					Pre-	Number				
Classroom			Grade-Level	Content Area	SCORE	of P-12	Post-SCORE	"Y-X"		
Sample	Semester	Year	Assessed	Assessed	(X)	Students	(Y)	Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 207	Winter	2018	4th Grade	Not indicated	70.00		73.00	3.00	-3.00	9
Classroom 208	Winter	2018	1st Grade	Not indicated	51.00		83.00	32.00	-32.00	1024
Classroom 209	Winter	2018	4th Grade	Not indicated	47.00		92.00	45.00	-45.00	2025
Classroom 210	Winter	2018	4th Grade	Not indicated	32.00	24	63.00	31.00	-31.00	961
	Winter	2018	Kindergarten	Not indicated	63.00		77.00	14.00	-14.00	196
Classroom 212		2018	5th Grade	Not indicated	14.00		77.00	63.00	-63.00	3969
Classroom 213		2018	Kindergarten	Not indicated	65.22	26	88.59	23.37	-23.37	546.1569
Classroom 214		2018	3rd Grade	Not indicated	35.00		56.00	21.00	-21.00	441
Classroom 215		2018	5th Grade	Not indicated	43.00		70.00	27.00	-27.00	729
Classroom 216		2018	4th Grade	Not indicated	57.84		75.04	17.20	-17.20	295.84
Classroom 217	Winter	2018	2nd Grade	Not indicated	77.00		94.00	17.00	-17.00	289
Classroom 218		2018	1st Grade	Not indicated	34.00		67.00	33.00	-33.00	1089
Classroom 219		2018	2nd Grade	Not indicated	22.00	25	92.00	70.00	-70.00	4900
Classroom 220	Winter	2018	5th Grade	Not indicated	33.00		73.00	40.00	-40.00	1600
Classroom 221	Winter	2018	5th Grade	Not indicated	39.10		84.30	45.20	-40.00 -45.20	2043.04
Classroom 222	Winter	2018	5th Grade	Not indicated	35.80	19	74.00	38.20	-38.20	1459.24
		2018			22.00	26	82.00	60.00	-60.00	3600
Classroom 223	Winter		1st Grade	Not indicated						
Classroom 224		2018	1st Grade	Not indicated	69.00		82.00	13.00	-13.00	169
	Winter	2018	1st Grade	Not indicated	71.00		76.00	5.00	-5.00	25
Classroom 226	Winter	2018	5th Grade	Not indicated	71.00		85.00	14.00	-14.00	196
Classroom 227	Winter	2018	3rd Grade	Not indicated	56.00		78.79	22.79	-22.79	519.3841
Classroom 228	Winter	2018	1st Grade	Not indicated	50.00	17	81.00	31.00	-31.00	961
Classroom 229	Winter	2018	Kindergarten	Not indicated	16.27	24	58.91	42.64	-42.64	1817.862605
Classroom 230		2018	5th Grade	Not indicated	40.00		72.00	32.00	-32.00	1024
	Winter	2018	5th Grade	Not indicated	48.00	29	56.00	8.00	-8.00	64
	Winter	2018	Kindergarten	Not indicated	25.00		52.00	27.00	-27.00	729
Classroom 233		2018	5th Grade	Not indicated	89.70		91.20	1.50	-1.50	2.25
Classroom 234		2018	3rd Grade	Not indicated	23.00	23	76.00	53.00	-53.00	2809
Classroom 235	Winter	2018	5th Grade	Not indicated	31.00	25	49.00	18.00	-18.00	324
Classroom 236		2018	5th Grade	Not indicated	29.00		56.00	27.00	-27.00	729
	Winter	2018	1st Grade	Not indicated	37.60		98.80	61.20	-61.20	3745.44
Classroom 238	Winter	2018	1st Grade	Not indicated	39.00		88.00	49.00	-49.00	2401
Classroom 239	Winter	2018	1st Grade	Not indicated	47.60		76.20	28.60	-28.60	817.96
Classroom 240	Winter	2018	2nd Grade	Not indicated	63.00	19	84.00	21.00	-21.00	441
Classroom 241	Winter	2018	4th Grade	Not indicated	48.60	26	85.70	37.10	-37.10	1376.41
Classroom 242		2018	2nd Grade	Not indicated	67.00		82.00	15.00	-15.00	225
Classroom 243	Winter	2018	5th Grade	Not indicated	70.00		76.00	6.00	-6.00	36
Classroom 244	Winter	2018	3rd Grade	Not indicated	71.00		91.40	20.40	-20.40	416.16
Classroom 245	Winter	2018	3rd Grade	Not indicated	63.00	19	73.00	10.00	-10.00	100
Classroom 246	Winter	2018	Kindergarten	Not indicated	46.00	18	88.00	42.00	-42.00	1764

					Pre-	Number				
Classroom			Grade-Level	Content Area	SCORE	of P-12	Post-SCORE	"Y-X"		
Sample	Semester	Year	Assessed	Assessed	(X)	Students	(Y)	Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
	Winter	2018	2nd Grade	Not indicated	38.50	16	61.50	23.00	-23.00	529
Classroom 248	Winter	2018	2nd Grade	Not indicated	38.20	17	65.60	27.40	-27.40	750.76
	Winter	2018	Kindergarten	Not indicated	48.00	18	58.00	10.00	-10.00	100
	Winter	2018	1st Grade	Not indicated	33.00	18	91.00	58.00	-58.00	3364
	Winter	2018	3rd Grade	Not indicated	48.00	25	93.00	45.00	-45.00	2025
Classroom 252		2018	1st Grade	Not indicated	63.49	21	84.92	21.43	-43.00	459.2449
	Winter	2018	4th Grade	Not indicated	28.33	28	69.00	40.67	-40.67	1654.0489
Classroom 254	Winter	2018	6th Grade	Not indicated	56.00	27	90.00	34.00	-34.00	1156
	Winter	2018	5th Grade	Not indicated	67.00	80	80.00	13.00	-13.00	169
Classroom 256	Winter	2018	3rd Grade	Not indicated	26.00	23	79.00	53.00	-53.00	2809
Classroom 257	Winter	2018	4th Grade	Not indicated	19.00	28	61.00	42.00	-42.00	1764
Classroom 258		2018	Kindergarten	Not indicated	29.00	24	61.00	32.00	-32.00	1024
	Winter	2018	5th Grade	Not indicated	85.70	24	93.75	8.05	-8.05	64.8025
	Winter	2018	4th Grade	Not indicated	52.00	18	88.00	36.00	-36.00	1296
Classroom 261	Winter	2018	3rd Grade	Not indicated	48.00	19	72.00	24.00	-24.00	576
	Winter	2018	2nd Grade	Not indicated	81.00	25	96.00	15.00	-15.00	225
		2018	2nd Grade	Not indicated	50.00	13	77.00	27.00	-27.00	729
	Winter					16				625
Classroom 264		2018	4th Grade	Not indicated	51.00		76.00	25.00	-25.00	529
	Winter	2018	1st Grade	Not indicated	49.00	23	72.00	23.00	-23.00	
Classroom 266	Winter	2018	3rd Grade	Not indicated	58.55	18	76.92	18.37	-18.37	337.4569
Classroom 267	Winter	2018	3rd Grade	Not indicated	51.00	11	89.00	38.00	-38.00	1444
	Winter	2018	5th Grade	Not indicated	13.30	27	51.20	37.90	-37.90	1436.41
Classroom 269	Winter	2018	3rd Grade	Not indicated	48.00	24	78.00	30.00	-30.00	900
Classroom 270		2018	1st Grade	Not indicated	51.00	24	100.00	49.00	-49.00	2401
	Winter	2018	5th Grade	Not indicated	21.00	24	82.00	61.00	-61.00	3721
Classroom 272		2018	5th Grade	Not indicated	21.00	27	63.00	42.00	-42.00	1764
Classroom 273		2018	2nd Grade	Not indicated	60.00	23	83.00	23.00	-23.00	529
Classroom 274		2018	5th Grade	Not indicated	56.00	38	64.00	8.00	-8.00	64
Classroom 275		2018	4th Grade	Not indicated	26.00	23	78.00	52.00	-52.00	2704
Classroom 276		2018	1st Grade	Not indicated	81.48	27	90.28	8.80	-8.80	77.37489369
	Winter	2018	1st Grade	Not indicated	26.00	23	59.00	33.00	-33.00	1089
Classroom 278		2018	7th Grade	Not indicated	74.00	40	90.00	16.00	-16.00	256
Classroom 279	Winter	2018	12th Grade	Not indicated	70.00	60	90.00	20.00	-20.00	400
Classroom 280	Fall	2018	1st Grade	Integrated Science	83.00	22	94.00	11.00	-11.00	121
Classroom 281	Fall	2018	Kindergarten	Mathematics	0.00	24	68.18	68.18	-68.18	4648.5124
Classroom 282	Fall	2018	5th Grade	Language Arts	71.15	26	87.60	16.45	-16.45	270.6025
Classroom 283	Fall	2018	1st Grade	Mathematics	84.00	22	93.00	9.00	-9.00	81
Classroom 284	Fall	2018	1st Grade	Integrated Science	75.00	21	90.00	15.00	-15.00	225
Classroom 285	Fall	2018	1st Grade	Language Arts	23.60	24	83.60	60.00	-60.00	3600
Classroom 286	Fall	2018	10th Grade	Art	15.00	30	98.00	83.00	-83.00	6889

