

Immigrant peers and English language skills

Online Appendices

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Table A1 Country of Origin of Immigrant Students in Norway at Grade 5 2010-2015:

Country	% inhabitants with English as first language	Number of students in 5 th grade across all years.
United Kingdom	92.3	8239
US	78.1	7412
Australia	72.74	579
Ireland	93.22	252
New Zealand	85.9	174
Grenada	90.91	12
Bahamas	78.66	11
Barbados	93.91	10
Gibraltar	96.97	7
Belize	63.07	5
Bermuda	96.92	5
Virgin island (U.S)	90.37	4
Saint Vincent and Grenadine	95	4
Isle of Man	99.93	1
Antigua og Barbuda	77.65	1
British Virgin Islands	86.96	1
Cayman Islands	76.6	1
Montserrat	67.8	1
Anguilla	92.31	1
Saint Kitts and Nevis	78	1
French Guyana	86.55	1
English-Speaking Background Countries (>60% of Adults Speaking English as a First Language).		

Source: CIA World Factbook, Eurobarometer, American Community Survey.

Table A2: Selected Descriptive statistics by Student Group

	ESB		Natives		Non ESB refugees		Non ESB other immigrants	
	Mean	St.dev	Mean	St.dev	Mean	St.dev	Mean	St.dev
Math Score 8th grade	0.161	0.991	0.038	0.992	-0.530	0.934	-0.194	1.005
English Score 8th grade	0.406	0.982	-0.006	0.992	-0.299	1.01	-0.084	1.015
Reading score 8th grade	0.181	0.979	0.043	0.987	-0.569	0.979	-0.327	1.010
Math score 5th grade	0.146	0.994	0.048	0.982	-0.579	0.986	-0.240	1.041
English Score 5th grade	0.497	1.061	-0.023	0.976	-0.272	1.069	0.015	1.079
Reading score 5th grade	0.158	0.984	0.054	0.976	-0.615	1.020	-0.408	1.052
Fathers with university degree	0.502		0.342		0.224		0.234	
Mothers with university degree	0.607		0.487		0.163		0.277	
Mothers's income (NOK)	378 382	328 237	347 131	240 729	138 767	176 244	213 520	221 039
Father's income (NOK)	695 399	802576	586 254	483 070	244 195	263 869	405 790	354 320
Female	0.497		0.489		0.493		0.491	
Parity	1.84	0.927	1.92	0.972	2.348	1.53	1.848	1.11

Table A3: Native Student Characteristics and Exposure to ESB students

	Father w/Degree	Mother w/Degree	Father's Income	Mother's Income	Refugee Share	Other Immigrant Share	Female Share
One ESB student	0.003 (0.003)	0.002 (0.003)	3,027 (2,154)	1,890 (1,184)	-0.001 (0.0009)	-0.002** (0.001)	-0.005 (0.003)
Two ESB students	0.004 (0.004)	0.011*** (0.004)	4,031 (3,222)	-703,1 (1,729)	0.000 (0.001)	-0.003** (0.001)	-0.005 (0.004)
3+ ESB students	0.004 (0.004)	0.010** (0.004)	7,962* (4,570)	3,794* (2,282)	-0.004*** (0.0014)	-0.005*** (0.002)	-0.009** (0.005)
Constant	0.316*** (0.002)	0.433*** (0.003)	495,215*** (2,438)	276,020*** (1,122)	0.029*** (0.0008)	0.032*** (0.001)	0.496*** (0.003)
Observations	206,032	206,032	206,032	206,032	206,032	206,032	206,032

NOTE: Each Column reports estimates from a separate regression for difference individual and school-grade characteristics. All regressions include school-fixed effects. Standard errors in parentheses, ***, **, * report statistical significance at the 1%, 5%, and 10% level, respectively

TABLE A4: The Effect of English-Speaking Background (ESB) Peers on Grade 10 English Test Score Performance

	(1)
One ESB	-0.009 (0.016)
Two ESB	0.028 (0.020)
3+ ESB students	0.027 (0.023)
Constant	-0.455*** (0.041)
Observations	42,023
R-squared	0.200

