

2018 PROGRAM EVALUATION

WEST VIRGINIA ARIZONA

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Exhibit 1 Operation Tone-Up 2018 Program Evaluation West Virginia & Arizona

Mean Score Improvement & Percentage Improvement by State/School

			Knowledge	of Nutrients	Push	-Ups	Sit-	Ups
		Student	Mean	Mean %	Mean	Mean %	Mean	Mean 9
State	School	Count*	Change	Change	Change	Change	Change	Change
AZ	Moon Mountain	73	5.22	170.1%	5.37	55.1%	14.19	75.9%
AZ Total		73	5.22	170.1%	5.37	55.1%	14.19	75.9%
WV	Wilkerson	27	4.22	128.1%	9.30	154.9%	10.15	44.0%
	Crescent	137	2.13	49.7%	7.11	209.7%	11.42	121.49
	Chesapeake	16	3.50	101.8%	2.13	16.8%	10.67	59.0%
	Adamston	21	1.00	15.7%	0.67	12.0%	0.71	12.1%
	Anne Bailey	17	41.76	114.5%	5.12	92.6%	9.71	300.09
	Cheat Lake	24	1.71	32.8%	5.88	34.9%	9.71	32.4%
	Coalton	24	4.42	132.5%	2.71	17.7%	0.50	1.6%
	Crab Orchard	22	5.36	140.5%	1.73	39.2%	2.95	21.1%
	Cranberry Prosperity	9	1.56	107.7%	10.67	168.4%	17.00	119.09
	Eastbrook	21	4.62	116.9%	4.86	107.4%	5.81	29.7%
	Gilbert Middle	15	1.87	57.1%	1.00	10.1%	-3.80	-9.4%
	Jumping Branch	30	0.50	10.3%	5.67	44.2%	19.47	129.29
	Mercer	21	3.14	124.5%	3.58	43.3%	11.10	78.4%
	Milton	22	3.36	98.7%	21.60	1107.7%	13.38	638.69
	New Manchester	15	1.93	64.4%	4.14	290.0%	14.60	663.69
	New Martinsville	33	2.88	43.6%	5.44	57.8%	4.33	19.8%
	Overbrook	23	2.48	77.0%	8.71	569.2%	21.00	619.29
	Sophia Soak Creek	42	1.98	50.6%	9.87	1133.3%	2.76	8.6%
	Southside	20	4.90	107.7%	3.55	120.3%	4.95	31.69
	Spanishburg	18	2.50	50.0%	6.17	45.1%	6.28	18.69
WV Total	<u>J</u>	557	3.88	75.1%	6.23	94.1%	8.92	53.79
Total		630	4.03	81.9%	6.12	86.9%	9.58	56.89

			Systolic Blo	ood Pressure	Diastolic Blo	ood Pressure	Resting F	leart Rate
		Student	Mean	Mean %	Mean	Mean %	Mean	Mean %
State	School	Count*	Change	Change	Change	Change	Change	Change
AZ	Moon Mountain	73						
AZ Total		73						
WV	Wilkerson	27						
	Crescent	137	-5.79	-6.0%	-2.31	-3.6%	-2.35	-3.2%
	Chesapeake	16						
	Adamston	21	-1.00	-0.8%	-0.67	-0.8%	-0.81	-1.0%
	Anne Bailey	17	-3.71	-3.7%	1.53	2.4%	-2.94	-3.7%
	Cheat Lake	24	-1.00	-1.0%	-0.42	-0.6%		
	Coalton	24						
	Crab Orchard	22						
	Cranberry Prosperity	9	-22.88	-19.1%	-10.38	-14.3%	-2.25	-2.4%
	Eastbrook	21						
	Gilbert Middle	15						
	Jumping Branch	30						
	Mercer	21	-0.10	-0.1%	1.52	2.5%	3.05	3.7%
	Milton	22	0.72	0.8%	-0.61	-0.9%	-4.83	-5.5%
	New Manchester	15	-9.86	-9.1%	-4.86	-7.0%	-4.29	-4.8%
	New Martinsville	33						
	Overbrook	23	0.38	0.5%	-0.62	-1.1%	0.38	0.5%
	Sophia Soak Creek	42						
	Southside	20						
	Spanishburg	18						
WV Total		557	-4.28	-4.3%	-1.63	-2.5%	-1.88	-2.4%
Total		630	-4.28	-4.3%	-1.63	-2.5%	-1.88	-2.4%

^{*}Student count is based upon the number of students that had a pre and post test score for knowledge of nutrients

