Return/Graduation Success of Students Taking the Heritage Language Course

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College Completion Initiatives

- **The Bill and Melinda Gates Foundation** (2008)
  - Doubling the number of low-income students with a post-secondary degree or certificate by 2025

- **The Lumina Foundation** (2008)
  - Increase the percentage of American with high-quality degree and credentials to 60% by 2025

- **President Barack Obama** (2009)
  - American Graduation Initiative, which proposes that America should have the highest proportion of college graduates in the world

- Similar proposals and initiatives by local governments (states and cities), major philanthropists (such as Ford, Carnegie, and Kellogg), and higher-ed organizations (such as AASCU)

College completion rates by different types of institutions

Public 4-year institution (150% of normal time)	59%
Private 4-year institution (150% of normal time)	66%
For-profit 4-year institution (150% of normal time)	23%
Public 2-year institution (150% of normal time)	22%

U.S. Department of Education, National Center for Education Statistics. (2017)

- The issue of college completion mirrors ethnic/socioeconomic inequities in education
  - The completion rate for Hispanic students is about 10% points lower than for White students.
  - The completion rate for African American students is about 25% points lower than for White students.
  - Fewer than half of Pell Grant recipients complete college.
  - 70% of students who are assigned to remedial courses never graduate.

Previous research on college completion

Research on college completion (cf. Tinto (2007))

- 1970's: Psychological analyses of students leaving college
- 1980's: Age of involvement
  - Tinto's *stages of student departure* (Tinto, 1988)
  - Academic and social involvement/engagement as a key to retention
- 1990's: Age of institutional high-impact practices
  - Freshman seminar, Learning community etc.
- 2000's: College completion initiatives; Age of big data
  - Intensive statistical analyses of big data (e.g., IPEDS)

"Where it was once argued that retention required students to break away from past communities, we now know that for some if not many students the ability to remain connected to their past communities, family, church, or tribe is essential to their persistence" (Tinto, 2007)

Research questions

- Is there any systematic difference between students who take a heritage language class and those who do not?
- What is the role of heritage language instruction in college retention/completion?

Current study I

Data (cf. Dickmeyer (2016))

- 58,254 students who are matriculated at a large urban community college from Spring 2012 to Spring 2015

- 620 students took the heritage language class.

- A control (no HL class) group of 2,040 students was created so that they match on each of the following seven characteristics.
  - **Semester**: Enrolled in the same semester as the student in the HL group
  - **Admissions code**: continuing students matched against continuing, etc.
  - **Gender**
  - **International student status**: F-1 visa or not
  - **Developmental math status**: completed math requirement or not
  - **Cumulative Credits**: Same bracket: <6, 6-14.5, 15-29.5, 30-44.5 and 45 or more
  - **GPA**: Null, <1.00, 1.00-1.99, 2.00-2.99, 3.00-3.99 and 4.00 and above.

Current study II

w/ Heritage Class

Variable	Levels	n	%	∑ %
CumulativeCredits	<6	116	18.7	18.7
	6-14.5	162	26.1	44.8
	15-29.5	145	23.4	68.2
	30-44.5	104	16.8	85.0
	45+	93	15.0	100.0
	all	620	100.0	
GPA	<1.00	99	16.0	16.0
	1.00-1.99	43	6.9	22.9
	2.00-2.99	184	29.7	52.6
	3.00+	294	47.4	100.0
	all	620	100.0	
Gender	Male	198	31.9	31.9
	Female	422	68.1	100.0
	all	620	100.0	
International	Not F-1	609	98.2	98.2
	F-1 Visa	11	1.8	100.0
	all	620	100.0	
MathRequirement	No	126	20.3	20.3
	Yes	321	51.8	72.1
	Unknown	173	27.9	100.0
	all	620	100.0	

w/o Heritage Class

Variable	Levels	n	%	∑ %
CumulativeCredits	<6	327	16.0	16.0
	6-14.5	322	15.8	31.8
	15-29.5	519	25.4	57.2
	30-44.5	374	18.3	75.6
	45+	498	24.4	100.0
	all	2040	100.0	
GPA	<1.00	266	13.0	13.0
	1.00-1.99	108	5.3	18.3
	2.00-2.99	696	34.1	52.4
	3.00+	970	47.5	100.0
	all	2040	100.0	
Gender	Male	738	36.2	36.2
	Female	1302	63.8	100.0
	all	2040	100.0	
International	Not F-1	2033	99.7	99.7
	F-1 Visa	7	0.3	100.0
	all	2040	100.0	
MathRequirement	No	448	22.0	22.0
	Yes	1396	68.4	90.4
	Unknown	196	9.6	100.0
	all	2040	100.0	

Current study III

w/ Heritage Class

Variable	Levels	n	%	$\sum$ %
Admission	Non-degree	170	27.4	27.4
	Continuing	392	63.2	90.7
	1st time	26	4.2	94.8
	Transfer	16	2.6	97.4
	Re-admit	14	2.3	99.7
	NA	2	0.3	100.0
	all	620	100.0	

w/o Heritage Class

Variable	Levels	n	%	$\sum$ %
Admission	Non-degree	193	9.5	9.5
	Continuing	1649	80.8	90.3
	1st time	145	7.1	97.4
	Transfer	50	2.5	99.8
	Re-admit	3	0.1	100.0
	NA	0	0.0	100.0
	all	2040	100.0	

Results I

Overall result

- Once non-degree students are eliminated from the dataset, students who took the heritage language class appear 8.8% point more likely to remain/graduate college than those not taking the heritage language class.

w/ Heritage Class

Variable	Levels	n	%	$\sum$ %
Retention	No	62	13.8	13.8
	Yes	388	86.2	100.0
	all	450	100.0	

w/o Heritage Class

Variable	Levels	n	%	$\sum$ %
Retention	No	418	22.6	22.6
	Yes	1429	77.4	100.0
	all	1847	100.0	

Results II

Analyses with logistic regression

- The data were submitted to logistic regression models.
- Multicollinearity nature of the variables in the data
  - e.g., GPA and cumulative credits are consistently in an inverse relationship.
- Some logistic regression models show:
  - No interaction between heritage class and remedial math requirement.
  - No interaction between heritage class and admission types.
  - A significant interaction between heritage class and gender such that female students benefit more than male students from heritage class.
  - A significant interaction between heritage class and GPA such that students with GPA 2.00-2.99 benefit more from heritage class.
  - A significant interaction between heritage class and cumulative credits such that students with cumulative credits 15-29.5 benefit more from heritage class.

Discussion

Why/How does the heritage language class help students' retention?

- By engaging students in analyzing history, anthropology, linguistics, literature, and art of their home country, the HL class helps students:

    - re-discover the richness of their home culture and the complex rhetorics in the HL
    - openly discuss gaps between the accepted normative values in the U.S. and the value systems at home
    - alleviate students' stigmatization about their home language and culture
    - integrate students' home values into academic aspirations and curricula
    - reconstruct their self-identifies as Americans as well as their home culture, and contradictory senses of comradeship and self-abnegation in the HL community.

Bibliography I

Dickmeyer, N. (2016). Return/graduation success of students taking heritage language course. Technical report, Institutional Research and Assessment, LaGuardia Community College, Long Island City, NY.

Tinto, V. (2007). Research and practice of student retention: What next? *Journal of College Student Retention*, 8(1):1–19.

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