					Pre-	Number				
Classroom	_		Grade-Level	Content Area	SCORE	of P-12	Post-SCORE	"Y-X"		
Sample	Semester		Assessed	Assessed	(X)	Students	(Y)	Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
	Fall	2018	1st Grade	Mathematics	40.00	18	80.00	40.00	-40.00	1600
Classroom 288		2018	3rd Grade	Social Studies	51.00	23	75.00	24.00	-24.00	576
Classroom 289		2018	5th Grade	Language Arts	43.00	25	98.00	55.00	-55.00	3025
Classroom 290	Fall	2018	1st Grade	Mathematics	39.00	21	84.00	45.00	-45.00	2025
	Fall	2018	3rd Grade	Mathematics	45.00	17	59.00	14.00	-14.00	196
Classroom 292		2018	7th Grade	Chemistry	54.00	135	76.00	22.00	-22.00	484
Classroom 293	Fall	2018	9th Grade	English	51.00	72	60.00	9.00	-9.00	81
Classroom 294	Fall	2018	2nd Grade	Language Arts	52.08	24	89.13	37.05	-37.05	1372.7025
Classroom 295	Fall	2018	1st Grade	Mathematics	83.00	23	89.00	6.00	-6.00	36
Classroom 296	Fall	2018	5th Grade	Mathematics	40.00	27	76.00	36.00	-36.00	1296
Classroom 297	Fall	2018	Kindergarten	Integrated Science	22.50	26	64.80	42.30	-42.30	1789.29
Classroom 298	Fall	2018	4th Grade	Spanish	41.67	25	66.67	25.00	-25.00	625
Classroom 299		2018	3rd Grade	Mathematics	70.00	22	81.80	11.80	-11.80	139.24
Classroom 300		2018	2nd Grade	Mathematics	25.00	8	83.00	58.00	-58.00	3364
Classroom 301	Fall	2018	1st Grade	Mathematics	43.00	23	79.00	36.00	-36.00	1296
Classroom 302	Fall	2018	3rd Grade	Language Arts	73.60	25	92.00	18.40	-18.40	338.56
Classroom 303	Fall	2018	4th Grade	Social Studies	47.00	24	79.00	32.00	-32.00	1024
Classroom 304		2018	1st Grade	Integrated Science	64.00	20	95.00	31.00	-31.00	961
Classroom 305		2018	1st Grade	Mathematics	51.00	24	93.00	42.00	-42.00	1764
Classroom 306		2018	Kindergarten	Mathematics	85.00	20	87.00	2.00	-2.00	4
	Fall	2018	2nd Grade	Language Arts	26.66	21	83.00	56.34	-56.34	3174.1956
Classroom 308	Fall	2018	9th Grade	Mathematics	0.00	98	57.80	57.80	-57.80	3340.84
Classroom 309		2018	6th Grade	Social Studies	27.00	51	78.00	51.00	-51.00	2601
Classroom 310	Fall	2018	4th Grade	Language Arts	50.00	26	67.00	17.00	-17.00	289
Classroom 311		2018	5th Grade	Language Arts	14.80	27	100.00	85.20	-85.20	7259.04
Classroom 312		2018	Kindergarten	Social Studies	59.00	19	79.00	20.00	-20.00	400
Classroom 313		2018	1st Grade	Biology	70.53	27	92.40	21.87	-21.87	478.2969
Classroom 314		2018	Kindergarten	Social Studies	48.00	22	87.00	39.00	-39.00	1521
Classroom 315		2018	2nd Grade	Language Arts	52.00	5	88.00	36.00	-36.00	1296
Classroom 316		2018	5th Grade	Language Arts	48.00	28	72.50	24.50	-24.50	600.25
Classroom 317		2018	5th Grade	Language Arts	59.38	24	79.55	20.17	-20.17	406.8289
Classroom 318		2018	4th Grade	Mathematics	68.65	21	86.50	17.85	-17.85	318.6225
Classroom 319		2018	5th Grade	Mathematics	91.25		93.75	2.50	-2.50	6.25
Classroom 320		2018	Kindergarten	Integrated Science	21.10	19	55.00	33.90	-33.90	1149.21
	Fall	2018	5th Grade	Language Arts	38.00	22	58.00	20.00	-20.00	400
Classroom 322		2018	4th Grade	Mathematics	41.56	20	74.69	33.13	-33.13	1097.5969
Classroom 323		2018	Kindergarten	Social Studies	65.00	21	84.00	19.00	-19.00	361
Classroom 324		2018	7th Grade	English	34.05	123	76.64	42.59	-42.59	1813.9081
Classroom 325		2018	7th Grade	Health	59.00	29	74.00	15.00	-42.59 -15.00	225
Classroom 326		2018	3rd Grade	Integrated Science	41.00	23	81.00	40.00	-40.00	1600
UIASSI UUIII 326	rall	2010	Sid Glade	Integrated Science	41.00	23	01.00	40.00	-40.00	1600

					Pre-	Number				
Classroom			Grade-Level	Content Area	SCORE	of P-12	Post-SCORE	"Y-X"		
Sample	Semester	Year	Assessed	Assessed	(X)	Students	(Y)	Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 327	Fall	2018	4th Grade	Integrated Science	42.00	23	72.00	30.00	-30.00	900
Classroom 328	Fall	2018	Kindergarten	Integrated Science	61.36	22	81.81	20.45	-20.45	418.2025
Classroom 329	Fall	2018	Kindergarten	Integrated Science	70.00	19	94.70	24.70	-24.70	610.09
Classroom 330	Fall	2018	Kindergarten	Mathematics	86.00	25	90.00	4.00	-4.00	16
Classroom 331	Fall	2018	5th Grade	Integrated Science	54.00	26	95.00	41.00	-41.00	1681
Classroom 332	Fall	2018	5th Grade	Language Arts	66.67	28	79.01	12.34	-12.34	152.2756
Classroom 333		2018	Kindergarten	Integrated Science	50.00	20	61.00	11.00	-11.00	121
Classroom 334	Fall	2018	10th Grade	Social Studies	50.00	52	76.00	26.00	-26.00	676
Classroom 335	Fall	2018	1st Grade	Mathematics	51.00	19	55.00	4.00	-4.00	16
Classroom 336	Fall	2018	4th Grade	Social Studies	31.56	28	57.79	26.23	-26.23	688.0129
Classroom 337	Fall	2018	Kindergarten	Mathematics	81.94	24	89.49	7.55	-7.55	57.0025
Classroom 338	Fall	2018	3rd Grade	Mathematics	53.50	21	55.90	2.40	-2.40	5.76
Classroom 339		2018	4th Grade	Mathematics	53.00	28	95.00	42.00	-42.00	1764
Classroom 340		2018	4th Grade	Language Arts	74.00	25	85.00	11.00	-11.00	121
Classroom 341	Fall	2018	2nd Grade	Language Arts	73.00	4	97.00	24.00	-24.00	576
Classroom 342	Fall	2018	11th Grade	Economics	44.00	20	60.00	16.00	-16.00	256
Classroom 343	Fall	2018	10th Grade	English	38.69	55	61.48	22.79	-22.79	519.3841
Classroom 344		2018	6th Grade	Language Arts	75.86	29	91.85	15.99	-15.99	255.6801
Classroom 345		2018	2nd Grade	Mathematics	83.00	24	90.00	7.00	-7.00	49
Classroom 346		2018	8th Grade	Social Studies	44.00	79	78.00	34.00	-34.00	1156
Classroom 347	Fall	2018	12th Grade	French	81.00	17	89.00	8.00	-8.00	64
Classroom 348	Fall	2018	7th Grade	Mathematics	52.00	21	73.00	21.00	-21.00	441
Classroom 349		2018	9th Grade	English	22.00	108	75.90	53.90	-53.90	2905.21
Classroom 350	Fall	2018	10th Grade	Mathematics	44.00	58	88.00	44.00	-44.00	1936
Classroom 351		2018	10th Grade	Physics	45.40	105	85.20	39.80	-39.80	1584.04
Classroom 352	Fall	2018	7th Grade	English	90.60	86	92.40	1.80	-1.80	3.24
Classroom 353	Fall	2018	11th Grade	English	32.00	32	53.00	21.00	-21.00	441
Classroom 354	Fall	2018	Kindergarten	Music	50.00	123	100.00	50.00	-50.00	2500
Classroom 355	Fall	2018	10th Grade	Social Studies	38.50	126	83.00	44.50	-44.50	1980.25
Classroom 356	Fall	2018	10th Grade	English	30.30	110	62.60	32.30	-32.30	1043.29
Classroom 357		2018	9th Grade	Biology	27.90	30	65.00	37.10	-37.10	1376.41
Classroom 358	Fall	2018	6th Grade	Music	65.46	100	87.19	21.73	-21.73	472.1929
Classroom 359		2018	8th Grade	Mathematics	86.50	40	95.00	8.50	-8.50	72.25
Classroom 360		2018	7th Grade	Earth Science	26.30	18	88.90	62.60	-62.60	3918.76
	Fall	2018	8th Grade	Mathematics	11.00	27	72.50	61.50	-61.50	3782.25
Classroom 362	Fall	2018	1st Grade	Integrated Science	27.00	23	67.00	40.00	-40.00	1600
Classroom 363		2018	8th Grade	Mathematics	24.30	76	88.80	64.50	-64.50	4160.25
Classroom 364		2018	4th Grade	Social Studies	15.33	30	67.00	51.67	-51.67	2669.7889
Classroom 365		2018	5th Grade	Social Studies	10.00	28	77.00	67.00	-67.00	4489
Classroom 366		2018	Kindergarten	Integrated Science	26.60	25	73.30	46.70	-46.70	2180.89

