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# LAS LINKS GROWTH STUDY

Research Memorandum

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# TABLE OF CONTENTS

LIST OF TABLES .....	1
LAS Links® Form C/D: A Brief Description .....	2
About This Document.....	3
Growth Analysis for LAS links Form C/D .....	3
Sample .....	3
Yearly Score Gains: Descriptive Statistics .....	8
Regression.....	27

## LIST OF TABLES

Table 1. Grade Distributions.....	3
Table 2. Total Matched Student Records by State.....	4
Table 3. Distributions by Starting Proficiency Levels (PLs) and Grade.....	5
Table 4. Yearly Score Gain Descriptive Statistics .....	9
Table 5. Expected Score Gain from Regression and Standard Errors .....	28

## LAS LINKS<sup>®</sup> FORM C/D: A BRIEF DESCRIPTION

LAS Links Form C/D, part of the LAS Links family of assessments, is available for five grade-level spans: K–1, 2–3, 4–5, 6–8, and 9–12. The tests are intended to measure students' English language proficiency in Grades K–12 school settings. A combination of item types including multiple-choice (MC), dichotomous constructed-response (DCR), short constructed-response (SCR), and extended constructed-response (ECR) is used to provide diverse opportunities for students to demonstrate proficiency and to maintain a reasonable administration time.

LAS Links Form C/D provides reliable and practical ways to determine students' placement in or exit from bilingual/English as a Second Language (ESL) programs, measure how well English language learners (ELLs) are acquiring the language skills they need, and offer end-of-year accountability evidence for English language proficiency (ELP) programs.

Form C/D measures knowledge and use of the English language in four domains: Listening, Speaking, Reading, and Writing. The assessment also provides composite scores for Overall, Comprehension, Oral, Literacy, and Productive. Domain-level scale scores are obtained using raw score to scale score tables. The composite scale scores are computed as the average of the scale scores from contributing domains. Formulae for deriving the composite scale scores are presented below., where SS=Scale Score.

- Overall SS = (Listening SS + Speaking SS + Reading SS + Writing SS) / 4
- Comprehension SS = (Listening SS + Reading SS) / 2
- Oral SS = (Speaking SS + Listening SS) / 2
- Productive SS = (Speaking SS + Writing SS) / 2
- Literacy SS = (Reading SS + Writing SS) / 2

LAS Links Forms C and D were designed as equivalent forms and may be used interchangeably. The forms are placed on a LAS Links English common scale that was established in 2006. Reported scale scores at the domain and composite levels, in addition to proficiency level scores, help educators track student growth on the LAS Links English common scale from year to year across Grades K–12.

With the common scale, students' original scale scores can be subtracted from their scores in subsequent years, yielding a measure of growth from one grade level to the next. A common scale allows for comparison of individual and groups of students within grades and across grade spans and permits the monitoring of student performance across years. A common scale permits educators to interpret the improvement in student scores from one test administration to the next as evidence of student growth in English language proficiency across grades and years in the

bilingual or ESL program. Additionally, common scaling provides a way for linking test forms built for students from different grade spans to a single underlying scale score metric. As separate test forms were built to be grade-span appropriate, linking these test forms allows for tracking progress of individual students as they move from one grade level to the next.

## ABOUT THIS DOCUMENT

Student yearly scale score gains were analyzed based on data collected from 2014 to 2017 across the nation on LAS Links Form C/D. This document describes the sample used in the analysis, and presents the growth analysis results.

## GROWTH ANALYSIS FOR LAS LINKS FORM C/D

### SAMPLE

Student year-by-year scale score gains were calculated based on strictly matched student data collected from 2014 to 2017 across the nation on LAS Links Form C/D. As shown in Table 1, the data consist of 199 to 8686 student records per starting grade (K–12).

Table 1. Grade Distributions

Grade	N
K	8686
1	8135
2	7547
3	6091
4	5002
5	3873
6	3663
7	3109
8	2435
9	3141
10	2555
11	1893
12	199

The total number of matched student records by state is provided in Table 2.

Table 2. Total Matched Student Records by State

State	N
AZ	12
CA	3193
CT	45007
IL	182
MS	7884
NY	2
OH	32
National Organization	17

Table 3 shows the student distributions by starting proficiency level (PL) and grade in the sample. The distributions are presented for the four language domains (Listening, Speaking, Reading, and Writing) and the five composite scales (Overall, Comprehension, Oral, Literacy, and Productive). Student score gains were derived for each of the scales using the sample.

Table 3. Distributions by Starting Proficiency Levels (PLs) and Grade

Grade	Test Scale	PL = 1	PL = 2	PL = 3	PL = 4	PL = 5
K	Speaking	1059	2499	3807	1011	259
K	Listening	2507	2174	2703	1116	140
K	Reading	2808	2688	2746	328	34
K	Writing	5005	2970	516	86	32
K	Overall	3089	3502	1807	161	7
K	Oral	1640	3630	2515	761	76
K	Comprehension	2233	3256	2685	292	133
K	Literacy	4290	3170	1031	67	41
K	Productive	3315	3731	1399	111	40
1	Speaking	375	1038	3257	2746	631
1	Listening	824	1456	2286	2888	600
1	Reading	429	821	3043	3392	389
1	Writing	1330	3954	2549	154	99
1	Overall	589	1853	3891	1608	78
1	Oral	480	1681	3251	2394	260
1	Comprehension	387	1050	3773	2294	559
1	Literacy	801	2646	3496	927	200
1	Productive	787	2824	3437	907	102
2	Speaking	198	469	2951	2783	723
2	Listening	1059	1863	2074	1710	411
2	Reading	2461	2486	1597	741	122
2	Writing	1666	2970	1939	662	166
2	Overall	990	2023	2892	1147	22
2	Oral	344	1025	2673	2623	480
2	Comprehension	2358	2111	1633	905	121
2	Literacy	1915	2784	1774	690	40
2	Productive	685	1728	3090	1487	146
3	Speaking	144	344	2099	2270	840
3	Listening	655	702	2604	1573	161
3	Reading	1192	1505	1591	1393	317
3	Writing	906	2655	1936	338	129
3	Overall	511	1072	2739	1306	23
3	Oral	263	502	2427	2162	361
3	Comprehension	1197	1418	1301	1464	343
3	Literacy	910	1785	2221	750	59
3	Productive	413	1181	2825	1106	199
4	Speaking	243	342	1308	2377	398
4	Listening	1016	926	1684	933	114
4	Reading	1249	1476	1304	826	37
4	Writing	716	1786	1567	779	48

Grade	Test Scale	PL = 1	PL = 2	PL = 3	PL = 4	PL = 5
4	Overall	642	957	1916	1103	15
4	Oral	435	476	1742	1911	123
4	Comprehension	1792	971	988	794	135
4	Literacy	956	1443	1613	669	14
4	Productive	482	793	1711	1568	120
5	Speaking	195	222	823	1844	490
5	Listening	642	536	1212	1021	156
5	Reading	963	762	939	1027	93
5	Writing	404	1144	1629	534	70
5	Overall	405	606	1254	1245	38
5	Oral	318	408	1012	1695	149
5	Comprehension	1231	501	786	909	144
5	Literacy	571	856	1347	786	38
5	Productive	315	490	1156	1410	211
6	Speaking	213	150	859	1697	505
6	Listening	595	444	1343	823	211
6	Reading	1446	729	1013	354	21
6	Writing	412	702	1559	771	125
6	Overall	489	567	1279	1023	23
6	Oral	359	284	1028	1556	199
6	Comprehension	1345	437	780	690	160
6	Literacy	739	805	1275	580	18
6	Productive	311	367	1212	1341	182
7	Speaking	182	167	780	1250	497
7	Listening	557	551	819	723	227
7	Reading	1095	610	896	384	24
7	Writing	342	545	1250	709	163
7	Overall	416	468	965	950	53
7	Oral	356	311	789	1195	237
7	Comprehension	1076	383	747	482	188
7	Literacy	588	618	1051	600	32
7	Productive	258	321	945	1102	255
8	Speaking	186	118	567	922	437
8	Listening	450	442	637	542	159
8	Reading	830	586	538	334	45
8	Writing	254	400	935	577	150
8	Overall	346	327	765	684	59
8	Oral	361	255	602	840	166
8	Comprehension	852	311	636	297	127
8	Literacy	441	453	791	490	48
8	Productive	215	252	688	833	237

