

Web Appendix F
Details on the Regression Models for Elementary School Students

This web appendix contains all of the regression results relating to elementary school students. It should be read in conjunction with Chapter 5.

Table F.1

Reading Regression Results for Elementary Students

	All Students	All Students	EL Students	EL Students
	School fixed effects; student fixed effects	School fixed effects	School fixed effects; student fixed effects	School fixed effects
Parental education level: high school	-0.5720	1.5803	-0.4473	3.2413
	(0.4148)	(0.3077)**	(0.6584)	(0.4687)**
Parental education level: some college	0.5068	3.1648	0.2937	3.0226
	(0.4700)	(0.3372)**	(1.0517)	(0.7068)**
Parental education level: college	0.2241	4.1751	1.6270	4.0045
	(0.5130)	(0.3616)**	(1.2938)	(0.8537)**
Parental education level: graduate school	-0.1610	6.5113	1.3583	2.0464
	(0.6875)	(0.4563)**	(2.2568)	(1.4498)
Student is female	0.0000	1.6429	0.0000	1.4089
	(0.0000)	(0.1961)**	(0.0000)	(0.3628)**
Student is Black	0.0000	-6.3447	0.0000	-8.3949
	(0.0000)	(0.3541)**	(0.0000)	(1.8438)**
Student is Asian	0.0000	-2.8368	0.0000	-5.7934
	(0.0000)	(0.3597)**	(0.0000)	(1.5723)**
Student is Hispanic	0.0000	-2.9953	0.0000	-5.7775
	(0.0000)	(0.3491)**	(0.0000)	(1.9752)**
Student is other race	0.0000	-0.5166	0.0000	-5.9441
	(0.0000)	(1.0166)	(0.0000)	(4.0157)
Student changed schools midyear	-0.2173	-1.7853	-0.2693	-2.8108
	(0.7187)	(0.4932)**	(1.2950)	(0.7831)**
Percentage of students at school that changed unexpectedly	-0.1218	-0.1757	-0.1320	-0.1465
	(0.0346)**	(0.0315)**	(0.0579)*	(0.0525)**
Unexpected school change	0.5422	0.2942	-1.8765	-0.6036
	(0.4756)	(0.3263)	(0.9423)*	(0.5774)
Student is new to district that year	49.8980	52.0218	0.0000	0.0000
	(20.5906)*	(21.5008)*	(0.0000)	(0.0000)

Continued on next page:

Table F.1 (continued)

Percentage of school that is new to the district	-0.0530	-0.1860	-0.0536	-0.0157
	(0.0583)	(0.0503)**	(0.1596)	(0.1282)
Age of student on the first day of school	2.0758	-0.1366	1.4471	-0.8808
	(1.3718)	(0.2083)	(2.3229)	(0.3513)*
Student is in 2 nd grade	-5.4209	-20.0476	10.5391	-20.5433
	(3.0391)	(1.6389)**	(5.2182)*	(2.7141)**
Student is in 4 th grade	7.1594	1.2639	5.6149	6.9558
	(0.2998)**	(0.4955)*	(0.6025)**	(0.9214)**
Student is in 5 th grade	0.0000	0.3711	0.0000	8.8512
	(0.0000)	(0.6494)	(0.0000)	(1.2048)**
Student is in 6 th grade	0.0000	0.0000	0.0000	0.0000
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Student is in 7 th grade	0.0000	0.0000	0.0000	0.0000
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Student is in 8 th grade	0.0000	0.0000	0.0000	0.0000
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Student is an English learner (EL)	-2.2791	-5.1407		
	(5.7606)	(0.5203)**		
Student was redesignated English proficient (FEP)	6.6749	2.5322		
	(5.9417)	(0.8483)**		
EL but not Spanish	-0.0725	0.0662	0.0000	0.2528
	(10.8157)	(0.5983)	(0.0000)	(1.8876)
Non Spanish FEP	-3.4942	-0.6230		
	(11.0020)	(0.8875)		
Special-ed student	-7.5112	0.0000	-14.7335	-1.8547
	(20.4784)	(12.4347)	(18.8888)	(14.1655)
Student skipped a year	-12.1362	0.0000	0.0000	15.5944
	(8.6408)	(0.0000)	(0.0000)	(8.1434)
Student retained that year	0.0000	-23.9064	15.4543	0.0000
	(0.0000)	(6.7321)**	(11.2938)	(0.0000)