					Pre-	Number				
Classroom			Grade-Level	Content Area	SCORE	of P-12	Post-SCORE	"Y-X"		
Sample	Semester	Year	Assessed	Assessed	(X)	Students	(Y)	Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 367	Fall	2018	Kindergarten	Language Arts	63.00	23	81.00	18.00	-18.00	324
Classroom 368		2018	10th Grade	Social Studies	31.00	48	84.00	53.00	-53.00	2809
Classroom 369	Fall	2018	4th Grade	Integrated Science	45.00	21	71.00	26.00	-26.00	676
Classroom 370		2018	12th Grade	English	0.00	17	82.20	82.20	-82.20	6756.84
Classroom 371	Fall	2018	Kindergarten	Mathematics	27.38	21	73.80	46.42	-46.42	2154.8164
Classroom 372	Fall	2018	Kindergarten	Language Arts	6.00	40	86.00	80.00	-80.00	6400
Classroom 373		2018	3rd Grade	Mathematics	50.00	16	59.00	9.00	-9.00	81
Classroom 374	Fall	2018	6th Grade	Social Studies	0.00	23	95.00	95.00	-95.00	9025
Classroom 375		2018	10th Grade	Mathematics	53.00	28	85.00	32.00	-32.00	1024
Classroom 376		2018	9th Grade	Social Studies	69.52	88	82.61	13.09	-13.09	171.3481
Classroom 377		2018	10th Grade	Social Studies	40.30	20	73.30	33.00	-33.00	1089
Classroom 378		2018	10th Grade	Social Studies	52.08	80	85.75	33.67	-33.67	1133.6689
Classroom 379		2018	10th Grade	Music	60.00	26	82.00	22.00	-22.00	484
Classroom 380	Fall	2018	2nd Grade	Mathematics	67.00	20	88.00	21.00	-21.00	441
Classroom 381	Fall	2018	1st Grade	Mathematics	87.00	25	94.00	7.00	-7.00	49
	Fall	2018	9th Grade	Mathematics	25.77	72	55.13	29.36	-29.36	862.0096
Classroom 383	Fall	2018	1st Grade	Mathematics	76.00	24	89.00	13.00	-13.00	169
Classroom 384		2018	1st Grade	Mathematics	57.00	25	71.00	14.00	-14.00	196
Classroom 385		2018	Kindergarten	Integrated Science	86.76	26	96.30	9.54	-9.54	91.0116
Classroom 386	Fall	2018	12th Grade	English	65.00	9	81.00	16.00	-16.00	256
Classroom 387	Fall	2018	5th Grade	Language Arts	0.00	15	73.00	73.00	-73.00	5329
	Fall	2018	2nd Grade	Mathematics	73.00	18	96.00	23.00	-23.00	529
Classroom 389	Fall	2018	5th Grade	Social Studies	15.00	29	70.00	55.00	-55.00	3025
Classroom 390	Fall	2018	Kindergarten	Mathematics	79.58	24	87.91	8.33	-8.33	69.3889
Classroom 391		2018	3rd Grade	Mathematics	53.60	9	76.00	22.40	-22.40	501.76
Classroom 392	Fall	2018	1st Grade	Mathematics	63.81	22	86.50	22.69	-22.69	514.8361
Classroom 393	Fall	2018	1st Grade	Mathematics	66.67	25	76.67	10.00	-10.00	100
Classroom 394		2018	3rd Grade	Integrated Science	36.11	45	63.02	26.91	-26.91	724.1481
Classroom 395	Fall	2018	Kindergarten	Mathematics	71.97	22	84.85	12.88	-12.88	165.8944
Classroom 396	Fall	2018	10th Grade	Health	27.74	59	94.49	66.75	-66.75	4454.895025
Classroom 397		2018	Kindergarten	Language Arts	70.50	19	90.00	19.50	-19.50	380.25
Classroom 398	Fall	2018	Kindergarten	Language Arts	22.00	22	81.00	59.00	-59.00	3481
Classroom 399		2018	Kindergarten	Integrated Science	77.00	22	95.00	18.00	-18.00	324
Classroom 400		2018	1st Grade	Integrated Science	46.00	20	86.00	40.00	-40.00	1600
Classroom 401	Fall	2018	2nd Grade	Mathematics	85.00	27	93.00	8.00	-8.00	64
Classroom 402	Fall	2018	2nd Grade	Mathematics	56.00	20	59.00	3.00	-3.00	9
Classroom 403		2018	12th Grade	English	79.70	112	91.50	11.80	-11.80	139.24
Classroom 404		2018	Kindergarten	Language Arts	25.00	24	90.00	65.00	-65.00	4225
Classroom 405	Fall	2018	5th Grade	Language Arts	31.00	25	67.50	36.50	-36.50	1332.25
Classroom 406	Fall	2018	4th Grade	Mathematics	40.00	26	99.56	59.56	-59.56	3547.3936

Classroom			Grade-Level	Content Area	Pre- SCORE	Number of P-12	Post-SCORE	"Y-X"		
Sample	Semester	Year	Assessed	Assessed	(X)	Students	(Y)	Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 407		2018	3rd Grade	Integrated Science	48.00	24	72.00	24.00	-24.00	
Classroom 408	Fall	2018	2nd Grade	Language Arts	71.70	20	89.20	17.50	-17.50	306.25
Classroom 409	Fall	2018	3rd Grade	Mathematics	60.00	5	86.00	26.00	-26.00	676
Classroom 410	Fall	2018	1st Grade	Integrated Science	18.00	21	72.00	54.00	-54.00	2916
Classroom 411	Fall	2018	4th Grade	Language Arts	49.00	23	94.00	45.00	-45.00	2025
Classroom 412	Fall	2018	3rd Grade	Mathematics	38.00	21	68.00	30.00	-30.00	900
Classroom 413	Fall	2018	2nd Grade	Mathematics	69.00	25	91.00	22.00	-22.00	484
Classroom 414	Fall	2018	1st Grade	Integrated Science	66.00	26	79.00	13.00	-13.00	169
Classroom 415	Fall	2018	2nd Grade	Mathematics	54.50	22	79.10	24.60	-24.60	605.16
Classroom 416	Fall	2018	2nd Grade	Mathematics	72.51	21	87.00	14.49	-14.49	209.9601
Classroom 417	Fall	2018	7th Grade	Music	20.00	48	95.00	75.00	-75.00	5625
Classroom 418	Fall	2018	4th Grade	Mathematics	46.50	28	50.20	3.70	-3.70	13.69
Classroom 419	Fall	2018	1st Grade	Health	56.00	23	94.00	38.00	-38.00	1444
Classroom 420	Fall	2018	4th Grade	Integrated Science	44.00	24	57.00	13.00	-13.00	169
Classroom 421	Fall	2018	5th Grade	Social Studies	18.41	26	86.35	67.94	-67.94	4615.8436
Classroom 422	Fall	2018	9th Grade	Physical Education	78.93	20	94.64	15.71	-15.71	246.8041
Classroom 423	Fall	2018	1st Grade	Mathematics	81.00		86.00	5.00	-5.00	25
Classroom 424		2018	1st Grade	Mathematics	60.00	22	95.00	35.00	-35.00	1225
Classroom 425	Fall	2018	4th Grade	Mathematics	85.00		95.00	10.00	-10.00	
Classroom 426		2018	3rd Grade	Mathematics	59.00	22	87.00	28.00	-28.00	
Classroom 427	Fall	2018	Kindergarten	Mathematics	45.00	22	54.00	9.00	-9.00	81

Number	of	Tests	= 1	N
			22	4

Number of P-12 Students: Average % Improvement: 30.26

+	$-\frac{\sum d}{N}$
•	$-\frac{1}{1 \sum d^2 - \frac{(\sum d)^2}{N}}$
	$\sqrt{\frac{N(N-1)}{N(N-1)}}$

"X-Y" or "ED":	"(X-Y)^2" or "ED^2"
-6687.43	284574.48
L =Top Value (∑d/N)	-30.26
M =Middle value	82213.89
O =Bottom Value	48620.00
P =Square root of M/O	1.30
T = (L/P)	-23.27
∞ = 0.05	Critical T = 1.645
	Significant
T/Square Root of N =	
Effect	-1.565

					Pre-	Number				
Classroom			Grade-Level	Content Area	SCORE	of P-12	Post-SCORE	"Y-X"		
Sample	Semester	Year	Assessed	Assessed	(X)	Students	(Y)	Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 211	Winter	2018	Kindergarten	Not indicated	63.00		77.00	14.00	-14.00	196
Classroom 213	Winter	2018	Kindergarten	Not indicated	65.22	26	88.59	23.37	-23.37	546.1569
Classroom 229	Winter	2018	Kindergarten	Not indicated	16.27	24	58.91	42.64	-42.64	1817.862605
Classroom 232	Winter	2018	Kindergarten	Not indicated	25.00	25	52.00	27.00	-27.00	729
Classroom 246	Winter	2018	Kindergarten	Not indicated	46.00	18	88.00	42.00	-42.00	1764
Classroom 249	Winter	2018	Kindergarten	Not indicated	48.00	18	58.00	10.00	-10.00	100
Classroom 258	Winter	2018	Kindergarten	Not indicated	29.00		61.00	32.00	-32.00	1024
	Fall	2018	Kindergarten	Mathematics	0.00		68.18	68.18	-68.18	4648.5124
Classroom 297	Fall	2018	Kindergarten	Integrated Science	22.50		64.80	42.30	-42.30	1789.29
Classroom 306	Fall	2018	Kindergarten	Mathematics	85.00		87.00	2.00	-2.00	4
Classroom 312	Fall	2018	Kindergarten	Social Studies	59.00	19	79.00	20.00	-20.00	400
Classroom 314	Fall	2018	Kindergarten	Social Studies	48.00	22	87.00	39.00	-39.00	1521
Classroom 320	Fall	2018	Kindergarten	Integrated Science	21.10	19	55.00	33.90	-33.90	1149.21
Classroom 323	Fall	2018	Kindergarten	Social Studies	65.00	21	84.00	19.00	-19.00	361
Classroom 328	Fall	2018	Kindergarten	Integrated Science	61.36	22	81.81	20.45	-20.45	418.2025
Classroom 329	Fall	2018	Kindergarten	Integrated Science	70.00	19	94.70	24.70	-24.70	610.09
Classroom 330	Fall	2018	Kindergarten	Mathematics	86.00	25	90.00	4.00	-4.00	16
Classroom 333	Fall	2018	Kindergarten	Integrated Science	50.00	20	61.00	11.00	-11.00	121
Classroom 337	Fall	2018	Kindergarten	Mathematics	81.94	24	89.49	7.55	-7.55	57.0025
Classroom 354	Fall	2018	Kindergarten	Music	50.00	123	100.00	50.00	-50.00	2500
Classroom 366	Fall	2018	Kindergarten	Integrated Science	26.60	25	73.30	46.70	-46.70	2180.89
Classroom 367	Fall	2018	Kindergarten	Language Arts	63.00	23	81.00	18.00	-18.00	324
Classroom 371	Fall	2018	Kindergarten	Mathematics	27.38	21	73.80	46.42	-46.42	2154.8164
Classroom 372	Fall	2018	Kindergarten	Language Arts	6.00	40	86.00	80.00	-80.00	6400
Classroom 385	Fall	2018	Kindergarten	Integrated Science	86.76		96.30	9.54	-9.54	91.0116
Classroom 390	Fall	2018	Kindergarten	Mathematics	79.58	24	87.91	8.33	-8.33	69.3889
Classroom 395	Fall	2018	Kindergarten	Mathematics	71.97	22	84.85	12.88	-12.88	165.8944
Classroom 397	Fall	2018	Kindergarten	Language Arts	70.50		90.00	19.50	-19.50	380.25
Classroom 398	Fall	2018	Kindergarten	Language Arts	22.00	22	81.00	59.00	-59.00	3481
Classroom 399	Fall	2018	Kindergarten	Integrated Science	77.00	22	95.00	18.00	-18.00	324
Classroom 404		2018		Language Arts	25.00	24	90.00	65.00	-65.00	4225
Classroom 427		2018		Mathematics	45.00	22	54.00	9.00	-9.00	81

