Online Appendix- Not for Publication

Table A1: Summary Statistics of Teachers' Characteristics

Number of Identified Teachers	78
Number of Identified Teachers Instructing only Math	13
Number of Identified Teachers Instructing only Hebrew	29
Number of Identified Teachers Instructing both Hebrew and Math	36
Proportion of Teachers Older than 50 years old	0.257 (0.439)
Proportion of Teachers from Europe-North America origin	0.471 (0.501)
Proportion of Married Teachers	0.681 (0.468)
Proportion of Single Teachers	0.115 (0.320)
Mean Number of Teachers' Offspring	2.354 (0.915)
Proportion of Daughters among Teachers' Offspring	0.501 (0.329)
At Least one Daughter among Teachers' Offspring	0.834 (0.373)

Notes: Identified teachers are teachers who are home class teachers and teach at least one of the relevant subjects: math, Hebrew or English. Standard deviations are reported in parentheses.

Table A2: Estimated Gender Biases by Subject at Student Level

	Total		Hebrew		Math		English	
	OLS	Student Fixed Effect	OLS	Student Fixed Effect	OLS	Student Fixed Effect	OLS	Student Fixed Effect
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Male	-0.145		-0.288		-0.018		-0.125	
	(0.029)		(0.034)		(0.037)		(0.041)	
Non-blind score	0.004	0.017	0.006	0.029	-0.024	-0.011	0.035	0.064
	(0.048)	(0.049)	(0.050)	(0.073)	(0.046)	(0.067)	(0.056)	(0.078)
Male x (non-blind score)	0.007	0.010	0.005	0.009	0.064	0.076	-0.051	-0.054
	(0.031)	(0.033)	(0.042)	(0.059)	(0.039)	(0.053)	(0.046)	(0.062)
Number of Students	16428	17395	5479	5806	5488	5812	5461	5777

Notes: Dependent variables are standardized scores. The number of observations is twice the number of exam takers, since the datasets are stacked. The OLS regressions includes in addition to the dependent variables presented in the table also pupil's characteristics (gender, parental education, number of siblings, and dummies for four ethnicity groups), year and subject dummies and class fixed effects. The Student Fixed Effect regression includes in addition to the dependent variables presented in the table also year and subject dummies and student fixed effects. Standard errors are corrected for class level clustering and are presented in parentheses.

Table A3: Distribution of Students across Matriculation Exams' Units of Study

		Boy				Girl			
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total	Mean of Total Number of Units	22				22.8			
	Percentage of Students awarded a Matriculation Diploma	62.6				73.6			
Hebrew	Number of Units	2			Total	2			Total
	Percentage of Students	86.9			86.9	91.1			91.1
Math	Number of Units	3	4	5	Total	3	4	5	Total
	Percentage of Students	34.1	25.7	21.1	80.9	40.5	29.7	14.1	84.3
English	Number of Units	3	4	5	Total	3	4	5	Total
	Percentage of Students	10.4	17.3	60.5	88.2	11.7	21.4	58.2	91.3
Physics	Number of Units	1	3	5	Total	1	3	5	Total
	Percentage of Students	6.0	0.5	15.1	21.6	0.0	3.3	4.8	8.1
Computer Science	Number of Units	1	3	5	Total	1	3	5	Total
	Percentage of Students	0.6	1.1	11.3	13.0	0.4	0.9	3.2	4.5

Notes: Percentage of students refers to the percentage of students who successfully completed each level of matriculation proficiency. The mean of total number of units (first row) is the mean of the total number of successfully completed matriculation exams' units.

Table A4: Estimated Direct-Subject Effect and Cross-Subject Effect of Teachers' Biases on 8th Grade Test Scores in Math, English, and Hebrew, from Separate Regressions

	Boy		Girl	
	Direct-Subject Effect	**Cross-Subject Effect**	**Direct-Subject Effect**	**Cross-Subject Effect**
	(1)	(2)	(3)	(4)
OLS	0.130	0.140	0.027	-0.008
	0.099	0.150	0.117	0.174
6th Grade School Fixed Effects	0.112	0.097	-0.049	-0.242
	(0.057)	(0.087)	(0.083)	(0.100)
6th Grade School Fixed Effects and Student Characteristics	0.107	0.122	-0.058	-0.235
	(0.058)	(0.087)	(0.081)	(0.094)
Number of Students	1420	1317	1420	1317

Notes: See table 4. The estimates in each row in columns 1-4 are each from separate regressions. Standard errors are clustered by class and are reported in parentheses.

