



Each Day of Freckle Usage Leads to Increased Math and ELA Test Scores in a Large District



Executive Summary

The Blended Learning program at a large school district in the northeastern United States showed encouraging results with Freckle (formerly Front Row) in the 2017/2018 school year. It was shown, with statistical significance, that each day of using Freckle improved student MAP scores in both Math and ELA, and using Freckle for 50 or more days in Math and 40 or more days in ELA are projected to increase results by 12.5% and 11.3% respectively, while controlling for teacher or school.

Introduction

This research addressed the question, “Does time spent using Freckle lead to higher test scores in Math and ELA?” To answer this question, Freckle analyzed product usage and test score data from students in 54 schools in a large district in the northeastern United States. Test score data



comes from the Measure of Academic Progress (MAP) assessment. The MAP assessment is administered by the Northwest Evaluation Association (NWEA) and is an adaptive measure of students' mathematics achievement.

Overview of Freckle

Freckle's mission is to ensure every student gets a world-class education. To that end, Freckle's differentiation platform empowers teachers to differentiate instruction across Math, ELA, Social Studies and Science. Freckle assignments adapt to each student's individual level, allowing them to progress at their own pace. Students can access Freckle through an age-appropriate online student dashboard, and teachers have access to a teacher dashboard that allows them to assign practice to students and track their growth.

Analysis

Math

To see the effect of Freckle on improvement of student scores, we ran a multiple regression on days of Freckle Math usage, controlling for the teacher. We found that each day of Freckle usage increased student scores by 0.1217, significant at a p-value of 0.1 (see table 1). This would imply **students who practiced Math on Freckle for 50 or more days in the year (as 63 students did) are predicted to grow an extra 6 points - or an extra 12.5% above the mean of 48.48 points.** In fact, students who practice Math on Freckle for 100 days would be predicted to grow an extra 25% above the mean of 48.48 points. This finding is statistically significant.

ELA - Reading

Similarly, to see the effect of Freckle ELA on improvement of student scores in ELA, we ran a multiple regression of Freckle ELA usage, controlling for the teacher. While the impact of days of Freckle usage was positive, the finding was not statistically significant. This would indicate that usage levels of Freckle ELA did not vary enough *within classrooms* to produce a statistically significant finding.

However, we additionally analyzed the impact of days of Freckle usage controlling for which school the student is in. Here, we found, statistically significant at a p-value of .05, each day of Freckle usage improved student scores by 0.1312 (see table 2). This would imply **students who practiced ELA on Freckle for 40 or more days in the year (as 65 students did) are predicted to grow an extra 5.2 points, or an extra 11.3% above the mean of 46 points.** This finding is statistically significant.

Appendix: Detailed Data

Table 1

OLS Regression Results						
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Dep. Variable:	Math	R-squared:				0.253
Model:	OLS	Adj. R-squared:				0.213
Method:	Least Squares	F-statistic:				6.234
Date:	Sat, 07 Jul 2018	Prob (F-statistic):				8.50e-171
Time:	09:16:52	Log-Likelihood:				-25339.
No. Observations:	5347	AIC:				5.123e+04
Df Residuals:	5070	BIC:				5.306e+04
Df Model:	276					
Covariance Type:	nonrobust					
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	coef	std err	t	P> t	[0.025	0.975]

