

Academic Excellence Must Include Physical Education

George A. Langford & LaGary Carter

Abstract

Physical education has long been an integral part of the school curriculum. However, many times the instruction is very similar from one grade to the next in middle/junior and senior high school. Physical education curricula should be sequential to promote lifelong physical activity. The problem is that primary and secondary physical education often invokes spectator sports or group activities, yet few individuals ever have the opportunity or desire to engage in such pursuits throughout adulthood. Physical educators within the schools have failed to address the components of health-related fitness within physical education such as body composition, cardiorespiratory endurance and musculoskeletal fitness. Instead, the bulk of instruction tends to be geared towards developing the components of skill-related fitness such as speed, agility, and muscular power. The majority of our states require only one year of physical education or have no requirements in grades 9-12. The debate among politicians, school administrators, teachers and parents concerns the value of subject matter as it relates to improving national test scores. The educational philosophy today is to compromise or even eliminate physical development in the hope of improving one's cognition. It is plausible that a decline in all aspects of the educational paradigm will suffer from an unbalanced approach to improving the whole.

The requirement of physical education has long been an integral part of the school curriculum. However, many times the instruction is very similar from one grade to the next in middle/junior and senior high school. The same skills that are taught in sixth grade softball are re-taught each year through the twelfth grade. For

the most part, students never experience a difference in content from one year to the next. This certainly doesn't happen in other disciplines. In mathematics, we find that pre-algebra knowledge and skills lead to algebra then to geometry then to algebra II and then to trigonometry. Curricular guides in physical education must be developed to provide distinct scope and sequence from one grade to the next. Physical education curricula should be sequential to promote lifelong physical activity. These guides must remove the redundancy of twelve years of content and superfluous repetition of skill development for the mere sake of expertness.

This capricious attitude exemplified by physical education curriculums has led to a decrease in the physical education requirements in the public schools. Also, it has produced a generation of unmotivated, overweight, inactive, technological couch potatoes.

Facing the Facts

The National Association for Sport and Physical Education (1993) revealed in its "Shape of the Nation" article, that after Congress passed Resolution 97 encouraging states and local school boards to provide quality physical education programs, six years later there are only thirteen states that require a physical education specialist to teach elementary school physical education. Also, more than half of the states requires only one year of physical education or have no requirements in grades 9-12. Less than 36% of elementary and secondary schools even offer daily physical education (Southern et al., 1999).

Data contained within the U.S. Department of Health and Human Services (1996), *Physical Activity and Health: A Report of the Surgeon*

General, revealed that fourteen percent of the young people surveyed reported they had not been involved recently in physical activity. As age or grade increases, participation in physical activity sharply diminishes. Almost half of Americans age 12-21 are not participating in regular vigorous activity. During adolescence, physical activity distinctly decreases. Less than 20 percent of high school students are physically active, five days a week, for 20 minutes or longer, in physical education classes. Between 1991 and 1995, enrollment of high school students in daily physical education classes have dropped from 42 percent to 25 percent. Additionally, the *Surgeon General's Report* recommended the following: "Childhood and adolescence may thus be pivotal times for preventing sedentary behavior among adults by maintaining the habit of physical activity throughout the school years. School-based interventions have shown to be successful in increasing physical activity levels. With evidence that success in this arena is possible, every effort should be made to encourage schools to require daily physical education in each grade and promote physical activities that can be enjoyed throughout life." (p. 6)

According to the National Children and Youth Fitness Study, at least half of today's youth do not engage in physical activity appropriate to long-term health promotion (*Sothorn et al., 1999*). The pattern that is appearing among school age children in the U.S. is one that is less active, permeated with unhealthy lifestyles, resulting in children becoming profoundly overweight. More than one fourth of children in the United States are considered clinically obese (*Sothorn et al., 1999*). Childhood obesity is occurring at an epidemic rate in the U.S. (*Moran, 1999*). The most severe cases of obesity, defined as a body mass index (BMI) for ages over the 95th percentile has doubled over the past twenty years. Also, the standard cases of obesity, BMI for age over the 85th percentile, has increased about 50 percent. (*Styne, 1999*) Research published in the *Journal of the American Medical Association*