Continued on next page:

Table F.1 (continued)

Percentage of year student was absent	-0.2179	-0.2756	-0.0271	-0.2405
	(0.0578)**	(0.0274)**	(0.1209)	(0.0539)**
Percentage of school on free/reduced meal	-0.0652	-0.0708	-0.1237	0.0067
	(0.0414)	(0.0281)*	(0.0922)	(0.0598)
Year-round school	0.2964	-1.3434	-4.4733	-1.9698
	(1.1725)	(0.6319)*	(2.4154)	(1.2247)
Charter school	-17.0741	-28.0962	0.0000	0.0000
	(27.0640)	(18.1006)	(0.0000)	(0.0000)
Atypical school	-31.1166	0.0000	0.0000	0.0000
	(32.1248)	(0.0000)	(0.0000)	(0.0000)
Elementary school ends at 5 th grade	0.0215	-5.8490	-6.8207	-6.0918
	(2.2587)	(1.3705)**	(3.4091)*	(1.7497)**
Elementary school ends at 6 th grade	-3.3642	-6.9922	-9.2629	-7.0983
	(2.3487)	(1.4333)**	(3.5722)**	(1.9047)**
Elementary school ends past 6 th grade	-2.5294	-8.4233	5.8924	-4.6945
	(3.0088)	(2.0722)**	(6.5378)	(4.2059)
Percentage of school that is Asian	-0.0587	-0.0469	0.0475	0.0529
	(0.0548)	(0.0321)	(0.1373)	(0.0692)
Percentage of school that is Hispanic	0.0525	-0.0575	0.1568	0.0401
	(0.0672)	(0.0412)	(0.1347)	(0.0745)
Percentage of school that is Black	0.0607	-0.0257	0.2059	0.0027
	(0.0544)	(0.0352)	(0.1320)	(0.0783)
Percentage of school that is Pacific Islander	-0.0008	-0.0963	0.2278	0.2092
	(0.4503)	(0.3380)	(1.0249)	(0.6565)
Percentage of school that is Native American	0.3015	1.4280	1.4310	2.6570
	(0.4689)	(0.3694)**	(1.1584)	(0.8354)**
Percentage of school that is EL	0.0138	0.0154	0.0504	0.0093
	(0.0531)	(0.0329)	(0.0983)	(0.0553)

Continued on next page:

Table F.1 (continued)

Percentage of school that is FEP	0.2324	-0.0185	0.1742	-0.2046
	(0.1154)*	(0.0915)	(0.2057)	(0.1467)
Classroom peer group	0.0240	5.4096	0.7846	7.2675
	(0.4344)	(0.2683)**	(0.8909)	(0.5420)**
Grade-level peer group	1.0702	-10.6061	3.6740	-6.2237
	(1.0480)	(0.6912)**	(2.1320)	(1.3112)**
Elementary class size	-0.1422	-0.1396	-0.3342	-0.1081
	(0.0455)**	(0.0344)**	(0.0926)**	(0.0671)
Interns with 0-1 years experience	-2.0617	-3.9499	-2.5851	-3.7058
	(1.2966)	(0.9581)**	(1.8028)	(1.1971)**
Interns with 2-5 years experience	-0.6799	1.4311	-5.8055	-0.4757
	(4.5092)	(4.5320)	(5.5387)	(5.3096)
Teachers with emergency credential and 0-1 years experience	6.3220	1.7465	0.2716	0.2917
	(1.7253)**	(1.2641)	(2.4983)	(1.6315)
Teachers with emergency credential and 2-5 years experience	-3.3426	-5.8697	-3.6864	-2.2902
	(1.8674)	(1.7750)**	(3.2765)	(2.9821)
Teachers with full credential and 0-1 years experience	-0.9836	-1.4699	-1.1413	-0.8997
	(0.5387)	(0.4125)**	(1.0722)	(0.7230)
Teachers with full credential and 2-5 years experience	-0.7329	-1.2289	-1.1465	-0.8687
	(0.4412)	(0.3328)**	(0.9277)	(0.6291)
Teachers with full credential and 6-9 years experience	-0.7408	-1.3923	-2.8413	-1.7053
	(0.4503)	(0.3458)**	(1.0536)**	(0.7218)*
Master's degree	0.0037	0.0121	0.0053	0.0071
	(0.0034)	(0.0026)**	(0.0071)	(0.0048)
Ph.D. degree	-0.0448	-0.0531	-0.0534	-0.0588
	(0.0284)	(0.0188)**	(0.0569)	(0.0327)
Bachelors in math	-0.0466	0.0350	-0.0165	0.0422
	(0.0248)	(0.0204)	(0.0493)	(0.0317)
Minor in math	0.0509	0.0736	0.0000	0.0686
	(0.0499)	(0.0275)**	(0.0000)	(0.1436)
Bachelors in English	-0.0028	0.0021	-0.0112	-0.0017
	(0.0061)	(0.0047)	(0.0136)	(0.0098)