const	88.0000	28.406	3.098	0.002	32.311	143.689
Math Days	0.1217	0.062	1.954	0.051	-0.000	0.244
41649	-55.5625	29.281	-1.898	0.058	-112.965	1.840
50241	-50.6000	29.338	-1.725	0.085	-108.115	6.915
50289	-32.7647	29.230	-1.121	0.262	-90.068	24.539
50293	-49.8235	29.230	-1.705	0.088	-107.127	7.480
50325	-49.0000	29.479	-1.662	0.097	-106.791	8.791
52768	-33.9688	28.847	-1.178	0.239	-90.521	22.584
52793	-40.5455	29.670	-1.367	0.172	-98.711	17.620
53353	-20.5000	34.791	-0.589	0.556	-88.705	47.705
53766	-11.0714	29.403	-0.377	0.707	-68.715	46.572
53877	-17.0000	30.682	-0.554	0.580	-77.151	43.151
55100	-40.0000	31.759	-1.259	0.208	-102.262	22.262
56527	-31.0794	28.934	-1.074	0.283	-87.802	25.643
58162	-13.0000	30.368	-0.428	0.669	-72.534	46.534
58406	1.0000	40.173	0.025	0.980	-77.756	79.756
58717	-28.7778	29.185	-0.986	0.324	-85.993	28.437
58878	-36.3579	29.018	-1.253	0.210	-93.245	20.529
59177	-36.2230	29.108	-1.244	0.213	-93.287	20.841
60851	-60.7853	28.749	-2.114	0.035	-117.146	-4.424
61031	-36.5000	30.682	-1.190	0.234	-96.651	23.651
61041	-33.0813	29.795	-1.110	0.267	-91.492	25.330
63150	-30.5000	34.791	-0.877	0.381	-98.705	37.705
66068	-56.0000	40.173	-1.394	0.163	-134.756	22.756
88452	-13.8333	28.992	-0.477	0.633	-70.671	43.004
88461	-37.3500	29.108	-1.283	0.199	-94.414	19.714
99343	-42.0000	40.173	-1.045	0.296	-120.756	36.756
100928	-55.5000	30.130	-1.842	0.066	-114.567	3.567
126065	-32.5000	34.791	-0.934	0.350	-100.705	35.705
224383	-44.3333	30.682	-1.445	0.149	-104.484	15.818
293482	-56.7419	28.861	-1.966	0.049	-113.322	-0.162
324662	-19.8119	28.948	-0.684	0.494	-76.562	36.938
330501	-70.5263	29.144	-2.420	0.016	-127.662	-13.391
360208	-37.7273	29.670	-1.272	0.204	-95.892	20.438
372258	-27.2121	29.282	-0.929	0.353	-84.617	30.193
372303	0.3917	40.174	0.010	0.992	-78.367	79.150
380225	-70.5733	29.393	-2.401	0.016	-128.196	-12.951
380226	-31.8642	28.778	-1.107	0.268	-88.281	24.553
380228	-64.4925	29.512	-2.185	0.029	-122.348	-6.637
380230	-27.8097	29.075	-0.956	0.339	-84.809	29.190
380231	-45.5896	28.993	-1.572	0.116	-102.428	11.249



