Appendix A

Table A1. Data Collection – April 2014-Dec 2016 June 2015

	All	Treatment 1	Treatment 2	Control
April 2014-Dec 2014				
Grades 4, 5	All (N = 3,026)	*Treatment 1* (N = 1,008)	*Treatment 2* (N = 1,008)	*Control* (N = 1,010)
April 2014 EGRA/EGMA scores	100%	100%	100%	100%
Oct 2014 Assigned Pilot Home Visit 1	69%	84%	84%	40%
Oct 2014 Received Pilot Home Visit 1	36%	43%	44%	20%
Dec 2014 EGRA/EGMA scores	89%	90%	89%	90%
June 2015-June 2017				
Grades 3, 4, 5	All (N = 4,371)	*Treatment 1* (N = 1,456)	*Treatment 2* (N = 1,456)	*Control* (N = 1,459)
June 2015 Pilot EGRA/EGMA scores: Grade 4, 5 in 2014	86%	84%	85%	87%
June 2015 EGRA/EGMA scores: Grade 3 in 2014	100%	100%	100%	100%
Oct 2015 Assigned Home Visit 2	100%	100%	100%	100%
Oct 2015 Received Home Visit 2	67%	70%	68%	64%
Dec 2015 EGRA/EGMA scores	68%	69%	68%	68%
June 2016 EGRA/EGMA scores	87%	88%	88%	86%
Dec 2016 EGRA/EGMA scores	84%	84%	85%	85%
June 2017 EGRA/EGMA scores	77%	79%	76%	77%

Notes: June 2016 and Dec 2016 EGRA/EGMA assessments included only those students who were enrolled in either grade 3 or grade 4 in 2014. Students who were in grade 5 in 2014 were not followed in 2016. June 2017 EGRA/EGMA assessments included only those students who were enrolled in grade 3 in 2014. Students who were in grades 4 or 5 in 2014 were not followed in 2017.

Table A2. Baseline balance table

	Analysis sample	Treatment 1	Treatment 2	Control	Difference (T1 vs. Control)	Difference (T2 vs. Control)
Baseline EGRA/EGMA assessments						
Baseline test scores						
Words read	91.91	91.26	92.10	92.38	-1.13*	-0.24
	(20.09)	(20.80)	(19.54)	(19.91)	[0.59]	[0.59]
Number of correct subtractions	12.75	12.67	12.67	12.90	-0.22	-0.24
	(5.29)	(5.16)	(5.32)	(5.39)	[0.20]	[0.20]
Number of correct sums	17.24	17.29	17.19	17.23	0.06	-0.04
	(5.23)	(5.23)	(5.26)	(5.19)	[0.25]	[0.25]
Number of correct problems	3.81	3.77	3.85	3.82	-0.04	0.03
	(1.64)	(1.66)	(1.64)	(1.62)	[0.06]	[0.06]
Child characteristics						
Age as of 01/20/2014	9.90	9.90	9.93	9.88	0.02	0.05
	(1.52)	(1.50)	(1.57)	(1.48)	[0.04]	[0.04]
Gender - female	0.46	0.46	0.45	0.47	-0.01	-0.02
	(0.50)	(0.50)	(0.50)	(0.50)	[0.02]	[0.02]
Grade in 2014	4.06	4.06	4.06	4.06		
	(0.82)	(0.82)	(0.82)	(0.82)		
Observations	4,371	1,456	1,456	1,459		
Initial home visit						
Respondent						
Mother/stepmother	0.73	0.73	0.75	0.73	0.00	0.03
	(0.44)	(0.45)	(0.43)	(0.45)	[0.03]	[0.03]
Father/stepfather	0.09	0.09	0.08	0.11	-0.02	-0.03*
	(0.29)	(0.29)	(0.28)	(0.32)	[0.02]	[0.02]
Other relative/non-relative	0.17	0.18	0.17	0.16	0.02	0.00
	(0.38)	(0.39)	(0.37)	(0.37)	[0.02]	[0.02]
Age of the guardian	38.69	39.14	38.12	38.89	0.15	-0.89
	(10.54)	(10.83)	(10.15)	(10.64)	[0.61]	[0.61]
Working - father/stepfather	0.88	0.88	0.89	0.87	0.00	0.01
	(0.32)	(0.32)	(0.32)	(0.33)	[0.02]	[0.02]
Working - mother/stepmother	0.46	0.44	0.47	0.48	-0.04	-0.01
	(0.50)	(0.50)	(0.50)	(0.50)	[0.03]	[0.03]
Years of education - father/stepfather	7.63	7.47	7.69	7.77	-0.29	-0.07
	(3.77)	(3.75)	(3.80)	(3.75)	[0.26]	[0.27]

Years of education - mother/stepmother	8.27	8.20	8.39	8.21	0.04	0.24
	(3.63)	(3.60)	(3.62)	(3.68)	[0.22]	[0.22]
Family income (in # of minimum salaries)						
Less than 1 MS	0.24	0.24	0.23	0.24	-0.01	-0.02
	(0.43)	(0.43)	(0.42)	(0.43)	[0.02]	[0.02]
1 MS	0.53	0.52	0.54	0.53	0.01	0.03
	(0.50)	(0.50)	(0.50)	(0.50)	[0.03]	[0.03]
Between 1-2 MS	0.18	0.19	0.18	0.18	0.02	0.00
	(0.39)	(0.40)	(0.38)	(0.38)	[0.02]	[0.02]
More than 2 MS	0.04	0.04	0.04	0.05	-0.01	-0.01
	(0.20)	(0.19)	(0.20)	(0.23)	[0.01]	[0.01]
Parent beliefs about student performance						
Words read	78.24	78.48	77.34	79.26	-0.62	-1.63
	(22.88)	(23.09)	(23.43)	(21.61)	[1.25]	[1.25]
Number of correct sums	19.32	18.97	19.32	19.82	-0.81**	-0.44
	(4.80)	(5.02)	(5.05)	(4.03)	[0.32]	[0.32]
Number of correct subtractions	18.17	17.79	18.21	18.72	-0.89**	-0.46
	(6.47)	(6.50)	(6.79)	(5.84)	[0.37]	[0.37]
Number of correct problems	4.32	4.37	4.24	4.39	-0.02	-0.15
	(1.32)	(1.32)	(1.32)	(1.33)	[0.16]	[0.16]
Parent investment						
Involvement - Ask about school (days/week)	4.85	4.87	4.86	4.80	0.07**	0.06*
	(0.57)	(0.54)	(0.52)	(0.69)	[0.03]	[0.03]
Involvement - Help studying (days/week)	4.15	4.17	4.19	4.06	0.14*	0.16**
	(1.41)	(1.39)	(1.38)	(1.46)	[0.08]	[0.08]
Involvement - Read with her/him (days/week)	3.14	3.20	3.12	3.07	0.16	0.09
	(1.89)	(1.89)	(1.85)	(1.93)	[0.11]	[0.11]
Involvement – Help with homework (days/week)	4.60	4.58	4.63	4.58	0.01	0.07
	(0.97)	(1.06)	(0.89)	(0.96)	[0.06]	[0.06]