Grade	Test Scale	PL = 1	PL = 2	PL = 3	PL = 4	PL = 5
9	Speaking	330	324	1034	968	264
9	Listening	883	489	886	617	50
9	Reading	1180	884	773	176	13
9	Writing	592	659	1024	585	134
9	Overall	657	634	1033	529	9
9	Oral	624	377	863	801	258
9	Comprehension	1433	487	699	243	71
9	Literacy	818	822	961	304	23
9	Productive	468	513	1076	783	79
10	Speaking	152	203	866	836	296
10	Listening	539	381	749	645	51
10	Reading	724	727	854	147	16
10	Writing	304	490	908	583	147
10	Overall	354	490	914	559	9
10	Oral	343	361	657	748	253
10	Comprehension	929	429	669	301	40
10	Literacy	451	628	901	359	22
10	Productive	223	364	854	784	122
11	Speaking	91	128	657	594	271
11	Listening	376	423	405	508	33
11	Reading	458	670	520	173	12
11	Writing	191	327	696	474	126
11	Overall	243	310	743	422	7
11	Oral	262	235	511	523	213
11	Comprehension	611	378	539	199	26
11	Literacy	300	417	733	294	17
11	Productive	133	257	688	569	101
12	Speaking	7	12	40	36	11
12	Listening	29	35	23	17	1
12	Reading	54	51	42	15	1
12	Writing	25	35	50	25	8
12	Overall	26	21	40	15	0
12	Oral	27	15	40	20	8
12	Comprehension	54	23	25	12	0
12	Literacy	33	39	32	12	0
12	Productive	18	23	46	23	3



## YEARLY SCORE GAINS: DESCRIPTIVE STATISTICS

Table 4 provides the descriptive statistics of obtained yearly student score gains, after initial data cleaning, by starting grade and proficiency level (PL) for each of the nine domain and composite scales in the sample. Score gain statistics for cell sizes with ten or less students are not reported for the purpose of student data confidentiality. Also, readers should exercise caution when interpreting reported score gains for cell sizes less than 100 students.

Generally, within a given domain and grade, the score gain tends to decrease as the starting proficiency level goes up. The observed pattern is reasonable as growth in language proficiency may slow down after a student reaches a certain level of proficiency.

It should be noted that students who have reached a desired level of proficiency in the local context may be exited from the program and no longer participate in the LAS Links, which may negatively impact the score gains observed at higher proficiency levels. Also, as grade 12 is typically the grade of high school graduation, it may not be feasible to track student growth after students graduate, so reported statistics on students with a starting grade at 12 may be biased due to inadequate data.

Table 4. Yearly Score Gain Descriptive Statistics

*Speaking*

Grade	PL	N	Min	Max	Mean	Median	SD
K	1	1059	-125	280	76.1	67	55.73
K	2	2499	-159	191	31.89	30	32.68
K	3	3807	-195	117	23.05	19	33.38
K	4	1011	-220	75	6.7	0	38.77
K	5	259	-280	0	-51.59	-53	43.41
1	1	375	-61	300	97.45	77	63.8
1	2	1038	-161	155	39.85	37	29.82
1	3	3257	-191	136	31.19	26	33.38
1	4	2746	-178	103	19.75	10	37.94
1	5	631	-230	20	-36.1	-45	40.61
2	1	198	-67	250	90.63	81	56.92
2	2	469	-167	146	27.54	25	35.93
2	3	2951	-190	126	19.63	15	35.98
2	4	2783	-185	90	12.25	1	41.7
2	5	723	-250	35	-54.73	-65	44.57
3	1	144	-45	225	85.65	81.5	61.07
3	2	344	-122	179	27.53	27	35.49
3	3	2099	-155	155	19.84	20	35.99
3	4	2270	-175	125	9.47	7	38.26
3	5	840	-240	35	-54.93	-58	44.33
4	1	243	-81	244	77.42	76	55.72
4	2	342	-113	185	36.25	36	33.57
4	3	1308	-143	159	23.21	21	34.39
4	4	2377	-220	122	9.3	9	39.77
4	5	398	-215	77	-34.72	-33	50.23
5	1	195	-86	214	73.51	72	56
5	2	222	-108	178	36.39	39	35.75
5	3	823	-138	151	19.78	21	34.09
5	4	1844	-193	129	7.09	5	42.51
5	5	490	-270	70	-43.26	-43	51.6
6	1	213	-70	280	85.87	85	54.96
6	2	150	-110	190	28.33	32	37.9
6	3	859	-144	167	20.48	21	35.98
6	4	1697	-189	133	11.74	7	42.91
6	5	505	-227	78	-17.07	-18	53.97
7	1	182	-79	280	79.77	79.5	62.02
7	2	167	-110	101	33.36	34	28.12
7	3	780	-147	167	21.69	23	35.49

Grade	PL	N	Min	Max	Mean	Median	SD
7	4	1250	-189	130	12.11	9	43.78
7	5	497	-259	78	-18.84	-18	54.4
8	1	186	-65	227	79.77	82.5	56.23
8	2	118	-100	126	22.03	20.5	29.13
8	3	567	-209	159	3.81	9	42.63
8	4	922	-236	135	-12.9	-10	40.69
8	5	437	-275	83	-65.8	-59	45.58
9	1	330	-81	211	56.18	52	54.19
9	2	324	-103	175	20.5	22.5	34.23
9	3	1034	-144	160	16.2	17	37.38
9	4	968	-177	133	4.2	4	41.73
9	5	264	-350	88	-28.31	-23	57.58
10	1	152	-76	180	69.63	77	63.54
10	2	203	-105	113	23.13	26	33.23
10	3	866	-141	158	16.94	18	34.04
10	4	836	-177	125	7.69	8	39.29
10	5	296	-193	88	-23.61	-27	46.3
11	1	91	-71	280	69.99	56	64.66
11	2	128	-107	87	16.82	19.5	32.92
11	3	657	-144	153	15.53	16	35.44
11	4	594	-177	133	9.44	8	39.44
11	5	271	-280	88	-29.67	-29	54.4
12	1	7					
12	2	12	-93	33	2.67	8	32.2
12	3	40	-211	67	4.03	13.5	44.42
12	4	36	-155	117	-0.75	2	48.15
12	5	11	-79	30	-17.73	-12	37.07

*Listening*

Grade	PL	N	Min	Max	Mean	Median	SD
K	1	2507	-122	230	53.14	45	44.78
K	2	2174	-139	132	33.01	30	30.51
K	3	2703	-163	85	24.51	23	30.2
K	4	1116	-176	60	4.23	0	30.3
K	5	140	-120	0	-35.58	-31	28.16
1	1	824	-122	238	42.48	36	47.09
1	2	1456	-129	144	23.94	21	27.85
1	3	2286	-153	107	17.31	17	27.94
1	4	2888	-166	96	-0.61	-5	30.19
1	5	600	-220	30	-36.42	-35	29.57
2	1	1059	-129	203	40.56	36	38.92
2	2	1863	-150	168	28.78	28	28.01
2	3	2074	-171	133	19.78	15	29.02
2	4	1710	-213	65	2.01	0	31.14
2	5	411	-94	58	-28.78	-25	29.12
3	1	655	-96	269	32.59	36	61.35
3	2	702	-110	181	27.99	32	45.11
3	3	2604	-145	161	22.63	25	40.48
3	4	1573	-163	127	1.81	1	39.7
3	5	161	-104	80	-24.72	-26	39.97
4	1	1016	-106	243	59.06	57	58.77
4	2	926	-133	161	29.71	31	43.87
4	3	1684	-171	136	17.76	18	40.26
4	4	933	-184	106	-2.2	0	37.2
4	5	114	-243	47	-38.46	-38	45.02
5	1	642	-96	272	55.7	52	58.81
5	2	536	-123	157	19.55	21	45.49
5	3	1212	-161	170	12.17	11	44.34
5	4	1021	-209	131	-6.47	-5	44.68
5	5	156	-233	72	-42.85	-40.5	48.96
6	1	595	-95	242	56.97	57	58.97
6	2	444	-119	186	31.57	31	46.51
6	3	1343	-170	174	14.46	15	43.38
6	4	823	-219	120	-8.96	-13	45.51
6	5	211	-305	79	-45.94	-45	53.6
7	1	557	-95	236	57.67	56	58.69
7	2	551	-131	186	21.37	25	48.96
7	3	819	-157	161	11.01	13	44.26
7	4	723	-219	135	-7.86	-5	46.56
7	5	227	-241	79	-47.92	-48	54.99

