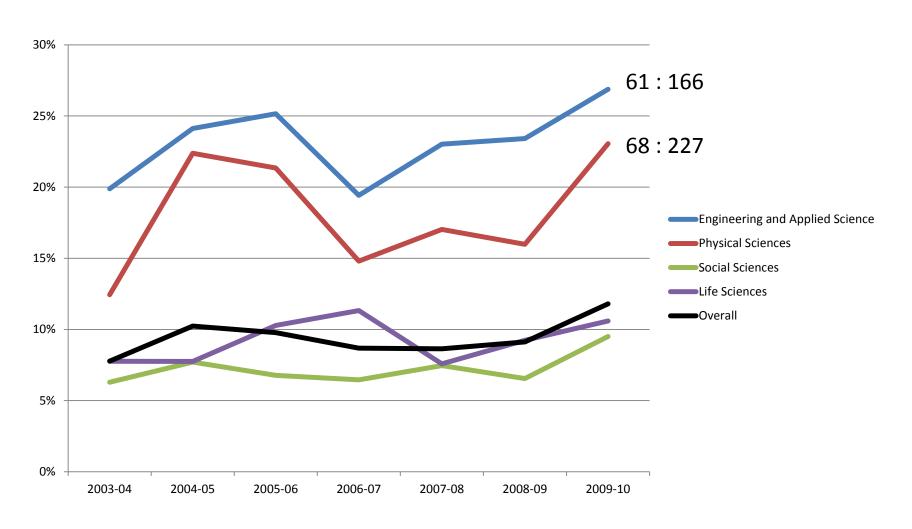
Time-to-Degree (TTD)



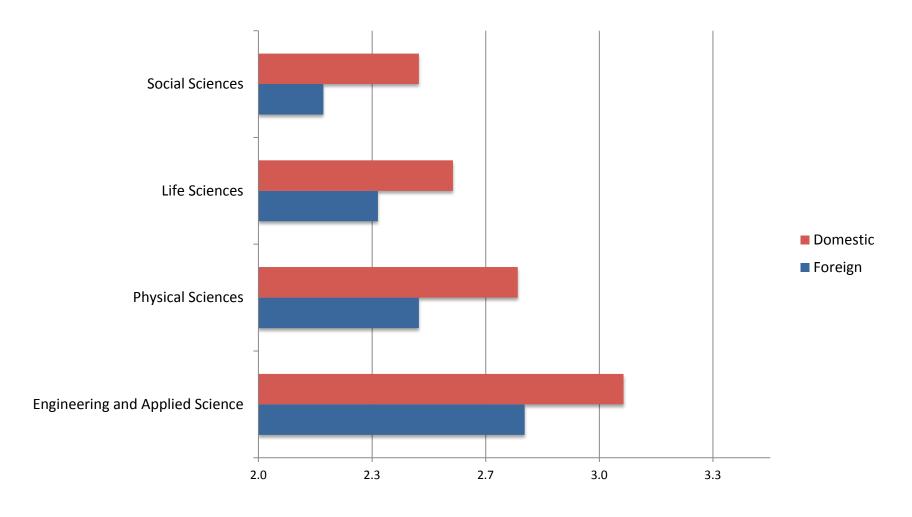
Focus on Transfers

- Representation of foreign students in transfer population enables a more complex analysis.
 - Greater number of section enrollment records
 - Sub-groups by academic division are sufficient in size
- Foreign transfers prove comparable to foreign freshmen:
 - In attitudes and opinions on the UCUES
 - In academic performance in undergraduate studies
 - In proportion majoring in two specific undergraduate divisions (Engineering and Social Sciences)
- Foreign transfer students consistently complete their degrees faster than domestic transfers.

Transfer Completions by Academic Division: Percent Foreign



Transfer TTD by Academic Division: Foreign and Domestic



Course-Taking Characteristics

- Types of courses chosen from among curriculum offered for major in division.
- Sequence of courses completed.
- Sheer volume of coursework for multiple degrees.
- Balance of coursework inside and outside major department.
- Utilization of summer session.