Involvement – Ask about grades (days/week)	4.64	4.67	4.64	4.61	0.04	0.01
	(0.93)	(0.86)	(0.95)	(1.00)	[0.05]	[0.05]
Parent relationship with the school						
Guardians' meetings (always)	0.86	0.87	0.87	0.86	0.01	0.01
	(0.34)	(0.34)	(0.34)	(0.35)	[0.02]	[0.02]
Parents' school (always)	0.48	0.47	0.47	0.51	-0.03	-0.03
	(0.50)	(0.50)	(0.50)	(0.50)	[0.03]	[0.03]
School activities (always)	0.68	0.68	0.70	0.65	0.03	0.05*
	(0.47)	(0.47)	(0.46)	(0.48)	[0.03]	[0.03]
Meetings with teachers (always)	0.70	0.70	0.71	0.66	0.05*	0.05**
	(0.46)	(0.46)	(0.45)	(0.47)	[0.03]	[0.03]
Observations	2,057	783	775	499		

First and second columns contain means with standard deviations in parentheses. For students in grades 4 and 5 in 2014, the baseline test score was collected in April 2014. For students in grade 3 in 2014, the baseline test score was collected in June 2015, when students were in grade 4. For students in grades 4 and 5, the initial home visit was conducted in October 2014. For students in grade 3 in 2014, the initial home visit was conducted in October 2015. Observations in the first column include all students who were ever assigned to the treatment condition. This includes students who received the treatment in December 2014 and 2015, and students who received the treatment in December 15. The third column includes the difference between students in the treatment and control groups, with asterisks indicating the p-value from a regression of the row variable on an indicator treatment status and grade indicators. Standard error in brackets.
* $p < 0.10$, ** $p < 0.05$, *** $p<0.01$.

Table A3. Correlations between measures of student performance over time and across subjects

	Baseline	Dec 2014	June 2015	--	--	Between math and reading
Grade 5 in 2014						
Baseline	1					0.135*
Dec 2014	0.584*	1				0.223*
June 2015	0.532*	0.564*	1			0.231*
Dec 2015	0.434*	0.447*	0.513*			0.251*

	Baseline	Dec 2014	June 2015	Dec 2015	June 2016	
Grade 4 in 2014						
Baseline	1					0.062+
Dec 2014	0.463*	1				0.187*
June 2015	0.430*	0.529*	1			0.254*
Dec 2015	0.399*	0.476*	0.618*	1		0.240*
June 2016	0.396*	0.425*	0.486*	0.491*	1	0.343*
Dec 2016	0.321*	0.430*	0.531*	0.496*	0.508*	0.357*

	Baseline	Dec 2015	June 2016	Dec 2016	--	
Grade 3 in 2014						
Baseline	1					0.197*
Dec 2015	0.516*	1				0.200*
June 2016	0.507*	0.460*	1			0.286*
Dec 2016	0.516*	0.455*	0.488*	1		0.280*
June 2017	0.262*	0.309*	0.300*	0.336*		0.362*

+p<0.05 *p<0.01

Table A4. Differential test-taking and missingness

	Missing outcome Dec 2015	Missing outcome June 2016	Missing outcome Dec 2016	Missing outcome June 2017
Treatment 1	-0.002	-0.019	0.004	-0.022
	(0.017)	(0.015)	(0.017)	(0.028)
Treatment 2	0.004	-0.021	-0.003	0.009
	(0.017)	(0.015)	(0.017)	(0.028)
Constant	0.316***	0.140***	0.155***	0.234***
	(0.012)	(0.011)	(0.012)	(0.020)
N	4,371	2,765	2,765	1,345
Overall % missing	32%	13%	16%	23%

Estimates from regression of indicator for whether student was missing test score in the follow-up wave on an indicator for treatment status. Standard errors in parentheses.
$^{*} p < 0.10,$ $^{**} p < 0.05,$ $^{***} p < 0.01$

Table A5. Attrition as a function of treatment status and baseline test performance

	Attrition: Dec 2015		Attrition: June 2016		Attrition: Dec 2016		Attrition: June 2017	
Treatment	-0.000	-0.003	-0.024*	-0.024	0.001	0.015	-0.007	0.008
	(0.015)	(0.020)	(0.014)	(0.018)	(0.015)	(0.019)	(0.024)	(0.032)
Baseline composite score	-0.005		0.008		0.002		-0.011	
	(0.008)		(0.007)		(0.008)		(0.013)	
Treatment* Baseline composite score	-0.002		-0.005		0.000		0.003	
	(0.010)		(0.009)		(0.010)		(0.016)	
Low baseline performance		0.004		-0.034		0.002		0.044
		(0.025)		(0.022)		(0.024)		(0.040)
Treatment* Low baseline performance		0.007		0.003		-0.031		-0.033
		(0.031)		(0.027)		(0.030)		(0.049)
N	4185	4185	2705	2705	2705	2705	1345	1345

Note: Standard errors in parentheses. Results based on estimating two groups of models. In the first group, an indicator for attrition in a given follow-up wave is regressed on an indicator for treatment status, students' baseline composite EGRA/EGMA, and the interaction. In the second group, and indicator for attrition in a given follow-up wave is regressed on an indicator for treatment status, and indicator for whether the student had low math or reading performance at baseline, and their interaction.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A6. Association between baseline test score, missing outcome data, and treatment status

	Dec 2015	June 2016	Dec 2016	June 2017
Outcome: Baseline reading performance (standardized)				
Missing outcome data	-0.100*	0.166*	0.075	0.034
	(0.058)	(0.099)	(0.095)	(0.117)
Treatment 1/2	-0.042	-0.010	-0.029	-0.007
	(0.040)	(0.045)	(0.046)	(0.069)
Treatment 1/2* Missing outcome data	-0.004	-0.149	-0.020	-0.049
	(0.071)	(0.124)	(0.116)	(0.144)
N	4,362	2,761	2,761	1,345
Outcome: Baseline math performance (standardized)				
Missing outcome data	0.028	-0.001	-0.034	-0.187*
	(0.057)	(0.094)	(0.091)	(0.110)
Treatment 1/2	-0.040	-0.017	-0.016	-0.068
	(0.039)	(0.043)	(0.044)	(0.065)
Treatment 1/2* Missing outcome data	-0.005	0.016	0.010	0.074
	(0.070)	(0.118)	(0.111)	(0.135)
N	4,190	2,709	2,709	1,345

