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Operation Tone-Up
 Fall 2010 Program Evaluation
 EL Monte & RE Miller School Districts

Mean Score Improvement & Percentage Improvement by Classroom

School Type	School District	School	Classroom/Teacher	Student Count	Knowledge of Nutrients		Push-Ups		Sit-Ups		Systolic Blood Pressure		Diastolic Blood Pressure		Resting Heart Rate				
					Mean Change	Mean % Change	Mean Change	Mean % Change	Mean Change	Mean % Change	Mean Change	Mean % Change	Mean Change	Mean % Change	Mean Change	Mean % Change			
Study Schools	EL Monte	Rio Vista	Vales	10	3.60	81.8%	11.40	335.3%	33.50	349.0%	-11.30	-10.1%	-11.60	-15.3%	-14.50	-17.5%			
			O'Leary	12	3.00	65.5%	9.50	422.2%	18.33	93.6%	-8.50	-7.4%	-6.08	-8.7%	-7.75	-9.2%			
			Thomas	28	4.79	127.6%	10.57	897.0%	23.00	191.7%	-8.25	-7.1%	-6.18	-8.4%	-4.64	-5.7%			
			Rio Vista Total	50	4.12	101.0%	10.48	557.4%	23.98	179.8%	-8.92	-7.7%	-7.24	-9.9%	-7.36	-8.9%			
			Wright	Tran	26	3.79	128.2%	4.13	105.3%	9.58	64.6%	0.58	0.5%	-1.96	-3.0%	-8.88	-9.7%		
				Wilson	25	4.88	176.8%	6.60	351.1%	15.56	1440.7%	-9.28	-8.3%	-9.08	-13.2%	-7.44	-8.8%		
				Marshall	27	5.59	155.7%	14.44	348.2%	19.56	83.0%	-4.81	-4.3%	-5.22	-7.8%	-0.04	0.0%		
				Wright Total	78	4.79	153.6%	8.61	258.5%	15.09	112.6%	-4.58	-4.1%	-5.46	-8.2%	-5.26	-6.1%		
				Cleminson	Wilson	27	4.96	170.0%	10.71	321.3%	21.88	193.7%	-10.70	-9.5%	-7.83	-11.0%	-9.35	-11.0%	
					Campbell	27	3.70	92.6%	4.50	688.2%	46.00	664.2%	-4.54	-4.2%	-6.58	-9.9%	0.46	0.6%	
					Cleminson Total	54	4.29	123.0%	7.48	385.6%	34.65	385.8%	-7.55	-6.9%	-7.19	-10.5%	-4.34	-5.4%	
					Rio Hondo	Kane	30	4.17	111.0%	8.21	884.6%	62.75	354.2%	3.86	3.5%	-3.10	-4.6%	-3.32	-3.5%
						Burt	29	2.88	69.4%	12.00	439.4%	15.96	85.2%	-6.46	-5.9%	-6.15	-9.1%	-2.58	-3.0%
						Rio Hondo Total	59	3.56	90.3%	10.04	558.8%	40.22	221.0%	-1.02	-0.9%	-4.55	-6.7%	-2.96	-3.3%
					Cherrylee	Richenberger	29	2.32	95.6%	5.93	108.1%	22.70	237.6%						
					Arellano	30	1.10	28.4%	-3.77	-20.5%	14.67	73.7%							
					Cherrylee Total	59	1.69	53.3%	0.82	6.7%	18.47	123.2%							
				Shirpsr	Gonzalez	26	3.42	105.1%				3.58	3.1%	2.54	3.6%	-1.17	-1.3%		
				New Lexington	Fletcher/Lemus	59	2.98	91.1%	9.16	164.2%	14.60	72.9%	-12.00	-10.6%	-10.85	-15.5%	-0.83	-0.9%	
				Potrero	Graf	26			2.00	23.5%	3.88	14.6%	0.25	0.2%	-0.75	-1.1%	1.13	1.4%	
			Cortada	Haupt	28			6.48	192.3%	21.59	477.9%								
			Gidley	Castillo	41	4.00	93.0%	4.40	69.8%	-5.70	-23.2%								
			Legore	Multiple	106	1.59	40.6%	3.98	107.1%	6.43	66.9%								
			EL Monte Total:		586	3.38	95.6%	6.86	148.3%	20.00	137.8%	-5.32	-4.7%	-5.77	-8.3%	-3.60	-4.2%		
	RE Miller	R.E. Miller	Giese	18	5.73	307.1%	10.06	171.3%	15.31	117.2%	2.12	2.2%	4.71	8.5%	-7.88	-9.5%			
			Kauppila	23	4.62	170.2%	10.36	228.0%	17.95	148.5%	-1.43	-1.4%	4.57	8.1%	-10.30	-11.9%			
			McDonald	22	4.68	245.2%	10.85	301.4%	22.25	251.4%	-3.00	-2.9%	0.18	0.3%	-5.09	-5.7%			
			Rich	28	4.50	117.4%	8.56	108.5%	16.33	95.2%	-3.15	-3.1%	-1.54	-2.6%	-5.12	-6.3%			
			Villarreal	23	3.05	80.6%	7.30	115.1%	21.52	137.9%	1.96	1.9%	4.35	7.2%	-9.83	-11.5%			
				Ward	24	4.25	202.4%	9.05	157.9%	14.32	128.6%	2.41	2.5%	0.32	0.5%	-4.36	-5.1%		
			R.E. Miller Total:	138	4.44	161.3%	9.26	160.3%	17.97	135.9%	-0.35	-0.4%	1.92	3.2%	-7.05	-8.3%			
			Study School Total:	724	3.61	107.5%	7.40	151.4%	19.55	137.4%	-3.89	-3.6%	-3.55	-5.3%	-4.60	-5.4%			
Control School	EL Monte	Wilkerson	Almance	24	2.21	55.8%	0.96	69.7%	8.67	161.2%	-1.50	-1.3%	0.17	0.2%	2.46	2.8%			
			All Other	48	0.77	21.4%	4.65	65.8%	5.44	60.4%									
			Control School Total:	72	1.25	33.6%	3.42	66.1%	6.51	83.6%	-1.50	-1.3%	0.17	0.2%	2.46	2.8%			

Exhibit II - Documentary Schools vs Control School

Operation Tone-Up

Fall 2010 Program Evaluation

EL Monte School District (5th Graders)

