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English Language Learners' Access to and Attainment in Postsecondary Education

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Background (1)

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- English language learners (ELLs): Students with limited English proficiency
- The fastest growing group of the school age population in the US
 - 1995: 1 in 15 public school students was an ELL
 - 2005: 1 in 10 public school students was an ELL
 - 2025: 1 in 4 public school students will be an ELL

(Sources: NCELA, 2006; Spelling, 2005)

Background

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ELLs' growing presence in K-12 education

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ELLs' growing presence in higher education

YET surprisingly little research or information on ELLs' college-going patterns

Literature

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- There is a large body of research on minority students' college access/success.
- However, in this body of research, scholars tend to focus on factors such as **race/ethnicity**, **socioeconomic status**, **first-generation college students**, **legal status**
→but NOT **language status**
- On the other hand, ELL research in higher education has focused mainly on academic literacy and L2 writing/composition classes (e.g., Leki, 2007; Matsuda, Ortmeier-Hooper, & You, 2006; Roberge, Siegal, & Harklau, 2009; Spack, 1997; Zamel, 1995)

Gap in Knowledge

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- Very little research available on ELLs' college-going patterns
- There are few national-level statistics on ELLs' college access and success

Research Questions

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1. Are ELLs' patterns of access to and attainment in college different from those of **monolingual English-speaking** students and those of **English-proficient linguistic minority** students?
2. If there are differences among these three groups, which variables predict level of access and level of attainment?

Theoretical Assumptions (1)

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1. Limited English proficient students' educational experiences are different from those of English proficient linguistic minority students, and therefore these two groups need to be separated in analysis.

Theoretical Assumptions (2)

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2. "ELL" is an aggregate of multiple attributes, not just a student with limited English proficiency.
 - "Being LEP as a high school-age youth in this country generally means you are also poorer, older, and more likely to be from a minority group than native speakers" (Bennici and Strang, 1995, p. 31)

Theoretical Assumptions (3)

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3. Presence or absence of a variety of capital shape students' chances for higher education.
 - Bourdieu's notion of forms of capital
 - Not just economic capital but various forms of cultural capital and social capital increase a student's chances for access to and degree attainment in higher ed.
 - "Access to higher education is more an issue of social and cultural capital than anything else" (Swail, 2000, p. 86).

Data

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The National Education Longitudinal Study of 1988 (NELS:88)

- Longitudinal study sponsored by the National Center for Education Statistics
- Started with a nationally representative sample of 24,599 eighth graders in 1988, and followed them until they were 26/27 years old in 2000 (5 surveys: 1988, 1990, 1992, 1994, 2000)
- Surveys with students, parents, teachers, and school administrators; students' high school and postsecondary transcripts
- We analyzed 12,144 students who persisted through 2000 data collection

Three Groups (1)

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- English Monolingual Speakers (EMs)
- English proficient linguistic minority students (EPs)
- English language learners (ELLs)

Three Groups (2)

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- **English Monolingual Speakers (EMs) (N = 8,520)**
 - Those who come from monolingual-English-speaking homes and whose L1 is English
 - Self-identification: student responses to first survey

Three Groups (3)

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- **English proficient linguistic minority students (EPs)**
(N = 1,400)
 - ▣ Those students whose L1 is not English and/or who speak a primary language other than English at home
 - ▣ AND who did not exhibit any sign of limited English proficiency
 - Self-identification: student responses to first survey

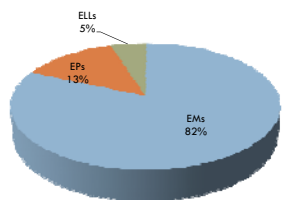
Three Groups (4)

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- **ELLs (N = 520)**
 - ▣ Linguistic minority students who exhibit obvious signs of limited English proficiency.
 1. **Self-identification**
 - First language and/or home language is NOT English and rated at least one of their four skills in English as limited
 2. **Teacher-identification**
 - At least one teacher report that student is an ELL
 3. **High school transcripts**
 - Student took at least one ESL or bilingual education course in high school (from high school transcripts)

Three Groups (5)

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Access and Attainment

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- **Access to higher education:** beginning a program of study beyond high school, as reported in NELS 1994 data collection
- **Attainment in higher education:** completing a program of study beyond high school, as reported in NELS 2000 data collection

Data Analysis (1)

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- We first examined distribution of EMs, EPs, and ELLs across different levels of access and attainment, and used chi square to determine statistical significance
 - ▣ High school dropout
 - ▣ High school diploma
 - ▣ Some postsecondary education
 - ▣ Community college
 - ▣ Four-year college/university

Data Analysis (2)

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- We then turned to examine which theory-driven predictors contributed to the differences in access and attainment level across the three groups

Demographic Characteristics
Access/Attain.

