

Appendix for Evaluation of Student Math Performance in California School Districts Using *Houghton Mifflin Mathematics*

All Students Average Increase in National Percentile Rank (NPR) on SAT-9								
	HOUGHTON MIFFLIN			CONTROL GROUP			STATISTICAL CONCLUSIONS	
	Number of Schools	2001–2002 Gain	Standard Deviation	Number of Schools	2001–2002 Gain	Standard Deviation	P-Value	Statistically Significant?
Grade 2	156	4.494	8.412	137	0.540	6.851	< 0.0001	Yes
Grade 3	156	2.910	7.215	137	0.766	7.116	0.0112	Yes
Grade 4	156	3.981	7.189	137	0.839	7.147	0.0002	Yes
Grade 5	156	2.673	6.881	135	0.422	7.021	0.0062	Yes
Grades 2–5 Combined	624	3.514	7.467	546	0.643	7.017	< 0.0001	Yes

Limited English Proficiency (LEP) Students Average Increase in National Percentile Rank (NPR) on SAT-9								
	HOUGHTON MIFFLIN			CONTROL GROUP			STATISTICAL CONCLUSIONS	
	Number of Schools	2001–2002 Gain	Standard Deviation	Number of Schools	2001–2002 Gain	Standard Deviation	P-Value	Statistically Significant?
Grade 2	154	3.890	8.783	137	-1.161	7.246	< 0.0001	Yes
Grade 3	156	2.032	7.325	137	0.255	7.684	0.0438	Yes
Grade 4	156	4.224	8.056	137	0.701	8.047	0.0002	Yes
Grade 5	156	3.077	7.168	135	0.689	7.603	0.0062	Yes
Grades 2–5 Combined	622	3.304	7.883	546	0.370	7.638	< 0.0001	Yes

*Only Schools with sufficient numbers of LEP students were used in this analysis.

**English Only (EO) Students
Average Increase in National Percentile Rank (NPR) on SAT-9**

	HOUGHTON MIFFLIN			CONTROL GROUP			STATISTICAL CONCLUSIONS	
	Number of Schools	2001–2002 Gain	Standard Deviation	Number of Schools	2001–2002 Gain	Standard Deviation	P-Value	Statistically Significant?
Grade 2	95	5.768	12.727	78	3.308	10.182	0.1687	No
Grade 3	91	5.714	13.634	77	3.688	10.672	0.2853	No
Grade 4	76	5.566	9.135	79	1.772	11.452	0.0243	Yes
Grade 5	75	3.987	8.748	74	0.216	11.446	0.0252	Yes
Grades 2–5 Combined	337	5.312	11.364	308	2.266	10.979	0.0006	Yes

*Only Schools with sufficient numbers of EO students were used in this analysis.

**Economically Disadvantaged Students
Average Increase in National Percentile Rank (NPR) on SAT-9**

	HOUGHTON MIFFLIN			CONTROL GROUP			STATISTICAL CONCLUSIONS	
	Number of Schools	2001–2002 Gain	Standard Deviation	Number of Schools	2001–2002 Gain	Standard Deviation	P-Value	Statistically Significant?
Grade 2	116	5.362	11.992	124	0.871	9.365	0.0013	Yes
Grade 3	112	3.688	9.788	124	1.258	9.423	0.0537	Yes
Grade 4	115	4.757	9.236	123	1.341	9.729	0.0060	Yes
Grade 5	111	2.946	9.642	121	0.306	8.734	0.0296	Yes
Grades 2–5 Combined	454	4.205	10.242	492	0.947	9.303	< 0.0001	Yes

*Only Schools with sufficient numbers of economically disadvantaged students were used in this analysis.

Female Students								
Average Increase in National Percentile Rank (NPR) on SAT-9								
	HOUGHTON MIFFLIN			CONTROL GROUP			STATISTICAL CONCLUSIONS	
	Number of Schools	2001–2002 Gain	Standard Deviation	Number of Schools	2001–2002 Gain	Standard Deviation	P-Value	Statistically Significant?
Grade 2	155	5.290	9.808	137	0.620	7.998	< 0.0001	Yes
Grade 3	155	3.316	8.464	137	0.620	8.271	0.0057	Yes
Grade 4	155	2.871	8.371	137	0.781	8.273	0.0331	Yes
Grade 5	156	2.461	7.873	135	0.200	8.468	0.0194	Yes
Grades 2–5 Combined	621	3.486	8.707	546	0.610	8.339	< 0.0001	Yes

Male Students								
Average Increase in National Percentile Rank (NPR) on SAT-9								
	HOUGHTON MIFFLIN			CONTROL GROUP			STATISTICAL CONCLUSIONS	
	Number of Schools	2001–2002 Gain	Standard Deviation	Number of Schools	2001–2002 Gain	Standard Deviation	P-Value	Statistically Significant?
Grade 2	155	3.968	9.761	137	0.365	7.715	0.0006	Yes
Grade 3	155	2.465	8.536	137	0.708	8.556	0.0807	Yes*
Grade 4	155	4.948	9.561	137	0.832	9.166	0.0002	Yes
Grade 5	156	2.660	9.194	135	0.844	9.224	0.0945	Yes*
Grades 2–5 Combined	621	3.509	9.307	546	0.687	8.663	< 0.0001	Yes

*Statistically significant at the alpha = 0.10 level, but not at the alpha = 0.05 level