Number of Tests = N	Number of P-12 Students:	Average % Improvement:	"X-Y" or "ED":	"(X-Y)^2" or "ED^2"
32	831	28.92	-925.46	39649.58
			L =Top Value (∑d/N)	-28.92

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre- SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
							Σd		M =Middle value O =Bottom Value	12884.90 992.00
							<u>Zu</u>		P =Square root of M/O	
					t = -	_			T = (L/P)	-8.02
						/ 5	$\mathbf{d}^2 = \mathbf{\Sigma}$	$d)^2$		Critical T = 1.645
					1	\\	Λ	<i>I</i>		Significant
						V 1	N (N-1)		T/Square Root of N = Effect	-1.419

					D	Nemakas				
Classica			Create Level	Comtont Avec	Pre-	Number	Deet COORE	"V V"		
Classroom Sample	Semester	Voor	Grade-Level Assessed	Content Area Assessed	SCORE (X)	of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 208		2018	1st Grade	Not indicated	51.00	22	83.00	32.00	-32.00	1024
Classroom 218		2018	1st Grade	Not indicated	34.00	24	67.00	33.00	-33.00	1024
Classroom 223	Winter	2018	1st Grade	Not indicated	22.00	26	82.00	60.00	-60.00	3600
Classroom 224		2018	1st Grade	Not indicated	69.00	17	82.00	13.00	-13.00	169
Classroom 225		2018	1st Grade	Not indicated	71.00	23	76.00	5.00	-5.00	25
	Winter	2018	1st Grade	Not indicated	50.00	17	81.00	31.00	-31.00	961
Classroom 237	Winter	2018	1st Grade	Not indicated	37.60	16	98.80	61.20	-61.20	3745.44
Classroom 238	Winter	2018	1st Grade	Not indicated	39.00	20	88.00	49.00	-49.00	2401
	Winter	2018	1st Grade	Not indicated	47.60	24	76.20	28.60	-28.60	817.96
Classroom 250		2018	1st Grade	Not indicated	33.00	18	91.00	58.00	-58.00	3364
Classroom 252		2018	1st Grade	Not indicated	63.49	21	84.92	21.43	-21.43	459.2449
Classroom 265		2018	1st Grade	Not indicated	49.00	23	72.00	23.00	-23.00	529
Classroom 270	Winter	2018	1st Grade	Not indicated	51.00	24	100.00	49.00	-49.00	2401
Classroom 276		2018	1st Grade	Not indicated	81.48	27	90.28	8.80	-8.80	77.37489369
	Winter	2018	1st Grade	Not indicated	26.00	23	59.00	33.00	-33.00	1089
Classroom 280		2018	1st Grade	Integrated Science	83.00	22	94.00	11.00	-11.00	121
Classroom 283		2018	1st Grade	Mathematics	84.00	22	93.00	9.00	-9.00	81
Classroom 284		2018	1st Grade	Integrated Science	75.00	21	90.00	15.00	-15.00	225
	Fall	2018	1st Grade	Language Arts	23.60	24	83.60	60.00	-60.00	3600
Classroom 287	Fall	2018	1st Grade	Mathematics	40.00	18	80.00	40.00	-40.00	1600
Classroom 290		2018	1st Grade	Mathematics	39.00	21	84.00	45.00	-45.00	2025
Classroom 295	Fall	2018	1st Grade	Mathematics	83.00	23	89.00	6.00	-6.00	36
Classroom 301	Fall	2018	1st Grade	Mathematics	43.00	23	79.00	36.00	-36.00	1296
	Fall	2018	1st Grade	Integrated Science	64.00	20	95.00	31.00	-31.00	961
Classroom 305		2018	1st Grade	Mathematics	51.00	24	93.00	42.00	-42.00	1764
Classroom 313		2018	1st Grade	Biology	70.53	27	92.40	21.87	-21.87	478.2969
	Fall	2018	1st Grade	Mathematics	51.00	19	55.00	4.00	-4.00	16
	Fall	2018	1st Grade	Integrated Science	27.00	23	67.00	40.00	-40.00	1600
Classroom 381	Fall	2018	1st Grade	Mathematics	87.00	25	94.00	7.00	-7.00	49
Classroom 383	Fall	2018	1st Grade	Mathematics	76.00	24	89.00	13.00	-13.00	169
Classroom 384		2018	1st Grade	Mathematics	57.00	25	71.00	14.00	-14.00	196
Classroom 392		2018	1st Grade	Mathematics	63.81	22	86.50	22.69	-22.69	514.8361
Classroom 393		2018	1st Grade	Mathematics	66.67	25	76.67	10.00	-10.00	100
	Fall	2018	1st Grade	Integrated Science	46.00	20	86.00	40.00	-40.00	1600
Classroom 410		2018	1st Grade	Integrated Science	18.00	21	72.00	54.00	-54.00	2916
	Fall	2018	1st Grade	Integrated Science	66.00	26	79.00	13.00	-13.00	169
Classroom 419		2018	1st Grade	Health	56.00	23	94.00	38.00	-38.00	1444
Classroom 423		2018	1st Grade	Mathematics	81.00	25	86.00	5.00	-5.00	25
Classroom 424		2018	1st Grade	Mathematics	60.00	22	95.00	35.00	-35.00	1225

						Pre-	Number				
C	lassroom			Grade-Level	Content Area	SCORE	of P-12	Post-SCORE	"Y-X"		
S	ample	Semester	Year	Assessed	Assessed	(X)	Students	(Y)	Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"

Number of P-12 Students: Average % Improvement: 867

28.68

:	"X-Y" or "ED":	"(X-Y)^2" or "ED^2"
	-1118.59	43963.15
	L =Top Value (∑d/N)	-28.68
	M =Middle value	11880.20
	O =Bottom Value	1482.00
	P =Square root of M/O	2.83
	T = (L/P)	-10.13
	∞ = 0.05	Critical T = 1.645
		Significant
	T/Square Root of N =	
	Effect	-1.622

t	$\frac{\sum d}{N}$
	$\int \Sigma d^2 - \frac{(\Sigma d)^2}{N}$
1	$\frac{N}{N(N-1)}$

01					Pre-	Number	D 4 000DE	W. M.		
Classroom				Content Area	SCORE	of P-12	Post-SCORE	"Y-X"		#/// X/) A O H
Sample	Semester		Assessed	Assessed	(X)	Students	(Y)	Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
	Winter	2018	2nd Grade	Not indicated	77.00		94.00	17.00	-17.00	289
Classroom 219		2018	2nd Grade	Not indicated	22.00	25	92.00	70.00	-70.00	4900
Classroom 240		2018	2nd Grade	Not indicated	63.00		84.00	21.00	-21.00	
Classroom 242	Winter	2018	2nd Grade	Not indicated	67.00	_	82.00	15.00	-15.00	
Classroom 247	Winter	2018	2nd Grade	Not indicated	38.50		61.50	23.00	-23.00	
Classroom 248	Winter	2018	2nd Grade	Not indicated	38.20	17	65.60	27.40	-27.40	
Classroom 262	Winter	2018	2nd Grade	Not indicated	81.00		96.00	15.00	-15.00	225
Classroom 263	Winter	2018	2nd Grade	Not indicated	50.00	13	77.00	27.00	-27.00	729
Classroom 273	Winter	2018	2nd Grade	Not indicated	60.00	23	83.00	23.00	-23.00	529
Classroom 294	Fall	2018	2nd Grade	Language Arts	52.08	24	89.13	37.05	-37.05	1372.7025
Classroom 300	Fall	2018	2nd Grade	Mathematics	25.00		83.00	58.00	-58.00	3364
Classroom 307	Fall	2018	2nd Grade	Language Arts	26.66	21	83.00	56.34	-56.34	3174.1956
Classroom 315	Fall	2018	2nd Grade	Language Arts	52.00	5	88.00	36.00	-36.00	1296
Classroom 341	Fall	2018	2nd Grade	Language Arts	73.00	4	97.00	24.00	-24.00	576
Classroom 345	Fall	2018	2nd Grade	Mathematics	83.00	24	90.00	7.00	-7.00	49
Classroom 380	Fall	2018	2nd Grade	Mathematics	67.00	20	88.00	21.00	-21.00	441
Classroom 388	Fall	2018	2nd Grade	Mathematics	73.00	18	96.00	23.00	-23.00	529
Classroom 401	Fall	2018	2nd Grade	Mathematics	85.00	27	93.00	8.00	-8.00	64
Classroom 402	Fall	2018	2nd Grade	Mathematics	56.00	20	59.00	3.00	-3.00	9
Classroom 408	Fall	2018	2nd Grade	Language Arts	71.70	20	89.20	17.50	-17.50	306.25
Classroom 413	Fall	2018	2nd Grade	Mathematics	69.00	25	91.00	22.00	-22.00	484
Classroom 415	Fall	2018	2nd Grade	Mathematics	54.50	22	79.10	24.60	-24.60	605.16
Classroom 416		2018	2nd Grade	Mathematics	72.51	21	87.00	14.49	-14.49	

Number of Tests = N 23	Number of P-12 Students: 432	Average % Improvement: 25.67
	$t = \frac{1}{\sqrt{\sum a}}$	$\frac{\frac{\sum d}{N}}{d^2 - \frac{(\sum d)^2}{N}}$

t:	"X-Y" or "ED":	"(X-Y)^2" or "ED^2"
	-590.38	21098.03
	L =Top Value (∑d/N)	-25.67
	M =Middle value	5943.74
	O =Bottom Value	506.00
	P =Square root of M/O	3.43
	T = (L/P)	-7.49
	∞ = 0.05	Critical T = 1.645
		Significant

Classroom Sample	Semester		Content Area Assessed	 Number of P-12 Students	Post-SCORE (Y)	Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
				V i	V (N-1)		T/Square Root of N = Effect	-1.562