- Language status
- Gender
- Race
- Family income

Family Capital
Access/Attain.

- Parental education
- Parental expectations
- Family composition
- Parental involvement

High School Factors
Access/Attain.

- High school GPA
- High school math course taking
- School climate

PSE Factors
Attain.

- Full-time/part-time enrollment status
- Delay between HS graduation and PSE entry
- Credits earned in first year
- First-year GPA

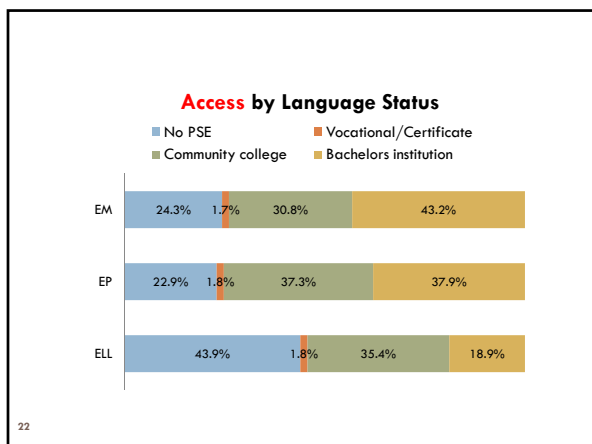
Results—RQ1

Research Question 1

Are ELLs' patterns of access to and attainment in college different from those of EMs and those of EPs?

Table 1 Access to Postsecondary Education by Language Group, Weighted

	Language Status			Total
	ELL	EP	EM	
Bachelor's institution				
<i>N</i>	8,567	92,167	903,336	1,004,070
%	18.9%	37.9%	43.2%	42.2%
Contribution to Chi square	-10533.0	-10273.2	20806.1	
Community college				
<i>N</i>	16,041	90,636	644,641	751,318
%	35.4%	37.3%	30.8%	31.6%
Contribution to Chi square	1749.0	13982.8	-15731.9	
Vocational/Certificate program				
<i>N</i>	824	4,403	36,082	41,309
%	1.8%	1.8%	1.7%	1.7%
Contribution to Chi square	38.2	188.5	-226.7	
No PSE				
<i>N</i>	19,866	55,744	508,974	584,584
%	43.9%	22.9%	24.3%	24.5%
Contribution to Chi square	8745.7	-3898.1	-4847.6	
Total	45,298	242,950	2,093,033	2,381,281



Results (Research Question 1)

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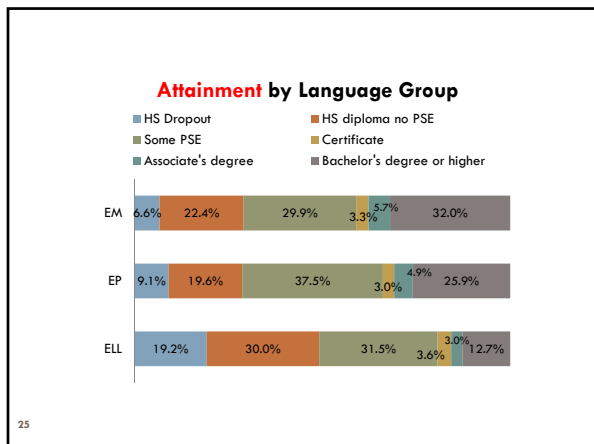
College Access

- Only 18.9% of ELLs attended 4-year institutions while 43.9% of them did not advance to any PSE institutions at all immediately after high school.
- 43.2% of EMs went straight to 4-year institutions right after high school, while only 24.3% did not advance to any PSE institutions.
- Access patterns for EPs resembled those of EMs more than they resembled those of ELLs

Table 2. *Attainment in Postsecondary Education, by Language Group, Weighted*

	LANGSTAT			Total
	ELL	EP	EM	
Bachelor's degree or higher				
N	6,597	70,423	727,397	804,417
%	12.7%	25.9%	32.0%	31.0%
Contribution to Chi square	-9,451.6	-13,698.2	23,149.8	
Associate's degree				
N	1,530	13,412	130,406	145,348
%	3.0%	4.9%	5.7%	5.6%
Contribution to Chi square	-1,369.8	-1,787.6	3,157.4	
Certificate				
N	1,889	8,224	74,539	84,652
%	3.6%	3.0%	3.3%	3.3%
Contribution to Chi square	200.1	-628.4	428.3	
Some PSE				
N	16,320	101,718	680,590	798,628
%	31.5%	37.5%	29.9%	30.8%
Contribution to Chi square	386.9	18,202.1	-18,589.1	
HS diploma				
N	15,527	53,154	509,969	578,650
%	30.0%	19.6%	22.4%	22.3%
Contribution to Chi square	3,982.6	-7,357.8	3,375.2	
HS Dropout				
N	9,951	24,661	150,816	185,428
%	19.2%	9.1%	6.6%	7.1%
Contribution to Chi square	6,251.6	5,270.0	-11,521.6	
Total	51,814	271,592	2,273,717	2,597,123