391889	-26.0000	40.173	-0.647	0.518	-104.756	52.756
391903	-31.4911	29.715	-1.060	0.289	-89.746	26.764
391910	-24.1223	28.794	-0.838	0.402	-80.572	32.327
405164	-29.9595	29.017	-1.032	0.302	-86.846	26.927
412523	-34.3658	29.403	-1.169	0.243	-92.009	23.278
412527	-43.3737	28.735	-1.509	0.131	-99.706	12.959
412534	-26.2222	29.943	-0.876	0.381	-84.924	32.479
412555	-46.4000	29.338	-1.582	0.114	-103.915	11.115
412561	-56.7000	29.793	-1.903	0.057	-115.107	1.707
412569	-72.0000	40.173	-1.792	0.073	-150.756	6.756
412571	-56.3333	29.566	-1.905	0.057	-114.296	1.630
416015	-32.6786	28.909	-1.130	0.258	-89.353	23.996
418337	-65.7788	28.943	-2.273	0.023	-122.519	-9.039
419738	-76.5013	40.239	-1.901	0.057	-155.387	2.384
419815	-30.3371	28.805	-1.053	0.292	-86.808	26.134
422469	-40.1835	28.646	-1.403	0.161	-96.342	15.975
423992	-50.1974	29.703	-1.690	0.091	-108.428	8.033
424931	-24.2253	29.338	-0.826	0.409	-81.741	33.291
425316	-88.0000	40.173	-2.191	0.029	-166.756	-9.244
426096	-2.8000	31.118	-0.090	0.928	-63.804	58.204
427528	-76.6150	31.760	-2.412	0.016	-138.878	-14.352
427753	-33.8902	29.281	-1.157	0.247	-91.293	23.513
427755	-43.5964	29.233	-1.491	0.136	-100.905	13.712
428048	-51.7090	29.111	-1.776	0.076	-108.779	5.361
428757	-31.0489	29.797	-1.042	0.297	-89.464	27.366
428797	-37.5767	28.983	-1.296	0.195	-94.396	19.243
428989	-56.5317	28.866	-1.958	0.050	-113.121	0.058
429032	-44.8889	29.943	-1.499	0.134	-103.590	13.812
429140	-51.4721	29.314	-1.756	0.079	-108.940	5.996
429199	-27.3102	29.222	-0.935	0.350	-84.597	29.977
429244	-37.6166	29.345	-1.282	0.200	-95.145	19.912
429349	-43.8772	29.432	-1.491	0.136	-101.576	13.822
429351	-51.9222	29.705	-1.748	0.081	-110.157	6.312
429381	-24.7804	31.759	-0.780	0.435	-87.043	37.482
429390	-44.9275	29.281	-1.534	0.125	-102.331	12.477
429398	-34.0252	29.404	-1.157	0.247	-91.670	23.620
429403	-54.1026	29.406	-1.840	0.066	-111.752	3.547
429407	3.4865	29.281	0.119	0.905	-53.916	60.889
429413	-65.0000	40.173	-1.618	0.106	-143.756	13.756
429436	-27.2458	28.788	-0.946	0.344	-83.682	29.191
429462	-45.5874	28.525	-1.598	0.110	-101.509	10.334
429464	-69.0439	29.627	-2.330	0.020	-127.126	-10.962
429466	-44.8147	30.368	-1.476	0.140	-104.349	14.720
429467	-65.8147	29.257	-2.250	0.025	-123.171	-8.458
429472	9.9773	32.803	0.304	0.761	-54.330	74.285
429476	-52.2981	34.820	-1.502	0.133	-120.561	15.964
429479	-62.0000	29.566	-2.097	0.036	-119.963	-4.037
429489	-28.5414	29.185	-0.978	0.328	-85.757	28.674
429570	-66.8194	29.743	-2.247	0.025	-125.129	-8.510
429584	-49.0000	40.173	-1.220	0.223	-127.756	29.756
429687	-35.5221	34.927	-1.017	0.309	-103.994	32.950
429784	-22.6015	29.357	-0.770	0.441	-80.154	34.951
429848	-36.1524	29.499	-1.226	0.220	-93.984	21.679
429849	-51.0896	29.345	-1.741	0.082	-108.619	6.440
429850	-25.4701	29.293	-0.869	0.385	-82.897	31.957
429852	-35.6647	28.792	-1.239	0.216	-92.110	20.781
429853	-54.8775	30.162	-1.819	0.069	-114.009	4.254
429859	-62.9271	29.963	-2.100	0.036	-121.668	-4.186
430220	-12.5882	28.821	-0.437	0.662	-69.090	43.914
430359	-29.3333	32.801	-0.894	0.371	-93.637	34.971
430569	-35.4328	28.618	-1.238	0.216	-91.536	20.670



