

**Health Foundation of South Florida  
Healthy Lifestyles Initiative  
Program Evaluation Brief Report**

Grantee	Miami-Dade County Public Schools (M-DCPS)
Project Name	SPARK Project
Period	January to June 2010
Date of Report	August 19, 2010
Summary of Project	M-DCPS conducted SPARK trainings with physical education teachers from 40 schools in January 2010 and then implemented SPARK at the schools.
Summary of Findings	Both individual level outcomes related to the project were met: 100% of SPARK sites engaged participants in moderate to vigorous physical activity a minimum of 75% of session time; and related to the physical fitness measures, approximately 21% of the below average cases at pretest scored above the pretest average at posttest.

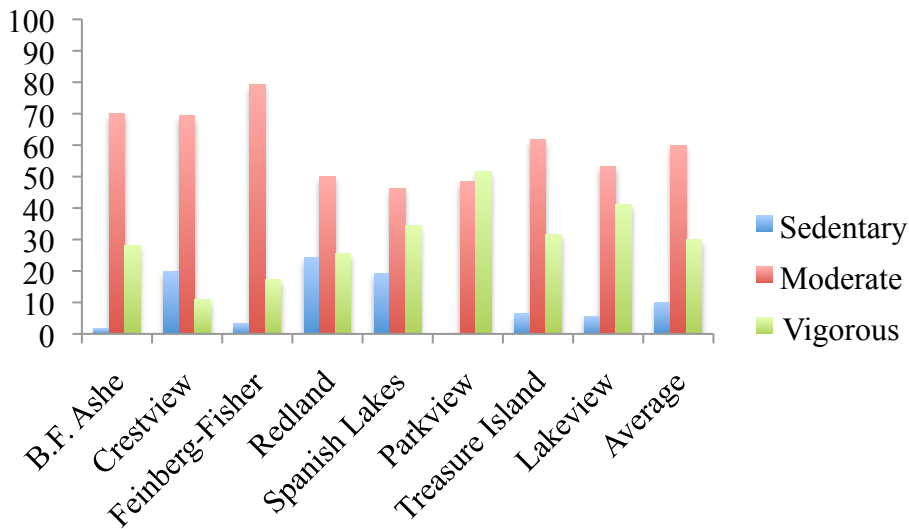
The individual outcome objectives related to the project are presented below in conjunction with a summary of the methods used to address the objectives and the respective findings.

***Goal 1, Objective 2: 100% of SPARK sites engaged participants in moderate to vigorous physical activity a minimum of 75% of session time.***

The SOFIT (System of Observing Fitness Instruction Time), a research-based assessment instrument, was utilized by members of the evaluation team to measure participant physical activity at a sample of 8 sites. The SOFIT was used to obtain a measure of participant activity levels at the sites through direct observation of physical activity sessions by trained observers. Percentile scores are obtained which reflect the observed activity level (i.e., sedentary, moderate, and vigorous) during 96 different 10-second intervals per observation at each site. The SOFIT prescribes that a random sample of 4 children are assessed during each observation. Each site was observed 2 times in order to obtain physical activity scores.

The findings revealed that all of the sites achieved combined moderate and vigorous physical activity levels of 75% and above (see Figure 1). On average, the sites achieved 10.08% sedentary, 59.80% moderate, and 30.11% vigorous physical activity levels. Therefore, this outcome objective was achieved.

Figure 1. Sedentary, Moderate, and Vigorous Physical Activity Levels of Sites



***Goal 1, Objective 3: Physical fitness: 16% or greater of the below-average cases at pretest will score above the pretest average at posttest.***

The M-DCPS physical education teachers at the SPARK sites administered the Fitnessgram assessment instrument. The instrument was used during January and February 2010 (pretest) and again during April and May 2010 (posttest). Research & Evaluation Network (REN) was provided with the surveys from 33 of the schools (which had complete pretests and posttests) and randomly sampled 7 students from each. In order to examine the extent to which this outcome was met 4 fitness tests on the measure were examined: push-ups, curl-ups, trunk lift, and 1 mile run. To further assess this outcome, dependent t-tests were performed to determine whether the change in the scores exceeded random chance levels. The dependent t-test yields a probability value that gauges the likelihood that the change between pretest and posttest was consistent with random chance. Consistent with widely-established convention, probability values that are less than .05 (i.e., 5%) indicate that the score change was unlikely to have occurred due to random chance (i.e., the increase is “statistically significant”), whereas probability values that exceed .05 are consistent with random chance (i.e., the change is effectively zero). In addition, the t-test was supplemented with the Cohen’s d effect size measure. Computationally, this effect size divides the change between the pretest and the posttest by the baseline standard deviation (the standard deviation is a statistic that quantifies the degree of individual score differences). The d statistic describes the magnitude of the change on a standardized metric that is comparable across outcomes. Additionally, this effect size has well-established cutoff values in the behavioral research literature. According to convention, d values that exceed .20 are considered a “small” effect, values greater than .50 are considered a “medium” effect, and values that exceed .80 are “large” effects.

The results are presented below in Table 1. The findings indicate that all four fitness areas demonstrated statistically significant improvements from pretest to posttest ( $p < .01$ ). The average effect size for all of the areas was in the small range ( $d = 0.26$ ). This approximately

corresponds with 21% of the below average cases at pretest scoring above the pretest average at posttest. Therefore, this outcome objective was met.

Table 1  
*Means and Standard Deviations for Fitnessgram Variables*

	n	Pretest		Posttest		d
		Mean	SD	Mean	SD	
Push-ups	230	7.76	6.50	9.55	6.98	0.27*
Curl-ups	229	15.08	11.61	19.23	12.12	0.35*
1 Mile Run	213	765.62	195.55	717.24	187.57	0.25*
Trunk Lift	230	10.70	2.19	11.10	2.00	0.19*

\* p < .01