

A Spearman (*rho*) correlation coefficient was calculated for the relationship between students 2008 CST Math Proficiency Level and 2008 Local Benchmark Proficiency Level. A strong positive correlation was found, indicating a significant relationship between the two variables (*rho* greater than 0.7 is considered strong). Students that score high on the CST tend to also score high on the local benchmark. This is true by grade level as well as the district overall.

Background – The Spearman correlation coefficient determines the *strength* of the relationship between two variables. A coefficient of zero indicates a weak relationship, while values close to 1.0 or -1.0 represent a strong relationship.

### **Results for Grades 2-8 English Language Arts**

**Correlations - All Students Grades 2 - 8**

			2008 CST ELA Proficiency Level	ELA Average Benchmark Proficiency Level
Spearman's rho	2008 CST ELA Proficiency Level	Correlation Coefficient	1.000	.774(**)
		Sig. (2-tailed)	.	.000
	N		9681	9681
	ELA Average Benchmark Proficiency Level	Correlation Coefficient	.774(**)	1.000
Sig. (2-tailed)		.000	.	
N		9681	9681	

\*\* Correlation is significant at the 0.01 level (2-tailed).

#### Number of Students, By Grade (ELA) – 2008

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	1367	14.1	14.1	14.1
	3	1296	13.4	13.4	27.5
	4	1357	14.0	14.0	41.5
	5	1382	14.3	14.3	55.8
	6	1480	15.3	15.3	71.1
	7	1446	14.9	14.9	86.0
	8	1353	14.0	14.0	100.0
	<b>Total</b>	<b>9681</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

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**Correlations – Grade 2**

			2008 CST ELA Proficiency Level	ELA Average Benchmark Proficiency Level
Spearman's rho	2008 CST ELA Proficiency Level	Correlation Coefficient	1.000	.857(**)
		Sig. (2-tailed)	.	.000
		N	1367	1367
ELA Average Benchmark Proficiency Level	2008 CST ELA Proficiency Level	Correlation Coefficient	.857(**)	1.000
		Sig. (2-tailed)	.000	.
		N	1367	1367

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Correlations - Grade 3**

			2008 CST ELA Proficiency Level	ELA Average Benchmark Proficiency Level
Spearman's rho	2008 CST ELA Proficiency Level	Correlation Coefficient	1.000	.858(**)
		Sig. (2-tailed)	.	.000
		N	1296	1296
ELA Average Benchmark Proficiency Level	2008 CST ELA Proficiency Level	Correlation Coefficient	.858(**)	1.000
		Sig. (2-tailed)	.000	.
		N	1296	1296

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Correlations - Grade 4**

			2008 CST ELA Proficiency Level	ELA Average Benchmark Proficiency Level
Spearman's rho	2008 CST ELA Proficiency Level	Correlation Coefficient	1.000	.864(**)
		Sig. (2-tailed)	.	.000
		N	1357	1357
ELA Average Benchmark Proficiency Level	2008 CST ELA Proficiency Level	Correlation Coefficient	.864(**)	1.000
		Sig. (2-tailed)	.000	.
		N	1357	1357

\*\* Correlation is significant at the 0.01 level (2-tailed).

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**Correlations - Grade 5**

			2008 CST ELA Proficiency Level	ELA Average Benchmark Proficiency Level
Spearman's rho	2008 CST ELA Proficiency Level	Correlation Coefficient	1.000	.858(**)
		Sig. (2-tailed)	.	.000
		N	1382	1382
ELA Average Benchmark Proficiency Level	2008 CST ELA Proficiency Level	Correlation Coefficient	.858(**)	1.000
		Sig. (2-tailed)	.000	.
		N	1382	1382

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Correlations - Grade 6**

			2008 CST ELA Proficiency Level	ELA Average Benchmark Proficiency Level
Spearman's rho	2008 CST ELA Proficiency Level	Correlation Coefficient	1.000	.846(**)
		Sig. (2-tailed)	.	.000
		N	1480	1480
ELA Average Benchmark Proficiency Level	2008 CST ELA Proficiency Level	Correlation Coefficient	.846(**)	1.000
		Sig. (2-tailed)	.000	.
		N	1480	1480

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Correlations - Grade 7**

			2008 CST ELA Proficiency Level	ELA Average Benchmark Proficiency Level
Spearman's rho	2008 CST ELA Proficiency Level	Correlation Coefficient	1.000	.860(**)
		Sig. (2-tailed)	.	.000
		N	1446	1446
ELA Average Benchmark Proficiency Level	2008 CST ELA Proficiency Level	Correlation Coefficient	.860(**)	1.000
		Sig. (2-tailed)	.000	.
		N	1446	1446