Estimates from regression of baseline EGRA and EGMA scores on an indicator for whether student was missing test score in the follow-up wave, indicators for treatment status, and the interactions between the indicator for missing test score in the follow-up wave and indicators for treatment status. Standard errors in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A7. Correlations between parent beliefs, student performance, school performance, and parent behaviors at baseline

	Gap between baseline student performance and parent beliefs		Absolute value of gap between baseline student performance and parent beliefs	
	Reading	Subtractions	Reading	Subtractions
Student performance at baseline:				
Reading	0.518***	0.043*	0.020	0.002
Subtractions	-0.008	0.556***	-0.075***	-0.352***
School performance at baseline:				
Reading	0.226***	-0.030	0.238***	0.066***
Subtractions	-0.056**	0.187***	-0.020	-0.134***
Parent investment (days/week):				
Ask about school	0.043*	0.062***	0.029	-0.043*
Help studying	-0.069***	-0.048**	-0.064***	-0.012
Read with her/him	-0.075***	-0.080***	-0.069***	0.059***
Help with homework	-0.030	0.016	-0.039*	-0.029
Ask about grades	0.027	0.014	0.008	-0.031
Parent relationship with the school (always/less than always):				
Guardians' meetings	0.038*	0.010	0.013	-0.020
Parents' school	0.028	0.007	0.024	-0.039*
School activities	0.020	-0.002	0.010	-0.006
Meetings with teachers	-0.011	-0.014	-0.013	0.017

Note: All pairwise correlations at the child/household level. School performance calculated based on the average of students in the analytic sample within the same grade and school. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A8. Impact of pilot intervention on parent behavior

	(1) Parent index	(2) Parent index
Pilot Treatment 1 (Individual information)	0.064 (0.055)	
Pilot Treatment 2 (School information)	0.110** (0.055)	
Pilot Treatment 1/2		0.052 (0.064)
Pilot Treatment 1/2* Low baseline math and/or reading performance		0.088 (0.100)
Impact on low-performing students		0.139
Observations	1976	1869

Note: Standard errors in parentheses. Outcome is calculated by the following: Individual measures of parent behaviors (days/week asked about school, helped with studying, read with child, helped with homework, asked about grades) were standardized with respect to the overall sample. The average of these standardize measures was standardized again to form the composite index. All models include controls for age, gender, and baseline math and reading scores.
$^{*} p < 0.10,$ $^{**} p < 0.05,$ $^{***} p < 0.01$

Table A9. Impact of pilot intervention on parents' satisfaction with the school

	(1) Overall quality	(2) Discipline and order	(3) Infrastructure	(4) Information	(5) Teacher quality	(6) Teacher disposition
Overall impact of pilot intervention						
Pilot Treatment 1	-0.041	-0.140**	-0.081	-0.130**	-0.059	-0.081
	(0.063)	(0.062)	(0.062)	(0.063)	(0.063)	(0.063)
Pilot Treatment 2	0.011	-0.149**	-0.052	-0.091	-0.017	-0.039
	(0.064)	(0.062)	(0.063)	(0.063)	(0.063)	(0.063)
Observations	1970	1970	1970	1970	1970	1970
Variation baseline on baseline student performance						
Pilot Treatment 1/2	0.006	-0.158**	-0.010	-0.031	-0.006	-0.036
	(0.074)	(0.072)	(0.072)	(0.073)	(0.073)	(0.073)
Pilot Treatment 1/2* Low baseline math and/or reading performance	-0.083	0.017	-0.174	-0.215*	-0.054	-0.064
	(0.116)	(0.113)	(0.114)	(0.115)	(0.114)	(0.114)
Observations	1863	1863	1863	1863	1863	1863

Note: Standard errors in parentheses. Results based on estimating ordered probit models. All outcomes are ordinal variables for parental satisfaction, with the lowest value being "Very unsatisfied," "Unsatisfied," or "Neither satisfied nor unsatisfied;" 2 = "Satisfied;" and 3 = "Very satisfied." All models include controls for age, gender, grade, and baseline math and reading scores.

$^* p < 0.10$, $^{**} p < 0.05$, $^{***} p < 0.01$

Table A10. Impact of pilot intervention on composite test score outcomes

	(1) Dec 2014	(2) June 2015
Pilot Treatment 1 (Individual information)	-0.010 (0.046)	0.017 (0.053)
Pilot Treatment 2 (School information)	-0.060 (0.046)	0.003 (0.053)
Observations	2661	2593

Note: Standard errors in parentheses. Composite math and reading score calculated by the following: Reading and math (subtractions) scores were standardized within grade with respect to the control group at baseline. The sum of the standardized reading and math scores were calculated for each wave. Composite scores for each follow-up wave were standardized again with respect to the composite score for the control group at baseline. All models include controls for age, gender, grade, and baseline math and reading scores. Models include students who were enrolled in grades 4 or 5 in 2014.
$^{*} p < 0.10,$ $^{**} p < 0.05,$ $^{***} p < 0.01.$

Table A11. Impact of information intervention on composite test score outcomes

	(1) Dec 2015	(2) June 2016	(3) Dec 2016	(4) June 2017
Outcome: Composite test score				
Treatment 1	0.096**	0.086	-0.054	-0.051
	(0.043)	(0.077)	(0.082)	(0.118)
Treatment 2	0.085**	0.131*	-0.101	0.011
	(0.043)	(0.077)	(0.082)	(0.119)
Observations	2984	2416	2336	1036
Outcome: Reading performance (standardized)				
Treatment 1	0.074*	0.050	-0.061	-0.003
	(0.040)	(0.092)	(0.098)	(0.139)
Treatment 2	0.066	0.100	-0.112	0.045
	(0.040)	(0.092)	(0.097)	(0.141)
Observations	2987	2416	2336	1036
Outcome: Math performance (standardized)				
Treatment 1	0.069	0.079	-0.020	-0.076
	(0.043)	(0.048)	(0.049)	(0.078)
Treatment 2	0.059	0.097**	-0.041	-0.028
	(0.044)	(0.048)	(0.049)	(0.078)
Observations	2984	2416	2336	1036

Note: Standard errors in parentheses. Composite math and reading score calculated by the following: Reading and math (subtractions) scores were standardized within grade with respect to the control group at baseline. The sum of the standardized reading and math scores were calculated for each wave. Composite scores for each follow-up wave were standardized again with respect to the composite score for the control group at baseline. All models include controls for age, gender, grade, and baseline math and reading scores. First column includes students who were enrolled in grades 3, 4 or 5 in 2014. Second and third columns include students who were enrolled in grades 3 or 4 in 2014. Fourth column includes students who were enrolled in grade 3 in 2014.