Mean Score Improvement & Percentage Improvement by School/Classroom

			Knowledge	of Nutrients	Push	-Ups	Sit-	Ups
		Student	Mean	Mean %	Mean	Mean %	Mean	Mean 9
School	Classroom	Count*	Change	Change	Change	Change	Change	Chang
Wilkerson	Eva Jeng	27	4.22	128.1%	9.30	154.9%	10.15	44.0%
Moon Mountain	Alexander	23	6.13	276.5%	5.38	59.8%	23.42	152.39
	Caraway	27	5.04	144.7%	6.74	69.4%	13.94	69.3%
	Cave	23	4.52	131.6%	3.33	31.1%	3.64	17.7%
Chesapeake	Allison Sigman	16	3.50	101.8%	2.13	16.8%	10.67	59.0%
Adamston	Alan Bashnett Jr	21	1.00	15.7%	0.67	12.0%	0.71	12.1%
Anne Bailey	Brandy Copen	17	41.76	114.5%	5.12	92.6%	9.71	300.09
Cheat Lake	Brianna Parks	24	1.71	32.8%	5.88	34.9%	9.71	32.4%
Coalton	Ashley Kimble	24	4.42	132.5%	2.71	17.7%	0.50	1.6%
Crab Orchard	Breanna Rider	22	5.36	140.5%	1.73	39.2%	2.95	21.1%
Cranberry Prosperity	Angela Hughes	9	1.56	107.7%	10.67	168.4%	17.00	119.09
Crescent	Carrie Austin	24	3.83	90.2%	8.43	206.4%	8.78	74.19
	Katelyn Cooper	22	2.18	61.5%	4.25	154.5%	7.45	131.29
	Kimberly Dalton	18	1.39	35.2%	5.19	218.4%	6.11	88.7%
	Lisa Della Mea	27	1.48	31.7%	6.29	181.9%	11.61	105.29
	Katie Ringwald	24	1.79	43.0%	7.94	234.4%	12.68	112.69
	Bethany Kirby	22	2.00	39.6%	9.94	255.7%	23.26	278.09
Eastbrook	Donald Pauley	21	4.62	116.9%	4.86	107.4%	5.81	29.7%
Gilbert Middle	Clay Campbell	15	1.87	57.1%	1.00	10.1%	-3.80	-9.4%
Jumping Branch	Jessica Collins	12	0.17	4.4%	6.00	116.1%	20.50	282.89
	Pam Mounts	18	0.72	12.9%	5.44	30.3%	18.78	92.69
Mercer	Angie Neal	21	3.14	124.5%	3.58	43.3%	11.10	78.4%
Milton	Davota Lowe	22	3.36	98.7%	21.60	1107.7%	13.38	638.69
New Manchester	Cara McMahan	15	1.93	64.4%	4.14	290.0%	14.60	663.69
New Martinsville	Marlee Amos	19	4.74	95.7%	6.21	61.8%	5.63	18.49
	Valerie Cain	14	0.36	4.0%	4.31	50.9%	2.57	25.5%
Overbrook	Brooke Bias	23	2.48	77.0%	8.71	569.2%	21.00	619.29
Sophia Soak Creek	Samantha Gordon	42	1.98	50.6%	9.87	1133.3%	2.76	8.6%
Southside	Kristen Austin	20	4.90	107.7%	3.55	120.3%	4.95	31.69
Spanishburg	William Harmon	18	2.50	50.0%	6.17	45.1%	6.28	18.69
Total	.7	630	4.03	81.9%	6.12	86.9%	9.58	56.89

			Systolic Blo	ood Pressure	Diastolic Blo	od Pressure	Resting F	Heart Rate
		Student	Mean	Mean %	Mean	Mean %	Mean	Mean %
School	Classroom	Count*	Change	Change	Change	Change	Change	Change
Wilkerson	Eva Jeng	27		-	-	-		
Moon Mountain	Alexander	23						
	Caraway	27						
	Cave	23						
Chesapeake	Allison Sigman	16						
Adamston	Alan Bashnett Jr	21	-1.00	-0.8%	-0.67	-0.8%	-0.81	-1.0%
Anne Bailey	Brandy Copen	17	-3.71	-3.7%	1.53	2.4%	-2.94	-3.7%
Cheat Lake	Brianna Parks	24	-1.00	-1.0%	-0.42	-0.6%		
Coalton	Ashley Kimble	24						
Crab Orchard	Breanna Rider	22						
Cranberry Prosperity	Angela Hughes	9	-22.88	-19.1%	-10.38	-14.3%	-2.25	-2.4%
Crescent	Carrie Austin	24	-8.48	-8.4%	-3.04	-4.7%	-6.80	-9.2%
	Katelyn Cooper	22	-10.50	-10.8%	-4.09	-6.5%	-2.09	-2.8%
	Kimberly Dalton	18	-4.44	-4.7%	-1.56	-2.5%	-2.78	-3.7%
	Lisa Della Mea	27	-2.07	-2.2%	-2.21	-3.4%	-0.07	-0.1%
	Katie Ringwald	24	-4.36	-4.6%	-0.64	-1.0%	0.09	0.1%
	Bethany Kirby	22	-5.43	-5.5%	-2.10	-3.3%	-2.67	-3.5%
Eastbrook	Donald Pauley	21						
Gilbert Middle	Clay Campbell	15						
Jumping Branch	Jessica Collins	12						
200L2	Pam Mounts	18						
Mercer	Angie Neal	21	-0.10	-0.1%	1.52	2.5%	3.05	3.7%
Milton	Davota Lowe	22	0.72	0.8%	-0.61	-0.9%	-4.83	-5.5%
New Manchester	Cara McMahan	15	-9.86	-9.1%	-4.86	-7.0%	-4.29	-4.8%
New Martinsville	Marlee Amos	19						
	Valerie Cain	14						
Overbrook	Brooke Bias	23	0.38	0.5%	-0.62	-1.1%	0.38	0.5%
Sophia Soak Creek	Samantha Gordon	42	0.02	0.0			0.02	
Southside	Kristen Austin	20						
Spanishburg	William Harmon	18						
Total	***************************************	630	-4.28	-4.3%	-1.63	-2.5%	-1.88	-2.4%