Continued on next page:

Table F.1 (continued)

Minor in English	0.0155	0.0012	0.0212	-0.0075
	(0.0068)*	(0.0057)	(0.0163)	(0.0122)
Bachelors in social science	-0.0023	0.0072	0.0004	0.0223
	(0.0036)	(0.0028)*	(0.0077)	(0.0054)**
Minor in social science	0.0013	0.0009	0.0127	0.0039
	(0.0056)	(0.0044)	(0.0131)	(0.0094)
Bachelors in science	-0.0304	-0.0028	-0.0119	-0.0148
	(0.0105)**	(0.0080)	(0.0210)	(0.0141)
Minor in science	0.0026	0.0119	-0.1239	-0.0447
	(0.0178)	(0.0140)	(0.0517)*	(0.0388)
Bachelors in foreign language	-0.0097	0.0022	-0.0024	-0.0006
	(0.0083)	(0.0066)	(0.0149)	(0.0103)
Minor in foreign language	0.0005	0.0131	0.0217	0.0286
	(0.0095)	(0.0071)	(0.0148)	(0.0099)**
Bachelors in other subject	0.0014	0.0108	0.0212	0.0221
	(0.0037)	(0.0028)**	(0.0076)**	(0.0054)**
CLAD credential	-0.0027	-0.0031	-0.0027	-0.0061
	(0.0038)	(0.0030)	(0.0075)	(0.0054)
CLAD-equivalent credential	0.0048	0.0152	0.0071	0.0131
	(0.0048)	(0.0036)**	(0.0101)	(0.0076)
Spanish BCLAD credential	-0.0010	0.0063	-0.0221	0.0034
	(0.0093)	(0.0069)	(0.0103)*	(0.0066)
Spanish BCLAD-equivalent credential	-5.7972	-9.2786	0.0000	0.0000
	(5.7330)	(5.8593)	(0.0000)	(0.0000)
CLAD teacher and EL student interaction	0.2795	-0.0446		
	(0.7628)	(0.5694)		
CLAD-equivalent teacher and EL student interaction	2.0811	-0.9809		
	(0.9394)*	(0.7029)		
BCLAD teacher and EL student interaction	-3.7875	-0.4097		
	(1.2037)**	(0.8263)		

Continued on next page:

Table F.1 (continued)