Mean Score Improvement & Percentage Improvement by Classroom

School Type	School	Classroom/Teacher	Student Count	Knowledge of Nutrients		Push-Ups		Sit-Ups		Systolic Blood Pressure		Diastolic Blood Pressure		Resting Heart Rate		
				Mean Change	Mean % Change	Mean Change	Mean % Change	Mean Change	Mean % Change	Mean Change	Mean % Change	Mean Change	Mean % Change	Mean Change	Mean % Change	
Documentary Schools	Rio Vista	Vales	10	3.60	81.8%	11.40	335.3%	33.50	349.0%	-11.30	-10.1%	-11.60	-15.3%	-14.50	-17.5%	
		O'Leary	12	3.00	65.5%	9.50	422.2%	18.33	93.6%	-8.50	-7.4%	-6.08	-8.7%	-7.75	-9.2%	
		Thomas	28	4.79	127.6%	10.57	897.0%	23.00	191.7%	-8.25	-7.1%	-6.18	-8.4%	-4.64	-5.7%	
		Rio Vista Total:	50	4.12	101.0%	10.48	557.4%	23.98	179.8%	-8.92	-7.7%	-7.24	-9.9%	-7.36	-8.9%	
		Wright	Tran	26	3.79	128.2%	4.13	105.3%	9.58	64.6%	0.58	0.5%	-1.96	-3.0%	-8.88	-9.7%
			Wilson	25	4.88	176.8%	6.60	351.1%	15.56	1440.7%	-9.28	-8.3%	-9.08	-13.2%	-7.44	-8.8%
			Marshall	27	5.59	155.7%	14.44	348.2%	19.56	83.0%	-4.81	-4.3%	-5.22	-7.8%	-0.04	0.0%
	Wright Total:	78	4.79	153.6%	8.61	258.5%	15.09	112.6%	-4.58	-4.1%	-5.46	-8.2%	-5.26	-6.1%		
	Documentary School Total:	128	4.52	129.3%	9.35	339.5%	18.62	139.1%	-6.30	-5.6%	-6.17	-8.9%	-6.10	-7.2%		
Control School	Wilkerson	Almance	24	2.21	55.8%	0.96	69.7%	8.67	161.2%	-1.50	-1.3%	0.17	0.2%	2.46	2.8%	
		All Other	48	0.77	21.4%	4.65	65.8%	5.44	60.4%							
	Control School Total:	72	1.25	33.6%	3.42	66.1%	6.51	83.6%	-1.50	-1.3%	0.17	0.2%	2.46	2.8%		
	Vales & Wilson Total:	35	4.51	139.8%	7.97	344.4%	20.69	588.6%	-9.86	-8.8%	-9.80	-13.8%	-9.46	-11.3%		
	Almance Total:	24	2.21	55.8%	0.96	69.7%	8.67	161.2%	-1.50	-1.3%	0.17	0.2%	2.46	2.8%		

Exhibit III

**Operation Tone-Up
Fall 2010 Program Evaluation
EL Monte & RE Miller School Districts**

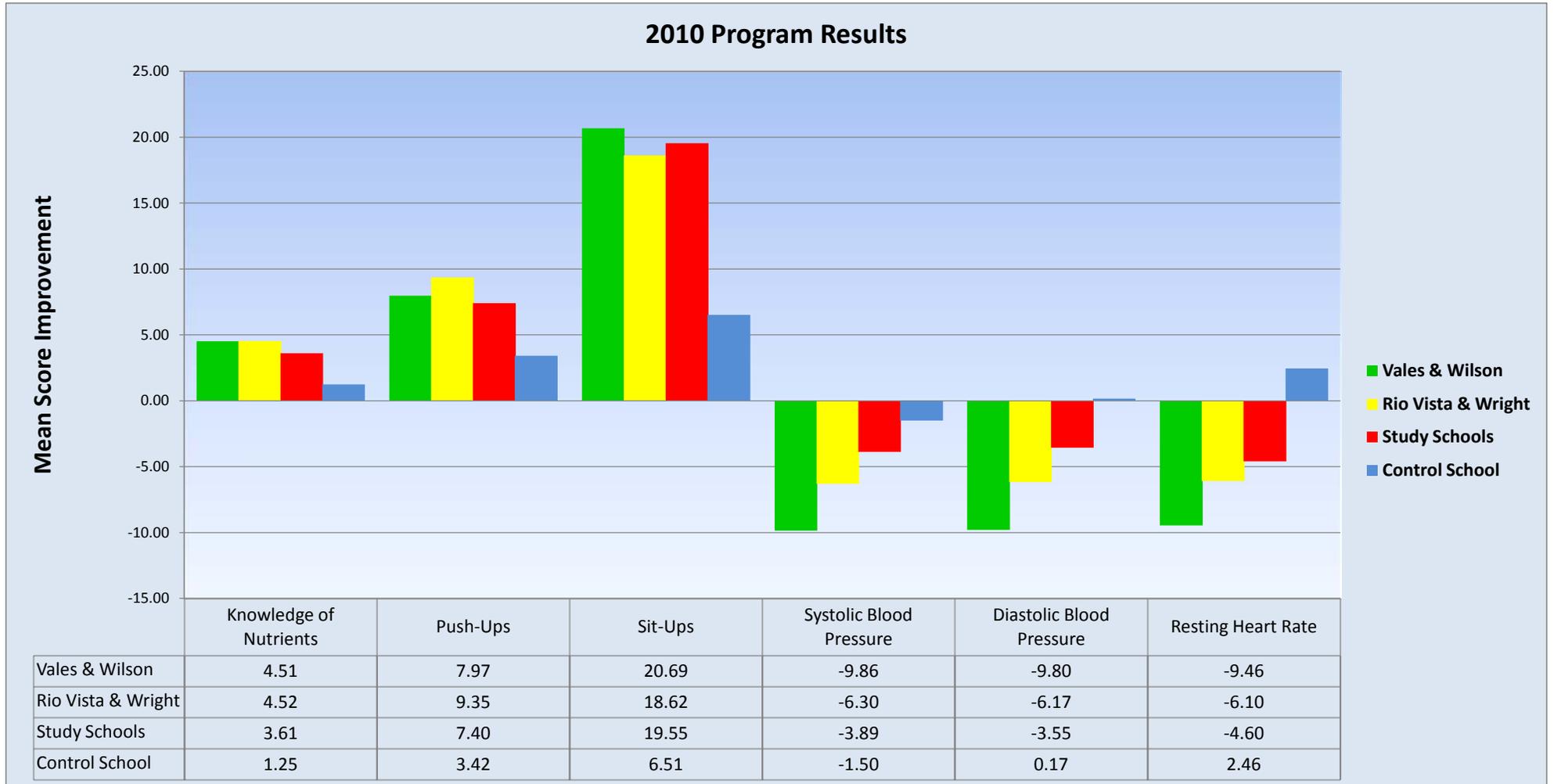


Exhibit IV, Sheet I**Pre & Post Test Scores for Knowledge of Nutrients****Operation Tone-Up****Fall 2010 Program Evaluation****EL Monte & RE Miller School Districts****Pre & Post Test Scores for Study Schools by Grade Level**

Grade Level	Student Count	(a) Pre Test Mean Score	(b) Post Test Mean Score	(c) = (b) - (a) Mean Change	(d) = (c) / (a) Mean % Change
3	78	2.17	6.92	4.76	219.5%
4	43	3.81	7.67	3.86	101.2%
5	428	3.54	6.92	3.38	95.6%
Total	549	3.36	6.98	3.61	107.5%