Approach

- Analysis of nearly 600,000 course enrollments for over 25,000 degree recipients.
- Identification of course-taking patterns and characteristics per student.
- Creation of divisional regression models to account for variance in transfer student TTD, given admissions GPA and course-taking patterns.
- Comparison of foreign and domestic students regarding key course-taking patterns/behaviors.
- Examination of course choices by students at major degree program level.
- Exploration of student motivations (UCUES Survey).

Course-Taking Pattern	Engineering and App Sci	Physical Sciences	Life Sciences	Social Sciences		
	(26% var. expl.)	(43% var. expl.)	(32% var. expl.)	(30% var. expl.)		
Higher GPA (entry)	/	TTD Shorter	TTD Shorter	TTD Shorter		
Finishing LD courses sooner	TTD Shorter	TTD Shorter	TTD Shorter	TTD Shorter		
Starting UD courses sooner	TTD Shorter	TTD Shorter	TTD Shorter	TTD Shorter		
Did not take graduate level courses	TTD Shorter	TTD Shorter	TTD Shorter	TTD Shorter		
Took summer course(s)	TTD Shorter	✓	TTD Longer	TTD Conger		
Took one or more practical courses		TTD Shorter	TTD Shorter	TTD Shorter		
Completed one major	TTD Shorter	TTD Shorter	TTD Shorter	TTD Shorter		
Major/Service Ratio higher	TTD Shorter	/	TTD Shorter	TTD Shorter		

Findings

- Course-taking patterns have a strong association with TTD.
- Foreign students engage to a greater extent than domestic students in many key coursetaking patterns that improve TTD.
- Factors vary across divisions; how students navigate different curricular structures must be examined more closely to inform departmental planning.

A Convergent Micro-Analysis of Course Selection Patterns

- Provoking Discussion by Digging Down AND by Working from the Bottom Up
- Controlling Noise by Fixing on 10 Major Programs and a Shorter Time Frame
- 3 Economics Majors 3 Engineering Majors 4 Miscellaneous Majors
- Foreign/Non-Foreign Course Selection Not Different within Major Programs
 - With One Exception that Proves the Rule and Speaks to the Nature of the Institution
- Differences between the Major Programs Themselves are Far More Important
- Analysis Highlights Differences between Common and Elective Courses
 - Half of All Courses in the Engineering Majors are Common Courses for Transfers
 - ZERO Courses in Political Sciences are Common Courses for Transfers

Selected Outcomes for Foreign and Non-Foreign Transfers Receiving Bacccalaureate Degrees in Ten Major Programs at UCLA in Academic Year 2010-11