$^* p < 0.10$, $^{**} p < 0.05$, $^{***} p < 0.01$.

Table A12. Impacts of information intervention on composite test score outcome, separately by grade and using only students with outcome information in all grades

	(1) Dec 2015	(2) June 2016	(3) Dec 2016	(4) June 2017
Grade 5 in 2014				
Treatment 1	0.116*	--	--	--
	(0.062)			
Treatment 2	0.187***			
	(0.063)			
Observations	989			
Grade 4 in 2014				
Treatment 1	0.068	0.295*	0.123	--
	(0.109)	(0.155)	(0.156)	
Treatment 2	0.045	0.229	-0.043	
	(0.107)	(0.153)	(0.154)	
Observations	833	833	833	
Grade 3 in 2014				
Treatment 1	0.065	0.050	-0.041	-0.185
	(0.068)	(0.100)	(0.105)	(0.137)
Treatment 2	0.023	0.108	-0.064	-0.107
	(0.070)	(0.102)	(0.108)	(0.141)
Observations	779	779	779	779

Note: Standard errors in parentheses. Composite math and reading score calculated by the following: Reading and math (subtractions) scores were standardized within grade with respect to the control group. The sum of the standardized reading and math scores were calculated for baseline and each wave. Composite scores for each follow-up wave were standardized again with respect to the composite score for the control group at baseline. All models include controls for age, gender, grade, and baseline math and reading scores.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A13. Impact of information intervention on being at score ceiling – Separately by subject

	(1) Dec 2015	(2) June 2016	(3) Dec 2016	(4) June 2017
Student at ceiling for number of words read				
Treatment 1	0.036*	0.002	-0.006	0.006
	(0.022)	(0.021)	(0.011)	(0.014)
Treatment 2	0.034	0.009	0.000	0.008
	(0.022)	(0.021)	(0.011)	(0.014)
Observations	2979	2650	2527	1036
Control mean	0.44	0.26	0.06	0.03
Student at ceiling for number of correct subtractions				
Treatment 1	-0.002	0.013	-0.004	-0.016
	(0.012)	(0.010)	(0.011)	(0.014)
Treatment 2	0.014	0.010	-0.002	-0.005
	(0.012)	(0.010)	(0.011)	(0.014)
Observations	2888	2594	2475	1036
Control mean	0.08	0.04	0.06	0.04

Note: Standard errors in parentheses. All models include controls for age, gender, grade, and baseline math and reading scores.

$^*\, p < 0.10,\ ^{**}\, p < 0.05,\ ^{***}\, p < 0.01.$

Table A14. Impact of information intervention on student reading and math outcomes, by gap between baseline reading student performance and parent beliefs

	(1) Dec 2015	(2) June 2016	(3) Dec 2016	(4) June 2017
Number of correct words read (standardized)				
Treatment 1/2	0.057	0.387***	0.036	0.026
	(0.049)	(0.107)	(0.117)	(0.153)
Treatment 1/2*Abs(Gap, reading)	0.005**	0.021***	0.012*	-0.009
	(0.003)	(0.006)	(0.007)	(0.009)
Observations	1484	1338	1287	742
Number of correct subtractions (standardized)				
Treatment 1/2	0.030	0.085	-0.041	-0.063
	(0.060)	(0.062)	(0.062)	(0.079)
Treatment 1/2* Abs(Gap, subtractions)	-0.014	-0.025**	-0.019	-0.006
	(0.012)	(0.012)	(0.012)	(0.016)
Observations	1476	1361	1309	762

Note: Standard errors in parentheses. Reading scores were standardized within grade with respect to the control group at baseline. All models include controls for age, gender, grade, and baseline math and reading scores.

$^*p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Table A15. Impact of information intervention on student reading and math outcomes, by whether parents over-predict student performance at baseline

	(1) Dec 2015	(2) June 2016	(3) Dec 2016	(4) June 2017
Number of correct words read (standardized)				
Treatment 1/2	0.074	0.237*	-0.004	-0.239
	(0.057)	(0.124)	(0.135)	(0.178)
Treatment 1/2* Over-prediction of reading performance	-0.087	0.242	-0.046	0.797***
	(0.110)	(0.232)	(0.254)	(0.302)
Observations	1484	1338	1287	742
Number of correct subtractions (standardized)				
Treatment 1/2	-0.057	0.178	-0.019	-0.256*
	(0.120)	(0.119)	(0.118)	(0.153)
Treatment 1/2* Over-prediction of math performance	0.122	-0.121	-0.014	0.286
	(0.138)	(0.139)	(0.139)	(0.178)
Observations	1476	1361	1309	762

Note: Standard errors in parentheses. Reading scores were standardized within grade with respect to the control group at baseline. All models include controls for age, gender, grade, and baseline math and reading scores. Over-prediction of baseline performance is an indicator for whether parents' predicted student performance at the initial home visit (i.e., number of words read, number of correct subtractions) was above the student's actual performance at baseline (i.e., number of words read, number of correct subtractions).
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A16. Impact of information intervention on student reading and math outcomes, by parents' initial beliefs about relative student and school performance

	(1) Dec 2015	(2) June 2016	(3) Dec 2016	(4) June 2017
Treatment 1/2	0.057	0.357***	0.107	0.075
	(0.072)	(0.113)	(0.121)	(0.157)
Treatment 1/2* Low parent beliefs about student relative performance[a]	0.015	-0.275	-0.304	-0.127
	(0.112)	(0.181)	(0.196)	(0.244)
Low parent beliefs about student relative performance	-0.030	0.225	0.017	0.129
	(0.097)	(0.158)	(0.170)	(0.206)
Impacts for student with high parent beliefs	0.057	0.357***	0.107	0.075
Impacts for student with low parent beliefs	0.072	0.082	-0.197	-0.053
Observations	1519	1378	1326	764

Note: Standard errors in parentheses. Composite math and reading score calculated by the following: Reading and math (subtractions) scores were standardized within grade with respect to the control group. The sum of the standardized reading and math scores were calculated, and standardized again with respect to the control group, to form the composite score. All models include controls for age, gender, and baseline math and reading scores. First column includes students who were enrolled in grades 3, 4 or 5 in 2014. Second and third columns include students who were enrolled in grades 3 or 4 in 2014. Fourth column includes students who were enrolled in grade 3 in 2014.

[a] Low parent beliefs is an indicator for whether parent beliefs regarding the number of words read and/or correct subtractions by the student is less than parent beliefs regarding the average number of words read/correct subtractions in the student's school.