 $^{{}^{\}star}$ Student count is based upon the number of students that had a pre and post test score for knowledge of nutrients

Exhibit 3 Operation Tone-Up 2018 Program Evaluation West Virginia & Arizona

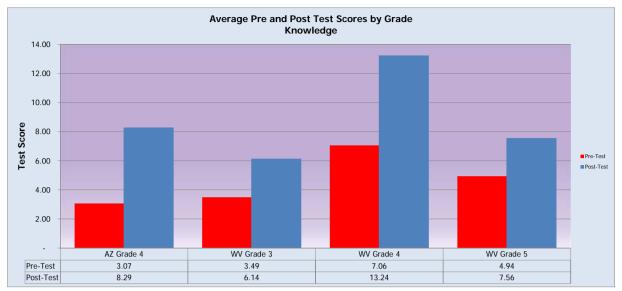
Mean Score Improvement & Percentage Improvement by Grade Level

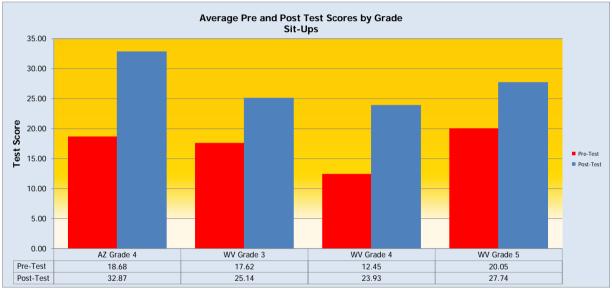
		Knowledge of Nutrients		Push	-l ins	Sit-Ups	
		<u> </u>		Push-Ups		-	
	Student	Mean	Mean %	Mean	Mean %	Mean	Mean %
Grade	Count*	Change	Change	Change	Change	Change	Change
3rd	199	2.65	75.8%	5.13	88.4%	7.52	42.7%
4th	268	5.92	99.1%	7.40	112.9%	12.29	85.9%
5th	163	2.62	53.0%	5.13	55.9%	7.69	38.4%
Total	630	4.03	81.9%	6.12	86.9%	9.58	56.8%

		Systolic Blood Pressure		Diastolic Blo	od Pressure	Resting Heart Rate		
	Student	Mean	Mean %	Mean	Mean %	Mean	Mean %	
Grade	Count*	Change	Change	Change	Change	Change	Change	
3rd	199	-7.64	-7.5%	-2.86	-4.4%	-1.33	-1.6%	
4th	268	-2.28	-2.3%	-0.58	-0.9%	-1.67	-2.1%	
5th	163	-3.79	-3.9%	-1.92	-2.9%	-3.19	-4.4%	
Total	630	-4.28	-4.3%	-1.63	-2.5%	-1.88	-2.4%	

^{*}Student count is based upon the number of students that had a pre and post test score for knowledge of nutrients