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre- SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 214	Winter	2018	3rd Grade	Not indicated	35.00	26	56.00	21.00	-21.00	441
Classroom 227	Winter	2018	3rd Grade	Not indicated	56.00	19	78.79	22.79	-22.79	519.3841
Classroom 234	Winter	2018	3rd Grade	Not indicated	23.00	23	76.00	53.00	-53.00	2809
Classroom 244	Winter	2018	3rd Grade	Not indicated	71.00	17	91.40	20.40	-20.40	416.16
Classroom 245	Winter	2018	3rd Grade	Not indicated	63.00	19	73.00	10.00	-10.00	100
Classroom 251	Winter	2018	3rd Grade	Not indicated	48.00	25	93.00	45.00	-45.00	2025
Classroom 256	Winter	2018	3rd Grade	Not indicated	26.00	23	79.00	53.00	-53.00	2809
Classroom 261	Winter	2018	3rd Grade	Not indicated	48.00	19	72.00	24.00	-24.00	576
Classroom 266	Winter	2018	3rd Grade	Not indicated	58.55	18	76.92	18.37	-18.37	337.4569
Classroom 267	Winter	2018	3rd Grade	Not indicated	51.00	11	89.00	38.00	-38.00	1444
Classroom 269		2018	3rd Grade	Not indicated	48.00	24	78.00	30.00	-30.00	900
Classroom 288		2018	3rd Grade	Social Studies	51.00	23	75.00	24.00	-24.00	576
Classroom 291		2018	3rd Grade	Mathematics	45.00	17	59.00	14.00	-14.00	196
Classroom 299		2018	3rd Grade	Mathematics	70.00		81.80	11.80	-11.80	139.24
Classroom 302	Fall	2018	3rd Grade	Language Arts	73.60	25	92.00	18.40	-18.40	338.56
Classroom 326		2018	3rd Grade	Integrated Science	41.00	23	81.00	40.00	-40.00	1600
Classroom 338	Fall	2018	3rd Grade	Mathematics	53.50	21	55.90	2.40	-2.40	5.76
Classroom 373	Fall	2018	3rd Grade	Mathematics	50.00	16	59.00	9.00	-9.00	81
Classroom 391	Fall	2018	3rd Grade	Mathematics	53.60		76.00	22.40	-22.40	501.76
Classroom 394	Fall	2018	3rd Grade	Integrated Science	36.11	45	63.02	26.91	-26.91	724.1481
Classroom 407		2018	3rd Grade	Integrated Science	48.00	24	72.00	24.00	-24.00	576
Classroom 409		2018	3rd Grade	Mathematics	60.00	5	86.00	26.00	-26.00	676
Classroom 412	Fall	2018	3rd Grade	Mathematics	38.00	21	68.00	30.00	-30.00	900
Classroom 426	Fall	2018	3rd Grade	Mathematics	59.00	22	87.00	28.00	-28.00	784

Tests = N	of	Number
24		

Number of P-12 Students: Average % Improvement: 497 25.52

+	$-\frac{\sum d}{N}$
	$\int \sum d^2 - \frac{(\sum d)^2}{N}$

"X-Y" or "ED":	"(X-Y)^2" or "ED^2"
-612.47	19475.47
L =Top Value (∑d/N)	-25.52
M =Middle value	3845.49
O =Bottom Value	552.00
P =Square root of M/O	2.64
T = (L/P)	-9.67
∞ = 0.05	Critical T = 1.645
	Significant

Classroom Sample	Semester		Content Area Assessed		Number of P-12 Students	Post-SCORE (Y)	Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
				$\bigvee N(N-1)$				T/Square Root of N = Effect	-1.974

					Pre-	Number				
Classroom				Content Area	SCORE	of P-12	Post-SCORE	"Y-X"		
Sample	Semester		Assessed	Assessed	(X)	Students	(Y)	Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 207		2018	4th Grade	Not indicated	70.00		73.00	3.00	-3.00	9
Classroom 209		2018	4th Grade	Not indicated	47.00	25	92.00	45.00	-45.00	2025
Classroom 210		2018	4th Grade	Not indicated	32.00		63.00	31.00	-31.00	961
Classroom 216		2018	4th Grade	Not indicated	57.84		75.04	17.20	-17.20	295.84
Classroom 241		2018	4th Grade	Not indicated	48.60	26	85.70	37.10	-37.10	1376.41
Classroom 253		2018	4th Grade	Not indicated	28.33		69.00	40.67	-40.67	1654.0489
Classroom 257		2018	4th Grade	Not indicated	19.00	28	61.00	42.00	-42.00	1764
Classroom 260		2018	4th Grade	Not indicated	52.00	18	88.00	36.00	-36.00	1296
Classroom 264		2018	4th Grade	Not indicated	51.00		76.00	25.00	-25.00	625
Classroom 275		2018	4th Grade	Not indicated	26.00	23	78.00	52.00	-52.00	2704
Classroom 298	Fall	2018	4th Grade	Spanish	41.67	25	66.67	25.00	-25.00	625
Classroom 303	Fall	2018	4th Grade	Social Studies	47.00	24	79.00	32.00	-32.00	1024
Classroom 310	Fall	2018	4th Grade	Language Arts	50.00	26	67.00	17.00	-17.00	289
Classroom 318	Fall	2018	4th Grade	Mathematics	68.65	21	86.50	17.85	-17.85	318.6225
Classroom 322	Fall	2018	4th Grade	Mathematics	41.56		74.69	33.13	-33.13	1097.5969
Classroom 327	Fall	2018	4th Grade	Integrated Science	42.00	_	72.00	30.00	-30.00	900
Classroom 336	Fall	2018	4th Grade	Social Studies	31.56	28	57.79	26.23	-26.23	688.0129
Classroom 339	Fall	2018	4th Grade	Mathematics	53.00		95.00	42.00	-42.00	1764
Classroom 340	Fall	2018	4th Grade	Language Arts	74.00	25	85.00	11.00	-11.00	121
Classroom 364	Fall	2018	4th Grade	Social Studies	15.33	30	67.00	51.67	-51.67	2669.7889
Classroom 369	Fall	2018	4th Grade	Integrated Science	45.00	21	71.00	26.00	-26.00	676
Classroom 406	Fall	2018	4th Grade	Mathematics	40.00	26	99.56	59.56	-59.56	3547.3936
Classroom 411	Fall	2018	4th Grade	Language Arts	49.00	23	94.00	45.00	-45.00	2025
Classroom 418	Fall	2018	4th Grade	Mathematics	46.50	28	50.20	3.70	-3.70	13.69
Classroom 420	Fall	2018	4th Grade	Integrated Science	44.00	24	57.00	13.00	-13.00	169
Classroom 425	Fall	2018	4th Grade	Mathematics	85.00	4	95.00	10.00	-10.00	100

Number of Tests = N	Number of P-12 Students:	Average % Improvement:	"X-Y" or "ED":	"(X-Y)^2" or "ED^2"
26	607	29.70	-772.11	28738.40
			L =Top Value (∑d/N)	-29.70
		_	M =Middle value	5809.41
		Σd	O =Bottom Value	650.00
		N/	P =Square root of M/O	2.99
	t	<i>I</i> V	T = (I/D)	0.02

Classroom Sample	Semester	Year	 Content Area Assessed	Pre- SCORE (X)	Number of P-12 Students		Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
	•			,	Σ	Σ	<u>d)</u> ²		Critical T = 1.645 Significant
					y 1	N (N-1)		T/Square Root of N = Effect	-1.948

Classroom		v		Content Area	Pre- SCORE	Number of P-12	Post-SCORE	"Y-X"	W W #FD#	#(V.VA.A.)
Sample 040	Semester		Assessed	Assessed	(X)	Students	(Y)	Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 212		2018	5th Grade	Not indicated	14.00	50	77.00	63.00	-63.00	3969
Classroom 215		2018	5th Grade	Not indicated	43.00	23	70.00	27.00	-27.00	729
Classroom 220		2018	5th Grade	Not indicated	33.00	20 23	73.00	40.00	-40.00	1600
	Winter	2018	5th Grade	Not indicated	39.10		84.30	45.20	-45.20	2043.04
Classroom 222		2018	5th Grade	Not indicated	35.80	19 27	74.00	38.20	-38.20	1459.24
Classroom 226		2018	5th Grade	Not indicated	71.00		85.00	14.00	-14.00	196
Classroom 230		2018	5th Grade	Not indicated	40.00	21 29	72.00	32.00	-32.00	1024
	Winter	2018	5th Grade	Not indicated	48.00		56.00	8.00	-8.00	64
Classroom 233		2018 2018	5th Grade	Not indicated	89.70		91.20	1.50	-1.50	2.25 324
	Winter		5th Grade	Not indicated	31.00	_	49.00	18.00	-18.00	· · ·
	Winter	2018	5th Grade	Not indicated	29.00	25 21	56.00	27.00	-27.00	729
Classroom 243		2018	5th Grade	Not indicated	70.00		76.00 80.00	6.00	-6.00	36
Classroom 255			5th Grade	Not indicated	67.00		00.00	13.00	-13.00	169
Classroom 259		2018	5th Grade	Not indicated	85.70	24 27	93.75	8.05	-8.05	64.8025
Classroom 268		2018	5th Grade	Not indicated	13.30		51.20	37.90	-37.90	1436.41
	Winter	2018	5th Grade	Not indicated	21.00	24	82.00	61.00	-61.00	3721
Classroom 272		2018	5th Grade	Not indicated	21.00	27	63.00	42.00	-42.00	1764
Classroom 274		2018	5th Grade	Not indicated	56.00	38	64.00	8.00	-8.00	64
Classroom 282		2018	5th Grade	Language Arts	71.15		87.60	16.45	-16.45	270.6025
Classroom 289		2018	5th Grade	Language Arts	43.00	25	98.00	55.00	-55.00	3025
Classroom 296		2018	5th Grade	Mathematics	40.00	27	76.00	36.00	-36.00	1296
	Fall	2018	5th Grade	Language Arts	14.80	27 28	100.00	85.20	-85.20	7259.04
Classroom 316		2018	5th Grade	Language Arts	48.00		72.50	24.50	-24.50	600.25
	Fall	2018	5th Grade	Language Arts	59.38		79.55	20.17	-20.17	406.8289
Classroom 319		2018	5th Grade	Mathematics	91.25	22	93.75	2.50	-2.50	6.25
	Fall	2018	5th Grade	Language Arts	38.00	26	58.00	20.00	-20.00	400
	Fall	2018	5th Grade	Integrated Science	54.00		95.00	41.00	-41.00	1681
Classroom 332		2018	5th Grade	Language Arts	66.67	28 28	79.01	12.34	-12.34	152.2756
Classroom 365			5th Grade	Social Studies	10.00		77.00	67.00	-67.00 72.00	4489
	Fall	2018	5th Grade	Language Arts	0.00	15	73.00	73.00	-73.00	5329
Classroom 389		2018	5th Grade	Social Studies	15.00	29	70.00	55.00	-55.00	3025
Classroom 405		2018	5th Grade	Language Arts	31.00	25	67.50	36.50	-36.50	1332.25
Classroom 421	Fall	2018	5th Grade	Social Studies	18.41	26	86.35	67.94	-67.94	4615.8436