Table A17. Impact of information intervention on composite test score outcomes, by gender

	(1) Dec 2015	(2) June 2016	(3) Dec 2016	(4) June 2017
Treatment 1/2	0.013	0.109	-0.207**	-0.034
	(0.051)	(0.092)	(0.097)	(0.140)
Treatment 1/2*Gender - Female	0.166**	-0.001	0.277*	0.028
	(0.075)	(0.135)	(0.142)	(0.206)
Observations	2984	2416	2336	1036

Note: Standard errors in parentheses. Composite math and reading score calculated by the following: Reading and math (subtractions) scores were standardized within grade with respect to the control group at baseline. The sum of the standardized reading and math scores were calculated for baseline and each wave. Composite scores for each follow-up wave were standardized again with respect to the composite score for the control group at baseline. All models include controls for age, gender, grade, and baseline math and reading scores.
$^{*} p < 0.10, ^{**} p < 0.05, ^{***} p < 0.01.$

Table A18. Impact on composite test score outcomes, by baseline performance

	(1) Dec 2015	(2) June 2016	(3) Dec 2016	(4) June 2017
Low baseline performance: Below 25th percentile in math or reading at baseline				
Treatment 1/2	-0.013	0.010	-0.081	0.001
	(0.049)	(0.089)	(0.094)	(0.135)
Treatment 1/2*Low baseline perf.	0.216***	0.268**	-0.011	-0.051
	(0.077)	(0.136)	(0.144)	(0.208)
Impact on low-performing students	0.203***	0.278***	-0.092	-0.050
Observations	2884	2365	2290	1036
Measure of baseline performance: Continuous baseline composite math and reading score				
Treatment 1/2	0.076**	0.124*	-0.090	-0.020
	(0.038)	(0.067)	(0.071)	(0.103)
Treatment 1/2*Baseline composite score	-0.047*	-0.021	-0.002	-0.013
	(0.026)	(0.044)	(0.047)	(0.067)
Observations	2884	2365	2290	1036
Low baseline performance: Below 25th percentile on composite math and reading score				
Treatment 1/2	0.029	0.088	-0.080	-0.033
	(0.043)	(0.078)	(0.082)	(0.118)
Treatment 1/2*Low baseline perf.	0.197**	0.144	-0.028	0.051
	(0.089)	(0.155)	(0.165)	(0.241)
Impact on low-performing students	0.227***	0.232*	-0.108	0.019
Observations	2884	2365	2290	1036
Low baseline performance: Below 50th percentile on composite math and reading score				
Treatment 1/2	0.003	0.050	-0.059	-0.033
	(0.053)	(0.095)	(0.100)	(0.141)
Treatment 1/2*Low baseline perf.	0.146*	0.143	-0.063	0.027
	(0.076)	(0.134)	(0.142)	(0.206)
Impact on low-performing students	0.150***	0.193**	-0.122	-0.006
Observations	2884	2365	2290	1036

Note: Standard errors in parentheses. Composite math and reading score calculated by the following: Reading and math (subtractions) scores were standardized within grade with respect to the control group. The sum of the standardized reading and math scores were calculated, and standardized again with respect to the control group, to form the composite score. All models include controls for age, gender, and baseline math and reading scores.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A19. Impact of information intervention on math and reading outcomes, by baseline performance

	(1) Dec 2015	(2) June 2016	(3) Dec 2016	(4) June 2017
Number of correct words read (standardized)				
Treatment 1/2	-0.006	-0.003	-0.122	-0.045
	(0.040)	(0.092)	(0.098)	(0.141)
Treatment 1/2*Low baseline reading	0.290***	0.283	0.116	0.241
	(0.081)	(0.181)	(0.193)	(0.275)
Impact on low-performing students	0.283***	0.280*	-0.006	0.196
Observations	2981	2412	2332	1036
Number of correct subtractions (standardized)				
Treatment 1/2	0.037	0.106**	-0.037	-0.013
	(0.044)	(0.049)	(0.050)	(0.078)
Treatment 1/2*Low baseline math	0.073	-0.029	0.011	-0.144
	(0.087)	(0.095)	(0.098)	(0.156)
Impact on low-performing students	0.110	0.077	-0.026	-0.157
Observations	2888	2369	2294	1036

Note: Standard errors in parentheses. Composite math and reading score calculated by the following: Reading and math (subtractions) scores were standardized within grade with respect to the control group. The sum of the standardized reading and math scores were calculated, and standardized again with respect to the control group, to form the composite score. All models include controls for age, gender, and baseline math and reading scores.
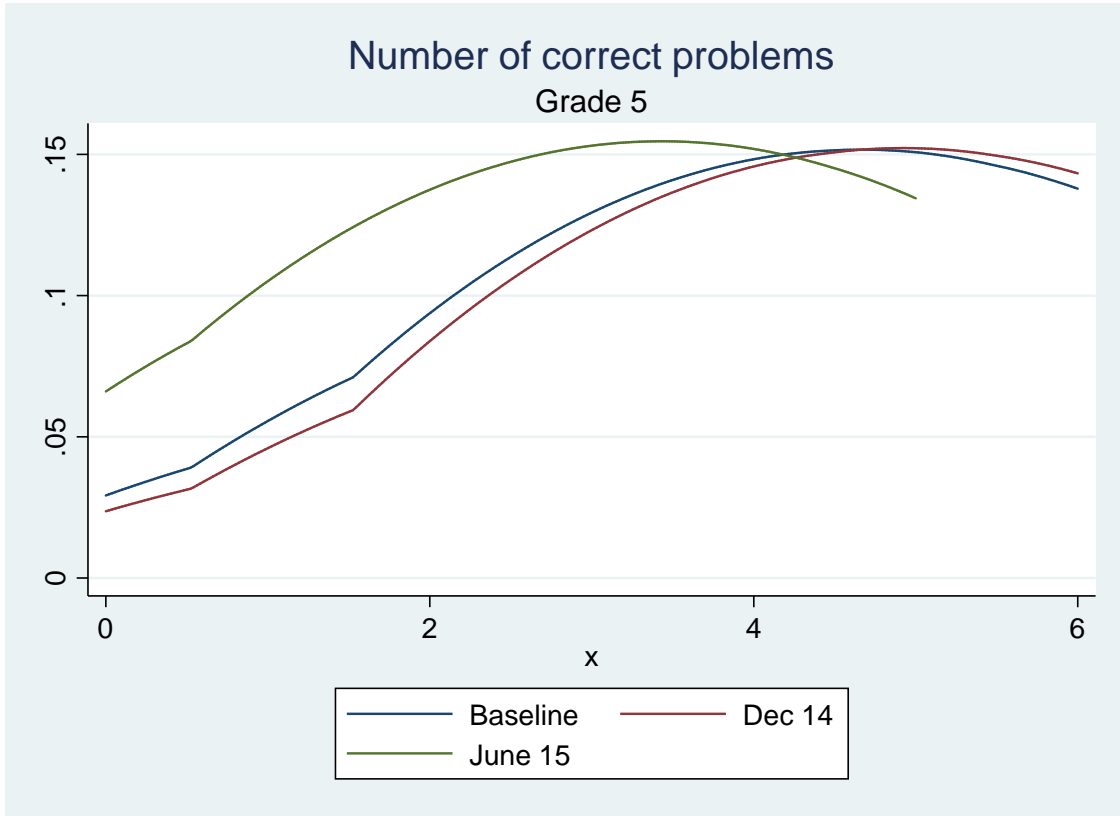* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A20. Impact of information intervention on math and reading outcomes, by baseline performance

