

Appendices

Appendix A1

Socio-demographic Characteristics for All High School 9th Graders and Those Who Graduated from Public Middle Schools in Texas

	All High School 9th Graders		High School 9th Graders who Graduated from Public Middle Schools	
	EAP	Non-EAP	EAP	Non-EAP
Female	54%	47%	54%	48%
Male	46%	53%	46%	52%
White	38%	33%	38%	35%
African American	9%	15%	9%	14%
Hispanic	41%	48%	40%	47%
Other Races	12%	4%	12%	4%
FRPL	37%	57%	37%	55%
No FRPL	63%	43%	63%	45%
Observations	55,464	291,351	51,710	246,113

Appendix A2

Balance Test Results After Propensity Score Matching for All Students

	EAP	Non-EAP	<i>p</i> -value of
	Students	Students	Balance Test
	(1)	(2)	(3)
Socioeconomic Characteristics			
Age (8 th)	13.13	13.14	0.267
Female	0.569	0.566	0.735
African American	0.162	0.166	0.546
Hispanic	0.594	0.602	0.436
ESL (6 th –8 th)	0.052	0.054	0.507
Gifted and Talented (6 th –8 th)	0.075	0.081	0.282
Receipt of Special Education (6 th –8 th)	0.024	0.024	0.952
Receipt of Free Lunch (8 th)	0.394	0.395	0.954
Receipt of Reduced-Price Lunch (8 th)	0.089	0.089	0.974
Eligibility for Other Public Assistance (8 th)	0.123	0.127	0.554
Ability		0.364	0.224
TAKS Reading Test Scores at 6 th grade	2316.0	2312.9	0.327
TAKS Reading Test Scores at 7 th grade	2241.6	2240.6	0.692
TAKS Reading Test Scores at 8 th grade	787.64	787.15	0.565
TAKS Mathematics Test Scores at 6 th grade	2226.1	2223.2	0.343
TAKS Mathematics Test Scores at 7 th grade	2184.6	2183.5	0.548
TAKS Mathematics Test Scores at 8 th grade	734.51	733.97	0.270

Citation: Lee, H. B., Bahena, S., & Nichols, S. L. (2025). Effects of early AP coursetaking on high school outcomes and college enrollment for less academically prepared students. *Education Policy Analysis Archives*, 33(12). <https://doi.org/10.14507/epaa.33.8651>

	EAP Students	Non-EAP Students	<i>p</i> -value of Balance Test
	(1)	(2)	(3)
Behavior and Attendance			
Expulsion (6 th –8 th)	0.024	0.025	0.591
Suspension (6 th –8 th)	0.329	0.334	0.580
Attendance Rates (6 th –8 th)	96.25	96.12	0.071
Graduated from a Title I School	0.685	0.688	0.748
Random-Effects			
α^H	0.760	0.775	0.339
α^C	1.757	1.766	0.309

Notes: α^H and α^C denote predictions of cluster-level effects at the high school and county levels, respectively.