Table A5: Estimated Effect of Teachers' Biases on Students' Probability of Receiving a Matriculation Diploma and Students' Probability of Successfully Completing Advanced Level Courses in High School, from Logistic Regressions

		Boy		Girl		Boy	Girl
		Direct-Subject Effect	Cross-Subject Effect	Direct-Subject Effect	Cross-Subject Effect	Average-Subject Effect	Average-Subject Effect
		(1)	(2)	(3)	(4)	(5)	(6)
Probability of Receiving a Matriculation Diploma	Log of Odds Ratio	0.233	0.268	-0.317	-0.372	0.510	-0.697
		(0.164)	(0.273)	(0.213)	(0.297)	(0.289)	(0.344)
	Marginal Effect at the Mean	*0.051*	*0.059*	*-0.077*	*-0.090*	*0.110*	*-0.170*
English (dummy=1 if # units=5|4)	Log of Odds Ratio	0.185	0.166	-0.114	-0.390	0.366	-0.497
		(0.132)	(0.220)	(0.195)	(0.285)	(0.249)	(0.280)
	Marginal Effect at the Mean	*0.042*	*0.038*	*-0.028*	*-0.095*	*0.080*	*-0.120*
Math (dummy=1 if # units=5|4)	Log of Odds Ratio	0.535	0.131	-0.324	-0.033	0.669	-0.373
		(0.244)	(0.284)	(0.211)	(0.284)	(0.320)	(0.278)
	Marginal Effect at the Mean	*0.118*	*0.027*	*-0.024*	*-0.003*	*0.147*	*-0.028*
Physics/Computer Science (dummy=1 if units=5)	Log of Odds Ratio	0.136	0.040	0.402	-0.080	0.181	0.363
		(0.313)	(0.404)	(0.461)	(0.586)	(0.329)	(0.499)
	Marginal Effect at the Mean	*0.026*	*0.007*	*0.020*	*-0.003*	*0.035*	*0.017*

Notes: See Table 4 and Table 6. Each row presents log of odds ratios and the marginal effects at the means (in italic) from separate logistic regressions. The dependent variables are discrete and equal one if the student received a matriculation diploma (first row) or if the number of matriculation credit units' exceeds a certain level (other rows). Each regression includes students' characteristics, elementary school and year fixed effect. The estimates in each row in columns 1-2 are each from a joint regression and so are the estimates in columns 3-4. The estimates in each row in columns 5-6 are each from separate regressions. Standard errors are clustered by class and are reported in parentheses.

Table A6: Estimated Long Terms Effects of High School Educational Outcomes of Students

	Means of the Dependent Variable		Enrolment to Post-Secondary Education						Years of Post-Secondary Education						Annual Wages	
			Any Institution		University		College		Any Institution		University		College			
	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(7)
Means of the Dependent Variables			*0.61*	*0.64*	*0.28*	*0.30*	*0.28*	*0.28*	*2.10*	*2.39*	*1.01*	*1.16*	*0.80*	*0.82*	*76214*	*63323*
Total Number of Completed Matriculation Exams' Units	*22.8*	*22.8*	0.027	0.027	0.018	0.020	0.009	0.007	0.109	0.126	0.073	0.087	0.028	0.025	1082	1476
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.003)	(0.004)	(0.003)	(0.004)	(0.002)	(0.002)	(145)	(105)
Total Number of Completed Units in Science Oriented Subjects	*0.68*	*0.61*	0.214	0.200	0.253	0.247	0.003	0.017	1.085	1.173	1.082	1.148	0.045	0.100	7729	12275
			(0.008)	(0.007)	(0.008)	(0.008)	(0.009)	(0.008)	(0.037)	(0.037)	(0.004)	(0.038)	(0.029)	(0.028)	(1641)	(1104)
Probability of Receiving a Matriculation Diploma	*0.69*	*0.73*	0.457	0.479	0.273	0.278	0.220	0.228	1.886	2.067	1.051	1.092	0.708	0.745	11232	19589
			(0.016)	(0.015)	(0.011)	(0.011)	(0.014)	(0.013)	(0.056)	(0.057)	(0.043)	(0.044)	(0.043)	(0.039)	(2335)	(1460)
Number of Students	4182	4866														

Notes: The table presents the estimated effects of several educational outcomes (total number of successfully completed matriculation exams' units, number of successfully completed units in science oriented subjects and the probability of receiving a matriculation diploma) on the enrollment to post-secondary education, number of years of post-secondary education, and annual wages 10 years after the end of high school. The sample includes the students in Tel-Aviv, between the years 2000-2001. Each row presents the effect from separate OLS regressions for each dependent variable. All regressions include year fixed effects as controls. Robust Standard errors are reported in parentheses.