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Correlations - Grade 8**

			2008 CST ELA Proficiency Level	ELA Average Benchmark Proficiency Level
Spearman's rho	2008 CST ELA Proficiency Level	Correlation Coefficient	1.000	.822(**)
		Sig. (2-tailed)	.	.000
		N	1353	1353
ELA Average Benchmark Proficiency Level	2008 CST ELA Proficiency Level	Correlation Coefficient	.822(**)	1.000
		Sig. (2-tailed)	.000	.
		N	1353	1353

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Results for Grades 2 - 8 Mathematics**

**Correlations (Grade 2 – 8 All Students)**

			2008 CST Math Proficiency Level	Math Average Benchmark Proficiency Level
Spearman's rho	2008 CST Math Proficiency Level	Correlation Coefficient	1.000	.828(**)
		Sig. (2-tailed)	.	.000
		N	8710	8710
	Math Average Benchmark Proficiency Level	Correlation Coefficient	.828(**)	1.000
		Sig. (2-tailed)	.000	.
		N	8710	8710

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Number of Students, By Grade (Mathematics) – 2008**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	1372	15.8	15.8	15.8
	3	1288	14.8	14.8	30.5
	4	1357	15.6	15.6	46.1
	5	1385	15.9	15.9	62.0
	6	1475	16.9	16.9	79.0
	7	1304	15.0	15.0	93.9
	8	529	6.1	6.1	100.0
	<b>Total</b>		<b>8710</b>	<b>100.0</b>	<b>100.0</b>

**Results for Grades 2 - 8**

**Correlations - Grade 2**

			2008 CST Math Proficiency Level	Math Average Benchmark Proficiency Level
Spearman's rho	2008 CST Math Proficiency Level	Correlation Coefficient	1.000	.801(**)
		Sig. (2-tailed)	.	.000
		N	1372	1372
Math Average Benchmark Proficiency Level	Math Average Benchmark Proficiency Level	Correlation Coefficient	.801(**)	1.000
		Sig. (2-tailed)	.000	.
		N	1372	1372

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Correlations - Grade 3**

			2008 CST Math Proficiency Level	Math Average Benchmark Proficiency Level
Spearman's rho	2008 CST Math Proficiency Level	Correlation Coefficient	1.000	.844(**)
		Sig. (2-tailed)	.	.000
		N	1288	1288
Math Average Benchmark Proficiency Level	Math Average Benchmark Proficiency Level	Correlation Coefficient	.844(**)	1.000
		Sig. (2-tailed)	.000	.
		N	1288	1288

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Correlations - Grade 4**

			2008 CST Math Proficiency Level	Math Average Benchmark Proficiency Level
Spearman's rho	2008 CST Math Proficiency Level	Correlation Coefficient	1.000	.836(**)
		Sig. (2-tailed)	.	.000
		N	1357	1357
Math Average Benchmark Proficiency Level	Math Average Benchmark Proficiency Level	Correlation Coefficient	.836(**)	1.000
		Sig. (2-tailed)	.000	.
		N	1357	1357

\*\* Correlation is significant at the 0.01 level (2-tailed).

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**Correlations - Grade 5**

			2008 CST Math Proficiency Level	Math Average Benchmark Proficiency Level
Spearman's rho	2008 CST Math Proficiency Level	Correlation Coefficient	1.000	.872(**)
		Sig. (2-tailed)	.	.000
		N	1385	1385
	Math Average Benchmark Proficiency Level	Correlation Coefficient	.872(**)	1.000
		Sig. (2-tailed)	.000	.
		N	1385	1385

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Correlations - Grade 6**

			2008 CST Math Proficiency Level	Math Average Benchmark Proficiency Level
Spearman's rho	2008 CST Math Proficiency Level	Correlation Coefficient	1.000	.861(**)
		Sig. (2-tailed)	.	.000
		N	1475	1475
	Math Average Benchmark Proficiency Level	Correlation Coefficient	.861(**)	1.000
		Sig. (2-tailed)	.000	.
		N	1475	1475

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Correlations - Grade 7**

			2008 CST Math Proficiency Level	Math Average Benchmark Proficiency Level
Spearman's rho	2008 CST Math Proficiency Level	Correlation Coefficient	1.000	.833(**)
		Sig. (2-tailed)	.	.000
		N	1304	1304
	Math Average Benchmark Proficiency Level	Correlation Coefficient	.833(**)	1.000
		Sig. (2-tailed)	.000	.
		N	1304	1304

\*\* Correlation is significant at the 0.01 level (2-tailed).

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**Correlations - Grade 8**

			2008 CST Math Proficiency Level	Math Average Benchmark Proficiency Level
Spearman's rho	2008 CST Math Proficiency Level	Correlation Coefficient	1.000	.727(**)
		Sig. (2-tailed)	.	.000
		N	529	529
	Math Average Benchmark Proficiency Level	Correlation Coefficient	.727(**)	1.000
		Sig. (2-tailed)	.000	.
		N	529	529

\*\* Correlation is significant at the 0.01 level (2-tailed).