Pre & Post Test Scores for Study Schools by Gender

Gender	Student Count	(a) Pre Test Mean Score	(b) Post Test Mean Score	(c) = (b) - (a) Mean Change	(d) = (c) / (a) Mean % Change
Female	185	3.69	6.72	3.03	82.0%
Male	238	3.37	7.05	3.68	109.1%

Pre & Post Test Scores by Study Schools vs Control School

School Type	Student Count	(a) Pre Test Mean Score	(b) Post Test Mean Score	(c) = (b) - (a) Mean Change	(d) = (c) / (a) Mean % Change
Control	72	3.72	4.97	1.25	33.6%
Study	549	3.36	6.98	3.61	107.5%

Exhibit IV, Sheet II

Pre & Post Test Scores for Knowledge of Nutrients

Operation Tone-Up

Fall 2010 Program Evaluation

EL Monte & RE Miller School Districts

Pre & Post Test Scores by Classroom

School	Classroom	Student Count	(a) Pre Test Mean Score	(b) Post Test Mean Score	(c) = (b) - (a) Mean Change	(d) = (c) / (a) Mean % Change
Rio Vista	O'Leary	12	4.58	7.58	3.00	65.5%
	Thomas	28	3.75	8.54	4.79	127.6%
	Vales	10	4.40	8.00	3.60	81.8%
Rio Vista Total		50	4.08	8.20	4.12	101.0%
Wright	Marshall	27	3.59	9.19	5.59	155.7%
	Tran	24	2.96	6.75	3.79	128.2%
	Wilson	25	2.76	7.64	4.88	176.8%
Wright Total		76	3.12	7.91	4.79	153.6%
Cleminson	Campbell	27	4.00	7.70	3.70	92.6%
	Wilson	24	2.92	7.88	4.96	170.0%
Cleminson Total		51	3.49	7.78	4.29	123.0%
Rio Hondo	Burt	26	4.15	7.04	2.88	69.4%
	Kane	29	3.76	7.93	4.17	111.0%
Rio Hondo Total		55	3.95	7.51	3.56	90.3%
Cherrylee	Richenberger	28	2.43	4.75	2.32	95.6%
	Arellano	30	3.87	4.97	1.10	28.4%
Cherrylee Total		58	3.17	4.86	1.69	53.3%
Shirpser	Gonzalez	24	3.25	6.67	3.42	105.1%
New Lexington	Fletcher/Lemus	55	3.27	6.25	2.98	91.1%
	Potrero					
	Cortada					
	Gidley	10	4.30	8.30	4.00	93.0%
	Legore	49	3.92	5.51	1.59	40.6%
R.E. Miller	Giese	15	1.87	7.60	5.73	307.1%
	Kauppila	21	2.71	7.33	4.62	170.2%
	McDonald	22	1.91	6.59	4.68	245.2%
	Rich	24	3.83	8.33	4.50	117.4%
	Villarreal	19	3.79	6.84	3.05	80.6%
	Ward	20	2.10	6.35	4.25	202.4%
R.E Miller Total		121	2.75	7.19	4.44	161.3%
Wilkerson	Almance	24	3.96	6.17	2.21	55.8%
	All Other	48	3.60	4.38	0.77	21.4%
Wilkerson Total		72	3.72	4.97	1.25	33.6%

Exhibit V, Sheet I

Pre & Post Test Scores for Push-Ups & Sit-Ups

Operation Tone-Up

Fall 2010 Program Evaluation

EL Monte & RE Miller School Districts

Pre & Post Test Scores for Study Schools by Grade Level

Grade Level	Push-Ups					Sit-Ups				
	Student Count	(a) Pre Test Mean Score	(b) Post Test Mean Score	(c) = (b) - (a) Mean Change	(d) = (c) / (a) Mean % Change	Student Count	(e) Pre Test Mean Score	(f) Post Test Mean Score	(g) = (f) - (e) Mean Change	(h) = (g) / (e) Mean % Change
3	80	4.90	14.96	10.06	205.4%	80	11.21	28.71	17.50	156.1%
4	50	7.18	15.16	7.98	111.1%	50	16.44	35.16	18.72	113.9%
5	453	4.63	11.49	6.86	148.3%	454	14.51	34.51	20.00	137.8%
Total	583	4.89	12.28	7.40	151.4%	584	14.22	33.77	19.55	137.4%

Pre & Post Test Scores for Study Schools by Gender

Gender	Push-Ups					Sit-Ups				
	Student Count	(a) Pre Test Mean Score	(b) Post Test Mean Score	(c) = (b) - (a) Mean Change	(d) = (c) / (a) Mean % Change	Student Count	(e) Pre Test Mean Score	(f) Post Test Mean Score	(g) = (f) - (e) Mean Change	(h) = (g) / (e) Mean % Change
Female	195	3.78	10.53	6.74	178.2%	196	14.67	32.07	17.40	118.6%
Male	252	5.30	12.29	6.99	132.0%	252	14.28	36.52	22.24	155.8%

Pre & Post Test Scores for Study Schools vs Control School

School Type	Push-Ups					Sit-Ups				
	Student Count	(a) Pre Test Mean Score	(b) Post Test Mean Score	(c) = (b) - (a) Mean Change	(d) = (c) / (a) Mean % Change	Student Count	(e) Pre Test Mean Score	(f) Post Test Mean Score	(g) = (f) - (e) Mean Change	(h) = (g) / (e) Mean % Change
Control	72	5.17	8.58	3.42	66.1%	72	7.79	14.31	6.51	83.6%
Study	583	4.89	12.28	7.40	151.4%	584	14.22	33.77	19.55	137.4%

Exhibit V, Sheet II
Pre & Post Test Scores for Push-Ups & Sit-Ups

Operation Tone-Up
Fall 2010 Program Evaluation
EL Monte & RE Miller School Districts