Grade	PL	N	Min	Max	Mean	Median	SD
8	1	450	-95	232	54.8	55	60.54
8	2	442	-121	166	19.57	23	51.9
8	3	637	-217	135	1.87	3	49.56
8	4	542	-209	179	-26.42	-20	54.29
8	5	159	-175	33	-62.04	-57	41.24
9	1	883	-100	226	48	48	61.47
9	2	489	-129	176	15.2	20	54.83
9	3	886	-172	211	5.07	6	50.21
9	4	617	-207	110	-19.96	-18	50.28
9	5	50	-164	90	-54.34	-57	51.9
10	1	539	-100	207	50.18	49	58.3
10	2	381	-129	180	18.2	20	53.05
10	3	749	-172	197	5.86	6	47.62
10	4	645	-207	165	-23.03	-18	47.31
10	5	51	-264	31	-64.39	-64	46.36
11	1	376	-100	244	54.86	57	61.61
11	2	423	-143	166	22.35	20	47.65
11	3	405	-172	123	-4.27	0	49.8
11	4	508	-226	147	-29.37	-26	51.91
11	5	33	-264	90	-77	-64	67.2
12	1	29	-82	222	61.79	62	67.42
12	2	35	-129	82	5.14	14	51.23
12	3	23	-107	123	-32.26	-33	56.22
12	4	17	-144	47	-26.53	-18	44.45
12	5	1					

*Reading*

Grade	PL	N	Min	Max	Mean	Median	SD
K	1	2808	-111	310	82.29	75	54.61
K	2	2688	-136	192	52.18	48	42.29
K	3	2746	-179	168	52.82	45	47.6
K	4	328	-64	121	44.75	28	50.04
K	5	34	-170	0	-47.15	-32.5	51.91
1	1	429	-110	310	70.36	64	68.16
1	2	821	-80	234	38	49	51.07
1	3	3043	-116	194	39.43	43	44.06
1	4	3392	-169	179	40.15	40	38.81
1	5	389	-113	60	-34.42	-34	38.17
2	1	2461	-130	301	55.85	55	60.61
2	2	2486	-216	173	36.07	38	37.91
2	3	1597	-183	150	29.66	31	35.29
2	4	741	-207	110	19.49	19	36.89
2	5	122	-113	68	-4.92	0	38.9
3	1	1192	-122	333	56.92	55	61.93
3	2	1505	-150	173	29.24	33	45.07
3	3	1591	-138	135	29.22	33	37.79
3	4	1393	-166	154	18.07	17	36.11
3	5	317	-193	116	-1.49	-2	38.53
4	1	1249	-98	238	53.88	57	60.27
4	2	1476	-142	144	28.07	34	44.51
4	3	1304	-169	153	25.6	27	34.92
4	4	826	-189	140	16.6	16	35.18
4	5	37	-74	82	-8.92	-14	37.59
5	1	963	-89	227	47.57	48	57.34
5	2	762	-122	161	15.72	21	46.55
5	3	939	-149	167	8.3	13	42.87
5	4	1027	-171	133	-6.29	-6	37.65
5	5	93	-196	64	-32.46	-28	42.35
6	1	1446	-116	222	40.64	42	56.45
6	2	729	-142	161	18.46	23	45.36
6	3	1013	-229	106	13.65	15	38.81
6	4	354	-196	97	-2.56	0	37.58
6	5	21	-96	64	-6.62	0	41.52
7	1	1095	-116	249	42.55	44	56.47
7	2	610	-142	150	20.41	24	43.34
7	3	896	-173	147	15.25	16	37.71
7	4	384	-157	129	5.29	8.5	41.93
7	5	24	-93	39	-16.33	-14.5	28.49

Grade	PL	N	Min	Max	Mean	Median	SD
8	1	830	-116	191	27.23	30	56.68
8	2	586	-144	101	-1.69	3	44.83
8	3	538	-161	71	-8.56	-3	40.9
8	4	334	-205	107	-22.32	-17	38.4
8	5	45	-131	74	-40.76	-43	35.92
9	1	1180	-157	218	31.05	32	56.36
9	2	884	-224	151	4.27	10	45.31
9	3	773	-188	156	-1.32	2	39.16
9	4	176	-218	122	-7.95	-9	42.63
9	5	13	-69	69	-9	0	37.75
10	1	724	-123	204	28.35	30	52.99
10	2	727	-149	120	7.19	12	40.51
10	3	854	-222	169	1.4	2.5	36.64
10	4	147	-218	101	-18.05	-14	47.76
10	5	16	-250	69	-47.62	-47.5	77.65
11	1	458	-111	196	25.91	30	58.53
11	2	670	-156	141	4.86	11	42.88
11	3	520	-200	112	-7.53	-2	41.82
11	4	173	-207	112	-22.58	-18	46.56
11	5	12	-53	44	-14.17	-23.5	35.85
12	1	54	-119	174	36.11	37	54.25
12	2	51	-149	48	-7.27	10	49.71
12	3	42	-188	62	-15.43	-2.5	50.7
12	4	15	-195	30	-26.47	-1	63.02
12	5	1					

Writing

Grade	PL	N	Min	Max	Mean	Median	SD
K	1	5005	-142	430	110.37	108	68.36
K	2	2970	-211	274	80.32	64	72.68
K	3	516	-253	201	52.35	30	83.22
K	4	86	-133	132	23.53	6	80.41
K	5	32	-218	0	-91.72	-114	85.83
1	1	1330	-128	336	96.97	96	67.49
1	2	3954	-220	268	65.9	67	43.41
1	3	2549	-208	204	42.2	40	43.15
1	4	154	-108	124	-21.08	-26	38.45
1	5	99	-192	10	-121.57	-128	44.6
2	1	1666	-164	370	64.03	61	62.68
2	2	2970	-200	202	36.29	36	40.88
2	3	1939	-228	164	26.13	23	43.67
2	4	662	-237	133	8.86	5	46.47
2	5	166	-201	94	-10.93	-11	55.62
3	1	906	-134	312	55.26	57	69.94
3	2	2655	-206	198	34.22	37	45.5
3	3	1936	-228	190	24.8	26	39.88
3	4	338	-236	134	-2.36	-2	39.96
3	5	129	-197	94	-47.08	-47	47.58
4	1	716	-138	292	64.6	68	69.74
4	2	1786	-297	186	37.84	39	39.7
4	3	1567	-222	157	24.3	25	36.46
4	4	779	-292	144	3.83	2	39.13
4	5	48	-185	34	-30.58	-27	41.55
5	1	404	-128	309	67.27	72	76.1
5	2	1144	-197	213	31.64	35	43.43
5	3	1629	-266	174	19.11	19	37.48
5	4	534	-271	131	-0.7	1	40.59
5	5	70	-328	75	-32.6	-29.5	50.06
6	1	412	-144	313	71.47	68	77.13
6	2	702	-218	151	26.03	29	49.02
6	3	1559	-258	186	17.28	16	39.44
6	4	771	-272	114	1.94	0	37.64
6	5	125	-159	111	-23.61	-27	45.18
7	1	342	-231	255	66.58	66	77.01
7	2	545	-194	161	29.57	30	44.88
7	3	1250	-247	179	19.52	23	39.81
7	4	709	-272	139	-0.23	0	44.06
7	5	163	-200	103	-10.94	-17	45.78