Table A7: Estimated Effect of Teachers' Biases on Test Scores in Math, English, and Hebrew, Controlling for Several Classroom's Characteristics

	Boy	Girl
	Average-Subject Effect	**Average-Subject Effect**
	(1)	(2)

A. 8th Grade GEMS Test Scores

Proportion of Boys	0.226	-0.263
	(0.112)	(0.118)
Difference Between Boys' Grades and Girls' Grades in Class	0.274	-0.337
	(0.117)	(0.135)
Difference Between Boys' Violent Behavior and Girls' Violent Behavior in Class	0.230	-0.387
	(0.160)	(0.131)
Number of Students	1187	1115

B. Matriculation Test Scores

Proportion of Boys	0.248	-0.137
	0.248	-0.137
	(0.083)	(0.089)
Difference Between Boys' Grades and Girls' Grades in Class	0.209	-0.132
	(0.077)	(0.075)
Number of Students	3883	4033

Notes: See Table 4. Each regression includes students' characteristics, primary school, year and subject fixed effect. The first regression includes as a control the proportion of boys in primary school class; the second regression includes as a control the differences between boys' grade to girls' grades in 5th grade national exams; and in the last row of Panel A, the difference between boys' and girls' violent behaviors in class is added as a control. Standard errors are clustered by class and are reported in parentheses.

Table A8: Correlations between Biases of Teachers by Subjects of Instruction

	Overall		Within School		Same Teachers	Different Teachers
	Teachers' Biases in Hebrew	Teachers' Biases in Math	Teachers' Biases in Hebrew	Teachers' Biases in Math	Teachers' Biases in Hebrew	Teachers' Biases in Hebrew
	(1)	(2)	(3)	(4)	(5)	(6)
Teachers' Biases in Math	0.508		0.315		0.654	0.140
Teachers' Biases in English	0.287	0.311	0.077	0.180		
Number of Observations	112		112		36	42

Notes: The correlations in each row in columns 1-2 are the correlations between teachers' biases measures across subjects from the overall sample; The correlations in each row in columns 3-4 are similar to those in columns 1-2, but the school means of teachers' biases in each subject are netted out; The correlation in column 5 is between biases measures of the same teachers who instruct students from the same class both math and Hebrew; and the correlation in column 6 is between biases measures of different teachers who instruct students from the same class both math and Hebrew.

Table A9: Estimated Effect of Teachers' Attitude Towards Low Achievers on 8th Grade GEMS Test Scores in Math, English, and Hebrew

	Low Preforming Students		High Preforming Students		Low Preforming Students	High Preforming Students
	Direct-Subject Effect	Cross-Subject Effect	Direct-Subject Effect	Cross-Subject Effect	Average-Subject Effect	Average-Subject Effect
	(1)	(2)	(3)	(4)	(5)	(6)
OLS	-0.111	-0.144	-0.024	0.022	-0.257	-0.001
	0.063	0.125	0.043	0.059	0.149	0.088
6th Grade School Fixed Effects	-0.017	0.089	-0.052	0.045	0.071	-0.006
	0.061	0.101	0.038	0.054	0.125	0.075
6th Grade School Fixed Effects and Student Characteristics	-0.014	0.054	-0.056	0.035	0.039	-0.019
	0.065	0.109	0.039	0.057	0.138	0.082
Number of Students	909	909	1415	1415	909	1415

Notes: See Table 4. The test scores in all three subjects (math, English, and Hebrew) are pooled together. These test scores are standardized scores, by year and subject. High preforming students in class equal one if the student average 5th grade GEMS test score in math, Hebrew and English is higher or equal to zero and zero otherwise. Lower preforming students in class are defined in the opposite way. The measure of teachers' attitude towards low achievers is defined at the class level by the difference between low preforming students' and high preforming students' average gap between the school score (non-blind) and the national score (blind). Standard errors are clustered by class and are reported in parentheses.

Table A10: Estimated Average-Subject Effect of Teachers' Biases on Matriculation Exam Scores, by Sub-Groups

	Boy	Girl	Boy	Girl
	(1)	(2)	(3)	(4)
	Low Parental Education		**High Parental Education**	
Mother's Education Level	0.206	-0.348	0.216	0.053
	(0.123)	(0.120)	(0.094)	(0.114)
Number of Students	1943	2064	1761	1718
	Low Parental Education Gap		**High Parental Education Gap**	
Parental Education Gap (Father's Education Less Mothers' Education)	0.153	-0.369	0.211	-0.138
	(0.188)	(0.172)	(0.084)	(0.100)
Number of Students	1140	1112	2564	2670

Notes: See Table 8. The Table presents the estimated average-subject effect of teachers' biases on matriculation test scores. Standard errors are clustered by class and are reported in parentheses.