Exhibit 4 Operation Tone-Up 2018 Program Evaluation West Virginia & Arizona





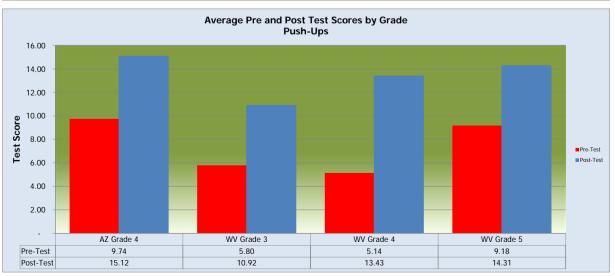
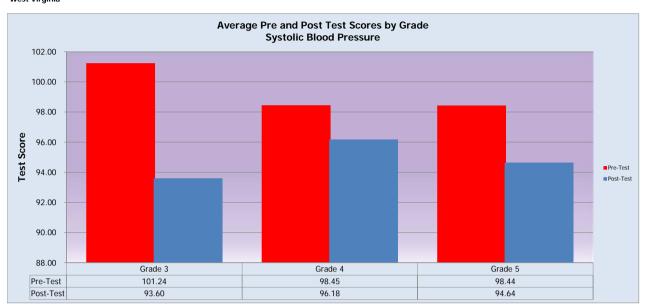
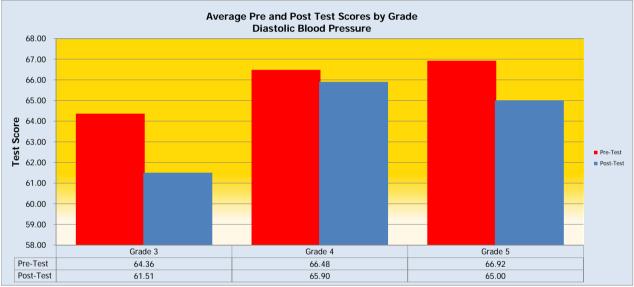


Exhibit 5 Operation Tone-Up 2018 Program Evaluation West Virginia





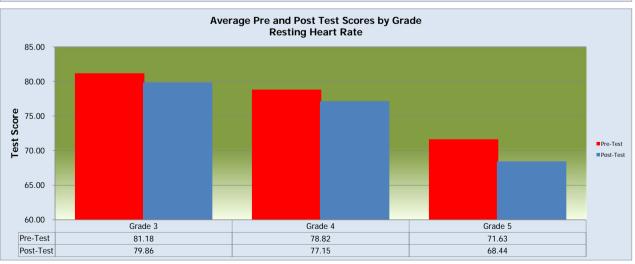
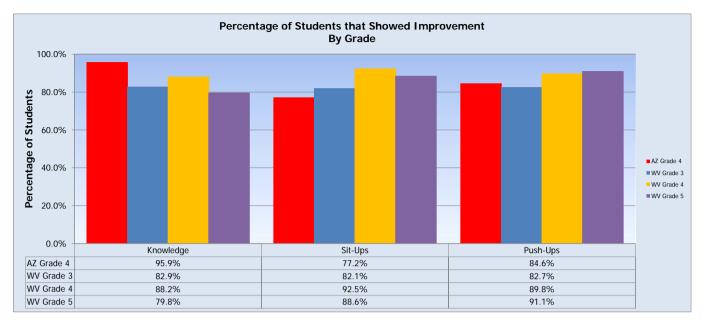


Exhibit 6 Operation Tone-Up 2018 Program Evaluation West Virginia & Arizona



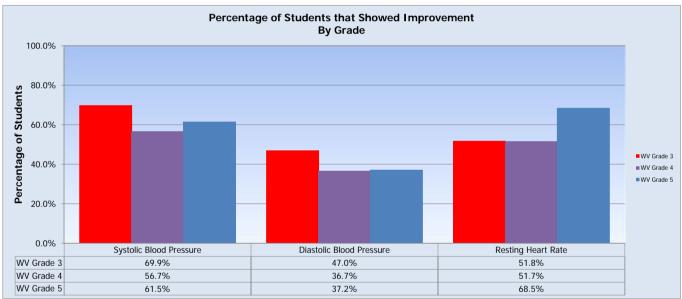


Exhibit 7 Operation Tone-Up 2018 Program Evaluation West Virginia & Arizona

Pre & Post Test Scores for Knowledge of Nutrients

		(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)
	Student	Pre Test	Post Test	Mean	Mean
School	Count	Mean Score	Mean Score	Change	% Change
Wilkerson	27	3.30	7.52	4.22	128.1%
Moon Mountain	73	3.07	8.29	5.22	170.1%
Crescent	137	4.29	6.42	2.13	49.7%
Chesapeake	16	3.44	6.94	3.50	101.8%
Adamston	21	6.38	7.38	1.00	15.7%
Anne Bailey	17	36.47	78.24	41.76	114.5%
Cheat Lake	24	5.21	6.92	1.71	32.8%
Coalton	24	3.33	7.75	4.42	132.5%
Crab Orchard	22	3.82	9.18	5.36	140.5%
Cranberry Prosperity	9	1.44	3.00	1.56	107.7%
Eastbrook	21	3.95	8.57	4.62	116.9%
Gilbert Middle	15	3.27	5.13	1.87	57.1%
Jumping Branch	30	4.87	5.37	0.50	10.3%
Mercer	21	2.52	5.67	3.14	124.5%
Milton	22	3.41	6.77	3.36	98.7%
New Manchester	15	3.00	4.93	1.93	64.4%
New Martinsville	33	6.61	9.48	2.88	43.6%
Overbrook	23	3.22	5.70	2.48	77.0%
Sophia Soak Creek	42	3.90	5.88	1.98	50.6%
Southside	20	4.55	9.45	4.90	107.7%
Spanishburg	18	5.00	7.50	2.50	50.0%
Total	630	4.92	8.95	4.03	81.9%