Grade	PL	N	Min	Max	Mean	Median	SD
8	1	254	-134	276	53.19	42	84.15
8	2	400	-204	123	-3.88	1	57.68
8	3	935	-242	143	-10.21	-6	49.32
8	4	577	-270	115	-25.21	-22	47.18
8	5	150	-289	63	-41.72	-40	49.3
9	1	592	-133	275	49.75	51	74.17
9	2	659	-183	171	17.37	25	58.94
9	3	1024	-233	166	12.18	17	48.31
9	4	585	-277	141	3.18	7	49.57
9	5	134	-167	107	-10.85	-13	50.8
10	1	304	-133	321	48.31	50.5	75.7
10	2	490	-183	187	18.32	25	56.07
10	3	908	-225	161	14.06	17	46.46
10	4	583	-250	126	2.5	0	40.67
10	5	147	-323	95	-19.33	-17	51.56
11	1	191	-133	299	43.68	40	80.95
11	2	327	-166	154	20.04	25	54.25
11	3	696	-326	121	6.16	15	53.16
11	4	474	-268	117	-6.89	-2	50.71
11	5	126	-329	111	-35.79	-28	57.89
12	1	25	-19	266	76.2	52	76.54
12	2	35	-142	75	7.51	32	55.18
12	3	50	-318	104	-18.44	-8	72.54
12	4	25	-134	87	-19.96	-23	54.27
12	5	8					

Overall

Grade	PL	N	Min	Max	Mean	Median	SD
K	1	3089	-121	255	64.11	63	33.23
K	2	3502	-102	166	50.59	48	28.14
K	3	1807	-189	141	45.32	42	32.66
K	4	161	-59	104	26.32	26	35.97
K	5	7					
1	1	589	-98	258	61.24	59	43.53
1	2	1853	-115	165	38.8	39	25.13
1	3	3891	-161	126	32.83	32	23.66
1	4	1608	-62	105	20.85	20	24.84
1	5	78	-59	60	-6.77	-10	27.59
2	1	990	-117	226	44.97	44	36.3
2	2	2023	-191	141	28.01	28	24.88
2	3	2892	-146	102	23.73	24	23.33
2	4	1147	-208	79	13.77	14	25.14
2	5	22	-31	38	3.09	4	19.98
3	1	511	-74	223	41.2	36	42.15
3	2	1072	-125	128	21.81	24	30.95
3	3	2739	-141	111	20.81	22	26.4
3	4	1306	-149	100	14.03	15	26.61
3	5	23	-73	63	6.57	10	28.94
4	1	642	-57	200	46.15	43	42.35
4	2	957	-112	115	28.58	30	29.34
4	3	1916	-182	101	23.75	24	24.67
4	4	1103	-184	94	14.95	16	23.83
4	5	15	-71	29	-8.6	-7	23.25
5	1	405	-82	219	45.67	46	41.21
5	2	606	-140	125	22.54	25	31.81
5	3	1254	-170	97	12.91	14	27.3
5	4	1245	-102	95	3.94	5	25.19
5	5	38	-124	61	-14.89	-5	33.87
6	1	489	-73	199	44.55	45	40.75
6	2	567	-122	129	22.43	22	31.87
6	3	1279	-162	110	16.46	17	27.04
6	4	1023	-189	77	8.33	10	27.89
6	5	23	-73	35	-14.57	-14	30.28
7	1	416	-78	157	42.33	38.5	37.61
7	2	468	-131	111	26.31	26	32.49
7	3	965	-178	98	16.1	16	29.27
7	4	950	-142	87	8.37	9	26.76
7	5	53	-118	43	-5.21	-4	29.21

Grade	PL	N	Min	Max	Mean	Median	SD
8	1	346	-103	175	32.98	33	43.55
8	2	327	-135	92	7.28	12	37.22
8	3	765	-164	72	-4.74	-4	29.63
8	4	684	-180	66	-19.21	-16	30.51
8	5	59	-115	18	-37.64	-39	27.68
9	1	657	-106	183	30.9	30	40.41
9	2	634	-147	105	17.1	21	34.76
9	3	1033	-168	84	9.31	12	29.54
9	4	529	-207	84	4.02	7	32.01
9	5	9					
10	1	354	-100	177	29.35	28	38.93
10	2	490	-145	104	14.54	19	31.26
10	3	914	-158	85	10.7	13	27.27
10	4	559	-232	74	-0.38	3	27.51
10	5	9					
11	1	243	-97	201	29.76	29	40.53
11	2	310	-148	96	13.85	18	33.93
11	3	743	-184	90	4.14	9	32.99
11	4	422	-216	86	-7.09	-3	34.04
11	5	7					
12	1	26	-15	204	38.46	29.5	45.03
12	2	21	-128	55	-2.38	9	49.29
12	3	40	-98	51	-3.95	2.5	34.11
12	4	15	-74	32	4.07	12	27.95

*Comprehension*

Grade	PL	N	Min	Max	Mean	Median	SD
K	1	2233	-86	290	65.17	63	38.63
K	2	3256	-137	148	42.38	41	29.19
K	3	2685	-177	127	39.34	36	31.37
K	4	292	-116	90	30.42	28.5	34.97
K	5	133	-100	70	12.71	13	35.77
1	1	387	-112	240	53.83	48	53.15
1	2	1050	-139	160	28.71	31	33.32
1	3	3773	-149	165	26.72	28	28.29
1	4	2294	-167	124	20.57	21	29.31
1	5	559	-133	84	-8.67	-8	29.16
2	1	2358	-118	205	40.33	39.5	37.78
2	2	2111	-143	120	28.49	29	26.77
2	3	1633	-205	142	22.04	23	27.16
2	4	905	-145	82	12.78	12	26.03
2	5	121	-67	48	2.06	1	24.01
3	1	1197	-96	242	36.66	35	46.19
3	2	1418	-154	138	22.22	26	34.36
3	3	1301	-107	126	23.44	26	31.41
3	4	1464	-103	140	18.29	18	30.64
3	5	343	-71	98	10.06	10	30.01
4	1	1792	-127	240	39.3	40	44.79
4	2	971	-141	155	25.85	28	32.31
4	3	988	-153	138	21.35	22	30.28
4	4	794	-173	100	15.87	16	29.04
4	5	135	-77	60	2.44	3	27.33
5	1	1231	-114	198	31.92	31	44.77
5	2	501	-148	112	12.63	16	35.43
5	3	786	-142	119	7.98	9	34.14
5	4	909	-127	108	-1.44	0	32.21
5	5	144	-124	80	-14.44	-17.5	36.85
6	1	1345	-115	190	34.41	34	42.89
6	2	437	-132	121	16.29	19	36.5
6	3	780	-179	114	14.88	17	34.59
6	4	690	-187	105	4.81	5	34.13
6	5	160	-132	62	-11.65	-8	36.83
7	1	1076	-123	175	34.45	34	45.63
7	2	383	-141	107	17.34	19	36.47
7	3	747	-159	129	14.9	15	33.48
7	4	482	-108	108	2.04	3	31.6
7	5	188	-154	91	-9.07	-5	39.11