Pre & Post Test Scores by Classroom

School	Classroom	Push-Ups					Sit-Ups				
		Student Count	(a) Pre Test Mean Score	(b) Post Test Mean Score	(c) = (b) - (a) Mean Change	(d) = (c) / (a) Mean % Change	Student Count	(e) Pre Test Mean Score	(f) Post Test Mean Score	(g) = (f) - (e) Mean Change	(h) = (g) / (e) Mean % Change
Rio Vista	O'Leary	12	2.25	11.75	9.50	422.2%	12	19.58	37.92	18.33	93.6%
	Thomas	28	1.18	11.75	10.57	897.0%	28	12.00	35.00	23.00	191.7%
	Vales	10	3.40	14.80	11.40	335.3%	10	9.60	43.10	33.50	349.0%
Rio Vista Total		50	1.88	12.36	10.48	557.4%	50	13.34	37.32	23.98	179.8%
Wright	Marshall	27	4.15	18.59	14.44	348.2%	27	23.56	43.11	19.56	83.0%
	Tran	24	3.92	8.04	4.13	105.3%	24	14.83	24.42	9.58	64.6%
	Wilson	25	1.88	8.48	6.60	351.1%	25	1.08	16.64	15.56	1440.7%
Wright Total		76	3.33	11.93	8.61	258.5%	76	13.41	28.50	15.09	112.6%
Cleminson	Campbell	26	0.65	5.15	4.50	688.2%	27	6.93	52.93	46.00	664.2%
	Wilson	24	3.33	14.04	10.71	321.3%	24	11.29	33.17	21.88	193.7%
Cleminson Total		50	1.94	9.42	7.48	385.6%	51	8.98	43.63	34.65	385.8%
Rio Hondo	Burt	26	2.73	14.73	12.00	439.4%	26	18.73	34.69	15.96	85.2%
	Kane	28	0.93	9.14	8.21	884.6%	28	17.71	80.46	62.75	354.2%
Rio Hondo Total		54	1.80	11.83	10.04	558.8%	54	18.20	58.43	40.22	221.0%
Cherrylee	Richenberger	27	5.48	11.41	5.93	108.1%	27	9.56	32.26	22.70	237.6%
	Arellano	30	18.40	14.63	-3.77	-20.5%	30	19.90	34.57	14.67	73.7%
Cherrylee Total		57	12.28	13.11	0.82	6.7%	57	15.00	33.47	18.47	123.2%
New Lexington	Gonzalez	55	5.58	14.75	9.16	164.2%	55	20.02	34.62	14.60	72.9%
	Fletcher/Lemus	25	8.52	10.52	2.00	23.5%	25	26.64	30.52	3.88	14.6%
	Potrero	27	3.37	9.85	6.48	192.3%	27	4.52	26.11	21.59	477.9%
	Cortada	10	6.30	10.70	4.40	69.8%	10	24.60	18.90	-5.70	-23.2%
	Gidley	49	3.71	7.69	3.98	107.1%	49	9.61	16.04	6.43	66.9%
R.E. Miller	Legore	16	5.88	15.94	10.06	171.3%	16	13.06	28.38	15.31	117.2%
	Giese	22	4.55	14.91	10.36	228.0%	22	12.09	30.05	17.95	148.5%
	Kauppila	20	3.60	14.45	10.85	301.4%	20	8.85	31.10	22.25	251.4%
	McDonald	27	7.89	16.44	8.56	108.5%	27	17.15	33.48	16.33	95.2%
	Rich	23	6.35	13.65	7.30	115.1%	23	15.61	37.13	21.52	137.9%
R.E Miller Total	Villarreal	22	5.73	14.77	9.05	157.9%	22	11.14	25.45	14.32	128.6%
	Ward	130	5.78	15.04	9.26	160.3%	130	13.22	31.19	17.97	135.9%
Wilkerson	Almance	24	1.38	2.33	0.96	69.7%	24	5.38	14.04	8.67	161.2%
	All Other	48	7.06	11.71	4.65	65.8%	48	9.00	14.44	5.44	60.4%
Wilkerson Total		72	5.17	8.58	3.42	66.1%	72	7.79	14.31	6.51	83.6%

Exhibit VI, Sheet I
Pre & Post Test Scores for Cardiovascular Tests

Operation Tone-Up
Fall 2010 Program Evaluation
EL Monte & RE Miller School Districts

Pre & Post Test Scores for Study Schools by Grade Level

Grade Level	Systolic Blood Pressure					Diastolic Blood Pressure					Resting Heart Rate				
	Student Count	(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)	Student Count	(e)	(f)	(g) = (f) - (e)	(h) = (g) / (e)	Student Count	(i)	(j)	(k) = (j) - (i)	(l) = (k) / (i)
		Pre Test Mean Score	Post Test Mean Score	Mean Change	Mean % Change		Pre Test Mean Score	Post Test Mean Score	Mean Change	Mean % Change		Pre Test Mean Score	Post Test Mean Score	Mean Change	Mean % Change
3	84	99.56	99.44	-0.12	-0.1%	84	59.02	61.36	2.33	4.0%	84	86.00	79.11	-6.89	-8.0%
4	49	101.61	100.86	-0.76	-0.7%	49	60.37	61.59	1.22	2.0%	49	83.16	75.84	-7.33	-8.8%
5	329	112.34	107.02	-5.32	-4.7%	329	69.29	63.52	-5.77	-8.3%	327	85.40	81.81	-3.60	-4.2%
Total	462	108.88	104.99	-3.89	-3.6%	462	66.47	62.92	-3.55	-5.3%	460	85.27	80.68	-4.60	-5.4%

Pre & Post Test Scores for Study Schools by Gender

Gender	Systolic Blood Pressure					Diastolic Blood Pressure					Resting Heart Rate				
	Student Count	(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)	Student Count	(e)	(f)	(g) = (f) - (e)	(h) = (g) / (e)	Student Count	(i)	(j)	(k) = (j) - (i)	(l) = (k) / (i)
		Pre Test Mean Score	Post Test Mean Score	Mean Change	Mean % Change		Pre Test Mean Score	Post Test Mean Score	Mean Change	Mean % Change		Pre Test Mean Score	Post Test Mean Score	Mean Change	Mean % Change
Female	139	111.12	106.90	-4.22	-3.8%	139	67.68	63.68	-4.00	-5.9%	138	86.31	82.64	-3.67	-4.2%
Male	188	113.26	107.01	-6.24	-5.5%	188	70.47	63.37	-7.10	-10.1%	187	84.55	81.15	-3.40	-4.0%

Pre & Post Test Scores for Study Schools vs Control School

School Type	Systolic Blood Pressure					Diastolic Blood Pressure					Resting Heart Rate				
	Student Count	(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)	Student Count	(e)	(f)	(g) = (f) - (e)	(h) = (g) / (e)	Student Count	(i)	(j)	(k) = (j) - (i)	(l) = (k) / (i)
		Pre Test Mean Score	Post Test Mean Score	Mean Change	Mean % Change		Pre Test Mean Score	Post Test Mean Score	Mean Change	Mean % Change		Pre Test Mean Score	Post Test Mean Score	Mean Change	Mean % Change
Control	24	113.38	111.88	-1.50	-1.3%	24	68.58	68.75	0.17	0.2%	24	88.92	91.38	2.46	2.8%
Study	462	108.88	104.99	-3.89	-3.6%	462	66.47	62.92	-3.55	-5.3%	460	85.27	80.68	-4.60	-5.4%

Exhibit VI, Sheet II
Pre & Post Test Scores for Cardiovascular Tests

Operation Tone-Up
Fall 2010 Program Evaluation
EL Monte & RE Miller School Districts