BCLAD-equivalent teacher and EL student interaction	0.0000	0.0000		
	(0.0000)	(0.0000)		
CLAD teacher and FEP student interaction	-0.9056	-0.2287		
	(1.1839)	(0.9757)		
CLAD-equivalent teacher and FEP student interaction	-0.2075	-0.1198		
	(1.4033)	(1.0684)		
BCLAD teacher and FEP student interaction	0.4193	0.6996		
	(2.6668)	(1.6581)		
BCLAD-equivalent teacher and FEP student interaction	0.0000	0.0000		
	(0.0000)	(0.0000)		
Female teacher	0.0034	0.0112	-0.0056	0.0092
	(0.0033)	(0.0025)**	(0.0066)	(0.0046)*
Black teacher	-0.0016	0.0023	-0.0051	0.0003
	(0.0046)	(0.0037)	(0.0103)	(0.0080)
Asian teacher	-0.0042	0.0052	0.0055	-0.0085
	(0.0060)	(0.0047)	(0.0124)	(0.0093)
Hispanic teacher	-0.0043	0.0035	-0.0093	-0.0112
	(0.0053)	(0.0039)	(0.0090)	(0.0059)
Other race teacher	-0.0108	0.0189	0.0119	0.0102
	(0.0136)	(0.0105)	(0.0423)	(0.0325)
Sat9: previous reading scaled score	-1.3784	-0.2931	-1.3702	-0.3531
	(0.0074)**	(0.0032)**	(0.0165)**	(0.0077)**
Constant	889.1561	234.6333	819.4052	237.7225
	(33.0247)**	(7.4340)**	(39.3857)**	(7.2902)**
Observations	48794	48794	12449	12449
Number of student id number	35305		9516	
R-squared	0.76	0.24	0.75	0.20
Standard errors in parentheses				

* significant at 5%

** significant at 1%

Notes: Each column refers to a separate model, with the dependent variable being gains in reading achievement, and the sample being all students or English Learners. The omitted college major is education and the omitted minor is education/no minor. Regressors not shown include fixed effects as listed at the top of the table, and dummies set to 1 if a given variable was missing.

Some regressors range from 0-1. They are: interns with 0-1 years experience, interns with 2-5 years experience, teachers with emergency credentials and 0-1 years experience, emergency credentials and 2-5 years experience, full credential and 0-1 years experience, full credential and 2-5 years experience, full credential and 6-9 years experience, BCLAD equivalent teachers, and interactions of CLAD, BCLAD, CLAD-equivalent, and BCLAD-equivalent with EL and FEP students.

Variables not listed above include: dummy for year (1998-1999), dummy variables for missing variables, dummy variables for schools, and dummy variables for zip code.

Table F.2

Math Regression Results for Elementary Students

	All Students	All Students	EL Students	EL Students
	School fixed effects; student fixed effects	School fixed effects	School fixed effects; student fixed effects	School fixed effects
Parental education level: high school	0.0550 (0.4338)	1.4126 (0.3248)**	-0.7218 (0.6750)	1.5391 (0.4994)**
Parental education level: some college	0.7671 (0.4943)	3.0894 (0.3578)**	0.1051 (1.0771)	2.4301 (0.7551)**
Parental education level: college	0.3348 (0.5408)	4.7352 (0.3843)**	0.9515 (1.3281)	2.5177 (0.9203)**
Parental education level: graduate school	0.6603 (0.7339)	7.5419 (0.4878)**	3.1118 (2.2625)	3.1126 (1.5684)*
Student is female	0.0000 (0.0000)	0.6777 (0.2081)**	0.0000 (0.0000)	1.2638 (0.3855)**
Student is Black	0.0000 (0.0000)	-7.4733 (0.3769)**	0.0000 (0.0000)	-8.9524 (1.9559)**
Student is Asian	0.0000 (0.0000)	0.7046 (0.3864)	0.0000 (0.0000)	-3.4208 (1.6818)*
Student is Hispanic	0.0000 (0.0000)	-2.8955 (0.3719)**	0.0000 (0.0000)	-6.6325 (2.0889)**
Student is other race	0.0000 (0.0000)	-0.8230 (1.1013)	0.0000 (0.0000)	-7.4606 (4.5263)
Student changed schools midyear	-1.2682 (0.7485)	-1.2914 (0.5172)*	-0.7239 (1.2775)	-1.5831 (0.8235)
Percentage of students at school that changed unexpectedly	-0.1217 (0.0361)**	-0.2121 (0.0336)**	-0.0890 (0.0594)	-0.1299 (0.0563)*
Unexpected school change	0.3236 (0.4977)	0.9521 (0.3447)**	0.5709 (0.9322)	1.0102 (0.6111)
Student is new to district that year	5.3518 (22.5554)	-1.0880 (23.4802)	0.0000 (0.0000)	0.0000 (0.0000)
Percentage of school that is new to the district	-0.0448 (0.0625)	-0.1829 (0.0537)**	0.2446 (0.1665)	-0.0650 (0.1376)