430812	-51.7556	28.898	-1.791	0.073	-108.408	4.896
430830	-34.5536	28.659	-1.206	0.228	-90.738	21.630
430879	-51.9091	32.388	-1.603	0.109	-115.403	11.585
430904	-34.6472	28.909	-1.198	0.231	-91.322	22.027
430976	-51.0572	28.752	-1.776	0.076	-107.423	5.309
430977	-58.3061	29.108	-2.003	0.045	-115.370	-1.242
430979	-67.5905	32.807	-2.060	0.039	-131.907	-3.274
430981	-32.0000	28.727	-1.114	0.265	-88.318	24.318
430982	-38.9202	29.670	-1.312	0.190	-97.085	19.245
431050	-8.5000	29.281	-0.290	0.772	-65.903	48.903
431154	-6.4232	29.281	-0.219	0.826	-63.827	50.980
431225	-27.0473	29.108	-0.929	0.353	-84.112	30.017
431228	-19.1938	32.802	-0.585	0.558	-83.500	45.112
431229	-88.0000	40.173	-2.191	0.029	-166.756	-9.244
431327	-83.6667	32.801	-2.551	0.011	-147.971	-19.363
431404	-62.7569	29.281	-2.143	0.032	-120.161	-5.353
432128	-30.1000	29.108	-1.034	0.301	-87.164	26.964
432487	-46.7900	29.186	-1.603	0.109	-104.008	10.428
432799	-80.9912	29.228	-2.771	0.006	-138.291	-23.692
432804	-29.2236	29.300	-0.997	0.319	-86.665	28.218
434357	-52.1053	29.144	-1.788	0.074	-109.241	5.030
435668	-15.4167	29.566	-0.521	0.602	-73.380	42.546
435877	-46.4074	29.010	-1.600	0.110	-103.279	10.464
436016	9.6388	29.045	0.332	0.740	-47.302	66.579
436336	-47.1189	28.874	-1.632	0.103	-103.725	9.487
436345	-27.0195	29.356	-0.920	0.357	-84.570	30.531
436867	-48.8911	29.473	-1.659	0.097	-106.672	8.889
437197	-23.7592	28.727	-0.827	0.408	-80.077	32.559
437854	-34.4375	29.281	-1.176	0.240	-91.840	22.965
438255	-57.3254	28.927	-1.982	0.048	-114.034	-0.616
438374	-37.4183	29.007	-1.290	0.197	-94.285	19.449
438395	6.0000	40.173	0.149	0.881	-72.756	84.756
438397	-67.4363	29.186	-2.311	0.021	-124.654	-10.219
438454	-42.5573	29.230	-1.456	0.145	-99.862	14.747
439002	-29.1490	29.949	-0.973	0.330	-87.862	29.564
439314	-40.4167	29.234	-1.383	0.167	-97.728	16.895
439335	-60.5949	34.795	-1.741	0.082	-128.808	7.619
439423	-35.5696	28.870	-1.232	0.218	-92.168	21.029
439594	-46.7574	31.776	-1.471	0.141	-109.052	15.537
439792	-75.0000	40.173	-1.867	0.062	-153.756	3.756
440276	-50.3627	28.935	-1.741	0.082	-107.088	6.363
440364	-51.1947	31.118	-1.645	0.100	-112.199	9.810
441256	-57.4513	28.639	-2.006	0.045	-113.595	-1.307
441294	-30.9762	31.131	-0.995	0.320	-92.006	30.054
441335	-24.5552	29.153	-0.842	0.400	-81.707	32.596
441472	-24.9163	28.736	-0.867	0.386	-81.252	31.419
441513	-58.2992	29.095	-2.004	0.045	-115.338	-1.261
441640	-35.5888	30.368	-1.172	0.241	-95.123	23.945
441641	-16.1739	29.017	-0.557	0.577	-73.061	40.713
441643	-22.5714	30.368	-0.743	0.457	-82.105	36.963
442457	-39.5050	29.086	-1.358	0.174	-96.526	17.516
442544	-59.1649	29.282	-2.021	0.043	-116.570	-1.759
442602	-36.3708	28.996	-1.254	0.210	-93.215	20.474
442764	-56.6984	28.988	-1.956	0.051	-113.528	0.131
442770	-47.4419	29.564	-1.605	0.109	-105.400	10.516
442774	-66.8333	30.682	-2.178	0.029	-126.984	-6.682
442779	-22.9756	28.751	-0.799	0.424	-79.340	33.388
442857	-53.4906	29.445	-1.817	0.069	-111.215	4.233
442858	-57.8517	29.024	-1.993	0.046	-114.752	-0.951
442860	-45.2122	28.828	-1.568	0.117	-101.728	11.303
442861	-42.8103	28.854	-1.484	0.138	-99.376	13.755