Pre & Post Test Scores by Classroom

School	Classroom	Systolic Blood Pressure					Diastolic Blood Pressure					Resting Heart Rate				
		Student Count	(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)	Student Count	(e)	(f)	(g) = (f) - (e)	(h) = (g) / (e)	Student Count	(i)	(j)	(k) = (j) - (i)	(l) = (k) / (i)
			Pre Test Mean Score	Post Test Mean Score	Mean Change	Mean % Change		Pre Test Mean Score	Post Test Mean Score	Mean Change	Mean % Change		Pre Test Mean Score	Post Test Mean Score	Mean Change	Mean % Change
Rio Vista	O'Leary	12	114.92	106.42	-8.50	-7.4%	12	69.67	63.58	-6.08	-8.7%	12	84.67	76.92	-7.75	-9.2%
	Thomas	28	116.54	108.29	-8.25	-7.1%	28	73.93	67.75	-6.18	-8.4%	28	81.25	76.61	-4.64	-5.7%
	Vales	10	111.40	100.10	-11.30	-10.1%	10	75.90	64.30	-11.60	-15.3%	10	83.00	68.50	-14.50	-17.5%
Rio Vista Total		50	115.12	106.20	-8.92	-7.7%	50	73.30	66.06	-7.24	-9.9%	50	82.42	75.06	-7.36	-8.9%
Wright	Marshall	27	111.15	106.33	-4.81	-4.3%	27	67.33	62.11	-5.22	-7.8%	27	81.48	81.44	-0.04	0.0%
	Tran	24	109.29	109.88	0.58	0.5%	24	64.21	62.25	-1.96	-3.0%	24	91.83	82.96	-8.88	-9.7%
	Wilson	25	111.88	102.60	-9.28	-8.3%	25	68.72	59.64	-9.08	-13.2%	25	84.28	76.84	-7.44	-8.8%
Wright Total		76	110.80	106.22	-4.58	-4.1%	76	66.80	61.34	-5.46	-8.2%	76	85.67	80.41	-5.26	-6.1%
Cleminson	Campbell	24	107.83	103.29	-4.54	-4.2%	24	66.17	59.58	-6.58	-9.9%	24	76.04	76.50	0.46	0.6%
	Wilson	23	112.04	101.35	-10.70	-9.5%	23	71.00	63.17	-7.83	-11.0%	23	84.70	75.35	-9.35	-11.0%
Cleminson Total		47	109.89	102.34	-7.55	-6.9%	47	68.53	61.34	-7.19	-10.5%	47	80.28	75.94	-4.34	-5.4%
Rio Hondo	Burt	26	109.81	103.35	-6.46	-5.9%	26	67.85	61.69	-6.15	-9.1%	26	86.42	83.85	-2.58	-3.0%
	Kane	29	111.90	115.76	3.86	3.5%	29	68.07	64.97	-3.10	-4.6%	28	95.11	91.79	-3.32	-3.5%
Rio Hondo Total		55	110.91	109.89	-1.02	-0.9%	55	67.96	63.42	-4.55	-6.7%	54	90.93	87.96	-2.96	-3.3%
Cherrylee	Richenberger Arellano															
Cherrylee Total																
Shirpser	Gonzalez	24	113.88	117.46	3.58	3.1%	24	70.79	73.33	2.54	3.6%	24	88.46	87.29	-1.17	-1.3%
New Lexington	Fletcher/Lemus	53	113.55	101.55	-12.00	-10.6%	53	69.87	59.02	-10.85	-15.5%	52	87.54	86.71	-0.83	-0.9%
	Potrero	24	115.29	115.54	0.25	0.2%	24	70.50	69.75	-0.75	-1.1%	24	80.71	81.83	1.13	1.4%
Cortada	Haupt															
Gidley	Castillo															
Legore	Multiple															
R.E. Miller	Giese	17	97.47	99.59	2.12	2.2%	17	55.35	60.06	4.71	8.5%	17	83.00	75.12	-7.88	-9.5%
	Kauppila	23	98.96	97.52	-1.43	-1.4%	23	56.57	61.13	4.57	8.1%	23	86.26	75.96	-10.30	-11.9%
	McDonald	22	103.45	100.45	-3.00	-2.9%	22	62.91	63.09	0.18	0.3%	22	88.86	83.77	-5.09	-5.7%
	Rich	26	102.19	99.04	-3.15	-3.1%	26	60.27	58.73	-1.54	-2.6%	26	81.35	76.23	-5.12	-6.3%
	Villarreal	23	100.96	102.91	1.96	1.9%	23	60.48	64.83	4.35	7.2%	23	85.22	75.39	-9.83	-11.5%
	Ward	22	97.91	100.32	2.41	2.5%	22	60.55	60.86	0.32	0.5%	22	85.18	80.82	-4.36	-5.1%
R.E Miller Total		133	100.32	99.96	-0.35	-0.4%	133	59.52	61.44	1.92	3.2%	133	84.95	77.90	-7.05	-8.3%
Wilkerson	Almance	24	113.38	111.88	-1.50	-1.3%	24	68.58	68.75	0.17	0.2%	24	88.92	91.38	2.46	2.8%
	All Other															
Wilkerson Total		24	113.38	111.88	-1.50	-1.3%	24	68.58	68.75	0.17	0.2%	24	88.92	91.38	2.46	2.8%

Exhibit VI, Sheet III
Pre & Post Test Scores for Cardiovascular Tests

Operation Tone-Up
Fall 2010 Program Evaluation
EL Monte & RE Miller School Districts

Pre & Post Test Scores for Study Schools by Systolic Blood Pressure Range

Systolic Pre Test Range	Student Count	<u>Systolic Blood Pressure</u>		(c) = (b) - (a) Mean Change	(d) = (c) / (a) Mean % Change
		(a) Pre Test Mean Score	(b) Post Test Mean Score		
0 < X ≤ 114	314	102.06	100.92	-1.14	-1.1%
114 < X ≤ 125	104	119.96	112.06	-7.90	-6.6%
> 125	44	131.36	117.34	-14.02	-10.7%
Total	462	108.88	104.99	-3.89	-3.6%

Pre & Post Test Scores for Study Schools by Diastolic Blood Pressure Range

Diastolic Pre Test Range	Student Count	<u>Diastolic Blood Pressure</u>		(c) = (b) - (a) Mean Change	(d) = (c) / (a) Mean % Change
		(a) Pre Test Mean Score	(b) Post Test Mean Score		
0 < X ≤ 75	378	62.87	62.32	-0.55	-0.9%
75 < X ≤ 85	59	79.66	66.37	-13.29	-16.7%
> 85	25	89.80	63.84	-25.96	-28.9%
Total	462	66.47	62.92	-3.55	-5.3%

Pre & Post Test Scores for Study Schools by Resting Heart Rate Range

RHR Pre Test Range	Student Count	<u>Resting Heart Rate</u>		(c) = (b) - (a) Mean Change	(d) = (c) / (a) Mean % Change
		(a) Pre Test Mean Score	(b) Post Test Mean Score		
0 < X ≤ 100	396	81.62	78.73	-2.89	-3.5%
100 < X ≤ 120	57	106.23	92.68	-13.54	-12.7%
> 120	7	121.57	93.29	-28.29	-23.3%
Total	460	85.27	80.68	-4.60	-5.4%

Exhibit VI, Sheet IV
Pre & Post Test Scores for Cardiovascular Tests

Operation Tone-Up
Fall 2010 Program Evaluation
EL Monte & RE Miller School Districts