Continued on next page:

Table F.2 (continued)

Age of student on the first day of school	3.5341	-0.6800	2.0970	-0.9334
	(1.4719)*	(0.2207)**	(2.4351)	(0.3739)*
Student is in 2 nd grade	2.3270	-8.9852	2.2376	-6.8858
	(3.0268)	(1.6360)**	(7.9108)	(2.6993)*
Student is in 4 th grade	0.2303	0.3002	6.0046	0.4674
	(0.3159)	(0.5227)	(6.2186)	(0.9694)
Student is in 5 th grade	0.0000	10.7507	13.9884	13.1325
	(0.0000)	(0.6782)**	(12.2916)	(1.2422)**
Student is in 6 th grade	0.0000	0.0000	0.0000	0.0000
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Student is in 7 th grade	0.0000	0.0000	0.0000	0.0000
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Student is in 8 th grade	0.0000	0.0000	0.0000	0.0000
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Student is an English learner (EL)	-5.6538	-3.2944		
	(6.3275)	(0.5367)**		
Student was redesignated English proficient (FEP)	-0.8174	2.4655		
	(6.5095)	(0.9124)**		
EL but not Spanish	-2.7534	-0.1261	0.0000	0.1440
	(11.1392)	(0.6310)	(0.0000)	(2.0160)
Non Spanish FEP	-5.0486	0.2339		
	(11.3400)	(0.9519)		
Special-ed student	0.0000	-17.5653	0.0000	-8.9078
	(0.0000)	(16.6268)	(0.0000)	(22.3095)
Student skipped a year	-8.6568	24.2548	0.0000	0.0000
	(9.4190)	(7.3041)**	(0.0000)	(0.0000)
Student retained that year	0.0000	0.0000	0.0000	-11.4172
	(0.0000)	(0.0000)	(0.0000)	(8.9385)
Percentage of year student was absent	-0.1945	-0.5122	-0.2870	-0.5936
	(0.0605)**	(0.0292)**	(0.1222)*	(0.0573)**

Continued on next page:

Table F.2 (continued)

Percentage of school on free/reduced meal	0.0578 (0.0434)	-0.1350 (0.0296)**	-0.0415 (0.0935)	-0.0503 (0.0628)
Year-round school	-2.3485 (1.2459)	-3.1318 (0.6748)**	-1.3585 (2.5024)	-2.2503 (1.3283)
Charter school	-5.2296 (33.3336)	-23.9784 (19.2736)	0.0000 (0.0000)	0.0000 (0.0000)
Atypical school	-15.1854 (36.1496)	0.0000 (0.0000)	17.3681 (33.8029)	0.0000 (0.0000)
Elementary school ends at 5 th grade	-3.5021 (2.3088)	-10.9849 (1.4281)**	-4.9937 (3.3685)	-10.8433 (1.8591)**
Elementary school ends at 6 th grade	-6.5468 (2.4006)**	-11.7347 (1.4937)**	-8.9198 (3.5170)*	-13.3063 (2.0126)**
Elementary school ends past 6 th grade	-1.4631 (3.1650)	-13.3544 (2.1640)**	8.1637 (7.2099)	-15.5080 (4.4864)**
Percentage of school that is Asian	-0.1469 (0.0583)*	-0.0793 (0.0342)*	-0.3630 (0.1447)*	0.0939 (0.0737)
Percentage of school that is Hispanic	-0.1205 (0.0700)	-0.0633 (0.0434)	0.0231 (0.1360)	0.0759 (0.0787)
Percentage of school that is Black	0.0255 (0.0571)	-0.0004 (0.0373)	0.2256 (0.1303)	-0.0112 (0.0830)
Percentage of school that is Pacific Islander	-1.1344 (0.4710)*	-0.3143 (0.3549)	-1.2436 (1.0276)	-0.0941 (0.6921)
Percentage of school that is Native American	-0.9508 (0.4944)	0.5996 (0.3935)	2.0524 (1.1873)	2.0246 (0.8920)*
Percentage of school that is EL	0.1318 (0.0549)*	0.0649 (0.0344)	0.1839 (0.1000)	0.0240 (0.0585)
Percentage of school that is FEP	0.3714 (0.1201)**	-0.0922 (0.0964)	0.3544 (0.2075)	-0.5551 (0.1558)**
Classroom peer group	1.1340 (0.4518)*	7.2406 (0.2843)**	2.6616 (0.8955)**	6.9753 (0.5868)**

