

# **Texas Fitness NOW Support Sheet for Physical Fitness Data Improvement Plan**

## **SPARK Middle School Physical Education**

### **I. Overview:**

The SPARK Middle School Physical Education (PE) Program evolved from the original SPARK upper-elementary study which demonstrated statistically significant gains in students' fitness over control schools (sites which continued their own – non-SPARK – PE programming). The Fitnessgram was used as the fitness testing instrument. Concepts and methods tested and lessons learned from fitness promotion with children in grades 4 and 5 were applied to the SPARK group's next NIH funded study, Project MSPAN (Middle School Physical Activity and Nutrition). This project involved 24 middle schools spanning 9 school districts and showed an increase in moderate to vigorous physical activity (MVPA) in PE classes of almost 20% in a short, 2-year intervention. Gains in MVPA lead to increases in student fitness scores. These trials also served as the foundation for the SPARK Middle School (MS) PE Program (curriculum, teacher training, content-matched equipment) disseminated in Texas in partnership with Healthy and Wise. Together, Healthy and Wise and SPARK provide middle schools with the tools, training, and support to change school environments and student behaviors in alignment with the Coordinated School Health model.

### **II. Using SPARK content to support your fitness plan:**

The SPARK MS PE book was written in large part, to increase the MVPA and fitness levels of middle school students. Activities that were less active in nature (e.g., Golf) while included, are paired with more active lessons (e.g., Jump Rope) so students meet or surpass 50% or better MVPA during class time, and address personal fitness parameters daily.

#### **A. Fitness Focus Sections in the SPARK MS PE Binder:**

- Promoting Activity Outside of PE Class: This section provides tools and strategies to help teachers make the connection between class, home, and community.
- Warm-Up/Cool-Down (muscular flexibility)
- Strength and Conditioning (muscular strength and endurance – both upper and lower body)
- Power Walk and Jogging (MVPA with purpose and enjoyment)
- Fitness Circuits (allow the practice of any fitness parameters)
- Personal Best Section: Consists of 3 objective tests, aligned with the Fitnessgram, that help students monitor their fitness progress over time.
- Physical Activity Log: Located in the Extra Extra section, which supports instruction of goal setting and rewards for being active away from class.

- Traditional Sports Modified: All the skill related activities (e.g., basketball, softball, hockey, etc.) have been highly modified to address fitness development. Boundaries modified, groups smaller, rules changed, and touches and trials equalized.

## **B. SPARK Units/Activities Linked to Fitnessgram:**

(Note: Samples are provided because so many SPARK activities support the Fitnessgram tests)

### **1. Fitnessgram Measure: Aerobic Capacity**

- PACER test
- One-mile run/walk
- Walk test (ages 13 or greater)

### **SPARK Units provided direct support of cardio development:**

Personal Best Day: All Fitnessgram tests recommended and tested monthly

Dance: Scatter Square, Troika, Tinikling

Field Games: Speedball, Hockey

Games: Heart Alert, Grab The Apple, Flag Grab

Frisbee: 3 Catch, Endline, Ultimate

Fun and Fitness Circuits: All

Jump Rope: All

Power Walk/Jog: All

Soccer: Get Your Ball, 3 Trap, Modified Mini-Games

Track and Field: All

### **2. Fitnessgram Measure: Body Composition**

- Percent body fat (calculated from triceps and calf skinfolds)
- Body mass index (calculated from height and weight)

Note: All SPARK units support movement and calorie burning is a strategy to improve body composition.

### **3. Fitnessgram Measure: Muscular Strength, Endurance, and Flexibility**

- Abdominal strength and endurance (curl-up)

SPARK Strength and Conditioning Section – and many SPARK activities prompt practice in abdominal strength (e.g., Tag Game where pairs do 3 curl-ups if tagged, curl-up section in the Fitness Circuit, pairs laying back and coming up at same time to exchange a ball in Games section, etc.).

- Trunk extensor strength and endurance (trunk lift)

As above.

- Upper body strength and endurance (choose from push-up, modified pull-up, and flexed arm hang)

As above.

- Flexibility (choose from back-saver sit-and-reach and shoulder stretch)

As above.

## **Healthy and Wise Strength, Conditioning, and Wellness Program Guide A Plan for Fitness**

The emphasis of the Healthy and wise Strength, Conditioning, and Wellness Program Guide is to provide a well-rounded approach to fitness, offering a framework of activities weekly that address the components of fitness – cardiorespiratory endurance, flexibility, muscular strength and endurance, as well as body composition. Various sports and skill development activities are also integrated throughout the Program Guide to provide a wide variety of physical activities that offer fun, challenge, and health benefits.

The guide was developed to ensure that the primary fitness components are included and addressed each week. The program guide provides 36 weekly lesson plans with scheduled quarterly fitness assessments beginning with week 1 and occurring again in weeks 13, 25, and 35. This plan helps teachers evaluate results and improvements on an ongoing basis. Results are compared to previous fitness assessments so teachers can use a data-decision model for planning instruction.

Building aerobic capacity/endurance, and muscular strength and endurance are components addressed each week and there are many strength and conditioning

exercises for 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> graders that not only provide body weight exercise descriptions, but also exercises utilizing free weights and machine weights appropriate for 7<sup>th</sup> and 8<sup>th</sup> graders. This guide also includes spotting techniques and gender issues that will help support and encourage females to improve this area of fitness and also the importance of utilizing these exercises to maintain the right proportion of fat and lean muscle mass – body composition.

Flexibility exercises are utilized in warm-up and cool downs and the Program Guide provides fundamental reasons why and how these exercises should be incorporated as part of the fitness plan. In addition, some of the weekly lesson plans have more concentrated emphasis on various flexibility exercises.

### **Key Fitness Improvement Components**

- Provides a 36-week fitness plan with key fitness components built into each weekly lesson plan.
- Fitness assessments are included in the plan in Weeks 1, 13, 25, and 35 so teachers can gauge improvement throughout the year. Fitness forms for ongoing evaluation, comparison, and a comment section allow teachers to assess and compare from previous assessments and current data approximately every 11 to 13 weeks.
- A wide variety of muscular strength and endurance exercises (with descriptions) that include body weight exercises and exercises utilizing free weights and machine weights. Grade level and gender issues are highlighted in the program guide.
- Coordinated with SPARK PE to provide more resources that address each area of fitness.

**The Healthy and Wise Strength, Conditioning, and Wellness Program Guide can be accessed online at:**

[http://www.caprockpress.com/middleschool/Middle%20School%20HW-SPARK%20\(PE%20Guide\)%2008-09.pdf](http://www.caprockpress.com/middleschool/Middle%20School%20HW-SPARK%20(PE%20Guide)%2008-09.pdf)