	(1) Dec 2015	(2) June 2016	(3) Dec 2016	(4) June 2017
Number of correct words read (standardized)				
Treatment 1/2	-0.030	-0.057	-0.082	0.044
	(0.046)	(0.106)	(0.111)	(0.160)
Treatment 1/2*Low baseline reading or math	0.206***	0.342**	-0.031	-0.054
	(0.071)	(0.161)	(0.171)	(0.246)
Impact on low-performing students	0.177***	0.285**	-0.114	-0.010
Observations	2887	2365	2290	1036
Number of correct subtractions (standardized)				
Treatment 1/2	0.014	0.080	-0.033	-0.042
	(0.050)	(0.056)	(0.057)	(0.089)
Treatment 1/2* Low baseline reading or math	0.103	0.040	-0.001	-0.026
	(0.077)	(0.085)	(0.087)	(0.137)
Impact on low-performing students	0.117**	0.121*	-0.034	-0.067
Observations	2884	2365	2290	1036

Note: Standard errors in parentheses. Composite math and reading score calculated by the following: Reading and math (subtractions) scores were standardized within grade with respect to the control group. The sum of the standardized reading and math scores were calculated, and standardized again with respect to the control group, to form the composite score. All models include controls for age, gender, and baseline math and reading scores.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Figure A1. Distribution of number of correct problems across first three study waves