442862	-42.1750	28.759	-1.466	0.143	-98.556	14.206
442865	-59.7710	30.394	-1.967	0.049	-119.357	-0.185
443099	5.3175	34.791	0.153	0.879	-62.887	73.522
445771	-24.4803	29.479	-0.830	0.406	-82.271	33.311
446948	-15.4633	30.368	-0.509	0.611	-74.997	44.071
446988	-14.6000	29.793	-0.490	0.624	-73.007	43.807
447070	-74.2141	29.144	-2.546	0.011	-131.350	-17.078
447072	-37.3788	29.055	-1.286	0.198	-94.340	19.582
447099	-45.8125	29.138	-1.572	0.116	-102.935	11.310
447196	-44.7895	29.144	-1.537	0.124	-101.925	12.346
447203	-40.5000	34.791	-1.164	0.244	-108.705	27.705
447206	-53.8526	28.842	-1.867	0.062	-110.396	2.690
447209	-88.1217	40.173	-2.194	0.028	-166.878	-9.366
447210	-30.4138	28.892	-1.053	0.293	-87.055	26.227
447542	-29.8935	29.054	-1.029	0.304	-86.851	27.064
448244	-31.0280	28.993	-1.070	0.285	-87.867	25.811
450427	-35.2253	29.410	-1.198	0.231	-92.882	22.431
450428	-88.1217	40.173	-2.194	0.028	-166.878	-9.366
452208	-31.3400	29.144	-1.075	0.282	-88.476	25.796
452670	-40.0407	29.145	-1.374	0.170	-97.178	17.097
452897	-27.9370	29.808	-0.937	0.349	-86.373	30.499
453203	-37.8108	28.788	-1.313	0.189	-94.247	18.626
453252	-75.1427	29.573	-2.541	0.011	-133.118	-17.167
453279	-25.8974	28.655	-0.904	0.366	-82.073	30.278
453375	-50.2130	29.110	-1.725	0.085	-107.281	6.855
455066	-39.8090	29.111	-1.367	0.172	-96.879	17.261
455096	-46.1176	29.230	-1.578	0.115	-103.421	11.186
455099	-41.4451	29.281	-1.415	0.157	-98.848	15.958
455166	-33.3788	28.847	-1.157	0.247	-89.931	23.174
455169	-44.3344	28.861	-1.536	0.125	-100.914	12.246
455279	-72.6339	28.977	-2.507	0.012	-129.441	-15.827
455345	-39.2000	29.338	-1.336	0.182	-96.715	18.315
455557	-61.4751	28.847	-2.131	0.033	-118.028	-4.922
456110	-28.6000	29.338	-0.975	0.330	-86.115	28.915
456111	-77.9603	29.185	-2.671	0.008	-135.175	-20.745
456382	-48.8523	28.660	-1.705	0.088	-105.039	7.334
456384	-33.1250	28.759	-1.152	0.249	-89.506	23.256
456513	-33.9444	29.185	-1.163	0.245	-91.159	23.270
456914	-52.1894	28.866	-1.808	0.071	-108.780	4.401
457252	-29.5378	31.776	-0.930	0.353	-91.833	32.758
457270	-26.2372	29.108	-0.901	0.367	-83.302	30.827
457570	-26.7961	28.771	-0.931	0.352	-83.200	29.608
457617	-56.0949	40.177	-1.396	0.163	-134.859	22.669
457691	-23.3240	28.549	-0.817	0.414	-79.293	32.645
458581	-39.9427	28.688	-1.392	0.164	-96.183	16.297
461092	-31.6925	29.358	-1.080	0.280	-89.246	25.861
461151	-68.0236	29.320	-2.320	0.020	-125.504	-10.543
461348	-64.2500	28.992	-2.216	0.027	-121.087	-7.413
462658	-19.4184	29.146	-0.666	0.505	-76.557	37.720
464941	-35.4201	28.821	-1.229	0.219	-91.922	21.082
465257	-90.3723	29.429	-3.071	0.002	-148.065	-32.680
465564	-39.0370	28.928	-1.349	0.177	-95.748	17.674
465592	-88.1029	29.479	-2.989	0.003	-145.894	-30.312
465733	-88.0000	29.185	-3.015	0.003	-145.215	-30.785
466268	-30.5287	28.569	-1.069	0.285	-86.537	25.479
466531	-31.0759	28.910	-1.075	0.282	-87.751	25.600
467298	-41.7259	29.287	-1.425	0.154	-99.141	15.689
467523	-41.2299	34.793	-1.185	0.236	-109.439	26.979
467654	-44.5595	29.108	-1.531	0.126	-101.624	12.505
468393	-37.9444	29.185	-1.300	0.194	-95.159	19.270
468605	-47.0590	29.578	-1.591	0.112	-105.045	10.927