Grade	PL	N	Min	Max	Mean	Median	SD
8	1	852	-119	171	24.27	27	46.54
8	2	311	-143	107	4.97	9	41.05
8	3	636	-209	87	-9.29	-4	37.9
8	4	297	-211	71	-17.52	-16	36.52
8	5	127	-183	62	-31.39	-32	33.87
9	1	1433	-131	189	26.15	27	46.4
9	2	487	-153	143	6.97	10	39.4
9	3	699	-190	118	1.29	5	37.49
9	4	243	-188	104	-8.63	-7	37.26
9	5	71	-72	76	-8.51	-12	31.87
10	1	929	-132	190	23.34	25	44.15
10	2	429	-149	108	9.9	13	36.24
10	3	669	-181	120	1.48	4	32.04
10	4	301	-119	73	-13.12	-13	32.49
10	5	40	-257	34	-39.8	-26.5	57.52
11	1	611	-132	203	27.3	27	45.96
11	2	378	-153	96	3.8	11	41
11	3	539	-187	118	-8.82	-5	40.03
11	4	199	-207	89	-20.4	-17	38.23
11	5	26	-71	47	-16	-27	37.21
12	1	54	-124	198	19.94	17.5	64.1
12	2	23	-158	56	-15.57	-4	55.98
12	3	25	-151	65	-11.68	-12	46.13
12	4	12	-157	33	-15.92	1	50.65

Oral

Grade	PL	N	Min	Max	Mean	Median	SD
K	1	1640	-109	206	56.19	52.5	37.12
K	2	3630	-141	156	30.17	29	23.49
K	3	2515	-186	94	21.13	19	24.56
K	4	761	-190	67	4.35	4	28.51
K	5	76	-141	27	-29.04	-34	30.04
1	1	480	-120	236	62.27	58	44.62
1	2	1681	-150	129	26.27	26	23.63
1	3	3251	-149	115	20.8	17	24.34
1	4	2394	-140	90	4.88	3	26.73
1	5	260	-109	40	-22.73	-25	27.09
2	1	344	-92	172	45.58	48	50.51
2	2	1025	-133	112	24.76	23	25.19
2	3	2673	-192	110	19.81	18	25.7
2	4	2623	-139	84	8.21	7	28.11
2	5	480	-226	40	-24.21	-26.5	32.06
3	1	263	-82	220	35.83	41	61.82
3	2	502	-126	144	20.12	21.5	36.82
3	3	2427	-156	150	18.98	19	30.21
3	4	2162	-119	125	4.29	5	31.38
3	5	361	-129	58	-24.52	-25	30.32
4	1	435	-89	171	55.62	59	44.12
4	2	476	-114	144	30.42	32	36.72
4	3	1742	-146	138	22.37	22	31.2
4	4	1911	-178	110	7.98	8	30.29
4	5	123	-158	58	-30.6	-30	36.42
5	1	318	-84	196	52.25	54	43.8
5	2	408	-115	121	25.4	25	35.54
5	3	1012	-149	113	14.4	16	32.59
5	4	1695	-183	111	1.16	1	33.25
5	5	149	-124	46	-31.44	-30	33.04
6	1	359	-85	179	58.62	58	41.79
6	2	284	-101	151	27.08	28	37.35
6	3	1028	-132	145	19.19	19	30.76
6	4	1556	-198	113	4.63	4	35.56
6	5	199	-183	74	-21.88	-19	40.6
7	1	356	-90	197	49.43	50	44.66
7	2	311	-98	141	29.29	30	33.98
7	3	789	-144	131	16.53	18	33.1
7	4	1195	-192	124	4.64	3	35.95
7	5	237	-175	75	-25.82	-27	38.01

Grade	PL	N	Min	Max	Mean	Median	SD
8	1	361	-93	191	46.11	48	44.37
8	2	255	-120	131	14.29	19	40.23
8	3	602	-168	123	2.82	5	35.84
8	4	840	-191	93	-21.27	-19	37.86
8	5	166	-293	38	-57.61	-57	37.65
9	1	624	-91	160	40.74	43	41.79
9	2	377	-117	134	19.09	22	37.15
9	3	863	-154	122	11.6	15	35.05
9	4	801	-189	120	1.6	5	35.13
9	5	258	-226	95	-15.93	-14	41.63
10	1	343	-97	179	42.16	47	43.12
10	2	361	-122	137	19.52	21	33.21
10	3	657	-153	116	13.49	16	32.21
10	4	748	-192	105	0.9	1	32.68
10	5	253	-228	59	-24.61	-23	33.21
11	1	262	-98	200	42.42	43	40.12
11	2	235	-144	154	18.99	21	36.86
11	3	511	-147	123	12.96	15	33.64
11	4	523	-189	108	-4.65	-2	36.67
11	5	213	-264	110	-30.48	-29	46.81
12	1	27	-100	189	39.19	46	70.35
12	2	15	-119	81	5.2	3	42.86
12	3	40	-143	49	-6.7	1	45.9
12	4	20	-86	69	-9.65	-2.5	35.49
12	5	8					

*Literacy*

Grade	PL	N	Min	Max	Mean	Median	SD
K	1	4290	-110	340	87.34	85	48.71
K	2	3170	-159	239	71.73	64	46.41
K	3	1031	-188	191	65.57	56	54.11
K	4	67	-91	136	38.85	38	58.59
K	5	41	-74	89	5.49	1	53.26
1	1	801	-117	297	72.92	70	58.29
1	2	2646	-143	223	52.76	55	37.57
1	3	3496	-158	177	47.62	48	32.64
1	4	927	-172	168	32.63	31	35.87
1	5	200	-140	64	-17.43	-17	39.49
2	1	1915	-190	303	55.36	55	51.78
2	2	2784	-181	142	36.32	36	31.44
2	3	1774	-210	156	27.95	28	32.4
2	4	690	-182	118	23.34	23	33.44
2	5	40	-63	79	8.43	15	31.99
3	1	910	-125	281	50	47	55.5
3	2	1785	-152	138	29.04	32	37.6
3	3	2221	-155	142	28.33	29	31.16
3	4	750	-200	124	19.15	20.5	34.45
3	5	59	-100	88	-1.46	5	41.74
4	1	956	-118	224	51.65	51	54.43
4	2	1443	-162	118	32.04	36	35.5
4	3	1613	-210	126	24.77	26	29.78
4	4	669	-220	135	19.42	19	29.59
4	5	14	-46	34	-5.79	-8	25.46
5	1	571	-111	282	54.61	53	54.42
5	2	856	-162	187	21.08	24	40.45
5	3	1347	-194	144	12.14	14	33.14
5	4	786	-235	110	4.95	7	33.13
5	5	38	-120	39	-16.18	-17.5	34.18
6	1	739	-114	247	46.32	50	51.7
6	2	805	-155	157	20.87	23	38.51
6	3	1275	-243	120	15.43	17	34.96
6	4	580	-109	87	9.03	11	29.32
6	5	18	-79	59	10.17	9	33.34
7	1	588	-176	206	44.9	46.5	51.88
7	2	618	-164	128	23.6	25.5	39.54
7	3	1051	-314	105	16.26	20	36.35
7	4	600	-218	116	9.9	11	33.16
7	5	32	-42	59	11.22	13.5	20.17



Grade	PL	N	Min	Max	Mean	Median	SD
8	1	441	-124	177	27.51	25	59.33
8	2	453	-165	99	-2.85	3	44.16
8	3	791	-223	81	-11.59	-6	39.9
8	4	490	-283	72	-17.73	-15	35.85
8	5	48	-152	45	-31.1	-24	35.22
9	1	818	-125	238	33.9	33	55.52
9	2	822	-212	129	12.25	19	43.8
9	3	961	-206	85	8.42	14	35.88
9	4	304	-232	104	2.52	5	38.88
9	5	23	-37	69	10.7	9	27.62
10	1	451	-130	262	29.18	29	52.57
10	2	628	-159	110	12.76	18	39.9
10	3	901	-261	111	7.16	11	35.51
10	4	359	-237	98	3.29	4	31.95
10	5	22	-211	73	-26	-9.5	62.58
11	1	300	-126	240	29.48	29	58.51
11	2	417	-224	98	8.5	15	42.46
11	3	733	-225	105	-0.22	5	41.15
11	4	294	-254	93	-9.98	-3	44.39
11	5	17	-68	77	-8.41	-13	39.11
12	1	33	-204	220	29.91	44	73.4
12	2	39	-232	71	-8.31	14	66.03
12	3	32	-191	55	-18.66	1.5	62.42
12	4	12	-104	63	-5.08	8	49.34

