

Title of Intervention and Website: A Physical Fitness Program for Fifth Grade Students

Intervention Strategies: Group Education

Purpose of the Intervention: To determine the effect of a structured physical fitness program in improving 5th graders strength, flexibility and endurance

Population: 5th grade students

Setting: Neighboring schools in Tucson, AZ; school-based

Partners: None mentioned

Intervention Description:

- Group Education: A nine-month, three days per week physical fitness program was administered by the classroom teacher emphasizing physical fitness activities and the development of skills in several sports. Instruction included calisthenics, rope jumping, ball handling, walking, jogging and running. Students were also required to participate once a week in an additional set of training exercises.

Theory: Not mentioned

Resources Required:

- Staff/Volunteers: student physical education teacher
- Training: not mentioned
- Technology: not mentioned
- Space: space to conduct physical education sessions
- Budget: not mentioned
- Intervention: exercise equipment, staff to organize and conduct track meets and field day
- Evaluation: field evaluations, pull up bar, measuring tape, stop watch, mile course

Evaluation:

- Design: experimental
- Methods and Measures: Field trials to measure level of fitness were conducted prior to the beginning of the school year, at the end of the school year, and again at the beginning of the following school year: A battery of tests developed by the American Alliance for Health, Physical Education, and Recreation included pull ups for boys, flexed arm hang for girls, sit ups, standing long jump, shuttle run and mile walk/run.

Outcomes:

- Short Term Impact:
 - Significantly greater levels of improvement were found in experimental group children on four of nine fitness variables measuring endurance, strength and flexibility (hamstring flexibility, pull-ups, sit-ups, and the mile run)
 - Experimental children demonstrated significantly less decline in ankle flexibility when compared to controls.
 - The experimental group demonstrated improvements in both endurance and strength which significantly exceeded that found among controls.
 - For two of the five variables, sit-ups and the mile run, significant differences in the mean level of improvement were maintained for at least three months beyond the end of the experimental intervention.
 - The physical fitness program had a positive influence on the general activity level of the students and was adopted by nine of the other 10 classrooms in the experimental school.
- Long Term Impact: not mentioned

Maintenance: Not mentioned

Lessons Learned: The findings of this study indicated that an intensive program of exercise and physical skill development can foster significant improvement in the strength and endurance of elementary school children and improvements in the level of fitness may persist beyond the exposure to such a program.

Citation(s):

Duncan, B., W. T. Boyce, et al. (1983). "A controlled trial of a physical fitness program for fifth grade students." *J Sch Health* 53(8): 467-71.