Understanding Time-to-Degree for Graduate Students

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Graduate Studies

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Graduate Studies @ The Beach

CSULB has one of the largest populations of graduate students in the CSU system.

Master's Student Snapshot
- In AY 2017-18, there were 8,604 applications for master's programs.
- In Fall 2018, CSULB had 4,074 active graduate students seeking master's degrees.
- In AY 2017-18, 1,680 master's degrees were awarded.

Graduate Student Composition in AY 2016-17

Description	% of Total Students
Female	64%
Male	36%
Minority Status	39%
Latino/Latina	33%
Non-US Visa	13%
First Generation	44%
Parent with Graduate Degree	20%
Received SUG	35%
No Financial Aid	42%
Part-time (6 units or fewer)	34%
California Resident	83%

Master's Program Snapshot
- In 2018, CSULB had 101 master's programs, including all degree options.
- 12% of master's programs require a thesis, 68% of programs have a thesis option, and 28% of programs do not have a thesis option.

The Quest for Data

Context
Graduate student data has not been readily available on our campus. We have made considerable effort over several years to contextualize and improve graduate data by:
- Collaborating with Enrollment Services and Institutional Research & Analytics.
- Defining cohorts for graduate students in a way that mirrors matriculation and current policy.
- Working to verify the accuracy of graduate data.

Data Used for Regression Analysis
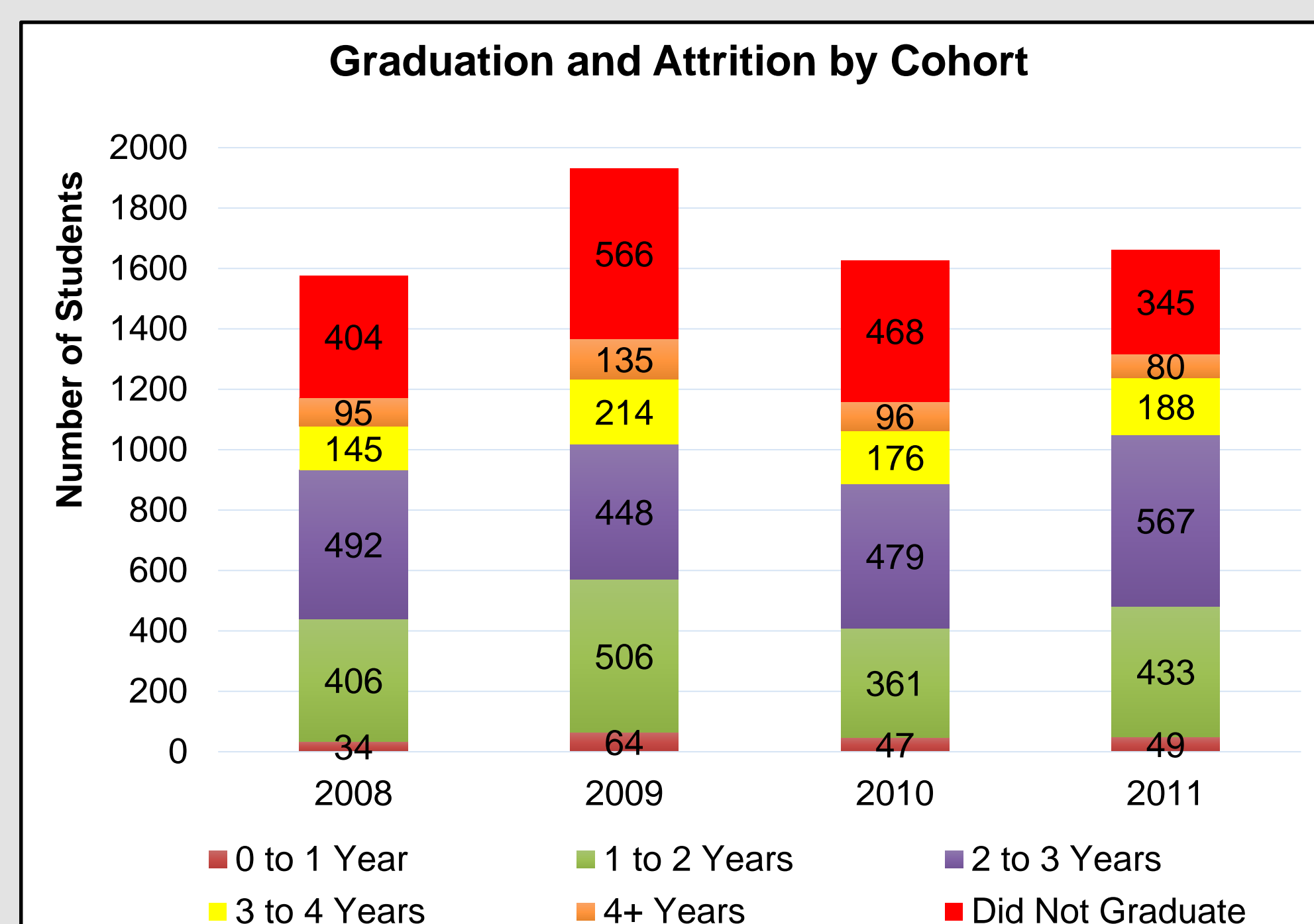Our data include 11,195 master's students who have graduated between 2008 and 2018.
Time-to-degree – number of years from entry semester to the semester the degree is completed.
- *Demographics:* gender, race/ethnicity, age, income category, resident status.
- *Degree progress:* average units earned across semesters, average GPA earned across semesters.
- *Program characteristics:* college, cohort year, number of units required, culminating experience options, credential status.