Appendix A3

Propensity Score Logistic Regression Results

	All Students	Exit-Exam Takers	College- Going Students	Two-Year College Enrollees	Four-Year College Enrollees
	(1)	(2)	(3)	(4)	(5)
Socioeconomic Characteristics					
Age (8 th)	-0.111*** (0.018)	-0.096*** (0.020)	-0.060** (0.028)	-0.020 (0.036)	-0.090** (0.046)
Female	0.120*** (0.016)	0.118*** (0.016)	0.071*** (0.021)	0.080*** (0.029)	0.041 (0.033)
African American	0.060** (0.026)	0.051 (0.027)	-0.027 (0.035)	-0.097 (0.052)	-0.102** (0.049)
Hispanic	0.073*** (0.021)	0.071*** (0.022)	0.055 (0.029)	0.113*** (0.038)	0.046 (0.045)
ESL (6 th –8 th)	0.185*** (0.035)	0.194*** (0.037)	0.130** (0.054)	0.124 (0.066)	0.155 (0.096)
Gifted and Talented (6 th –8 th)	0.388*** (0.034)	0.369*** (0.035)	0.343*** (0.044)	0.272*** (0.065)	0.379*** (0.060)
Receipt of Special Education (6 th –8 th)	-0.302*** (0.041)	-0.315*** (0.044)	-0.274*** (0.059)	-0.342*** (0.076)	-0.119 (0.096)
Receipt of Free Lunch (8 th)	-0.051*** (0.019)	-0.045** (0.020)	0.011 (0.027)	0.072** (0.035)	-0.031 (0.041)
Receipt of Reduced-Price Lunch (8 th)	-0.035*** (0.029)	-0.038 (0.030)	0.026 (0.039)	0.079 (0.051)	-0.003 (0.061)
Eligibility for Other Public Assistance (8 th)	-0.047 (0.029)	-0.032 (0.031)	-0.039 (0.041)	-0.048 (0.056)	0.050 (0.061)
Ability					
TAKS Reading Test Scores at 6 th grade	0.0003*** (0.0001)	0.0004*** (0.0001)	0.0004*** (0.0001)	0.0003** (0.0001)	0.0004** (0.0001)

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	All Students	Exit-Exam Takers	College- Going Students	Two-Year College Enrollees	Four-Year College Enrollees
	(1)	(2)	(3)	(4)	(5)
TAKS Reading Test Scores at 7 th grade	0.0007*** (0.0001)	0.0007*** (0.0001)	0.0007*** (0.0001)	0.0007*** (0.0001)	0.0006*** (0.0002)
TAKS Reading Test Scores at 8 th grade	0.0023*** (0.0002)	0.0023*** (0.0002)	0.0023*** (0.0003)	0.0020*** (0.0004)	0.0023*** (0.0004)
TAKS Mathematics Test Scores at 6 th grade	0.0004*** (0.0001)	0.0004*** (0.0001)	0.0004*** (0.0001)	0.0004*** (0.0001)	0.0004*** (0.0001)
TAKS Mathematics Test Scores at 7 th grade	0.0009*** (0.0001)	0.0009*** (0.0001)	0.0010*** (0.0001)	0.0009*** (0.0002)	0.0008*** (0.0002)
TAKS Mathematics Test Scores at 8 th grade	0.0036*** (0.0003)	0.0034*** (0.0004)	0.0037*** (0.0005)	0.0035*** (0.0006)	0.0031*** (0.0008)
Behavior and Attendance Expulsion (6 th –8 th)	–0.096** (0.043)	–0.045 (0.049)	–0.077 (0.079)	–0.065 (0.103)	–0.092 (0.124)
Suspension (6 th –8 th)	–0.289*** (0.017)	–0.255*** (0.018)	–0.218*** (0.023)	–0.191*** (0.031)	–0.223*** (0.037)
Attendance Rates (6 th –8 th)	0.034*** (0.002)	0.029*** (0.002)	0.033*** (0.003)	0.025*** (0.004)	0.041*** (0.005)
Graduated from a Title I School	0.045** (0.018)	0.055*** (0.019)	0.057** (0.025)	0.097*** (0.033)	0.051 (0.038)
Random-Effects α^H	0.598*** (0.009)	0.613*** (0.009)	0.649*** (0.013)	0.634*** (0.018)	0.702*** (0.020)
α^C	0.496*** (0.015)	0.511*** (0.016)	0.532*** (0.021)	0.532*** (0.030)	0.569*** (0.040)
Constant	–13.742*** (0.421)	–13.564*** (0.462)	–14.413*** (0.645)	–13.649*** (0.847)	–13.085*** (1.010)
Pseudo R ²	0.257	0.249	0.240	0.222	0.237
Observations	98,018	78,339	35,969	23,940	12,029

Notes: α^H and α^C denote predictions of cluster-level effects at the high school and county levels, respectively. Robust standard errors are reported in parentheses.

** $p < 0.05$. *** $p < 0.01$.