*Productive*

Grade	PL	N	Min	Max	Mean	Median	SD
K	1	3315	-113	322	77.96	77	43.29
K	2	3731	-178	217	55.94	51	40.18
K	3	1399	-208	166	42.91	35	49.13
K	4	111	-140	110	16.75	14	45.54
K	5	40	-120	66	-30.15	-19	52.42
1	1	787	-142	276	80.71	79	50.75
1	2	2824	-150	192	50.64	50	30.43
1	3	3437	-154	160	38.12	35	30.6
1	4	907	-138	117	13.19	11	33.5
1	5	102	-127	49	-51.16	-55	34.22
2	1	685	-177	246	57.21	60	48.84
2	2	1728	-138	157	28.59	28	30.72
2	3	3090	-180	145	24.02	21	31.71
2	4	1487	-231	111	5.35	5	36.02
2	5	146	-263	57	-17.66	-16	38.63
3	1	413	-81	216	50.11	50	49.13
3	2	1181	-151	150	22.17	24	38.04
3	3	2825	-186	132	22.05	23	32.2
3	4	1106	-185	137	-1.2	-1	33.92
3	5	199	-201	72	-23.82	-27	39.12
4	1	482	-115	269	57.13	56	52.59
4	2	793	-95	137	30.83	32	32.86
4	3	1711	-165	144	24.69	25	28.85
4	4	1568	-245	123	10.39	11	30.55
4	5	120	-193	49	-19.77	-17	33.57
5	1	315	-84	245	56.2	58	50.37
5	2	490	-103	122	29.55	32	33.74
5	3	1156	-180	112	16.88	19	33.56
5	4	1410	-224	106	7.61	8	31.68
5	5	211	-241	51	-26.04	-25	34.24
6	1	311	-101	239	66.15	68	53.37
6	2	367	-125	163	25.05	30	40.44
6	3	1212	-196	133	17.55	18	30.56
6	4	1341	-225	102	9.15	10	33.47
6	5	182	-146	50	-14.32	-12.5	33.86
7	1	258	-91	183	61.8	63	49.01
7	2	321	-152	164	24.7	29	41.6
7	3	945	-184	120	19.3	20	31.89
7	4	1102	-215	101	10.19	10	34.06
7	5	255	-186	70	-11.69	-8	35.16

Grade	PL	N	Min	Max	Mean	Median	SD
8	1	215	-94	193	53.33	52	55.3
8	2	252	-147	121	7.06	9	43.38
8	3	688	-181	103	-6.98	-4.5	38.74
8	4	833	-242	77	-20.57	-17	37.38
8	5	237	-290	32	-52.53	-53	37.26
9	1	468	-104	200	44.7	43	50.23
9	2	513	-147	143	18.03	23	42.11
9	3	1076	-189	135	12.86	15	37.2
9	4	783	-227	129	6.2	8	39.29
9	5	79	-103	92	-22.77	-25	38.53
10	1	223	-87	195	42.67	39	51.38
10	2	364	-133	148	19.65	23	39.49
10	3	854	-185	96	15.17	17	33.79
10	4	784	-213	90	5.85	7	31.04
10	5	122	-149	62	-16.92	-15	32.51
11	1	133	-83	199	45.59	51	53.14
11	2	257	-155	158	10.07	15	46.26
11	3	688	-256	101	11.45	15	36.17
11	4	569	-245	87	0.03	4	37.92
11	5	101	-249	88	-31.56	-27	50.96
12	1	18	-26	211	61.78	53	64.38
12	2	23	-146	49	-13.74	6	58.76
12	3	46	-264	63	-10.26	3.5	61.9
12	4	23	-194	60	-1.52	7	54.16
12	5	3					

## REGRESSION

Linear regressions were attempted with yearly score gains as the dependent variable and student starting grade, proficiency level, and their interaction (starting grade \* starting proficiency level) as categorical independent variables, for each of the nine LAS Links test scales (Listening, Speaking, Reading, Writing, Overall, Comprehension, Oral, Literacy and Productive). Cases with a starting proficiency level at 5 or a starting grade at 12 were excluded from the analyses due to frequently small sample sizes.

The analysis results show interaction effects and suggest differential effects on score gains across starting proficiency levels for students at the same starting grade. Therefore, linear regressions were run separately for each starting grade with the starting proficiency level as the independent variable, for each test scale. Identified outliers based on Cook's distance were removed before running final analyses.

The analyses show significant effect ( $p < 0.05$ ) for starting proficiency levels 2 through 4 across grades and test scales when contrasted with the starting proficiency level 1, except for Listening grade 3 proficiency level 2 ( $p = 0.06$ ) where the expected score gain on proficiency level 2 is very close to that for proficiency level 1.

Table 5 provides resulting expected score gains from the regression as well as associated standard errors (SEs).

The expected score gains with its confidence level ( $\pm 3 * SE$ ), in conjunction with the observed mean and median score gains reported in Table 4, could serve as a basis for decisions on reasonable growth for each starting grade and proficiency level.

Table 5. Expected Score Gain from Regression and Standard Errors

Starting Grade	Test Scale	Starting Proficiency Level	Expected Score Gain	Standard Error
K	Speaking	1	68.99	1.01
K	Speaking	2	31.69	1.16
K	Speaking	3	23.94	1.11
K	Speaking	4	1.75	1.38
K	Listening	1	47.14	0.60
K	Listening	2	33.03	0.86
K	Listening	3	25.19	0.81
K	Listening	4	7.09	1.05
K	Reading	1	80.18	0.78
K	Reading	2	47.15	1.12
K	Reading	3	51.80	1.11
K	Reading	4	27.16	3.39
K	Writing	1	109.45	0.91
K	Writing	2	73.86	1.50
K	Writing	3	29.56	3.70
K	Writing	4	13.64	13.66
K	Overall	1	63.58	0.50
K	Overall	2	50.18	0.68
K	Overall	3	43.71	0.83
K	Overall	4	26.60	3.63
K	Oral	1	53.30	0.59
K	Oral	2	30.69	0.70
K	Oral	3	21.40	0.74
K	Oral	4	4.08	1.08
K	Comprehension	1	63.39	0.61
K	Comprehension	2	42.11	0.78
K	Comprehension	3	39.11	0.82
K	Comprehension	4	26.81	2.33
K	Literacy	1	86.49	0.67
K	Literacy	2	69.75	1.03
K	Literacy	3	57.75	1.64
K	Literacy	4	40.00	11.73
K	Productive	1	76.95	0.66
K	Productive	2	55.00	0.91
K	Productive	3	35.23	1.28
K	Productive	4	12.90	5.33
1	Speaking	1	86.25	2.55
1	Speaking	2	39.19	2.74
1	Speaking	3	32.39	2.61

Starting Grade	Test Scale	Starting Proficiency Level	Expected Score Gain	Standard Error
1	Speaking	4	20.08	2.62
1	Listening	1	36.51	1.03
1	Listening	2	22.68	1.25
1	Listening	3	16.64	1.17
1	Listening	4	-0.33	1.14
1	Reading	1	66.72	2.20
1	Reading	2	48.11	2.59
1	Reading	3	42.87	2.30
1	Reading	4	41.50	2.28
1	Writing	1	97.37	1.15
1	Writing	2	66.37	1.29
1	Writing	3	40.67	1.37
1	Writing	4	-25.44	4.02
1	Overall	1	60.26	1.16
1	Overall	2	39.39	1.27
1	Overall	3	33.08	1.21
1	Overall	4	20.75	1.29
1	Oral	1	59.18	1.38
1	Oral	2	27.04	1.49
1	Oral	3	20.83	1.44
1	Oral	4	4.81	1.46
1	Comprehension	1	50.98	1.89
1	Comprehension	2	32.45	2.08
1	Comprehension	3	26.87	1.94
1	Comprehension	4	21.34	1.97
1	Literacy	1	72.34	1.32
1	Literacy	2	53.64	1.45
1	Literacy	3	48.01	1.42
1	Literacy	4	32.10	1.70
1	Productive	1	81.16	1.18
1	Productive	2	51.01	1.29
1	Productive	3	38.34	1.27
1	Productive	4	10.67	1.53
2	Speaking	1	86.91	4.33
2	Speaking	2	26.54	4.65
2	Speaking	3	21.46	4.38
2	Speaking	4	13.17	4.39
2	Listening	1	35.38	0.85
2	Listening	2	28.01	1.05
2	Listening	3	20.44	1.02
2	Listening	4	3.18	1.06