Continued on next page:

Table F.2 (continued)

Grade-level peer group	3.3321	-16.1940	7.1985	-8.1538
	(0.8988)**	(0.6174)**	(1.7896)**	(1.2097)**
Elementary class size	-0.0735	-0.0509	-0.1485	-0.0365
	(0.0475)	(0.0365)	(0.0923)	(0.0710)
Interns with 0-1 years experience	-4.6670	-7.5323	-5.0250	-9.0375
	(1.3277)**	(1.0003)**	(1.7991)**	(1.2655)**
Interns with 2-5 years experience	-2.6100	-14.4670	-7.4481	-17.4963
	(4.8171)	(4.6653)**	(6.0182)	(5.5861)**
Teachers with emergency credential and 0-1 years experience	6.9350	2.5040	0.2586	0.9117
	(1.7961)**	(1.3125)	(2.5543)	(1.7124)
Teachers with emergency credential and 2-5 years experience	0.7777	0.0812	-5.1248	1.1714
	(1.9761)	(1.9040)	(3.3804)	(3.1898)
Teachers with full credential and 0-1 years experience	-0.6112	-1.1694	-0.4525	-1.1501
	(0.5628)	(0.4355)**	(1.0616)	(0.7626)
Teachers with full credential and 2-5 years experience	-0.1024	-1.6281	-1.1829	-1.9656
	(0.4628)	(0.3536)**	(0.9260)	(0.6671)**
Teachers with full credential and 6-9 years experience	0.0545	-1.0471	0.3731	-0.9204
	(0.4782)	(0.3693)**	(1.0611)	(0.7706)
Master's degree	0.0087	0.0158	0.0024	0.0089
	(0.0036)*	(0.0027)**	(0.0072)	(0.0051)
Ph.D. degree	-0.0419	0.0091	-0.0598	-0.0160
	(0.0308)	(0.0191)	(0.0604)	(0.0307)
Bachelors in math	-0.0369	-0.0137	-0.0209	-0.1052
	(0.0266)	(0.0212)	(0.0520)	(0.0326)**
Minor in math	0.0701	0.0616	-0.0862	0.0398
	(0.0533)	(0.0300)*	(0.2433)	(0.1333)
Bachelors in English	-0.0064	0.0118	-0.0199	0.0194
	(0.0065)	(0.0050)*	(0.0136)	(0.0103)
Minor in English	0.0144	-0.0016	0.0319	-0.0169
	(0.0073)*	(0.0061)	(0.0167)	(0.0133)
Bachelors in social science	0.0100	0.0130	0.0149	0.0237
	(0.0038)**	(0.0030)**	(0.0078)	(0.0057)**

Continued on next page:

Table F.2 (continued)