469383	-31.4495	29.063	-1.082	0.279	-88.426	25.527
470186	-24.0000	31.118	-0.771	0.441	-85.004	37.004
473530	-28.2726	30.147	-0.938	0.348	-87.374	30.829
473918	-28.0907	28.678	-0.980	0.327	-84.313	28.131
474715	-34.4740	28.928	-1.192	0.233	-91.185	22.237
474729	-59.0111	29.670	-1.989	0.047	-117.176	-0.846
474731	-55.7052	28.976	-1.922	0.055	-112.511	1.101
474954	-61.2771	28.924	-2.119	0.034	-117.980	-4.574
479795	-87.0000	40.173	-2.166	0.030	-165.756	-8.244
480731	-19.4286	29.403	-0.661	0.509	-77.072	38.215
481940	-1.1217	40.173	-0.028	0.978	-79.878	77.634
483315	-39.0793	30.368	-1.287	0.198	-98.614	20.456
485520	-31.1008	29.584	-1.051	0.293	-89.099	26.897
486256	-41.5595	29.386	-1.414	0.157	-99.170	16.051
488657	-88.1764	29.108	-3.029	0.002	-145.241	-31.112
488716	-23.1569	29.017	-0.798	0.425	-80.044	33.730
488792	-56.6971	29.405	-1.928	0.054	-114.344	0.950
489105	-88.0000	40.173	-2.191	0.029	-166.756	-9.244
489106	-88.0000	40.173	-2.191	0.029	-166.756	-9.244
491547	-29.0628	28.969	-1.003	0.316	-85.855	27.730
491861	-39.6248	28.571	-1.387	0.166	-95.637	16.387
491915	-88.2433	40.173	-2.197	0.028	-167.000	-9.487
492001	-75.0000	40.173	-1.867	0.062	-153.756	3.756
492492	-39.5230	29.108	-1.358	0.175	-96.587	17.541
497131	-73.4243	29.793	-2.464	0.014	-131.831	-15.017
498738	-88.0000	29.566	-2.976	0.003	-145.963	-30.037
500309	-12.8000	31.118	-0.411	0.681	-73.804	48.204
503170	-88.0000	28.778	-3.058	0.002	-144.417	-31.583
505672	-55.6352	29.185	-1.906	0.057	-112.850	1.580
508445	-88.0000	40.173	-2.191	0.029	-166.756	-9.244
513815	-32.3548	28.861	-1.121	0.262	-88.935	24.225
514894	-27.4738	29.281	-0.938	0.348	-84.877	29.929
519063	-24.4524	28.743	-0.851	0.395	-80.800	31.896
519772	-36.3333	29.566	-1.229	0.219	-94.296	21.630
520327	-22.1500	29.019	-0.763	0.445	-79.041	34.741
520554	-37.9331	28.743	-1.320	0.187	-94.281	18.415
527360	-17.4231	28.948	-0.602	0.547	-74.173	39.327
527730	-32.3434	28.877	-1.120	0.263	-88.955	24.269
531005	-40.1973	28.548	-1.408	0.159	-96.164	15.769
532010	-38.4485	29.190	-1.317	0.188	-95.674	18.777
534234	-57.2308	29.479	-1.941	0.052	-115.022	0.560
536422	11.0000	40.173	0.274	0.784	-67.756	89.756
538080	-70.2222	29.943	-2.345	0.019	-128.924	-11.521
538384	-16.3438	28.847	-0.567	0.571	-72.896	40.209
540774	-29.0909	29.670	-0.980	0.327	-87.256	29.074
541641	-59.0000	40.173	-1.469	0.142	-137.756	19.756
545465	-58.2222	29.943	-1.944	0.052	-116.924	0.479
560685	-25.8736	29.230	-0.885	0.376	-83.177	31.430
563569	-50.0000	29.185	-1.713	0.087	-107.215	7.215
563889	-67.1476	28.969	-2.318	0.020	-123.940	-10.355
564339	-51.7815	31.128	-1.663	0.096	-112.806	9.243
567251	-35.6667	29.075	-1.227	0.220	-92.666	21.333
576136	-13.0000	40.173	-0.324	0.746	-91.756	65.756
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Omnibus:		392.101	Durbin-Watson:			1.895
Prob(Omnibus):		0.000	Jarque-Bera (JB):			133.782
Skew:		-0.045	Prob(JB):			8.90e-30
Kurtosis:		2.230	Cond. No.			1.76e+04
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Table 2