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Results (Research Question 1)

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College Attainment

- Within 8 years after HS graduation, 1 in 3 EMs and 1 in 4 EPs earned a bachelor's degree or higher whereas only 1 in 8 ELLs did.
- Conversely, roughly 1 in 2 ELLs did not go to college at all while 1 in 3 EMs did not.
- 1 in 5 ELLs was a high school dropout.
- Across language groups but especially for EPs, there was a large portion of students who started college but did not finish.

Results (Research Question 2)

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Research Question 2

If there are differences among these three groups, which variables predict level of access and level of attainment?

Probit regression (1)

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- In ordinary linear regression, we have an outcome such as a test score—there is a large range of scores, with a mean and a standard deviation
 - ▣ Results show us how big the contribution of each predictor is to the outcome, called coefficients
 - ▣ Results also show how well we explained the outcome (called R^2)

Probit regression (2)

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- Access and attainment, however, are categories, not scores
 - ▣ We can rank the levels of access and attainment (e.g., 2-year college is higher than just a HS diploma)
- We used a type of statistical analysis called probit regression that is suitable for these kinds of data and that gives us similar coefficients and R^2
- We used software (MPlus) that can take account of missing data—FIML uses all of the data that are there to estimate coefficients and test for significance

Probit regression results

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- Please see handout

Table 3 *PSE access regression*

	<i>b</i>	β
Demographic characteristics		
ELL	-.843*	-.033
EP	.275	.030
Female	-.126	-.028
Asian	.301	.026
Hispanic	-.049	-.005
Black	.140	.018
Family Income	.099*	.095*
Family capital		
Parental Education (highest level mother or father)	.229*	.117*
Educational Expectations of Parent	.177*	.168*
Two-Parent Family (1 = two-parent)	-.318	-.049
Parental Discussion with Child about PSE (Composite)	.146*	—
High school factors		
Highest Level of HS Math Completed	.852*	.241*
School Climate (Composite)	-.090	—
High School GPA	.886*	.256*

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Results (Research Question 2)

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Access (see Table 3)

- The final model explained 36.7 % of the variance in access
- *b* indicates the effect of a one *point* increase in the predictor on level of access or attainment; β , indicates the effect of a one standard deviation increase in the predictor on level of access or attainment
- ELL, but not EP, is a factor predicting level of access to PSE.
- Being an ELL has a negative impact on one's chances for gaining access to college, by almost one full level (*b* = -.84)

Results (Research Question 2)

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Access (Cont'd)

- Once family capital factors and school factors were added, *race* was no longer a significant influence on level of access.
- Family income was a significant factor; however, *parental education* and *their expectations for their children's PSE achievement* had stronger effects on their children's college access, indicating a critical role of the cultural and social capital coming from the parents.
- *High school GPA* and *math course taking patterns* in high school had the biggest impact on students' access to PSE, suggesting the importance of rigorous academic preparation at the high school level.

Discussion (1)

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- EMs, EPs, and ELLs each show a distinct pattern of college going; EMs have the highest levels of access and attainment; ELLs the lowest; and EPs in-between but closer to EMs.
- The regressions show that a variety of variables—not just language proficiency—contribute to differential access and attainment levels.

Discussion (2)

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- Academic preparation in high school is key to higher levels of access and attainment.
 - ▣ Yet studies have shown that once identified as an ELL, students are more likely to be placed in a non-college-bound track (Callahan, 2005; Callahan, Wilkinson & Muller, 2010)
- Parental education and parental educational expectations are also particularly important, even more so than family income.

Discussion (3)

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- With regard to attainment, students are at higher risk if they are Hispanic.
 - ▣ Other research suggests Hispanic students tend to enter less selective colleges with higher attrition rates (e.g., Fry, 2005)
- Certain behaviors and choices in PSE put students at risk for low attainment:
 - ▣ Enrolling part-time,
 - ▣ Delaying entering PSE, or
 - ▣ Completing few credits in their first year in PSE

→ Likely to be caused by financial difficulties

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Thank you!

If you have any questions or comments, please contact:

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