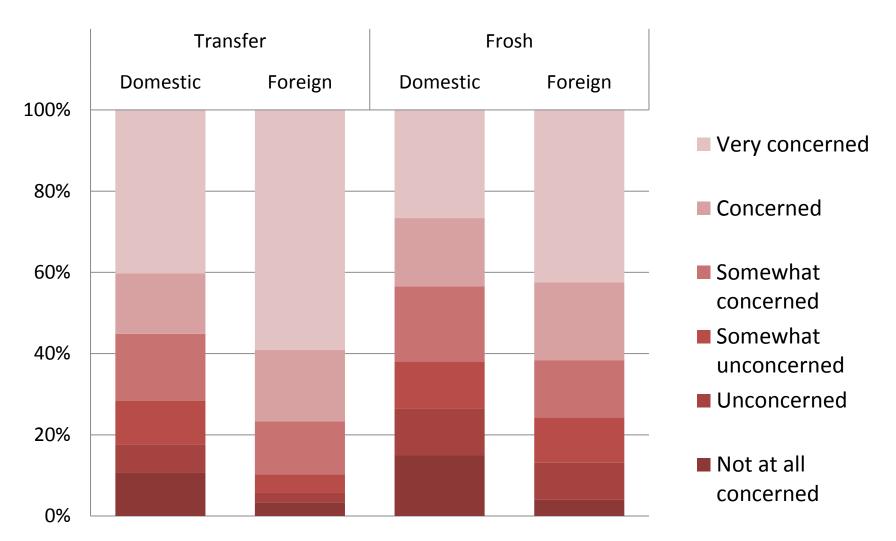
	2010-11 Degree Recipients			% Finished in 2		Avg. Total Courses			Avg. UC GPA				
Major Program	Foreign	Non	All	% Foreign	Foreign	Non	All	Foreign	Non	All	Foreign	Non	All
Business Economics	24	42	66	36	96	86	89	23	22.7	22.8	3.67	3.54	3.59
Economics	22	68	90	24	82	66	70	23.2	23.4	23.3	3.22	3.13	3.15
Mathematics/Economics	18	23	41	44	89	48	66	22	25.3	23.8	3.34	3.04	3.17
Electrical Engineering	16	30	46	35	-	3	2	35.4	32.3	33.4	3.12	3.16	3.15
Mechanical Engineering	10	24	34	29	30	-	9	29	30.2	29.8	3.18	3.27	3.24
Civil Engineering	8	19	27	30	38	11	19	29.5	30.1	29.9	3.23	3.07	3.12
Psychology	27	179	206	13	100	76	79	22	22.4	22.3	3.35	3.31	3.31
Political Science	11	175	186	6	91	77	77	21.3	21.9	21.9	3.36	3.45	3.44
Communication Studies	9	35	44	20	89	94	93	22.6	21.6	21.8	3.42	3.5	3.48
Sociology	8	81	89	9	100	70	73	21.6	22.4	22.3	3.13	3.34	3.32
Economics Group	64	133		32	89	69	76	22.8	23.5		3.43	3.24	3.3
Engineering Group	34	73	107	32	18	4	8	32.1	31	31.4	3.16	3.17	3.17
Miscellaneous Group	55	470	525	10	96	77	79	21.9	22.2	22.1	3.33	3.38	3.38
Ten Major Programs	153	676	829	18	76	67	69	24.5	23.4	23.6	3.33	3.33	3.33

Foreign Student Motivations and Experiences

- The UCUES Survey has been administered on campus every other year. The overall response rate has varied, as have response rates for sub-populations.
- When asked about their education, its value, their priorities, and their experiences on campus, foreign students report what follows.

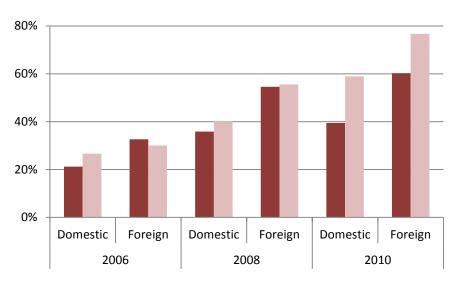


Concerned about paying for education up to now (2010)

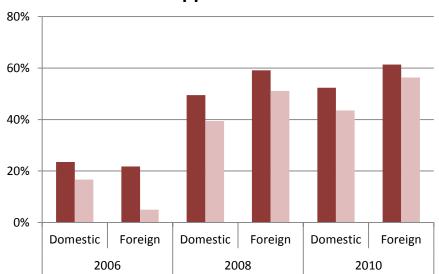




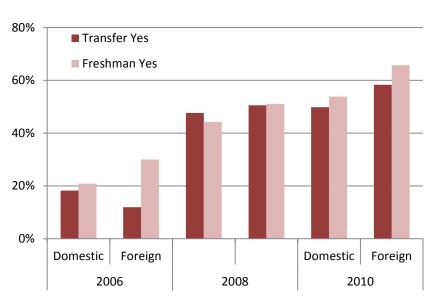
Import: Leads to high paying jobs



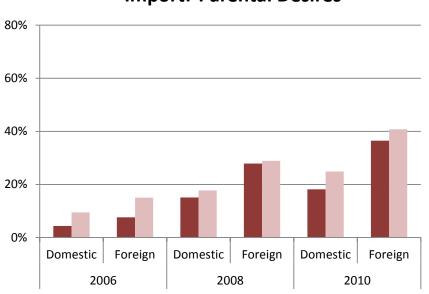
Import: Provides International Opportunities