Number of Tests = N	Number of P-12 Students:	Average % Improvement:	"X-Y" or "ED":	"(X-Y)^2" or "ED^2"
33	909	33.41	-1102.45	53283.08

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre- SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
									L =Top Value ($\sum d/N$)	-33.41
									M =Middle value	16452.90
							Σd		O =Bottom Value	1056.00
									P =Square root of M/O	3.95
					t = -				T = (L/P)	-8.46
						$/ \Sigma_{\ell}$	$d^2 - (\Sigma)$	$d)^2$	∞ = 0.05	Critical T = 1.645
						\	Λ	<i>I</i>		Significant
						V I	N(N-1))	T/Square Root of N = Effect	-1.473

"(X-Y)^2" or "ED^2"

Critical T = 1.645 Significant

35447.53

-1.429

-37.78 11186.73 272.00 6.41 -5.89

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre- SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 254	Winter	2018	6th Grade	Not indicated	56.00		90.00	34.00	-34.00	\ /
Classroom 278	Winter	2018	7th Grade	Not indicated	74.00	40	90.00	16.00	-16.00	256
Classroom 292	Fall	2018	7th Grade	Chemistry	54.00	135	76.00	22.00	-22.00	
Classroom 309	Fall	2018	6th Grade	Social Studies	27.00	51	78.00	51.00	-51.00	2601
Classroom 324	Fall	2018	7th Grade	English	34.05	123	76.64	42.59	-42.59	1813.9081
Classroom 325	Fall	2018	7th Grade	Health	59.00	29	74.00	15.00	-15.00	225
Classroom 344	Fall	2018	6th Grade	Language Arts	75.86	29	91.85	15.99	-15.99	255.6801
Classroom 346	Fall	2018	8th Grade	Social Studies	44.00	79	78.00	34.00	-34.00	1156
Classroom 348	Fall	2018	7th Grade	Mathematics	52.00	21	73.00	21.00	-21.00	441
Classroom 352	Fall	2018	7th Grade	English	90.60	86	92.40	1.80	-1.80	3.24
Classroom 358	Fall	2018	6th Grade	Music	65.46	100	87.19	21.73	-21.73	472.1929
Classroom 359	Fall	2018	8th Grade	Mathematics	86.50	40	95.00	8.50	-8.50	72.25
Classroom 360	Fall	2018	7th Grade	Earth Science	26.30	18	88.90	62.60	-62.60	3918.76
Classroom 361	Fall	2018	8th Grade	Mathematics	11.00	27	72.50	61.50	-61.50	3782.25
Classroom 363	Fall	2018	8th Grade	Mathematics	24.30	76	88.80	64.50	-64.50	4160.25
Classroom 374	Fall	2018	6th Grade	Social Studies	0.00	23	95.00	95.00	-95.00	9025
Classroom 417	Fall	2018	7th Grade	Music	20.00	48	95.00	75.00	-75.00	5625

Number of Tests = N 17

Number of P-12 Students: Average % Improvement: 951 37.78

	-642.21
	L =Top Value (∑d/N)
٦	M =Middle value
	O =Bottom Value
	P =Square root of M/O
·	T = (L/P)
	∞ = 0.05
	T/Square Root of N =
	Effect

"X-Y" or "ED":

+	$\frac{\sum d}{N}$
L	$-\frac{1}{\sqrt{\sum d^2 - \frac{(\sum d)^2}{N}}}$
	$\sqrt{N(N-1)}$

Classican			Overde Level	Comtout Avec	Pre-	Number of P-12	Deet SCORE	"Y-X"		
Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	(X)	Students	Post-SCORE (Y)	Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 279		2018	12th Grade	Not indicated	70.00	60	90.00	20.00	-20.00	400
Classroom 286		2018	10th Grade	Art	15.00	30	98.00	83.00	-83.00	6889
Classroom 293		2018	9th Grade	English	51.00	72	60.00	9.00	-9.00	81
Classroom 308		2018	9th Grade	Mathematics	0.00	98	57.80	57.80	-57.80	3340.84
Classroom 334		2018	10th Grade	Social Studies	50.00		76.00	26.00	-26.00	676
Classroom 342	Fall	2018	11th Grade	Economics	44.00	20	60.00	16.00	-16.00	256
Classroom 343	Fall	2018	10th Grade	English	38.69	55	61.48	22.79	-22.79	519.3841
Classroom 347	Fall	2018	12th Grade	French	81.00	17	89.00	8.00	-8.00	64
Classroom 349	Fall	2018	9th Grade	English	22.00	108	75.90	53.90	-53.90	2905.21
Classroom 350	Fall	2018	10th Grade	Mathematics	44.00	58	88.00	44.00	-44.00	1936
Classroom 351	Fall	2018	10th Grade	Physics	45.40	105	85.20	39.80	-39.80	1584.04
Classroom 353	Fall	2018	11th Grade	English	32.00	32	53.00	21.00	-21.00	441
Classroom 355	Fall	2018	10th Grade	Social Studies	38.50	126	83.00	44.50	-44.50	1980.25
Classroom 356	Fall	2018	10th Grade	English	30.30	110	62.60	32.30	-32.30	1043.29
Classroom 357	Fall	2018	9th Grade	Biology	27.90		65.00	37.10	-37.10	1376.41
Classroom 368	Fall	2018	10th Grade	Social Studies	31.00	48	84.00	53.00	-53.00	2809
Classroom 370	Fall	2018	12th Grade	English	0.00	17	82.20	82.20	-82.20	6756.84
Classroom 375	Fall	2018	10th Grade	Mathematics	53.00	28	85.00	32.00	-32.00	1024
Classroom 376	Fall	2018	9th Grade	Social Studies	69.52	88	82.61	13.09	-13.09	171.3481
Classroom 377		2018	10th Grade	Social Studies	40.30	20	73.30	33.00	-33.00	1089
Classroom 378	Fall	2018	10th Grade	Social Studies	52.08	80	85.75	33.67	-33.67	1133.6689
Classroom 379	Fall	2018	10th Grade	Music	60.00	26	82.00	22.00	-22.00	484
Classroom 382		2018	9th Grade	Mathematics	25.77	72	55.13	29.36	-29.36	862.0096
Classroom 386	Fall	2018	12th Grade	English	65.00	9	81.00	16.00	-16.00	256
Classroom 396		2018	10th Grade	Health	27.74	59	94.49	66.75	-66.75	4454.895025
Classroom 403		2018	12th Grade	English	79.70	112	91.50	11.80	-11.80	139.24
Classroom 422	Fall	2018	9th Grade	Physical Education	78.93	20	94.64	15.71	-15.71	246.8041

Number of Tests = N	Number of P-12 Students:	Average % Improvement:	"X-Y" or "ED":	"(X-Y)^2" or "ED^2"
27	1549	34.21	-923.77	42919.23
			L =Top Value (∑d/N)	-34.21
			M =Middle value	11313.98
		Σd	O =Bottom Value	702.00
		N	P =Square root of M/O	4.01

Classroom Sample	Semester	Year	 Content Area Assessed	Pre- SCORE (X)	Number of P-12 Students		Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
]	$\int \Sigma_i$	$d^2 - (\Sigma)$	<u>d)</u> ²	∞ = 0.05	Critical T = 1.645
				1 1/		<u>λ</u>			Significant
					V I	N (N-1)		T/Square Root of N = Effect	-1.640

	Semester			Content Area Assessed	Pre- SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 286	Fall	2018	10th Grade	Art	15.00	30	98.00	83.00	-83.00	6889
Classroom 354	Fall	2018	Kindergarten	Music	50.00	123	100.00	50.00	-50.00	2500
Classroom 358	Fall	2018	6th Grade	Music	65.46	100	87.19	21.73	-21.73	472.1929
Classroom 379	Fall	2018	10th Grade	Music	60.00	26	82.00	22.00	-22.00	484
Classroom 417	Fall	2018	7th Grade	Music	20.00	48	95.00	75.00	-75.00	5625

umber of Tests = N	Number of P-12 Students:	Average % Improvement:	
5	327	50.35	
			L
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		$\sum d$	(
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	t =		۰
	/ -	$(\Sigma d)^2$	
	$\int \Sigma a$	- (24)	
	1 1/	N	
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	N(N-1)	٦
	y 1	V (1V - 1)	F

:	"X-Y" or "ED":	"(X-Y)^2" or "ED^2"
	-251.73	15970.19
	L =Top Value (∑d/N)	-50.35
	M =Middle value	3296.59
	O =Bottom Value	20.00
	P =Square root of M/O	12.84
	T = (L/P)	-3.92
	∞ = 0.05	Critical T = 1.645
		Significant
	T/Square Root of N =	
	Effect	-1.754

