



of the American Alliance for Health, Physical Education, Recreation and Dance

AAHPERD RESEARCH GRANT PROGRAM AWARD 1998

A Comparison of Daily and 1 Day-a-Week Physical Education Programming

INVESTIGATOR Lynn Housner, West Virginia University

CATEGORY Collaborative Research Grant

**ABSTRACT
AUTHORS** Roxanne Light & Dale McVicker, Kingwood Elementary School
Linda Carson, Andrew Hawkins, Lynn Housner, Laura Treanor,
Sandra Vanin, & Robert Wiegand, West Virginia University

ABSTRACT

The project compared a yearlong program of daily PE to a 1 day-a-week PE curriculum. All children were to be taught by their regular PE teacher, who had 22 years of experience and a master's degree. The President's Physical Fitness test battery, required by law in West Virginia (at the time of the grant), was used to assess health-related fitness. The tests consisted of cardiovascular fitness (distance run), flexibility (sit & reach), upper body strength/endurance (flexed arm hang), agility (shuttle run), abdominal strength/endurance (curl-ups), and body composition (BMI). For traveling skills (hopping, galloping, sliding, jumping, leaping) and manipulative skills (throwing, catching, dribbling, kicking); Children were assessed on their ability to exhibit critical elements of the skills. A 15-item knowledge test was used to assess the children's knowledge of movement and fitness concepts.

The physical education component of the Sport, Play, and Active Recreation for Kids (SPARK), designated as a "program that works" by the U.S. Department of Education, was used. The lessons were 30 min and consisted of two parts; (a) health-fitness, which includes activities such as aerobic dance, jump rope, etc. that focus on cardiovascular fitness and abdominal and upper body strength and (b) skill-related, focusing on the development of skill while reinforcing cardiovascular fitness. Thirty-one lessons (daily = 14, and 1 day-a-week = 17) were observed using the West Virginia University Teaching Evaluation System. Multivariate analyses of variance (MANOVAs) were conducted for students, and teacher variables indicated that the lessons provided for the daily and 1 day-a-week programs were highly similar; $2 \times 2 \times 3$ (Group x Gender x Grade).

The findings of the study provide evidence that a structured program of physical education can positively effect the acquisition of motor skills, fitness, and knowledge of children in grades K-2. Additionally, the results indicate that children who receive daily physical education for 150 min each week achieve more in these areas than children who receive a 1 day-a-week program for 45 min each week.

FURTHER INFORMATION

Visit: <http://www.wvu.edu/~physed/housner/>

For further information on the AAHPERD Research Grant Program, contact the Research Consortium office at research@aahperd.org / (703)476-3415