OLS Regression Results

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Dep. Variable:          Reading    R-squared:                0.094
Model:                  OLS        Adj. R-squared:           0.084
Method:                 Least Squares  F-statistic:              10.11
Date:                   Sat, 07 Jul 2018  Prob (F-statistic):       7.74e-78
Time:                   09:19:43    Log-Likelihood:           -25726.
No. Observations:      5347        AIC:                      5.156e+04
Df Residuals:           5292        BIC:                      5.192e+04
Df Model:                54
Covariance Type:        nonrobust
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	coef	std err	t	P> t	[0.025	0.975]
ELA Days	0.1312	0.048	2.740	0.006	0.037	0.225
School 1	49.2169	2.205	22.318	0.000	44.894	53.540
School 2	63.1429	7.988	7.905	0.000	47.484	78.802
School 3	42.8878	2.678	16.014	0.000	37.637	48.138
School 4	37.9058	7.051	5.376	0.000	24.083	51.728
School 5	32.0000	29.887	1.071	0.284	-26.592	90.592
School 6	30.7500	10.567	2.910	0.004	10.035	51.465
School 7	36.9809	4.602	8.036	0.000	27.959	46.002
School 8	28.4516	5.368	5.300	0.000	17.928	38.975
School 9	36.5028	2.967	12.303	0.000	30.686	42.319
School 10	43.2132	2.613	16.538	0.000	38.091	48.336
School 11	77.0000	13.366	5.761	0.000	50.797	103.203
School 12	31.4211	6.857	4.583	0.000	17.979	44.863
School 13	46.5198	2.352	19.782	0.000	41.910	51.130
School 14	48.3333	9.962	4.852	0.000	28.803	67.864
School 15	47.2197	2.740	17.233	0.000	41.848	52.591
School 16	68.1176	7.249	9.397	0.000	53.907	82.328
School 17	50.3939	3.000	16.795	0.000	44.512	56.276
School 18	49.0032	2.004	24.456	0.000	45.075	52.931
School 19	21.0000	29.887	0.703	0.482	-37.592	79.592
School 20	45.5993	2.684	16.987	0.000	40.337	50.862
School 21	52.7054	3.002	17.557	0.000	46.820	58.591
School 22	43.9173	2.336	18.798	0.000	39.337	48.497
School 23	41.3579	2.524	16.384	0.000	36.409	46.307
School 24	49.0285	2.404	20.394	0.000	44.316	53.741
School 25	42.1008	1.669	25.220	0.000	38.828	45.373
School 26	46.1374	1.561	29.553	0.000	43.077	49.198
School 27	51.7455	4.030	12.840	0.000	43.845	59.646
School 28	35.3865	2.573	13.751	0.000	30.342	40.431
School 29	45.0110	2.786	16.156	0.000	39.549	50.473
School 30	39.3889	7.045	5.591	0.000	25.579	53.199
School 31	49.6364	9.011	5.508	0.000	31.970	67.302
School 32	27.3636	6.372	4.294	0.000	14.872	39.855
School 33	50.3749	1.595	31.589	0.000	47.249	53.501
School 34	46.1588	3.924	11.762	0.000	38.465	53.852
School 35	48.5202	3.680	13.185	0.000	41.306	55.735
School 36	56.0791	2.339	23.972	0.000	51.493	60.665
School 37	61.0889	4.455	13.711	0.000	52.355	69.823
School 38	21.0882	5.126	4.114	0.000	11.040	31.137
School 39	31.9579	4.194	7.620	0.000	23.736	40.179
School 40	36.3035	2.238	16.218	0.000	31.915	40.692
School 41	39.8889	5.752	6.935	0.000	28.613	51.165
School 42	47.3947	1.947	24.339	0.000	43.577	51.212
School 43	25.5982	9.452	2.708	0.007	7.069	44.128
School 44	49.3071	4.032	12.230	0.000	41.403	57.211
School 45	46.8486	5.562	8.423	0.000	35.944	57.753
School 46	50.2030	2.873	17.472	0.000	44.570	55.836



School 47	53.9147	2.381	22.646	0.000	49.247	58.582
School 48	52.3186	2.421	21.609	0.000	47.572	57.065
School 49	49.0906	2.973	16.515	0.000	43.263	54.918
School 50	42.3449	3.363	12.593	0.000	35.753	48.937
School 51	44.8099	2.717	16.492	0.000	39.483	50.136
School 52	54.9238	7.739	7.097	0.000	39.752	70.096
School 53	66.4528	4.105	16.187	0.000	58.405	74.501
School 54	-0.3309	2.790	-0.119	0.906	-5.800	5.138

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Omnibus:                2370.226   Durbin-Watson:                1.941
Prob(Omnibus) :         0.000   Jarque-Bera (JB) :           281.224
Skew:                   0.074   Prob(JB) :                   8.57e-62
Kurtosis:               1.886   Cond. No.                     821.
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