					Pre-	Number				
Classroom			Grade-Level	Content Area	SCORE	of P-12	Post-SCORE	"Y-X"		
Sample	Semester	Year	Assessed	Assessed	(X)	Students	(Y)	Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 282	Fall	2018	5th Grade	Language Arts	71.15	26	87.60	16.45	-16.45	270.6025
Classroom 285	Fall	2018	1st Grade	Language Arts	23.60	24	83.60	60.00	-60.00	3600
Classroom 289	Fall	2018	5th Grade	Language Arts	43.00	25	98.00	55.00	-55.00	3025
Classroom 293	Fall	2018	9th Grade	English	51.00		60.00	9.00	-9.00	81
Classroom 294	Fall	2018	2nd Grade	Language Arts	52.08	24	89.13	37.05	-37.05	1372.7025
Classroom 302		2018	3rd Grade	Language Arts	73.60		92.00	18.40	-18.40	338.56
Classroom 307	Fall	2018	2nd Grade	Language Arts	26.66		83.00	56.34	-56.34	3174.1956
Classroom 310	Fall	2018	4th Grade	Language Arts	50.00	26	67.00	17.00	-17.00	289
Classroom 311	Fall	2018	5th Grade	Language Arts	14.80	27	100.00	85.20	-85.20	7259.04
Classroom 315	Fall	2018	2nd Grade	Language Arts	52.00	5	88.00	36.00	-36.00	1296
Classroom 316	Fall	2018	5th Grade	Language Arts	48.00	28	72.50	24.50	-24.50	600.25
Classroom 317	Fall	2018	5th Grade	Language Arts	59.38	24	79.55	20.17	-20.17	406.8289
Classroom 321	Fall	2018	5th Grade	Language Arts	38.00	22	58.00	20.00	-20.00	400
Classroom 324	Fall	2018	7th Grade	English	34.05	123	76.64	42.59	-42.59	1813.9081
Classroom 332	Fall	2018	5th Grade	Language Arts	66.67	28	79.01	12.34	-12.34	152.2756
Classroom 340	Fall	2018	4th Grade	Language Arts	74.00	25	85.00	11.00	-11.00	121
Classroom 341	Fall	2018	2nd Grade	Language Arts	73.00	4	97.00	24.00	-24.00	576
Classroom 343	Fall	2018	10th Grade	English	38.69	55	61.48	22.79	-22.79	519.3841
Classroom 344	Fall	2018	6th Grade	Language Arts	75.86	29	91.85	15.99	-15.99	255.6801
Classroom 349	Fall	2018	9th Grade	English	22.00	108	75.90	53.90	-53.90	2905.21
Classroom 352	Fall	2018	7th Grade	English	90.60	86	92.40	1.80	-1.80	3.24
Classroom 353	Fall	2018	11th Grade	English	32.00	32	53.00	21.00	-21.00	441
Classroom 356	Fall	2018	10th Grade	English	30.30	110	62.60	32.30	-32.30	1043.29
Classroom 367	Fall	2018	Kindergarten	Language Arts	63.00	23	81.00	18.00	-18.00	324
Classroom 370	Fall	2018	12th Grade	English	0.00	17	82.20	82.20	-82.20	6756.84
Classroom 372	Fall	2018	Kindergarten	Language Arts	6.00	40	86.00	80.00	-80.00	6400
Classroom 386	Fall	2018	12th Grade	English	65.00	9	81.00	16.00	-16.00	256
Classroom 387	Fall	2018	5th Grade	Language Arts	0.00	15	73.00	73.00	-73.00	5329
Classroom 397	Fall	2018	Kindergarten	Language Arts	70.50	19	90.00	19.50	-19.50	380.25
Classroom 398	Fall	2018	Kindergarten	Language Arts	22.00	22	81.00	59.00	-59.00	3481
Classroom 403	Fall	2018	12th Grade	English	79.70	112	91.50	11.80	-11.80	139.24
Classroom 404	Fall	2018	Kindergarten	Language Arts	25.00	24	90.00	65.00	-65.00	4225
Classroom 405	Fall	2018	5th Grade	Language Arts	31.00	25	67.50	36.50	-36.50	1332.25
Classroom 408	Fall	2018	2nd Grade	Language Arts	71.70	20	89.20	17.50	-17.50	306.25
Classroom 411	Fall	2018	4th Grade	Language Arts	49.00	23	94.00	45.00	-45.00	2025

-1.485

T/Square Root of N = Effect

Classroom Sample	Semester	 Grade-Level Assessed er of Tests = N 35	Pre- SCORE (X) er of P-12	Number of P-12 Students Students: 1293		"Y-X" Change mprovement: 34.75	"X-Y" or "ED" "X-Y" or "ED": -1216.32	"(X-Y)^2" or "ED^2" "(X-Y)^2" or "ED^2" 60899.00
							L =Top Value (∑d/N)	-34.75
							M =Middle value	18629.44
					Σd		O =Bottom Value	1190.00
							P =Square root of M/O	3.96
			t =			->2	T = (L/P)	-8.78
				$\int \Sigma_i$	$d^2 - (\Sigma)$	$d)^2$	∞ = 0.05	Critical T = 1.645
			-	۱ <i>/</i> - ۱	Λ	I		Significant

N (N-1)

Classroom Sample	Semester			Content Area Assessed	Pre- SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 325	Fall	2018	7th Grade	Health	59.00	29	74.00	15.00	-15.00	225
Classroom 396	Fall	2018	10th Grade	Health	27.74	59	94.49	66.75	-66.75	4454.895025
Classroom 419	Fall	2018	1st Grade	Health	56.00	23	94.00	38.00	-38.00	1444
Classroom 422	Fall	2018	9th Grade	Physical Education	78.93	20	94.64	15.71	-15.71	246.8041

Number of P-12 Students: Average % Improvement: 33.86

"X-Y" or "ED":	"(X-Y)^2" or "ED^2"
-135.46	6370.70
L =Top Value ($\sum d/N$)	-33.86
M =Middle value	1783.68
O =Bottom Value	12.00
P =Square root of M/O	12.19
T = (L/P)	-2.78
∞ = 0.05	Critical T = 1.645
	Significant
T/Square Root of N =	
Effect	-1.389

t -	$\frac{\sum d}{N}$
-	$\int \Sigma d^2 - \frac{(\Sigma d)^2}{N}$
	$\sqrt{N(N-1)}$

					Pre-	Number				
Classroom			Grade-Level	Content Area	SCORE	of P-12	Post-SCORE	"Y-X"		
Sample	Semester	Year	Assessed	Assessed	(X)	Students	(Y)	Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
	Fall	2018	Kindergarten	Mathematics	0.00	24	68.18	68.18	-68.18	4648.5124
	Fall	2018	1st Grade	Mathematics	84.00	22	93.00	9.00	-9.00	81
	Fall	2018	1st Grade	Mathematics	40.00	18	80.00	40.00	-40.00	1600
Classroom 290		2018	1st Grade	Mathematics	39.00	21	84.00	45.00	-45.00	2025
	Fall	2018	3rd Grade	Mathematics	45.00	17	59.00	14.00	-14.00	196
Classroom 295		2018	1st Grade	Mathematics	83.00	23	89.00	6.00	-6.00	36
Classroom 296		2018	5th Grade	Mathematics	40.00	27	76.00	36.00	-36.00	1296
Classroom 299		2018	3rd Grade	Mathematics	70.00	22	81.80	11.80	-11.80	139.24
Classroom 300		2018	2nd Grade	Mathematics	25.00	8	83.00	58.00	-58.00	3364
	Fall	2018	1st Grade	Mathematics	43.00	23	79.00	36.00	-36.00	1296
	Fall	2018	1st Grade	Mathematics	51.00	24	93.00	42.00	-42.00	1764
Classroom 306		2018	Kindergarten	Mathematics	85.00	20	87.00	2.00	-2.00	1764
Classroom 308		2018	9th Grade	Mathematics	0.00	98	57.80	57.80	-57.80	3340.84
Classroom 318		2018	4th Grade	Mathematics	68.65	21	86.50	17.85	-17.85	318.6225
Classroom 319		2018	5th Grade	Mathematics	91.25	27	93.75	2.50	-2.50	6.25
	Fall	2018	4th Grade		41.56	20	74.69	33.13	-33.13	1097.5969
		2018		Mathematics	86.00	25	90.00	4.00		
Classroom 330			Kindergarten	Mathematics					-4.00	16 16
Classroom 335		2018	1st Grade	Mathematics	51.00		55.00	4.00	-4.00 -7.55	
	Fall	2018	Kindergarten	Mathematics	81.94	24	89.49	7.55		57.0025
	Fall	2018	3rd Grade	Mathematics	53.50	21	55.90	2.40	-2.40	5.76
	Fall	2018	4th Grade	Mathematics	53.00	28	95.00	42.00	-42.00	1764
	Fall	2018	11th Grade	Mathematics	44.00	20	60.00	16.00	-16.00	256
Classroom 345		2018	2nd Grade	Mathematics	83.00	24	90.00	7.00	-7.00	49
Classroom 348		2018	7th Grade	Mathematics	52.00	21	73.00	21.00	-21.00	441
Classroom 350		2018	10th Grade	Mathematics	44.00	58	88.00	44.00	-44.00	1936
Classroom 359		2018	8th Grade	Mathematics	86.50	40	95.00	8.50	-8.50	72.25
	Fall	2018	8th Grade	Mathematics	11.00	27	72.50	61.50	-61.50	3782.25
Classroom 363		2018	8th Grade	Mathematics	24.30	76	88.80	64.50	-64.50	4160.25
	Fall	2018	Kindergarten	Mathematics	27.38	21	73.80	46.42	-46.42	2154.8164
Classroom 373		2018	3rd Grade	Mathematics	50.00	16	59.00	9.00	-9.00	81
Classroom 375		2018	10th Grade	Mathematics	53.00	28	85.00	32.00	-32.00	1024
Classroom 380	Fall	2018	2nd Grade	Mathematics	67.00	20	88.00	21.00	-21.00	441
	Fall	2018	1st Grade	Mathematics	87.00	25	94.00	7.00	-7.00	49
Classroom 382	Fall	2018	9th Grade	Mathematics	25.77	72	55.13	29.36	-29.36	862.0096
Classroom 383	Fall	2018	1st Grade	Mathematics	76.00	24	89.00	13.00	-13.00	169
Classroom 384	Fall	2018	1st Grade	Mathematics	57.00	25	71.00	14.00	-14.00	196
Classroom 388	Fall	2018	2nd Grade	Mathematics	73.00	18	96.00	23.00	-23.00	529
Classroom 390	Fall	2018	Kindergarten	Mathematics	79.58	24	87.91	8.33	-8.33	69.3889
Classroom 391	Fall	2018	3rd Grade	Mathematics	53.60	9	76.00	22.40	-22.40	501.76
Classroom 392	Fall	2018	1st Grade	Mathematics	63.81	22	86.50	22.69	-22.69	514.8361