(*Mokdad et al., 1999*) revealed that the swell of obesity is epidemic in the United States, with an increase across all age groups from 12.0% in 1991 to 17.9% in 1998. The most significant increase was found in 18-29 year-olds (7.1% to 12.1%). Ironically this is an age group that spans a population just finishing high school to one that has completed college and moved on into society to become productive in the work force. It has been reported in the *New England Journal of Medicine* (*Whitaker et al., 1997*) that childhood obesity carries through into adulthood when there is a strong genetic component. However, the dramatic increase in obesity in the United States is not brought about only by genetics. The critical reason is the change in the environment that has caused populations that are genetically susceptible to obesity to increase in numbers. This environmental changes include: decrease in the number of mandated physical education programs in schools, lower physical activity levels, increase in caloric intake due to the availability of fast-foods, lack of safe neighborhood areas to exercise, and the perpetual development of technology (computer, video games, television)(*Styne, 1999*).

The health problems associated with obesity in adulthood are well known. These would include hypertension, heart disease, and type 2 diabetes mellitus. The estimated costs related to obesity and the problematic complications that follow approach \$100 billion (*Wolf & Colditz, 1998*). The problems related to childhood obesity bears its own morbidity. Type 2 diabetes mellitus is now the most common type of diabetes diagnosed in children (*Glaser & Jones, 1996*). *Styne (1999)* reports that physicians are seeing children between the ages of six and ten with BMI's over the 99th percentile die of sudden cardiopulmonary arrest caused by arrhythmias associated with their obesity. Today, the treatment of obesity in children is similar to the treatment of adults. It is lengthy, expensive, and usually only effective if the entire family becomes involved. It is time that our attention and goal should be directed toward prevention (*Styne, 1999*).

Again, data from the U.S. Department of Health and Human Services (1996) indicates that regular moderate physical activity can substantially reduce the risk of developing or dying from heart disease, diabetes, colon cancer, and high blood pressure. The report also points out that school-based physical education is “the most widely available resource for promoting physical activity among young people in the United States,” and recommends that “every effort should be made to encourage schools to require daily physical education in each grade and to promote physical activities that can be enjoyed throughout life” (p. 6). David Satcher, Surgeon General of the United States, (D. Satcher, personal communication, March 13, 2000) states that “if we do not require physical education in our schools, if playgrounds and parks are not safe to play in, if adults don’t organize children’s sports activities; children will be physically inactive. We must learn how to develop and implement measures to prevent obesity and promote healthy lifestyles. From that standpoint, our schools have a responsibility to educate both minds and bodies. That should be our challenge for the future.” Terry and Crawford (2000) consider the Surgeon General’s report to be a strong argument in support of the need for physical education, due to the fitness status of our youth. However, Crawford also claims “the Surgeon General’s report is not a panacea that leads to fitness utopias” (p.10). Therefore, it could be argued that physical education, as we know it, has failed in improving youth fitness or overall activity levels. The data from the Surgeon General’s report is either; (1) not reaching the physical educator, (2) filtering down to them, yet falling on deaf ears, or (3) the physical educators lack the time, knowledge or ability to bring about behavior changes through curricular reform.

Academic Trends

As a nation, we are all concerned about developing a better educational structure for improving academic performance. However, as

curriculum and educational reform take place, the solution has been to cut out those academic areas that are not evaluated by national standardized tests. These areas are sometimes referred to as the “fluff” of education. As politicians, school administrators, teachers and parents debate over which areas are more valuable and what will be funded, the controversy is driven by improvement on ACT and SAT scores. The goal of educational excellence is certainly understandable, however, if tomorrow’s scholars die prematurely from hypokinetic disease their greatest contributions to society will never materialize. The ancient Greeks understood that the educational experience encompassed the development of the mind, body, and spirit, with each deserving equal importance (McArdle, Katch & Katch, 2000). Although, our educational philosophy today is to compromise or even eliminate physical development in the hope of improving one’s mental aptitude. It is plausible that a decline in all aspects of the educational paradigm will suffer from an unbalanced approach to improving the whole.