Pre & Post Test Scores for Study Schools by BMI Range

BMI Pre Test Range	Student Count	<u>Systolic Blood Pressure</u>		(c) = (b) - (a) Mean Change	(d) = (c) / (a) Mean % Change
		(a) Pre Test Mean Score	(b) Post Test Mean Score		
0 < X ≤ 18.5	71	106.82	102.17	-4.65	-4.4%
18.5 < X ≤ 24.9	68	113.85	108.53	-5.32	-4.7%
24.9 < X ≤ 29.9	28	119.21	115.79	-3.43	-2.9%
> 29.9	7	130.43	118.43	-12.00	-9.2%
Total	174	112.51	107.50	-5.01	-4.5%

Pre & Post Test Scores for Study Schools by BMI Range

BMI Pre Test Range	Student Count	<u>Diastolic Blood Pressure</u>		(c) = (b) - (a) Mean Change	(d) = (c) / (a) Mean % Change
		(a) Pre Test Mean Score	(b) Post Test Mean Score		
0 < X ≤ 18.5	71	68.79	60.72	-8.07	-11.7%
18.5 < X ≤ 24.9	68	69.01	64.07	-4.94	-7.2%
24.9 < X ≤ 29.9	28	74.04	67.07	-6.96	-9.4%
> 29.9	7	76.14	70.00	-6.14	-8.1%
Total	174	70.02	63.43	-6.59	-9.4%

Pre & Post Test Scores for Study Schools by BMI Range

BMI Pre Test Range	Student Count	<u>Resting Heart Rate</u>		(c) = (b) - (a) Mean Change	(d) = (c) / (a) Mean % Change
		(a) Pre Test Mean Score	(b) Post Test Mean Score		
0 < X ≤ 18.5	71	84.27	81.68	-2.59	-3.1%
18.5 < X ≤ 24.9	68	84.63	82.28	-2.35	-2.8%
24.9 < X ≤ 29.9	27	91.48	81.04	-10.44	-11.4%
> 29.9	7	96.71	98.29	1.57	1.6%
Total	173	86.04	82.49	-3.55	-4.1%

Exhibit VII**Pre & Post Test Scores for BMI****Operation Tone-Up****Fall 2010 Program Evaluation****EL Monte & RE Miller School Districts****Pre & Post Test Scores for Study Schools vs Control Schools**

School Type	Student Count	(a) Pre Test Mean Score	(b) Post Test Mean Score	(c) = (b) - (a) Mean Change	(d) = (c) / (a) Mean % Change
Control	45	21.56	21.78	0.22	1.0%
Study	298	20.60	21.12	0.53	2.6%

Pre & Post Test Scores for Study Schools by BMI Range

BMI Pre Test Range	Student Count	(a) Pre Test Mean Score	(b) Post Test Mean Score	(c) = (b) - (a) Mean Change	(d) = (c) / (a) Mean % Change
0 < X ≤ 18.5	115	16.14	16.77	0.63	3.9%
18.5 < X ≤ 24.9	132	21.52	22.21	0.70	3.2%
24.9 < X ≤ 29.9	40	26.95	26.98	0.02	0.1%
> 29.9	11	33.02	32.32	-0.70	-2.1%
Total	298	20.60	21.12	0.53	2.6%

Appendix A, Sheet I
Statistical Tests - Study Schools

Operation Tone-Up
Fall 2010 Program Evaluation
EL Monte & RE Miller School Districts

Test and Confidence Interval for Paired t-Test

Program Indicator	Sample Size	Mean	Standard Deviation	Standard Error Mean	Paired t-Statistic	Degrees of Freedom	P-Value	99.8% Confidence Interval of Difference	
								Lower	Upper
Knowledge of Nutrients	549	3.614	2.540	0.108	33.334	548	< .001	3.277	3.950
Sit-Ups	584	19.546	23.189	0.960	20.370	583	< .001	16.568	22.525
Push-Ups	583	7.398	8.297	0.344	21.529	582	< .001	6.331	8.465
Systolic Blood Pressure	462	-3.887	11.431	0.532	7.309	461	< .001	-5.540	-2.234
Diastolic Blood Pressure	462	-3.552	12.799	0.595	5.965	461	< .001	-5.403	-1.701
Resting Heart Rate	460	-4.596	14.186	0.661	6.948	459	< .001	-6.651	-2.540

Critical Values for Student's T- Distribution

one-tail p	0.001	0.0025	0.005	0.01	0.025	0.05
two-tail p	0.002	0.005	0.01	0.02	0.05	0.1
df=						
460	3.108	2.821	2.587	2.334	1.965	1.648
465	3.108	2.820	2.586	2.334	1.965	1.648
550	3.105	2.818	2.585	2.333	1.964	1.648
585	3.104	2.818	2.584	2.333	1.964	1.647

Knowledge of Nutrients

H0: Mean Post Test Score is less than or equal to the Mean Pre Test Score
 Ha: Mean Post Test Score is greater than the Mean Pre Test Score
 The mean Pre Test Score was 3.36; the mean Post Test Score was 6.98. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score in Knowledge of Nutrients improved as a result of the 2010 Operation Tone-Up Program.

Sit-Ups

H0: Mean Post Test Score is less than or equal to the Mean Pre Test Score
 Ha: Mean Post Test Score is greater than the Mean Pre Test Score
 The mean Pre Test Score was 14.22; the mean Post Test Score was 33.77. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Sit-Ups improved as a result of the 2010 Operation Tone-Up Program.

Push-Ups

H0: Mean Post Test Score is less than or equal to the Mean Pre Test Score
 Ha: Mean Post Test Score is greater than the Mean Pre Test Score
 The mean Pre Test Score was 4.89; the mean Post Test Score was 12.28. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Push-Ups improved as a result of the 2010 Operation Tone-Up Program.

Systolic Blood Pressure

H0: Mean Post Test Score is greater than or equal to the Mean Pre Test Score
 Ha: Mean Post Test Score is less than the Mean Pre Test Score
 The mean Pre Test Score was 108.88; the mean Post Test Score was 104.99. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Systolic Blood Pressure decreased as a result of the 2010 Operation Tone-Up Program.

Diastolic Blood Pressure

H0: Mean Post Test Score is greater than or equal to the Mean Pre Test Score
 Ha: Mean Post Test Score is less than the Mean Pre Test Score
 The mean Pre Test Score was 66.47; the mean Post Test Score was 62.92. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Diastolic Blood Pressure decreased as a result of the 2010 Operation Tone-Up Program.

Resting Heart Rate

H0: Mean Post Test Score is greater than or equal to the Mean Pre Test Score
 Ha: Mean Post Test Score is less than the Mean Pre Test Score
 The mean Pre Test Score was 85.27; the mean Post Test Score was 80.68. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Resting Heart Rate decreased as a result of the 2010 Operation Tone-Up Program.