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre- SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 393		2018	1st Grade	Mathematics	66.67	25	76.67	10.00	-10.00	` '
Classroom 395		2018	Kindergarten	Mathematics	71.97	22	84.85	12.88	-12.88	
Classroom 401		2018	2nd Grade	Mathematics	85.00		93.00	8.00	-8.00	
Classroom 402		2018	2nd Grade	Mathematics	56.00		59.00	3.00	-3.00	
Classroom 406		2018	4th Grade	Mathematics	40.00	_	99.56	59.56	-59.56	
Classroom 409		2018	3rd Grade	Mathematics	60.00		86.00	26.00	-26.00	
Classroom 412		2018	3rd Grade	Mathematics	38.00	_	68.00	30.00	-30.00	
Classroom 413		2018	2nd Grade	Mathematics	69.00		91.00	22.00	-22.00	
Classroom 415	Fall	2018	2nd Grade	Mathematics	54.50		79.10	24.60	-24.60	605.16
Classroom 416	Fall	2018	2nd Grade	Mathematics	72.51	21	87.00	14.49	-14.49	209.9601
Classroom 418	Fall	2018	4th Grade	Mathematics	46.50	28	50.20	3.70	-3.70	13.69
Classroom 423		2018	1st Grade	Mathematics	81.00	25	86.00	5.00	-5.00	
Classroom 424		2018	1st Grade	Mathematics	60.00	22	95.00	35.00	-35.00	
Classroom 425	Fall	2018	4th Grade	Mathematics	85.00	4	95.00	10.00	-10.00	
Classroom 426		2018	3rd Grade	Mathematics	59.00	22	87.00	28.00	-28.00	784
Classroom 427	Fall	2018	Kindergarten	Mathematics	45.00	22	54.00	9.00	-9.00	81

1434

Number of P-12 Students: Average % Improvement: 23.41

"Y Y" "ED"	/\/ \/\ \A\
"X-Y" or "ED":	"(X-Y)^2" or "ED^2"
-1311.14	49350.48
L =Top Value (∑d/N)	-23.41
M =Middle value	18652.48
O =Bottom Value	3080.00
P =Square root of M/O	2.46
T = (L/P)	-9.51
∞ = 0.05	Critical T = 1.645
	Significant
T/Square Root of N =	
Effect	-1.271

<i>t</i>	$-\frac{\sum d}{N}$
	$\int \sum d^2 - \frac{(\sum d)^2}{N}$
	$\sqrt{N(N-1)}$

Classroom			Grade-Level	Content Area			Post-SCORE			
Sample	Semester	Year	Assessed	Assessed	(X)	Students	(Y)	Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 298	Fall	2018	4th Grade	Spanish	41.67	25	66.67	25.00	-25.00	625
Classroom 347	Fall	2018	12th Grade	French	81.00	17	89.00	8.00	-8.00	64

Number of P-12 Students: Average % Improvement: 42

16.50

"X-Y" or "ED":	"(X-Y)^2" or "ED^2"
-33.00	689.00
L =Top Value (∑d/N)	-16.50
M =Middle value	144.50
O =Bottom Value	2.00
P =Square root of M/O	8.50
T = (L/P)	-1.94
∞ = 0.05	Critical T = 1.645
	Significant
T/Square Root of N =	
Effect	-1.373

t -	$\frac{\sum d}{N}$
-	$\int \Sigma d^2 - \frac{(\Sigma d)^2}{N}$
	$\sqrt{\frac{N(N-1)}{N(N-1)}}$

					Pre-	Number				
Classroom				Content Area	SCORE	of P-12	Post-SCORE	"Y-X"		
Sample	Semester		Assessed	Assessed	(X)	Students	(Y)	Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 280		2018	1st Grade	Integrated Science	83.00	22	94.00	11.00	-11.00	121
Classroom 284		2018	1st Grade	Integrated Science	75.00	21	90.00	15.00	-15.00	225
Classroom 292		2018	7th Grade	Chemistry	54.00	135	76.00	22.00	-22.00	484
Classroom 297	Fall	2018	Kindergarten	Integrated Science	22.50	26	64.80	42.30	-42.30	1789.29
Classroom 304	Fall	2018	1st Grade	Integrated Science	64.00	20	95.00	31.00	-31.00	961
Classroom 313	Fall	2018	1st Grade	Biology	70.53	27	92.40	21.87	-21.87	478.2969
Classroom 320		2018	Kindergarten	Integrated Science	21.10	19	55.00	33.90	-33.90	1149.21
Classroom 326	Fall	2018	3rd Grade	Integrated Science	41.00	23	81.00	40.00	-40.00	1600
Classroom 327	Fall	2018	4th Grade	Integrated Science	42.00	23	72.00	30.00	-30.00	900
Classroom 328	Fall	2018	Kindergarten	Integrated Science	61.36		81.81	20.45	-20.45	418.2025
Classroom 329	Fall	2018	Kindergarten	Integrated Science	70.00	19	94.70	24.70	-24.70	610.09
Classroom 331	Fall	2018	5th Grade	Integrated Science	54.00	26	95.00	41.00	-41.00	1681
Classroom 333	Fall	2018	Kindergarten	Integrated Science	50.00	20	61.00	11.00	-11.00	121
Classroom 351	Fall	2018	10th Grade	Physics	45.40	105	85.20	39.80	-39.80	1584.04
Classroom 357	Fall	2018	9th Grade	Biology	27.90		65.00	37.10	-37.10	1376.41
Classroom 360	Fall	2018	7th Grade	Earth Science	26.30	18	88.90	62.60	-62.60	3918.76
Classroom 362	Fall	2018	1st Grade	Integrated Science	27.00	23	67.00	40.00	-40.00	1600
Classroom 366	Fall	2018	Kindergarten	Integrated Science	26.60	25	73.30	46.70	-46.70	2180.89
Classroom 369	Fall	2018	4th Grade	Integrated Science	45.00	21	71.00	26.00	-26.00	676
Classroom 385	Fall	2018	Kindergarten	Integrated Science	86.76	26	96.30	9.54	-9.54	91.0116
Classroom 394	Fall	2018	3rd Grade	Integrated Science	36.11	45	63.02	26.91	-26.91	724.1481
Classroom 399	Fall	2018	Kindergarten	Integrated Science	77.00	22	95.00	18.00	-18.00	324
Classroom 400	Fall	2018	1st Grade	Integrated Science	46.00	20	86.00	40.00	-40.00	1600
Classroom 407	Fall	2018	3rd Grade	Integrated Science	48.00	24	72.00	24.00	-24.00	576
Classroom 410	Fall	2018	1st Grade	Integrated Science	18.00	21	72.00	54.00	-54.00	2916
Classroom 414	Fall	2018	1st Grade	Integrated Science	66.00	26	79.00	13.00	-13.00	169
Classroom 420		2018	4th Grade	Integrated Science	44.00	24	57.00	13.00	-13.00	169

Number of Tests = N	Number of P-12 Students:	Average % Improvement:	"X-Y" or "ED":	"(X-Y)^2" or "ED^2"
27	829	29.44	-794.87	28443.35
			L =Top Value ($\sum d/N$)	-29.44
			M =Middle value	5042.67
		Σd	O =Bottom Value	702.00
		N/	P =Square root of M/O	2.68
	t =		T = (L/P)	-10.98

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre- SCORE (X)	Number of P-12 Students		Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
					,	\sum_{i}	$d^2 - \frac{(\Sigma)}{\Lambda}$	<u>d)</u> ² I		Critical T = 1.645 Significant
						V	N (N-1)		T/Square Root of N = Effect	-2.114

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre- SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 288	Fall	2018	3rd Grade	Social Studies	51.00	23	75.00	24.00	-24.00	576
Classroom 303	Fall	2018	4th Grade	Social Studies	47.00	24	79.00	32.00	-32.00	1024
Classroom 309	Fall	2018	6th Grade	Social Studies	27.00	51	78.00	51.00	-51.00	2601
Classroom 312	Fall	2018	Kindergarten	Social Studies	59.00	19	79.00	20.00	-20.00	400
Classroom 314	Fall	2018	Kindergarten	Social Studies	48.00		87.00	39.00	-39.00	1521
Classroom 323	Fall	2018	Kindergarten	Social Studies	65.00	21	84.00	19.00	-19.00	361
Classroom 334	Fall	2018	10th Grade	Social Studies	50.00		76.00	26.00	-26.00	676
Classroom 336	Fall	2018	4th Grade	Social Studies	31.56	28	57.79	26.23	-26.23	688.0129
Classroom 346	Fall	2018	8th Grade	Social Studies	44.00	79	78.00	34.00	-34.00	1156
Classroom 355	Fall	2018	10th Grade	Social Studies	38.50	126	83.00	44.50	-44.50	1980.25
Classroom 364	Fall	2018	4th Grade	Social Studies	15.33	30	67.00	51.67	-51.67	2669.7889
Classroom 365	Fall	2018	5th Grade	Social Studies	10.00	28	77.00	67.00	-67.00	4489
Classroom 368	Fall	2018	10th Grade	Social Studies	31.00	48	84.00	53.00	-53.00	2809
Classroom 374	Fall	2018	6th Grade	Social Studies	0.00	23	95.00	95.00	-95.00	9025
Classroom 376	Fall	2018	9th Grade	Social Studies	69.52	88	82.61	13.09	-13.09	171.3481
Classroom 377	Fall	2018	10th Grade	Social Studies	40.30	20	73.30	33.00	-33.00	1089
Classroom 378	Fall	2018	10th Grade	Social Studies	52.08	80	85.75	33.67	-33.67	1133.6689
Classroom 389	Fall	2018	5th Grade	Social Studies	15.00	29	70.00	55.00	-55.00	3025
Classroom 421	Fall	2018	5th Grade	Social Studies	18.41	26	86.35	67.94	-67.94	4615.8436

Number of P-12 Students: Average % Improvement: 813 41.32

+	$\frac{\Sigma d}{N}$
t	$=\frac{1}{\sqrt{\sum d^2 - \frac{(\sum d)^2}{N}}}$
	$\sqrt{\frac{N(N-1)}{N(N-1)}}$

"X-Y" or "ED":	"(X-Y)^2" or "ED^2"
-785.10	40010.91
L =Top Value (∑d/N)	-41.32
M =Middle value	7569.75
O =Bottom Value	342.00
P =Square root of M/O	4.70
T = (L/P)	-8.78
∞ = 0.05	Critical T = 1.645
	Significant
T/Square Root of N =	
Effect	-2.015