Starting Grade	Test Scale	Starting Proficiency Level	Expected Score Gain	Standard Error
2	Reading	1	56.44	0.75
2	Reading	2	37.77	1.04
2	Reading	3	30.24	1.17
2	Reading	4	19.14	1.57
2	Writing	1	62.84	0.96
2	Writing	2	36.72	1.17
2	Writing	3	25.77	1.28
2	Writing	4	6.07	1.85
2	Overall	1	44.68	0.77
2	Overall	2	28.65	0.91
2	Overall	3	24.33	0.87
2	Overall	4	13.97	1.01
2	Oral	1	45.37	1.79
2	Oral	2	24.58	1.95
2	Oral	3	20.63	1.85
2	Oral	4	8.69	1.85
2	Comprehension	1	40.52	0.53
2	Comprehension	2	29.34	0.75
2	Comprehension	3	23.24	0.81
2	Comprehension	4	12.36	1.00
2	Literacy	1	55.14	0.73
2	Literacy	2	37.10	0.92
2	Literacy	3	29.13	1.02
2	Literacy	4	22.74	1.41
2	Productive	1	60.18	1.29
2	Productive	2	29.75	1.46
2	Productive	3	24.68	1.39
2	Productive	4	5.21	1.49
3	Speaking	1	84.00	4.82
3	Speaking	2	26.84	5.16
3	Speaking	3	20.57	4.87
3	Speaking	4	10.82	4.87
3	Listening	1	35.35	1.59
3	Listening	2	31.30	2.15
3	Listening	3	24.07	1.74
3	Listening	4	1.30	1.83
3	Reading	1	53.74	1.11
3	Reading	2	34.42	1.44
3	Reading	3	31.50	1.41
3	Reading	4	18.09	1.45
3	Writing	1	56.37	1.40

Starting Grade	Test Scale	Starting Proficiency Level	Expected Score Gain	Standard Error
3	Writing	2	36.66	1.58
3	Writing	3	25.43	1.64
3	Writing	4	-4.40	2.61
3	Overall	1	38.98	1.33
3	Overall	2	22.56	1.54
3	Overall	3	21.29	1.41
3	Overall	4	14.73	1.49
3	Oral	1	36.26	2.61
3	Oral	2	21.80	2.98
3	Oral	3	19.18	2.68
3	Oral	4	4.45	2.69
3	Comprehension	1	34.18	0.89
3	Comprehension	2	24.54	1.18
3	Comprehension	3	24.08	1.20
3	Comprehension	4	18.74	1.17
3	Literacy	1	49.23	1.14
3	Literacy	2	31.43	1.36
3	Literacy	3	29.03	1.31
3	Literacy	4	19.63	1.62
3	Productive	1	49.32	1.83
3	Productive	2	25.36	2.03
3	Productive	3	22.88	1.91
3	Productive	4	0.42	2.04
4	Speaking	1	74.14	2.81
4	Speaking	2	35.92	3.36
4	Speaking	3	20.69	2.95
4	Speaking	4	10.62	2.89
4	Listening	1	60.53	1.22
4	Listening	2	32.14	1.73
4	Listening	3	18.82	1.51
4	Listening	4	-2.71	1.72
4	Reading	1	55.19	1.06
4	Reading	2	33.95	1.41
4	Reading	3	27.86	1.44
4	Reading	4	16.98	1.63
4	Writing	1	65.35	1.42
4	Writing	2	39.06	1.62
4	Writing	3	25.02	1.65
4	Writing	4	3.52	1.86
4	Overall	1	43.16	1.03
4	Overall	2	30.27	1.27



Starting Grade	Test Scale	Starting Proficiency Level	Expected Score Gain	Standard Error
4	Overall	3	24.67	1.15
4	Overall	4	15.88	1.23
4	Oral	1	59.50	1.56
4	Oral	2	31.18	2.08
4	Oral	3	23.40	1.70
4	Oral	4	8.85	1.69
4	Comprehension	1	39.03	0.72
4	Comprehension	2	27.93	1.21
4	Comprehension	3	22.51	1.20
4	Comprehension	4	16.24	1.29
4	Literacy	1	51.21	1.01
4	Literacy	2	34.90	1.26
4	Literacy	3	26.06	1.23
4	Literacy	4	19.65	1.50
4	Productive	1	57.08	1.43
4	Productive	2	31.90	1.73
4	Productive	3	25.52	1.57
4	Productive	4	11.49	1.58
5	Speaking	1	72.56	3.11
5	Speaking	2	39.77	3.92
5	Speaking	3	21.63	3.33
5	Speaking	4	9.25	3.21
5	Listening	1	55.12	1.63
5	Listening	2	23.71	2.39
5	Listening	3	13.90	1.98
5	Listening	4	-5.43	2.03
5	Reading	1	47.75	1.23
5	Reading	2	21.42	1.84
5	Reading	3	12.76	1.72
5	Reading	4	-4.05	1.68
5	Writing	1	70.60	2.06
5	Writing	2	34.08	2.30
5	Writing	3	20.26	2.23
5	Writing	4	1.33	2.56
5	Overall	1	44.72	1.35
5	Overall	2	24.18	1.68
5	Overall	3	14.00	1.51
5	Overall	4	4.45	1.51
5	Oral	1	53.89	1.94
5	Oral	2	27.23	2.48
5	Oral	3	16.01	2.14

Starting Grade	Test Scale	Starting Proficiency Level	Expected Score Gain	Standard Error
5	Oral	4	1.66	2.06
5	Comprehension	1	30.98	0.90
5	Comprehension	2	15.74	1.70
5	Comprehension	3	9.84	1.44
5	Comprehension	4	0.46	1.37
5	Literacy	1	54.04	1.39
5	Literacy	2	24.94	1.74
5	Literacy	3	13.55	1.61
5	Literacy	4	7.28	1.76
5	Productive	1	57.21	1.86
5	Productive	2	32.30	2.27
5	Productive	3	19.80	2.03
5	Productive	4	8.59	2.00
6	Speaking	1	87.87	2.94
6	Speaking	2	30.12	4.15
6	Speaking	3	22.37	3.15
6	Speaking	4	14.08	3.05
6	Listening	1	59.69	1.74
6	Listening	2	33.54	2.62
6	Listening	3	15.18	2.04
6	Listening	4	-7.80	2.22
6	Reading	1	43.08	1.07
6	Reading	2	21.93	1.86
6	Reading	3	16.62	1.65
6	Reading	4	0.25	2.50
6	Writing	1	62.74	2.05
6	Writing	2	29.82	2.46
6	Writing	3	18.46	2.24
6	Writing	4	3.19	2.42
6	Overall	1	45.07	1.24
6	Overall	2	22.99	1.64
6	Overall	3	17.08	1.42
6	Overall	4	10.06	1.46
6	Oral	1	60.81	1.77
6	Oral	2	28.86	2.64
6	Oral	3	19.28	1.99
6	Oral	4	6.14	1.92
6	Comprehension	1	34.47	0.91
6	Comprehension	2	19.22	1.89
6	Comprehension	3	17.20	1.50
6	Comprehension	4	6.09	1.56