Appendix A, Sheet II
Statistical Tests - EL Monte School District

Operation Tone-Up
Fall 2010 Program Evaluation
EL Monte School District (5th Graders)

Test and Confidence Interval for Paired t-Test

Program Indicator	Sample		Standard	Standard	Paired	Degrees	P-Value	99.8% Confidence Interval of Difference	
	Size	Mean	Deviation	Error Mean	t-Statistic	of Freedom		Lower	Upper
Knowledge of Nutrition	428	3.381	2.560	0.124	27.319	427	<..001	2.996	3.766
Sit-Ups	454	19.998	25.494	1.196	16.714	453	<..001	16.279	23.716
Push-Ups	453	6.863	8.664	0.407	16.860	452	<..001	5.598	8.128
Systolic Blood Pressure	329	-5.316	11.812	0.651	8.164	328	<..001	-7.345	-3.288
Diastolic Blood Pressure	329	-5.766	12.738	0.702	8.210	328	<..001	-7.954	-3.578
Resting Heart Rate	327	-3.596	15.404	0.852	4.222	326	<..001	-6.250	-0.943

Critical Values for Student's T- Distribution

one- tail p	0.001	0.0025	0.005	0.01	0.025	0.05
two-tail p	0.002	0.005	0.01	0.02	0.05	0.1
df=						
430	3.109	2.822	2.587	2.335	1.965	1.648
455	3.108	2.821	2.587	2.335	1.965	1.648
330	3.115	2.826	2.591	2.338	1.967	1.649

Knowledge of Nutrients

H0: Mean Post Test Score is less than or equal to the Mean Pre Test Score
 Ha: Mean Post Test Score is greater than the Mean Pre Test Score
 The mean Pre Test Score was 3.54; the mean Post Test Score was 6.92. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score in Knowledge of Nutrients improved as a result of the 2010 Operation Tone-Up Program.

Sit-Ups

H0: Mean Post Test Score is less than or equal to the Mean Pre Test Score
 Ha: Mean Post Test Score is greater than the Mean Pre Test Score
 The mean Pre Test Score was 14.51; the mean Post Test Score was 34.51. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Sit-Ups improved as a result of the 2010 Operation Tone-Up Program.

Push-Ups

H0: Mean Post Test Score is less than or equal to the Mean Pre Test Score
 Ha: Mean Post Test Score is greater than the Mean Pre Test Score
 The mean Pre Test Score was 4.63; the mean Post Test Score was 11.49. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Push-Ups improved as a result of the 2010 Operation Tone-Up Program.

Systolic Blood Pressure

H0: Mean Post Test Score is greater than or equal to the Mean Pre Test Score
 Ha: Mean Post Test Score is less than the Mean Pre Test Score
 The mean Pre Test Score was 112.34; the mean Post Test Score was 107.02. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Systolic Blood Pressure decreased as a result of the 2010 Operation Tone-Up Program.

Diastolic Blood Pressure

H0: Mean Post Test Score is greater than or equal to the Mean Pre Test Score
 Ha: Mean Post Test Score is less than the Mean Pre Test Score
 The mean Pre Test Score was 69.29; the mean Post Test Score was 63.52. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Diastolic Blood Pressure decreased as a result of the 2010 Operation Tone-Up Program.

Resting Heart Rate

H0: Mean Post Test Score is greater than or equal to the Mean Pre Test Score
 Ha: Mean Post Test Score is less than the Mean Pre Test Score
 The mean Pre Test Score was 85.40; the mean Post Test Score was 81.81. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Resting Heart Rate decreased as a result of the 2010 Operation Tone-Up Program.

Appendix A, Sheet III
Statistical Tests - Documentary Schools

Operation Tone-Up
Fall 2010 Program Evaluation
EL Monte District - Rio Vista & Wright

Test and Confidence Interval for Paired t-Test

Program Indicator	Sample Size	Mean	Standard Deviation	Standard Error Mean	Paired t-Statistic	Degrees of Freedom	P-Value	99.8% Confidence Interval of Difference	
								Lower	Upper
Knowledge of Nutrition	126	4.524	1.892	0.169	26.840	125	< .001	3.992	5.056
Sit-Ups	126	18.619	16.747	1.492	12.480	125	< .001	13.909	23.329
Push-Ups	126	9.349	7.057	0.629	14.872	125	< .001	7.365	11.334
Systolic Blood Pressure	126	-6.302	10.775	0.960	6.565	125	< .001	-9.332	-3.271
Diastolic Blood Pressure	126	-6.167	11.441	1.019	6.050	125	< .001	-9.384	-2.949
Resting Heart Rate	126	-6.095	14.312	1.275	4.780	125	< .001	-10.121	-2.070

Critical Values for Student's T- Distribution

one- tail p	0.001	0.0025	0.005	0.01	0.025	0.05
two-tail p	0.002	0.005	0.01	0.02	0.05	0.1
df =						
125	3.157	2.858	2.616	2.356	1.979	1.657

Knowledge of Nutrients

H0: Mean Post Test Score is less than or equal to the Mean Pre Test Score

Ha: Mean Post Test Score is greater than the Mean Pre Test Score

The mean Pre Test Score was 3.50; the mean Post Test Score was 8.02. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score in Knowledge of Nutrients improved as a result of the 2010 Operation Tone-Up Program.

Sit-Ups

H0: Mean Post Test Score is less than or equal to the Mean Pre Test Score

Ha: Mean Post Test Score is greater than the Mean Pre Test Score

The mean Pre Test Score was 13.38; the mean Post Test Score was 32.00. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Sit-Ups improved as a result of the 2010 Operation Tone-Up Program.

Push-Ups

H0: Mean Post Test Score is less than or equal to the Mean Pre Test Score

Ha: Mean Post Test Score is greater than the Mean Pre Test Score

The mean Pre Test Score was 2.75; the mean Post Test Score was 12.10. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Push-Ups improved as a result of the 2010 Operation Tone-Up Program.

Systolic Blood Pressure

H0: Mean Post Test Score is greater than or equal to the Mean Pre Test Score

Ha: Mean Post Test Score is less than the Mean Pre Test Score

The mean Pre Test Score was 112.52; the mean Post Test Score was 106.21. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Systolic Blood Pressure decreased as a result of the 2010 Operation Tone-Up Program.

Diastolic Blood Pressure

H0: Mean Post Test Score is greater than or equal to the Mean Pre Test Score

Ha: Mean Post Test Score is less than the Mean Pre Test Score

The mean Pre Test Score was 69.38; the mean Post Test Score was 63.21. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Diastolic Blood Pressure decreased as a result of the 2010 Operation Tone-Up Program.

Resting Heart Rate

H0: Mean Post Test Score is greater than or equal to the Mean Pre Test Score

Ha: Mean Post Test Score is less than the Mean Pre Test Score

The mean Pre Test Score was 84.38; the mean Post Test Score was 78.29. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Resting Heart Rate decreased as a result of the 2010 Operation Tone-Up Program.