NOTE: All explanatory variables are measured at 5th grade level. All models include controls for the share of other immigrants and the share of refugees. Other controls are gender, maternal education level, paternal education level, parental income, family structure and grade enrolment. All models have school fixed effects. Robust standard errors clustered at the school-year level in parentheses. ***, **, and * indicate statistical significance at the 1%, 5% and 10% level, respectively

Table A5: Exposure to ESB Peers and English Performance in 8th Grade Excluding schools with high numbers of ESB students

	10 or less ESBs in grade	5 or less ESBs in grade
One ESB student	-0.005 (0.007)	-0.005 (0.007)
Two ESB students	0.023** (0.009)	0.023** (0.009)
3+ ESB students	0.023** (0.010)	0.025** (0.010)
Constant	-0.220*** (0.018)	-0.217*** (0.018)
Observations	205,795	198,616
R-squared	0.119	0.114

NOTE: All explanatory variables are measured at 5th grade level. All models include controls for the share of other immigrants and the share of refugees. Other controls are gender, maternal education level, paternal education level, parental income, family structure and grade enrolment. All models have school fixed effects. Robust standard errors clustered at the school-year level in parentheses. ***, **, and * indicate statistical significance at the 1%, 5% and 10% level, respectively

Table A6: Exposure to ESB Peers and English Performance in 8th Grade Excluding

	(1) Ex Oslo	(2) Ex Stavanger	(3) Ex Bergen	(4) Ex Trondheim
One ESB student	-0.002 (0.007)	-0.005 (0.007)	-0.004 (0.007)	-0.002 (0.007)
Two ESB students	0.024** (0.010)	0.021** (0.009)	0.024** (0.010)	0.026*** (0.009)
3+ ESB students	0.021** (0.011)	0.025** (0.011)	0.021** (0.011)	0.025** (0.010)
Constant	-0.229*** (0.0184)	-0.217*** (0.018)	-0.209*** (0.018)	-0.204*** (0.018)
Observations	193,958	201,439	195,965	198,848
R-squared	0.106	0.119	0.120	0.121

Specific Cities in Norway

NOTE: All explanatory variables are measured at 5th grade level. All models include controls for the share of other immigrants and the share of refugees. Other controls are gender, maternal education level, paternal education level, parental income, family structure and grade enrolment. All models have school fixed effects. Robust standard errors clustered at the school-year level in parentheses. ***, **, and * indicate statistical significance at the 1%, 5% and 10% level, respectively

Table A7: Exposure to Romance Language Peers and English Performance in 8th Grade

	(I)
One Romance Language Peer	0.004 (0.007)
Two Romance Language Peers	0.0122 (0.009)
3+ Romance Language Peers	-0.0138 (0.013)
Constant	-0.212*** (0.0176)
Observations	206,032
R-squared	0.120

NOTE: All explanatory variables are measured at 5th grade level. All models include controls for the share of other immigrants and the share of refugees. Other controls are gender, maternal education level, paternal education level, parental income, family structure and grade enrolment. All models have school fixed effects. Robust standard errors clustered at the school-year level in parentheses. ***, **, and * indicate statistical significance at the 1%, 5% and 10% level, respectively

Table A8: Exposure to ESB Peers and English Performance – Sensitivity to Alternative Definitions of ESB

	>50%	>70%
One ESB student	-0.006 (0.007)	-0.005 (0.007)
Two ESB students	0.013 (0.009)	0.023** (0.009)
3+ ESB students	0.021** (0.010)	0.023** (0.010)
Share of refugees	-0.035 (0.087)	-0.035 (0.087)
Share of other immigrants	0.052 (0.072)	0.054 (0.072)
Constant	-0.209*** (0.018)	-0.210*** (0.018)
Observations	206,032	206,032
R-squared	0.120	0.120

Note: In table 1 an ESB student is defined as an immigrant from a country with more than 60 % of the inhabitants speaking English as first language. In this table we analyse the robustness of that cutoff. In column 1, 50 % is used as cutoff. In column 2, 70 % is used.