Exhibit 8 Operation Tone-Up 2018 Program Evaluation West Virginia & Arizona

Pre & Post Test Scores for Push-Ups

		(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)
	Student	Pre Test	Post Test	Mean	Mean
School	Count	Mean Score	Mean Score	Change	% Change
Wilkerson	27	6.00	15.30	9.30	154.9%
Moon Mountain	78	9.74	15.12	5.37	55.1%
Crescent	115	3.39	10.50	7.11	209.7%
Chesapeake	15	12.73	14.87	2.13	16.8%
Adamston	21	5.57	6.24	0.67	12.0%
Anne Bailey	17	5.53	10.65	5.12	92.6%
Cheat Lake	24	16.83	22.71	5.88	34.9%
Coalton	24	15.29	18.00	2.71	17.7%
Crab Orchard	22	4.41	6.14	1.73	39.2%
Cranberry Prosperity	6	6.33	17.00	10.67	168.4%
Eastbrook	21	4.52	9.38	4.86	107.4%
Gilbert Middle	15	9.87	10.87	1.00	10.1%
Jumping Branch	30	12.83	18.50	5.67	44.2%
Mercer	19	8.26	11.84	3.58	43.3%
Milton	20	1.95	23.55	21.60	1107.7%
New Manchester	14	1.43	5.57	4.14	290.0%
New Martinsville	32	9.41	14.84	5.44	57.8%
Overbrook	17	1.53	10.24	8.71	569.2%
Sophia Soak Creek	31	0.87	10.74	9.87	1133.3%
Southside	20	2.95	6.50	3.55	120.3%
Spanishburg	18	13.67	19.83	6.17	45.1%
Total	586	7.04	13.15	6.12	86.9%

Pre & Post Test Scores for Sit-Ups

		(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)
	Student	Pre Test	Post Test	Mean	Mean
School	Count	Mean Score	Mean Score	Change	% Change
Wilkerson	27	23.07	33.22	10.15	44.0%
Moon Mountain	79	18.68	32.87	14.19	75.9%
Crescent	133	9.41	20.83	11.42	121.4%
Chesapeake	15	18.07	28.73	10.67	59.0%
Adamston	21	5.90	6.62	0.71	12.1%
Anne Bailey	17	3.24	12.94	9.71	300.0%
Cheat Lake	24	29.96	39.67	9.71	32.4%
Coalton	24	31.25	31.75	0.50	1.6%
Crab Orchard	22	14.00	16.95	2.95	21.1%
Cranberry Prosperity	7	14.29	31.29	17.00	119.0%
Eastbrook	21	19.57	25.38	5.81	29.7%
Gilbert Middle	15	40.33	36.53	(3.80)	-9.4%
Jumping Branch	30	15.07	34.53	19.47	129.2%
Mercer	20	14.15	25.25	11.10	78.4%
Milton	21	2.10	15.48	13.38	638.6%
New Manchester	15	2.20	16.80	14.60	663.6%
New Martinsville	33	21.88	26.21	4.33	19.8%
Overbrook	23	3.39	24.39	21.00	619.2%
Sophia Soak Creek	42	32.12	34.88	2.76	8.6%
Southside	20	15.65	20.60	4.95	31.6%
Spanishburg	18	33.72	40.00	6.28	18.6%
Total	627	16.86	26.45	9.58	56.8%

Exhibit 9 Operation Tone-Up 2018 Program Evaluation West Virginia

Pre & Post Test Scores for Systolic Blood Pressure

		(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)
	Student	Pre Test	Post Test	Mean	Mean
School	Count	Mean Score	Mean Score	Change	% Change
Crescent	137	97.06	91.27	-5.79	-6.0%
Adamston	21	119.29	118.29	-1.00	-0.8%
Anne Bailey	17	100.47	96.76	-3.71	-3.7%
Cheat Lake	24	99.00	98.00	-1.00	-1.0%
Cranberry Prosperity	8	120.00	97.13	-22.88	-19.1%
Mercer	21	98.86	98.76	-0.10	-0.1%
Milton	18	95.39	96.11	0.72	0.8%
New Manchester	14	108.00	98.14	-9.86	-9.1%
Overbrook	21	83.05	83.43	0.38	0.5%
Total	281	99.27	94.99	-4.28	-4.3%