Starting Grade	Test Scale	Starting Proficiency Level	Expected Score Gain	Standard Error
6	Literacy	1	48.03	1.20
6	Literacy	2	23.42	1.63
6	Literacy	3	17.35	1.48
6	Literacy	4	10.20	1.76
6	Productive	1	67.99	1.90
6	Productive	2	26.34	2.46
6	Productive	3	18.98	2.06
6	Productive	4	10.74	2.05
7	Speaking	1	77.79	3.28
7	Speaking	2	35.01	4.21
7	Speaking	3	22.62	3.49
7	Speaking	4	14.62	3.41
7	Listening	1	58.28	1.79
7	Listening	2	26.37	2.51
7	Listening	3	11.38	2.28
7	Listening	4	-7.45	2.34
7	Reading	1	44.36	1.20
7	Reading	2	23.73	2.01
7	Reading	3	17.56	1.77
7	Reading	4	7.77	2.40
7	Writing	1	61.06	2.24
7	Writing	2	32.19	2.72
7	Writing	3	20.95	2.46
7	Writing	4	2.00	2.61
7	Overall	1	41.50	1.35
7	Overall	2	25.72	1.81
7	Overall	3	17.30	1.57
7	Overall	4	9.03	1.58
7	Oral	1	49.05	1.78
7	Oral	2	31.02	2.54
7	Oral	3	19.11	2.09
7	Oral	4	5.54	1.99
7	Comprehension	1	35.44	1.03
7	Comprehension	2	18.73	2.07
7	Comprehension	3	16.04	1.61
7	Comprehension	4	2.66	1.86
7	Literacy	1	46.60	1.35
7	Literacy	2	26.07	1.85
7	Literacy	3	18.83	1.65
7	Literacy	4	11.20	1.85
7	Productive	1	61.96	2.13

Starting Grade	Test Scale	Starting Proficiency Level	Expected Score Gain	Standard Error
7	Productive	2	29.64	2.72
7	Productive	3	20.87	2.32
7	Productive	4	12.10	2.29
8	Speaking	1	81.04	2.60
8	Speaking	2	23.50	3.76
8	Speaking	3	10.41	2.88
8	Speaking	4	-9.80	2.77
8	Listening	1	56.86	2.13
8	Listening	2	24.77	2.99
8	Listening	3	6.20	2.73
8	Listening	4	-21.03	2.84
8	Reading	1	30.06	1.38
8	Reading	2	5.39	2.15
8	Reading	3	-3.46	2.19
8	Reading	4	-20.16	2.55
8	Writing	1	42.39	3.14
8	Writing	2	2.84	3.82
8	Writing	3	-7.35	3.43
8	Writing	4	-21.88	3.60
8	Overall	1	32.77	1.59
8	Overall	2	10.54	2.24
8	Overall	3	-3.81	1.86
8	Overall	4	-17.17	1.89
8	Oral	1	43.24	1.73
8	Oral	2	20.40	2.71
8	Oral	3	5.76	2.14
8	Oral	4	-19.20	2.03
8	Comprehension	1	24.89	1.21
8	Comprehension	2	10.02	2.42
8	Comprehension	3	-5.63	1.85
8	Comprehension	4	-13.77	2.42
8	Literacy	1	25.50	1.75
8	Literacy	2	1.36	2.40
8	Literacy	3	-8.11	2.13
8	Literacy	4	-14.71	2.33
8	Productive	1	51.22	2.60
8	Productive	2	10.72	3.40
8	Productive	3	-4.26	2.88
8	Productive	4	-18.20	2.83
9	Speaking	1	50.73	1.67
9	Speaking	2	23.33	2.27

Starting Grade	Test Scale	Starting Proficiency Level	Expected Score Gain	Standard Error
9	Speaking	3	17.58	1.87
9	Speaking	4	5.11	1.89
9	Listening	1	50.41	1.55
9	Listening	2	22.21	2.64
9	Listening	3	8.57	2.18
9	Listening	4	-14.62	2.41
9	Reading	1	32.94	1.16
9	Reading	2	10.08	1.77
9	Reading	3	2.49	1.83
9	Reading	4	-5.97	3.44
9	Writing	1	48.57	1.87
9	Writing	2	25.24	2.53
9	Writing	3	16.27	2.30
9	Writing	4	6.59	2.58
9	Overall	1	29.02	1.05
9	Overall	2	20.36	1.48
9	Overall	3	11.92	1.32
9	Overall	4	7.22	1.54
9	Oral	1	40.55	1.19
9	Oral	2	22.82	1.96
9	Oral	3	14.67	1.54
9	Oral	4	4.60	1.57
9	Comprehension	1	27.06	0.95
9	Comprehension	2	10.82	1.91
9	Comprehension	3	4.71	1.67
9	Comprehension	4	-6.44	2.62
9	Literacy	1	32.79	1.22
9	Literacy	2	17.84	1.69
9	Literacy	3	11.67	1.62
9	Literacy	4	3.98	2.33
9	Productive	1	41.54	1.50
9	Productive	2	23.61	2.04
9	Productive	3	16.20	1.76
9	Productive	4	9.82	1.85
10	Speaking	1	69.12	3.09
10	Speaking	2	25.51	3.66
10	Speaking	3	18.69	3.22
10	Speaking	4	9.53	3.23
10	Listening	1	52.15	1.87
10	Listening	2	24.23	2.94
10	Listening	3	9.30	2.43

Starting Grade	Test Scale	Starting Proficiency Level	Expected Score Gain	Standard Error
10	Listening	4	-20.90	2.50
10	Reading	1	28.62	1.33
10	Reading	2	11.01	1.86
10	Reading	3	2.96	1.79
10	Reading	4	-15.64	3.55
10	Writing	1	46.83	2.55
10	Writing	2	25.62	3.11
10	Writing	3	17.10	2.85
10	Writing	4	4.51	3.00
10	Overall	1	30.79	1.35
10	Overall	2	17.70	1.73
10	Overall	3	12.54	1.56
10	Overall	4	1.65	1.68
10	Oral	1	42.82	1.61
10	Oral	2	21.10	2.20
10	Oral	3	15.85	1.95
10	Oral	4	2.41	1.91
10	Comprehension	1	24.84	1.06
10	Comprehension	2	13.43	1.91
10	Comprehension	3	2.14	1.62
10	Comprehension	4	-12.95	2.19
10	Literacy	1	30.56	1.50
10	Literacy	2	17.45	1.92
10	Literacy	3	9.77	1.80
10	Literacy	4	4.40	2.18
10	Productive	1	41.81	2.14
10	Productive	2	24.86	2.61
10	Productive	3	17.76	2.34
10	Productive	4	7.81	2.35
11	Speaking	1	63.86	4.07
11	Speaking	2	20.74	4.78
11	Speaking	3	17.89	4.21
11	Speaking	4	10.90	4.23
11	Listening	1	57.07	2.32
11	Listening	2	25.41	3.13
11	Listening	3	1.49	3.17
11	Listening	4	-25.36	3.01
11	Reading	1	27.75	1.73
11	Reading	2	9.32	2.21
11	Reading	3	-2.82	2.33
11	Reading	4	-18.69	3.34

Starting Grade	Test Scale	Starting Proficiency Level	Expected Score Gain	Standard Error
11	Writing	1	42.34	3.35
11	Writing	2	26.80	4.04
11	Writing	3	11.70	3.68
11	Writing	4	-1.73	3.83
11	Overall	1	29.98	1.71
11	Overall	2	17.44	2.24
11	Overall	3	7.48	1.94
11	Overall	4	-3.78	2.10
11	Oral	1	43.20	1.81
11	Oral	2	21.19	2.61
11	Oral	3	15.21	2.19
11	Oral	4	-1.98	2.18
11	Comprehension	1	25.90	1.37
11	Comprehension	2	9.90	2.23
11	Comprehension	3	-4.54	2.00
11	Comprehension	4	-15.58	2.83
11	Literacy	1	29.51	1.95
11	Literacy	2	14.11	2.50
11	Literacy	3	4.08	2.27
11	Literacy	4	-3.21	2.71
11	Productive	1	44.88	2.91
11	Productive	2	14.89	3.45
11	Productive	3	14.60	3.10
11	Productive	4	3.85	3.14