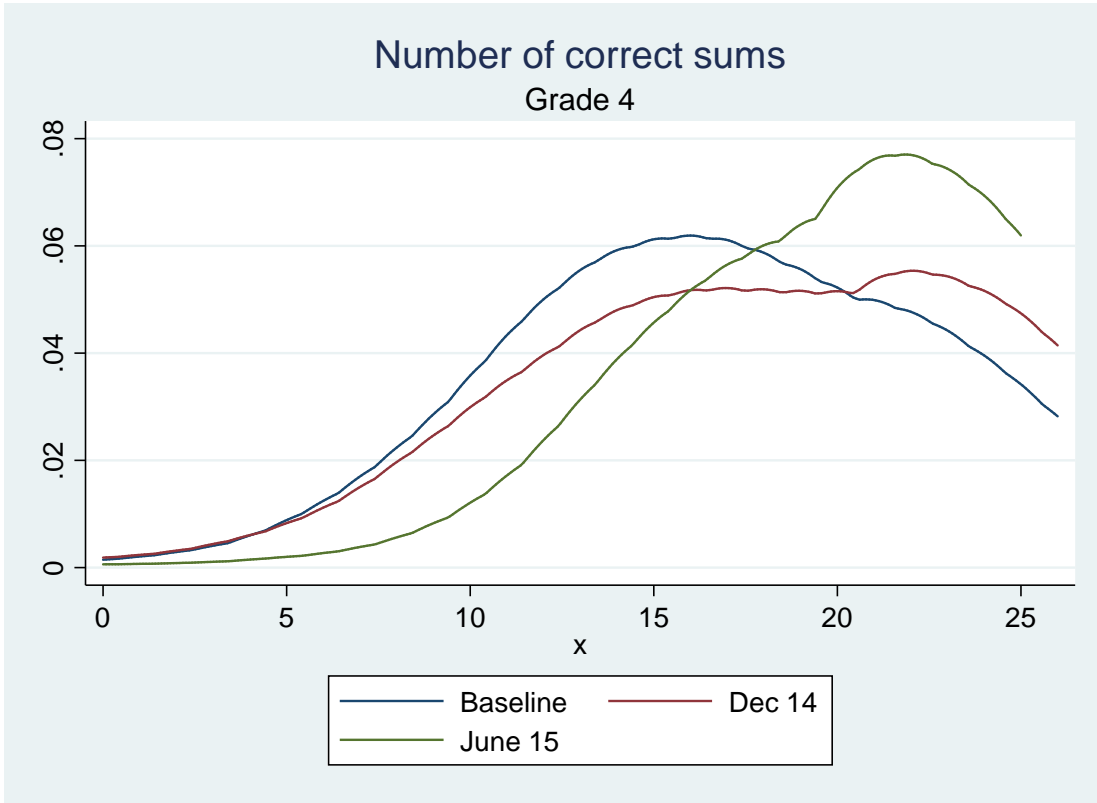**Figure A2. Distribution of number of correct sums across first three study waves**
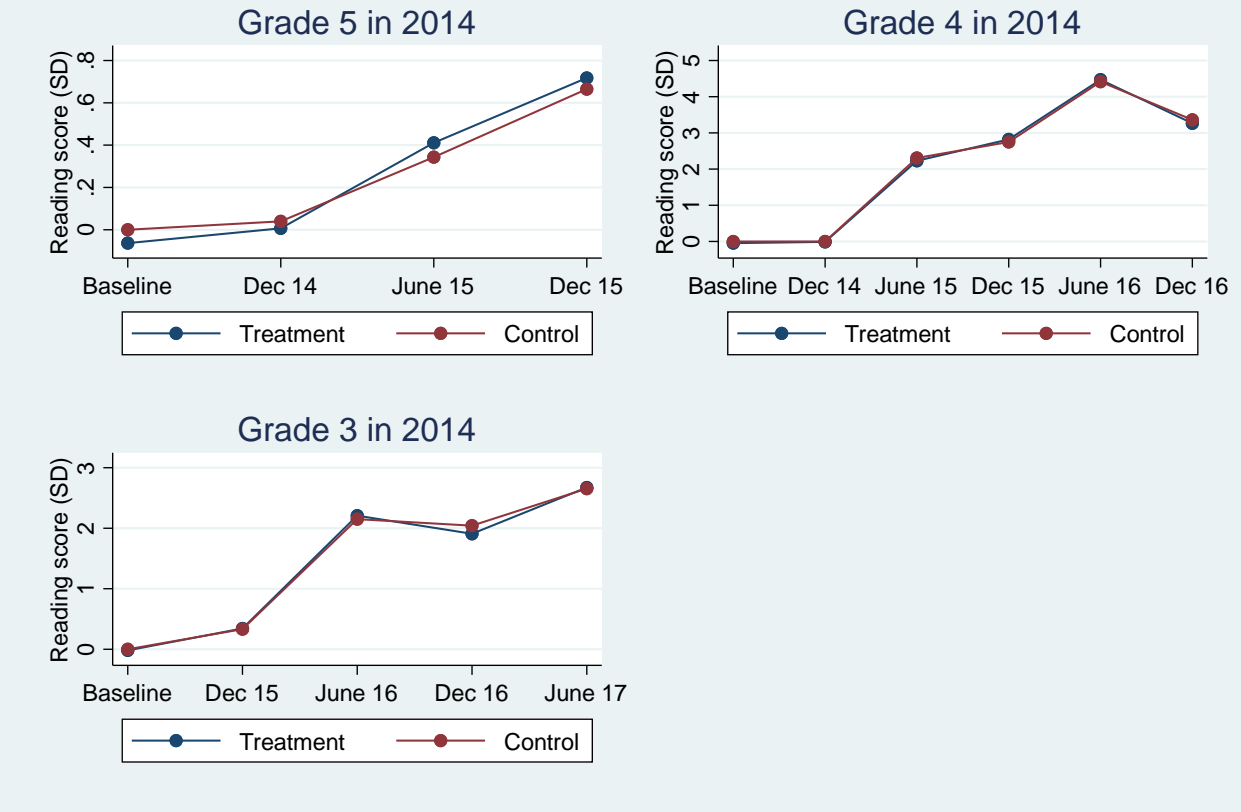
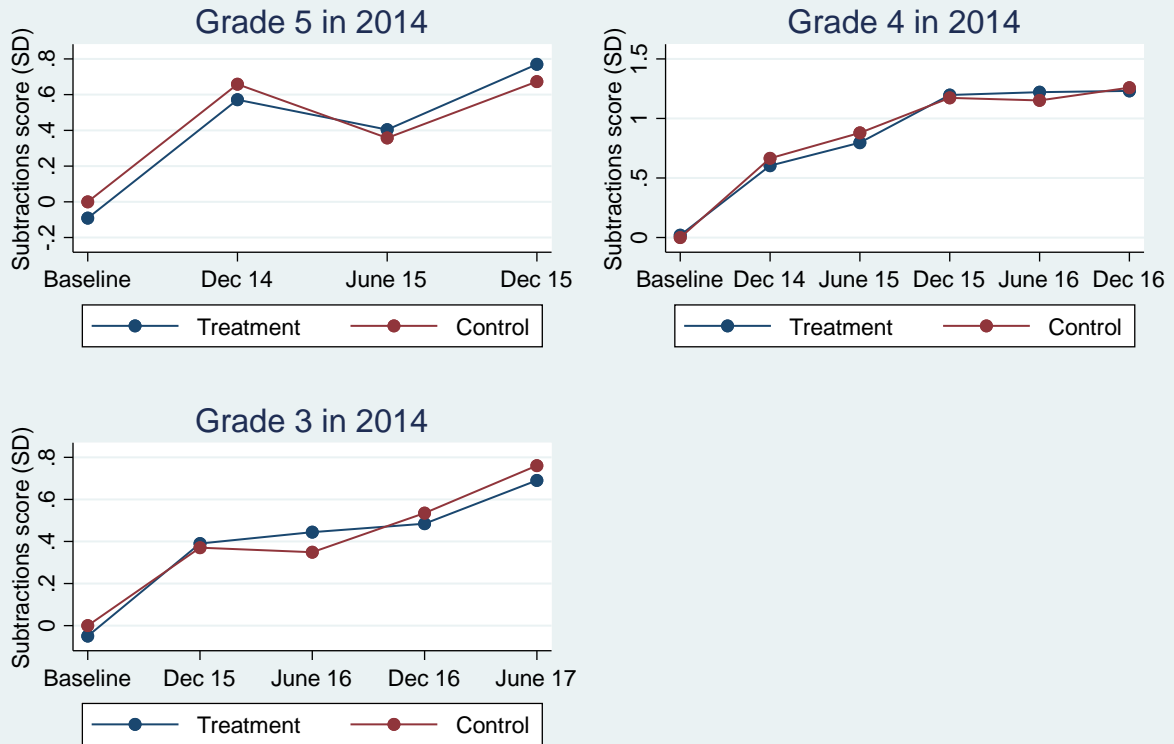**Figure A3. Unadjusted standardized reading scores across follow-up waves.** Note: Reading scores standardized with respect to the control group at baseline.