Pre & Post Test Scores for Diastolic Blood Pressure

	Student	(a) Pre Test	(b) Post Test	(c) = (b) - (a) Mean	(d) = (c) / (a) Mean
School	Count	Mean Score	Mean Score	Change	% Change
Crescent	137	63.58	61.27	-2.31	-3.6%
Adamston	21	82.33	81.67	-0.67	-0.8%
Anne Bailey	17	63.12	64.65	1.53	2.4%
Cheat Lake	24	72.08	71.67	-0.42	-0.6%
Cranberry Prosperity	8	72.75	62.38	-10.38	-14.3%
Mercer	21	61.14	62.67	1.52	2.5%
Milton	18	70.83	70.22	-0.61	-0.9%
New Manchester	14	69.71	64.86	-4.86	-7.0%
Overbrook	21	56.24	55.62	-0.62	-1.1%
Total	281	65.98	64.35	-1.63	-2.5%

Pre & Post Test Scores for Resting Heart Rate

		(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)
	Student	Pre Test	Post Test	Mean	Mean
School	Count	Mean Score	Mean Score	Change	% Change
Crescent	137	73.43	71.08	-2.35	-3.2%
Adamston	21	81.19	80.38	-0.81	-1.0%
Anne Bailey	17	79.71	76.76	-2.94	-3.7%
Cranberry Prosperity	8	93.75	91.50	-2.25	-2.4%
Mercer	21	82.95	86.00	3.05	3.7%
Milton	18	87.56	82.72	-4.83	-5.5%
New Manchester	14	89.00	84.71	-4.29	-4.8%
Overbrook	21	77.62	78.00	0.38	0.5%
Total	257	78.07	76.19	-1.88	-2.4%

Exhibit 10 Operation Tone-Up 2018 Program Evaluation West Virginia

Pre & Post Test Scores by Systolic Blood Pressure Range

	Systolic Blood Pressure									
Systolic		(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)					
Pre Test	Student	Pre Test	Post Test	Mean	Mean					
Range	Count	Mean Score	Mean Score	Change	% Change					
$0 < X \le 114$	246	96.11	92.97	-3.14	-3.3%					
114 < X ≤ 125	31	119.65	107.90	-11.74	-9.8%					
> 125	4	135.75	119.25	-16.50	-12.2%					
Total	281	99.27	94.99	-4.28	-4.3%					

Pre & Post Test Scores by Diastolic Blood Pressure Range

<u>Diastolic Blood Pressure</u>									
Diastolic		(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)				
Pre Test	Student	Pre Test	Post Test	Mean	Mean				
Range	Count	Mean Score	Mean Score	Change	% Change				
0 < X ≤ 75	222	61.94	61.60	-0.34	-0.6%				
75 < X ≤ 85	52	79.73	73.37	-6.37	-8.0%				
> 85	7	91.86	84.71	-7.14	-7.8%				
Total	281	65.98	64.35	-1.63	-2.5%				

Pre & Post Test Scores by Resting Heart Rate Range

Resting Heart Rate									
RHR		(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)				
Pre Test	Student	Pre Test	Post Test	Mean	Mean				
Range	Count	Mean Score	Mean Score	Change	% Change				
$0 < X \le 80$	179	72.32	72.59	0.26	0.4%				
$80 < X \le 100$	62	87.31	81.81	-5.50	-6.3%				
> 100	16	106.56	94.81	-11.75	-11.0%				
Total	257	78.07	76.19	-1.88	-2.4%				

Exhibit 11 Operation Tone-Up 2018 Program Evaluation West Virginia

Systolic Blood Pressure Range 0 < X ≤ 114

	Systolic Blood Pressure (Pre Test Score less than or equal to 114)							
		(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)			
	Student	Pre Test	Post Test	Mean	Mean			
School	Count	Mean Score	Mean Score	Change	% Change			
Crescent	129	95.65	90.60	-5.05	-5.3%			
Adamston	4	113.50	115.50	2.00	1.8%			
Anne Bailey	17	100.47	96.76	-3.71	-3.7%			
Cheat Lake	24	99.00	98.00	-1.00	-1.0%			
Cranberry Prosperity	4	107.75	95.25	-12.50	-11.6%			
Mercer	18	95.44	98.89	3.44	3.6%			
Milton	18	95.39	96.11	0.72	0.8%			
New Manchester	11	105.09	98.18	-6.91	-6.6%			
Overbrook	21	83.05	83.43	0.38	0.5%			
Total	246	96.11	92.97	-3.14	-3.3%			

Systolic Blood Pressure Range 114 < X ≤ 125

Systolic Blood Pressure (Pre Test Score less than or equal to 125 and greater than 114)							
		(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)		
	Student	Pre Test	Post Test	Mean	Mean		
School	Count	Mean Score	Mean Score	Change	% Change		
Crescent	8	119.75	102.00	-17.75	-14.8%		
Adamston	14	119.21	118.86	-0.36	-0.3%		
Cranberry Prosperity	3	122.67	92.33	-30.33	-24.7%		
Mercer	3	119.33	98.00	-21.33	-17.9%		
New Manchester	3	118.67	98.00	-20.67	-17.4%		
Total	31	119.65	107.90	-11.74	-9.8%		