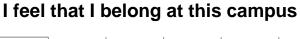
Import: Prestige

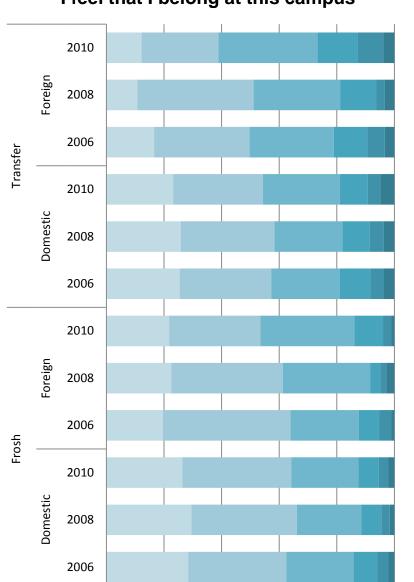


Import: Parental Desires









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20%

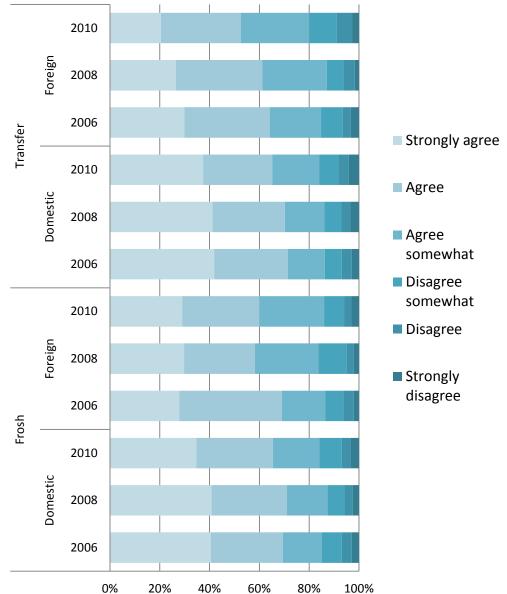
40%

60%

80%

100%

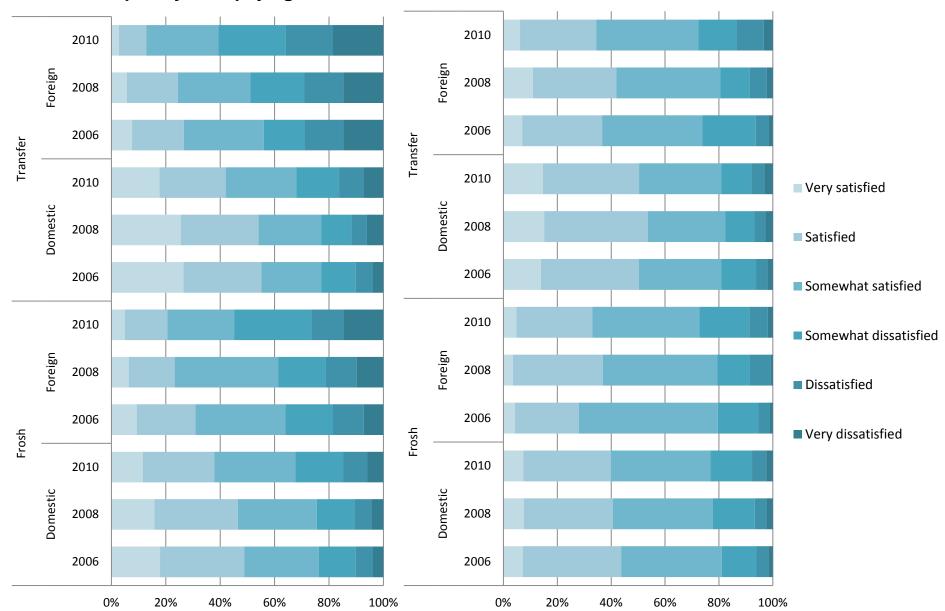
Knowing what I know now, I would still choose to enroll at this campus





Value of your education for the price you're paying

Ability to get into major of choice



Summary

- Course-taking patterns have an association with TTD, and foreign students who engage in these patterns may shorten their TTD.
- Foreign students' motivation and expectations for pursuing an education in the U.S. may influence their experience on campus.
- To optimize the course offerings at the departmental level, additional study of these issues is needed, particularly the impact of required course sequences and the unique challenges faced by foreign and transfer students.

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