Figure A4. Unadjusted standardized subtractions scores across follow-up waves. Note: Subtractions scores standardized with respect to the control group standard at baseline.
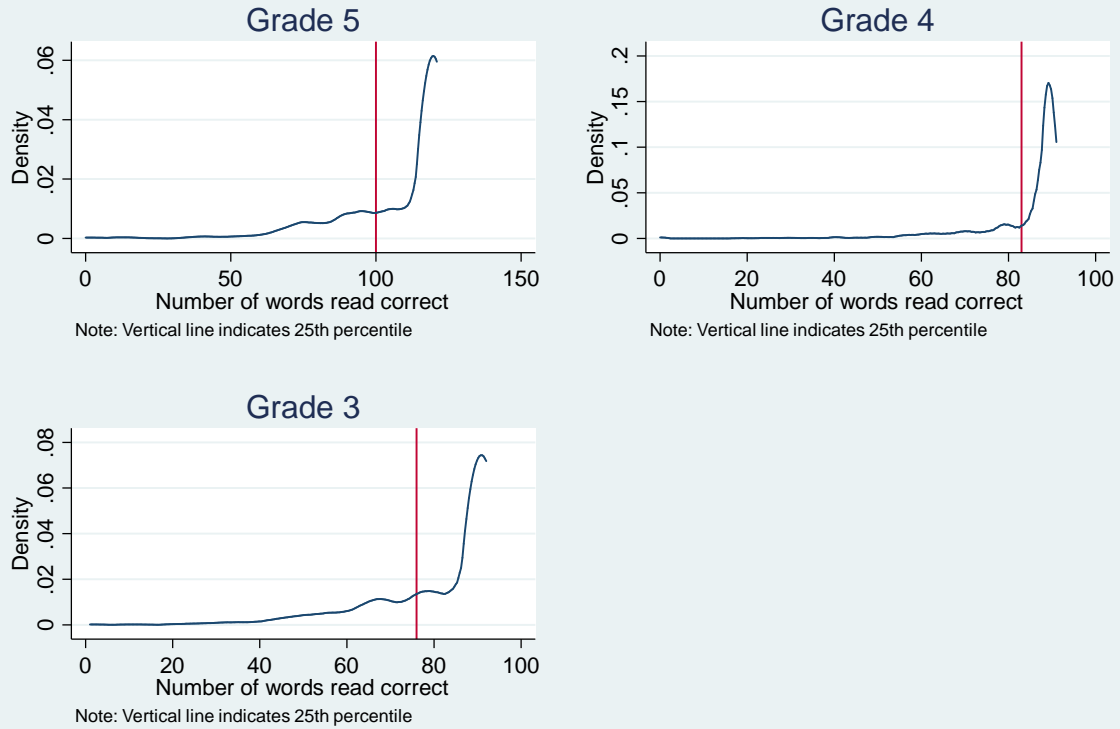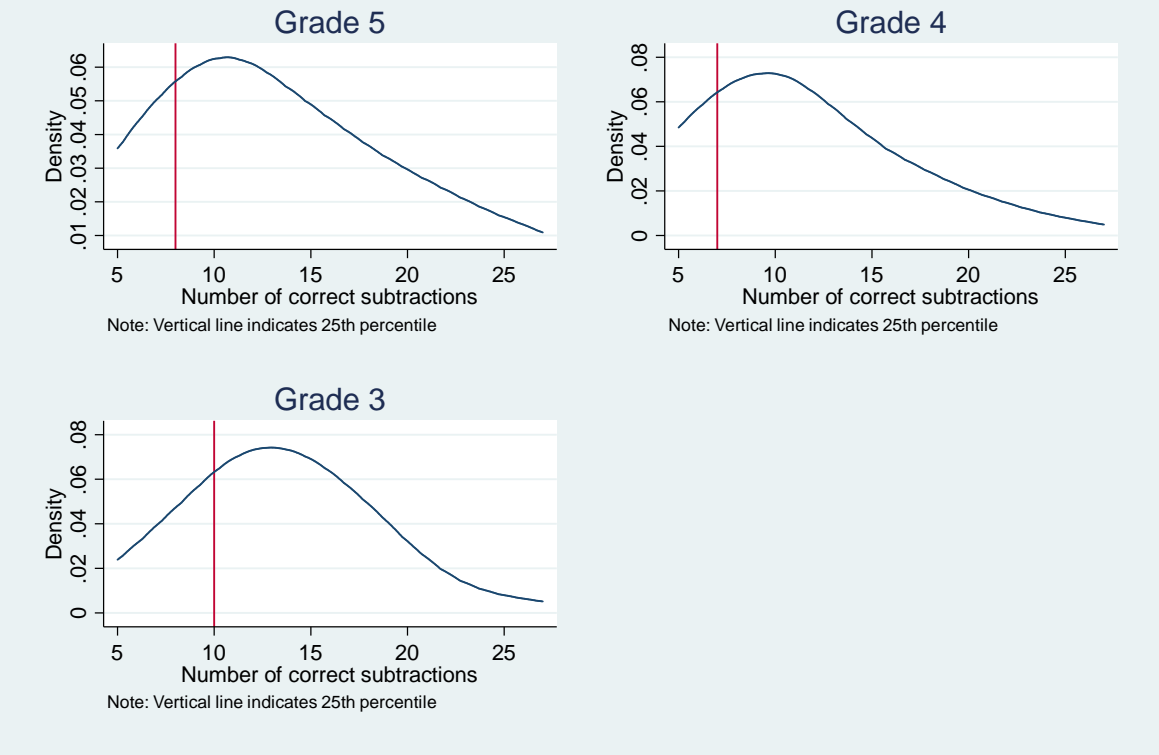
Figure A5. Baseline reading scores: above vs. below 25th percentile. Note: Vertical lines indicate scores at 25th percentile

Figure A6. Baseline reading scores: above vs. below 25th percentile. Note: Vertical lines indicate scores at 25th percentile

Appendix B

Details and results of the family-engagement intervention

Description of the family-engagement intervention

In the third phase of the study (2016-2017) we incorporated a family-engagement component. This component focused on the teachers of the students already in the experiment. In July 2016, teachers were randomly assigned to one of two groups. In the treatment group (Family-engagement intervention), teachers received a report card containing test score information, collected in June 2016, for the students in their class. We provided teachers with information on all students in their class, regardless of whether they had received they had participated in Phase 1 or Phase 2 of the study, and regardless of whether the household had received individual information or not. Teachers also received a list of suggestions to promote family-school engagement, with two components. First, a list of suggestions on how to improve their communication with the families. Second, a list of suggestions on how to encourage families to engage with their children's education outside of the school. No information was provided to teachers in the control group.

To implement this intervention, teachers were visited at their schools. A questionnaire was administered to all teachers. Only teachers assigned to the treatment group received the report card mentioned above. In December 2016 and June 2017, we administered new rounds of EGRA and EGMA tests to all students in our sample.

Results of the family-engagement intervention

We test two specifications to examine the impact of the teacher intervention. In the first specification, we examine the differences in students' results based on whether they were in a classroom with a treated or control teacher. In the second specification, we test the interaction between teacher group (treatment/control) and students group (treatment/control). The effects of the intervention of teachers are null.

It may be the case that the intervention did not provide new information to teachers; teachers had knowledge of their students' abilities but were unable to act upon it. Alternatively, the intervention may have provided new information to teachers, but the receipt of this new information did not change teacher behaviors. did in fact provide new information to teachers, but teachers were unable to act on it. We can not rule out any of these (plausible) hypotheses.

Table B1. Impact of the family-engagement intervention

	Dec. 2016	Dec. 2016	June 2017	June 2017
Math and reading composite				
Teacher treatment	-0.073	-0.035	-0.174	0.022
	(0.129)	(0.176)	(0.162)	(0.225)
Teacher treatment*				
Individual treatment		-0.038		-0.290
		(0.157)		(0.222)
Observations	2049	2049	965	965
Control mean	2.260		2.286	

Teacher treatment = Teacher was assigned to the treatment condition of the family-engagement intervention in Phase 3. Individual treatment = Student was assigned to the treatment condition of the household information intervention in Phase 1 or Phase 2. Composite math and reading score calculated by the following: Reading and math (subtractions) scores were standardized within grade with respect to the control group. The sum of the standardized reading and math scores were calculated for baseline and each wave. Composite scores for each follow-up wave were standardized again with respect to the composite score for the control group at baseline. All models include controls for age, gender, grade, and baseline math and reading scores. Standard errors in parentheses clustered at the teacher level. $^{*} p < 0.10$, $^{**} p < 0.05$, $^{***} p < 0.01$.