Systolic Blood Pressure Range > 125

Systolic Blood Pressure (Pre Test Score greater than 125)							
	(a) (b) $(c) = (b) - (a)$ $(d) = (c) / (a)$						
	Student	Pre Test	Post Test	Mean	Mean		
School	Count	Mean Score	Mean Score	Change	% Change		
Adamston	3	127.33	119.33	-8.00	-6.3%		
Cranberry Prosperity	1	161.00	119.00	-42.00	-26.1%		
Total	4	135.75	119.25	-16.50	-12.2%		

Exhibit 12 Operation Tone-Up 2018 Program Evaluation West Virginia

Diastolic Blood Pressure Range 0 < X ≤ 75

Dia	Diastolic Blood Pressure (Pre Test Score less than or equal to 75)							
		(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)			
	Student	Pre Test	Post Test	Mean	Mean			
School	Count	Mean Score	Mean Score	Change	% Change			
Crescent	123	61.72	60.62	-1.11	-1.8%			
Anne Bailey	16	62.00	63.69	1.69	2.7%			
Cheat Lake	13	66.31	66.46	0.15	0.2%			
Cranberry Prosperity	6	66.83	58.33	-8.50	-12.7%			
Mercer	18	58.00	61.67	3.67	6.3%			
Milton	16	68.81	70.38	1.56	2.3%			
New Manchester	9	64.22	64.67	0.44	0.7%			
Overbrook	21	56.24	55.62	-0.62	-1.1%			
Grand Total	222	61.94	61.60	-0.34	-0.6%			

Diastolic Blood Pressure Range 75 < X ≤ 85

Diastolic Blood Pressure (Pre Test Score less than or equal to 85 and greater than 75)							
		(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)		
	Student	Pre Test	Post Test	Mean	Mean		
School	Count	Mean Score	Mean Score	Change	% Change		
Crescent	14	79.86	67.00	-12.86	-16.1%		
Adamston	17	80.06	79.94	-0.12	-0.1%		
Anne Bailey	1	81.00	80.00	-1.00	-1.2%		
Cheat Lake	11	78.91	77.82	-1.09	-1.4%		
Cranberry Prosperity	1	80.00	50.00	-30.00	-37.5%		
Mercer	3	80.00	68.67	-11.33	-14.2%		
New Manchester	5	79.60	65.20	-14.40	-18.1%		
Grand Total	52	79.73	73.37	-6.37	-8.0%		

Diastolic Blood Pressure Range > 85

Diastolic Blood Pressure (Pre Test Score greater than 85)							
		(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)		
	Student	Pre Test	Post Test	Mean	Mean		
School	Count	Mean Score	Mean Score	Change	% Change		
Adamston	4	92.00	89.00	-3.00	-3.3%		
Cranberry Prosperity	1	101.00	99.00	-2.00	-2.0%		
Milton	2	87.00	69.00	-18.00	-20.7%		
Grand Total	7	91.86	84.71	-7.14	-7.8%		

Exhibit 13 Operation Tone-Up 2018 Program Evaluation West Virginia

Resting Heart Rate Range 0 < X ≤ 80

	Resting Heart Rate (Pre Test Score less than or equal to 80)							
		(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)			
	Student	Pre Test	Post Test	Mean	Mean			
School	Count	Mean Score	Mean Score	Change	% Change			
Crescent	120	71.70	70.23	-1.47	-2.0%			
Adamston	10	75.70	76.30	0.60	0.8%			
Anne Bailey	9	70.56	69.89	-0.67	-0.9%			
Cranberry Prosperity	1	79.00	79.00	0.00	0.0%			
Mercer	12	72.67	84.50	11.83	16.3%			
Milton	6	74.83	81.67	6.83	9.1%			
New Manchester	6	76.00	75.67	-0.33	-0.4%			
Overbrook	15	72.93	75.73	2.80	3.8%			
Grand Total	179	72.32	72.59	0.26	0.4%			

Resting Heart Rate Range 80 < X ≤ 100

Resting Heart Rate (Pre Test Score less than or equal to 80 and greater than 100)								
		(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)			
	Student	Pre Test	Post Test	Mean	Mean			
School	Count	Mean Score	Mean Score	Change	% Change			
Crescent	17	85.65	77.06	-8.59	-10.0%			
Adamston	11	86.18	84.09	-2.09	-2.4%			
Anne Bailey	6	85.00	81.00	-4.00	-4.7%			
Cranberry Prosperity	5	88.80	84.80	-4.00	-4.5%			
Mercer	6	89.00	84.00	-5.00	-5.6%			
Milton	9	91.22	82.56	-8.67	-9.5%			
New Manchester	3	88.00	88.00	0.00	0.0%			
Overbrook	5	87.20	83.20	-4.00	-4.6%			
Grand Total	62	87.31	81.81	-5.50	-6.3%			