Minor in social science	0.0024	0.0056	0.0088	0.0224
	(0.0059)	(0.0047)	(0.0133)	(0.0101)*
Bachelors in science	-0.0230	0.0139	-0.0401	0.0022
	(0.0111)*	(0.0085)	(0.0202)*	(0.0150)
Minor in science	0.0033	0.0184	-0.0608	0.0462
	(0.0192)	(0.0148)	(0.0526)	(0.0415)
Bachelors in foreign language	-0.0145	0.0023	0.0100	0.0230
	(0.0087)	(0.0069)	(0.0150)	(0.0108)*
Minor in foreign language	0.0108	0.0184	0.0520	0.0367
	(0.0100)	(0.0075)*	(0.0147)**	(0.0105)**
Bachelors in other subject	0.0167	0.0169	0.0327	0.0314
	(0.0039)**	(0.0030)**	(0.0077)**	(0.0057)**
CLAD credential	-0.0119	-0.0003	-0.0123	-0.0021
	(0.0041)**	(0.0032)	(0.0076)	(0.0057)
CLAD-equivalent credential	0.0063	0.0120	0.0162	0.0188
	(0.0051)	(0.0039)**	(0.0103)	(0.0081)*
Spanish BCLAD credential	-0.0001	0.0078	-0.0106	-0.0034
	(0.0098)	(0.0073)	(0.0102)	(0.0069)
Spanish BCLAD-equivalent credential	-16.3450	-20.0939	0.0000	0.0000
	(5.6762)**	(6.0024)**	(0.0000)	(0.0000)
CLAD teacher and EL student interaction	0.1719	-0.8638		
	(0.7893)	(0.5975)		
CLAD-equivalent teacher and EL student interaction	1.3917	-0.5276		
	(0.9732)	(0.7363)		
BCLAD teacher and EL student interaction	-0.7500	0.2515		
	(1.2350)	(0.8637)		
BCLAD-equivalent teacher and EL student interaction	0.0000	0.0000		
	(0.0000)	(0.0000)		
CLAD teacher and FEP student interaction	2.7247	1.2081		
	(1.2631)*	(1.0477)		

Continued on next page:

Table F.2 (continued)

CLAD-equivalent teacher and FEP student interaction	1.9772	1.5929		
	(1.4849)	(1.1498)		
BCLAD teacher and FEP student interaction	-1.7433	0.7955		
	(2.7943)	(1.7704)		
BCLAD-equivalent teacher and FEP student interaction	0.0000	0.0000		
	(0.0000)	(0.0000)		
Female teacher	0.0002	0.0026	-0.0006	-0.0028
	(0.0034)	(0.0027)	(0.0067)	(0.0050)
Black teacher	-0.0100	-0.0202	-0.0015	-0.0133
	(0.0049)*	(0.0040)**	(0.0107)	(0.0085)
Asian teacher	0.0168	-0.0013	0.0228	-0.0284
	(0.0064)**	(0.0050)	(0.0129)	(0.0099)**
Hispanic teacher	-0.0198	-0.0117	-0.0101	-0.0057
	(0.0055)**	(0.0041)**	(0.0089)	(0.0062)
Other race teacher	-0.0398	0.0194	-0.0679	-0.0496
	(0.0145)**	(0.0113)	(0.0428)	(0.0354)
Sat9: previous math scaled score	-1.3934	-0.3516	-1.3611	-0.3800
	(0.0070)**	(0.0034)**	(0.0140)**	(0.0070)**
Constant	863.0717	255.8182	791.7561	274.7531
	(38.7444)**	(3.9770)**	(39.0230)**	(11.2576)**
Observations	51441	51441	13715	13715
Number of student id number	36927		10322	
R-squared	0.77	0.23	0.79	0.23
Standard errors in parentheses				

* significant at 5%

** significant at 1%

Notes: Each column refers to a separate model, with the dependent variable being gains in math achievement, and the sample being all students or English Learners. The omitted college major is education and the omitted minor is education/no minor. Regressors not shown include fixed effects as listed at the top of the table, and dummies set to 1 if a given variable was missing.

Some regressors range from 0-1. They are: interns with 0-1 years experience, interns with 2-5 years experience, teachers with emergency credentials and 0-1 years experience, emergency credentials and 2-5 years experience, full credential and 0-1 years experience, full credential and 2-5 years experience, full credential and 6-9 years experience, BCLAD equivalent teachers, and interactions of CLAD, BCLAD, CLAD-equivalent, and BCLAD-equivalent with EL and FEP students.

Variables not listed above include: dummy for year (1998-1999), dummy variables for missing variables, dummy variables for schools, and dummy variables for zip code.