Research Questions

- What factors impact time-to-degree for graduate students?

- How do student demographics, student progress, and program characteristics impact time-to-degree?

About Time-to-Degree

Graduation and Attrition by Cohort

	2008	2009	2010	2011
0 to 1 Year	34	64	47	49
1 to 2 Years	406	506	361	433
2 to 3 Years	492	448	479	567
3 to 4 Years	145	214	176	188
4+ Years	95	135	96	80
Did Not Graduate	404	566	468	345

A majority of master's students are graduating within 3 years.

On average, 26% of students enrolled did not graduate.

OLS REGRESSSION RESULTS
Dependent Variable: Time-to-degree for master's students

Statistically Significant Variables	Coefficient
Demographics	
Male	0.036*
Income Category Omitted: $6,000 or Less	
Income ($36,00-$47,999)	-0.088**
Income ($48,000-$59,999)	-0.115***
Income ($60,000+)	-0.110***
Other Resident Status	-0.174**
Degree Progress	
Average Units Earned Per Semester	-0.197***
Average Term GPA	-0.328***
Program Characteristics	
Enrolled in Credential Program	-0.111*
Required Program Units	0.030***
Culminating Experience Omitted: Thesis Only	
Project Only	-0.813***
Comp Only	-0.530***
Comp, Project, Thesis Option	-0.475***
Project Thesis Option	-0.622***
Thesis Comp Option	-0.594***
College Controls Included	Yes
Cohort Year Included	Yes
Observations: 11,195	Adj. R-Squared: 0.383

*** p<0.01, ** p<0.05, * p<0.1

Insignificant Variables
Income: $6,000-$11,999, $12,000-$23,999, and $24,000-$35,999
Citizen Status: non-US citizen, other visa status, refugee/asylee, US Citizen
Resident Status: CA high school graduate, CA resident, foreign country, military
Race: Asian American, Caucasian, Latino/Latina, Native American, Pacific Islander, two or more races, unknown
Program Characteristics: project comp option

Average time-to-degree in years by required program units by part-time and full-time students

	30 Units (St. Dev)	31-40 Units (St. Dev)	41-59 Units (St. Dev)	60-65 Units (St. Dev)
Full-Time Students	2.07 (0.82)	2.28 (0.89)	2.20 (0.67)	2.14 (0.80)
Part-Time* Students	2.68 (1.19)	2.74 (1.09)	3.35 (1.10)	3.01 (1.94)
# of Students	4,657	2,796	1,294	2,209
% Part-Time	32.55%	26.29%	12.06%	1.27%

*Part-time is defined as taking on average 6-units or fewer across all semesters.

There are fewer part-time students in programs with more required units.

Males have a 0.036 year higher time-to-degree, relative to females.

Students with incomes that are $60,000+ have a 0.110 year lower time-to-degree, compared to those with incomes $6,000 or less.