Resting Heart Rate Range > 100

	Resting Heart Rate (Pre Test Score greater than 100)								
		(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)				
	Student	Pre Test	Post Test	Mean	Mean				
School	Count	Mean Score	Mean Score	Change	% Change				
Anne Bailey	2	105.00	95.00	-10.00	-9.5%				
Cranberry Prosperity	2	113.50	114.50	1.00	0.9%				
Mercer	3	112.00	96.00	-16.00	-14.3%				
Milton	3	102.00	85.33	-16.67	-16.3%				
New Manchester	5	105.20	93.60	-11.60	-11.0%				
Overbrook	1	100.00	86.00	-14.00	-14.0%				
Grand Total	16	106.56	94.81	-11.75	-11.0%				

Appendix A, Sheet 1 Operation Tone-Up 2018 Program Evaluation Arizona Statistical Tests

Test and Confidence Interval for Paired t-Test								99.8% Confidence	
	Sample		Standard	Standard	Paired	Degrees	P-Value	Interval of Difference	
Program Indicator	Size	Mean	Deviation	Error Mean	t- Statistic	of Freedom	(less than)	Lower	Upper
Knowledge of Nutrients	73	5.219	2.231	0.261	19.984	72	0.001	4.382	6.057
Sit-Ups	79	14.190	18.117	2.038	6.961	78	0.001	7.671	20.709
Push-Ups	78	5.372	6.067	0.687	7.820	77	0.001	3.174	7.570

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 difference between the mean Pre Test Score and the mean Post Test Score was significant at the 0.001 level.

We reject the H0; there was sufficient evidence to conclude that the average score for Knowledge of Nutrients improved as a result of the Operation Tone-Up Program.

Sit- Ups

HO: 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 difference between the mean Pre Test Score and the mean Post Test Score was significant at the 0.001 level.

We reject the H0; there was sufficient evidence to conclude that the average score for Sit-Ups improved as a result of the Operation Tone-Up Program.

Push-Ups

HO: 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 difference between the mean Pre Test Score and the mean Post Test Score was significant at the 0.001 level.

We reject the H0; there was sufficient evidence to conclude that the average score for Push-Ups improved as a result of the Operation Tone-Up Program.

Appendix A, Sheet 2 Operation Tone-Up 2018 Program Evaluation West Virginia Statistical Tests

Test and Confidence Interval for Paired t-Test								99.8% Confidence	
	Sample		Standard	Standard	Paired	Degrees	P-Value	Interval of Difference	
Program Indicator	Size	Mean	Deviation	Error Mean	t- Statistic	of Freedom	(less than)	Lower	Upper
Knowledge of Nutrients	557	3.876	9.032	0.383	10.129	556	0.001	2.688	5.064
Sit-Ups	548	8.918	13.310	0.569	15.684	547	0.001	7.152	10.683
Push-Ups	508	6.230	15.434	0.685	9.098	507	0.001	4.103	8.358
Systolic Blood Pressure	281	-4.281	9.761	0.582	7.352	280	0.001	-6.098	-2.465
Diastolic Blood Pressure	281	-1.626	7.525	0.449	3.623	280	0.001	-3.027	-0.226
Resting Heart Rate	257	-1.875	8.498	0.530	3.538	256	0.001	-3.531	-0.220

Knowledge of Nutrients

HO: 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 difference between the mean Pre Test Score and the mean Post Test Score was significant at the 0.001 level.

We reject the H0; there was sufficient evidence to conclude that the average score for Knowledge of Nutrients improved as a result of the Operation Tone-Up Program.

Sit- Ups

HO: 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 difference between the mean Pre Test Score and the mean Post Test Score was significant at the 0.001 level.

We reject the H0; there was sufficient evidence to conclude that the average score for Sit-Ups improved as a result of the Operation Tone-Up Program.

Push-Ups

HO: 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 difference between the mean Pre Test Score and the mean Post Test Score was significant at the 0.001 level.

We reject the H0; there was sufficient evidence to conclude that the average score for Push-Ups improved as a result of the Operation Tone-Up Program.

Systolic Blood Pressure

HO: 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 difference between the mean Pre Test Score and the mean Post Test Score was significant at the 0.001 level.

We do not reject the H0; there was not sufficient evidence to conclude that the average score for Systolic Blood Pressure improved as a result of the 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 difference between the mean Pre Test Score and the mean Post Test Score was significant at the 0.001 level.

We reject the H0; there was sufficient evidence to conclude that the average score for Diastolic Blood Pressure improved as a result of the Operation Tone-Up Program.

Resting Heart Rate

HO: 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 difference between the mean Pre Test Score and the mean Post Test Score was significant at the 0.001 level.

We reject the H0; there was sufficient evidence to conclude that the average score for Resting Heart Rate improved as a result of the Operation Tone-Up Program.