Appendix A, Sheet IV
Statistical Tests - Vales & Wilson

Operation Tone-Up
Fall 2010 Program Evaluation
EL Monte School District - Vales & Wilson(Wright) Classrooms

Test and Confidence Interval for Paired t-Test

Program Indicator	Sample Size	Mean	Standard Deviation	Standard Error Mean	Paired t-Statistic	Degrees of Freedom	P-Value	99.8% Confidence Interval of Difference	
								Lower	Upper
Knowledge of Nutrition	35	4.514	1.358	0.230	19.660	34	<..001	3.747	5.281
Sit-Ups	35	20.686	14.724	2.489	8.311	34	<..001	12.373	28.999
Push-Ups	35	7.971	6.492	1.097	7.264	34	<..001	4.306	11.637
Systolic Blood Pressure	35	-9.857	9.337	1.578	6.245	34	<..001	-15.129	-4.586
Diastolic Blood Pressure	35	-9.800	13.681	2.312	4.238	34	<..001	-17.524	-2.076
Resting Heart Rate	35	-9.457	9.565	1.617	5.849	34	<..001	-14.857	-4.057

Critical Values for Student's T- Distribution

one- tail p	0.001	0.0025	0.005	0.01	0.025	0.05
two-tail p	0.002	0.005	0.01	0.02	0.05	0.1
df =						
35	3.340	2.996	2.724	2.438	2.030	1.690

Knowledge of Nutrients

H0: Mean Post Test Score is less than or equal to the Mean Pre Test Score

Ha: Mean Post Test Score is greater than the Mean Pre Test Score

The mean Pre Test Score was 3.23; the mean Post Test Score was 7.74. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score in Knowledge of Nutrients improved as a result of the 2010 Operation Tone-Up Program.

Sit-Ups

H0: Mean Post Test Score is less than or equal to the Mean Pre Test Score

Ha: Mean Post Test Score is greater than the Mean Pre Test Score

The mean Pre Test Score was 3.51; the mean Post Test Score was 24.20. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Sit-Ups improved as a result of the 2010 Operation Tone-Up Program.

Push-Ups

H0: Mean Post Test Score is less than or equal to the Mean Pre Test Score

Ha: Mean Post Test Score is greater than the Mean Pre Test Score

The mean Pre Test Score was 2.31; the mean Post Test Score was 10.29. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Push-Ups improved as a result of the 2010 Operation Tone-Up Program.

Systolic Blood Pressure

H0: Mean Post Test Score is greater than or equal to the Mean Pre Test Score

Ha: Mean Post Test Score is less than the Mean Pre Test Score

The mean Pre Test Score was 111.74; the mean Post Test Score was 101.89. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Systolic Blood Pressure decreased as a result of the 2010 Operation Tone-Up Program.

Diastolic Blood Pressure

H0: Mean Post Test Score is greater than or equal to the Mean Pre Test Score

Ha: Mean Post Test Score is less than the Mean Pre Test Score

The mean Pre Test Score was 70.77; the mean Post Test Score was 60.97. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Diastolic Blood Pressure decreased as a result of the 2010 Operation Tone-Up Program.

Resting Heart Rate

H0: Mean Post Test Score is greater than or equal to the Mean Pre Test Score

Ha: Mean Post Test Score is less than the Mean Pre Test Score

The mean Pre Test Score was 83.91; the mean Post Test Score was 74.46. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Resting Heart Rate decreased as a result of the 2010 Operation Tone-Up Program.

Appendix A, Sheet V
Statistical Tests - R.E. Miller School District

Operation Tone-Up
Fall 2010 Program Evaluation
R.E. Miller School District (3rd & 4th Graders)

Test and Confidence Interval for Paired t-Test

Program Indicator	Sample Size	Mean	Standard Deviation	Standard Error Mean	Paired t-Statistic	Degrees of Freedom	P-Value	95.0% Confidence Interval of Difference	
								Lower	Upper
Knowledge of Nutrition	121	4.438	2.295	0.209	21.276	120	<.001	4.025	4.851
Sit-Ups	130	17.969	12.026	1.055	17.036	129	<.001	15.883	20.056
Push-Ups	130	9.262	6.563	0.576	16.089	129	<.001	8.123	10.400
Systolic Blood Pressure	133	-0.353	9.593	0.832	0.425	132	>.05		
Diastolic Blood Pressure	133	1.925	11.247	0.975	1.974	132	<.05	-0.004	3.854
Resting Heart Rate	133	-7.053	10.258	0.890	7.929	132	<.001	-8.812	-5.293

Critical Values for Student's T- Distribution

one- tail p	0.001	0.0025	0.005	0.01	0.025	0.05
two-tail p	0.002	0.005	0.01	0.02	0.05	0.1
df =						
120	3.160	2.860	2.617	2.358	1.980	1.658
130	3.154	2.856	2.614	2.355	1.978	1.657
135	3.152	2.854	2.613	2.354	1.978	1.656

Knowledge of Nutrients

H0: Mean Post Test Score is less than or equal to the Mean Pre Test Score

Ha: Mean Post Test Score is greater than the Mean Pre Test Score

The mean Pre Test Score was 2.75; the mean Post Test Score was 7.19. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score in Knowledge of Nutrients improved as a result of the 2010 Operation Tone-Up Program.

Sit-Ups

H0: Mean Post Test Score is less than or equal to the Mean Pre Test Score

Ha: Mean Post Test Score is greater than the Mean Pre Test Score

The mean Pre Test Score was 13.22; the mean Post Test Score was 31.19. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Sit-Ups improved as a result of the 2010 Operation Tone-Up Program.

Push-Ups

H0: Mean Post Test Score is less than or equal to the Mean Pre Test Score

Ha: Mean Post Test Score is greater than the Mean Pre Test Score

The mean Pre Test Score was 5.78; the mean Post Test Score was 15.04. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Push-Ups improved as a result of the 2010 Operation Tone-Up Program.

Systolic Blood Pressure

H0: Mean Post Test Score is greater than or equal to the Mean Pre Test Score

Ha: Mean Post Test Score is less than the Mean Pre Test Score

The mean Pre Test Score was 100.32; the mean Post Test Score was 99.96. The difference between these two paired means was not significant at the .05 level. We retain the H0; there was insufficient evidence to conclude that the average score for Systolic Blood Pressure decreased.

Diastolic Blood Pressure

H0: Mean Post Test Score is greater than or equal to the Mean Pre Test Score

Ha: Mean Post Test Score is less than the Mean Pre Test Score

The mean Pre Test Score was 59.52; the mean Post Test Score was 61.44. The difference between these two paired means was significant at the .05 level. We reject the H0; there was sufficient evidence to conclude that the average score for Diastolic Blood Pressure decreased as a result of the 2010 Operation Tone-Up Program.

Resting Heart Rate

H0: Mean Post Test Score is greater than or equal to the Mean Pre Test Score

Ha: Mean Post Test Score is less than the Mean Pre Test Score

The mean Pre Test Score was 84.95; the mean Post Test Score was 77.90. The difference between these two paired means was significant at the .001 level. We reject the H0; there was sufficient evidence to conclude that the average score for Resting Heart Rate decreased as a result of the 2010 Operation Tone-Up Program.