If average units earned across all semesters increases by 1 unit, time-to-degree decreases by 0.197 years.

Students in a program with a project only culminating experience have a 0.813 year lower time-to-degree, compared to those with a thesis only culminating experience.
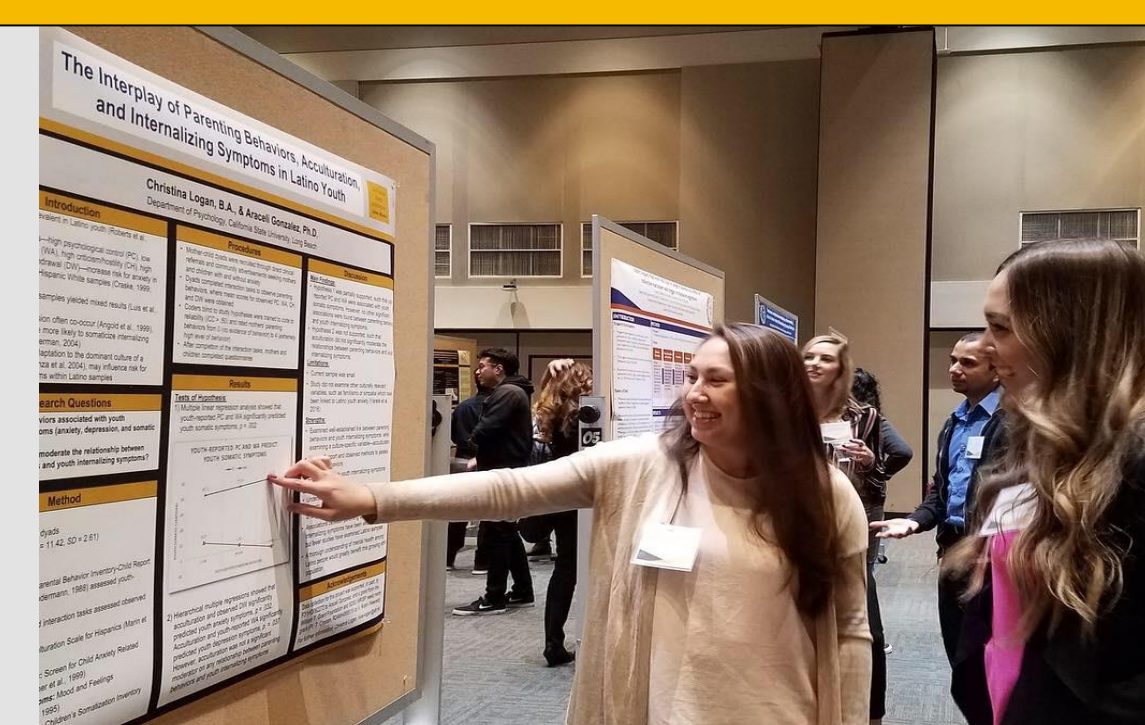
Limitations

Missing Data
- Information about the student's bachelor's degree is not available. For example, where the student earned their undergraduate degree and their undergraduate GPA is unknown.
- Which specific culminating experience students selected amongst program offerings are not known.
- Cohort or non-cohort program format is not known.
- Although we have financial aid and test score data, we were unable to incorporate these data into this project analysis.

University Data Access
Information about CSULB graduate programs and students is not publically available at this time.

Conclusions

- There are a number of factors that influence time-to-degree.
- Students who take more units per semester and have higher GPAs graduate faster.
- Programs with higher required units and thesis only programs take longer to complete.
- Most master's students graduate within 3 years, no matter the number of units required for the program.
- 30 unit programs have the highest percentage of part-time students and 60-65 unit programs have the lowest percentage of part-time students.

Implications for Action

- Provide more support for students with lower socio-economic status.
- Find ways to support students to complete their thesis.
- Seek external grant funding to better support full-time students.
- Once we can identify factors that impact attrition and time-to-degree, target specific groups for advising campaigns.

Next Steps

- Collect information on thesis completion across time and investigate how the culminating experience influences student outcomes.
- Investigate the factors that contribute to attrition.
- Refine credential data and investigate how credentials influence outcomes.
- Work with IR&A to provide data to graduate advisors, directors, associate deans, and deans for self-assessment and program improvement.