Gabbard (2000) indicates “many administrators express the view that, while acknowledging that physical education is important to child development and school activities, they consider it to be an enrichment or frill unworthy of high priority, especially if a school’s goal is improving poor academic performance” (p.1). Consequently, the trend is to cut physical education programs from school curriculums and state requirements. In lieu of the staggering research concerning the health status of school aged children, it is time to focus on physical education as a necessary objective of education, just as we do with other academic areas. In doing so, physical education can play an important role in changing health behaviors as well as improving the pursuit of academic excellence. If physical education is to have an impact upon the health of the nation, there must be a more aggressive drive toward physical education reform. The curriculum should provide for innovative physical activities instead of the traditional programs that have shown to be

unpopular and unsuccessful. The new curriculum must include accountability and provide success for every student. The National Association For Sport and Physical Education has created a task force to develop *National Standards for Physical Education*. These standards should provide teachers of physical education with an indication of what should be measured to determine the progress of student achievement in the areas of preventing obesity, diabetes, and heart disease. Student achievement is the key to physical education being considered part of the required curriculum. With more and more stress on traditional academic cognition, there is less opportunity for any physical activity to take place during the school day. This comes at a time where elementary and secondary school students are developing lifestyle attitudes and practices that will be carried on throughout adulthood. As physical educators, we must deliver a curriculum that allows students to be active and moving for as much of the class time as possible without standing in lines or sitting and watching. Also, teachers should plan activities that help students to develop healthy lifestyles.

Skill Redundancy versus Lifelong Health

Elementary and secondary health and physical education should focus less on the redundancy of skill development for team sports or recreational endeavors. Rather, this student populous should be instructed toward the health benefits and skills inherent to lifelong activities. The problem is that elementary and secondary physical education often invokes spectator sports or group activities, yet few individuals ever have the opportunity or desire to engage in such pursuits throughout adulthood. Many of these activities may be difficult for individuals to successfully participate in after schooling is complete with the responsibilities of job, family, and very little leisure time. Therefore, shouldn't adolescents be afforded the opportunity to learn and hopefully adopt the attributes of health and physical fitness which can be enjoyed over a lifetime?

A number of health agencies, such as the Centers for Disease Control and Prevention and the American College of Sports Medicine recommend that everyone above the age of six engage in at least 30 minutes of moderate—intensity exercise on most days of the week (Pate et al, 1995). It is time to increase the time being physically active in physical education classes. Arguably, many adolescents would rather play sports than indulge in fitness activities such as running, swimming, or weight lifting. In such instances, physical educators should try and incorporate activities such as basketball, handball, racquetball, mountain biking, rock climbing, inline skating, country line dancing, cross country skiing, canoeing, orienteering, and kayaking, which tend to address both skill and health-related fitness. The Center for Disease Control (1997) in collaboration with universities, national, federal, and voluntary organizations, developed *Guidelines for School and Community Programs to Promote Lifelong Physical Activity Among Young People*. The guidelines indicate key principles and state that “physical activity programs for young people are most likely to be effective when they: emphasize enjoyable participation in physical activities that are easily done throughout life, offer a diverse range of noncompetitive and competitive activities appropriate for different ages and abilities, give young people the skills and confidence they need to be physically active, promote physical activity through all components of a coordinated school health program and develop links between school and community programs” (p.3-4). However, few schools possess the equipment and facilities necessary to adequately promote lifelong physical activity and address the elements of health-related fitness. In order for physical educators to deliver a curriculum that includes innovative activities for motivating lifelong activity, community involvement becomes essential. Schools may have to form partnerships with local businesses and organizations that can help to provide equipment and facilities for physical education.

Partnerships

There has been tremendous growth in the corporate and medical fitness sector over the last two decades. McNeil (1987) believes that the rapid growth in company wellness programs may stem from the failure of health and physical education programs offered in the public schools and universities. The Medical Fitness Association (2000) reports a steady growth in medical fitness centers, especially during the last four years. The number of individuals being served by medical fitness centers increased fifteen percent each year from 1995 to 1998. The number of medical fitness center members is projected to be 1.8 million by 2005 and approximately 3 million by 2010. The future may find private, corporate, and medical fitness centers partnering with local schools. Physical education teachers would then be able to utilize the resources of the local YMCA, private health-club, hospital fitness center, or corporate fitness facility to introduce and motivate students towards adopting a healthy lifestyle. Students could be transported by bus to a given fitness facility or schools could build a fitness center, on site through corporate sponsorship, to be utilized by faculty, staff and students. We see this trend already among colleges and universities, so why not in elementary and secondary education as well? Employers have a vested interest in maintaining and improving the health of their employees in an effort to curtail health care costs, decrease absenteeism, and increase worker morale and productivity. This interest should encompass the children of employees in the form of preventive measures. After all, today's students are tomorrow's employees.

Conclusion

As we trace our professional roots from an era called physical training to a time of education through the physical, today known as physical education, the intent has always been to help students enjoy and participate in activities throughout their lifetime. In 1893, Dr. Thomas

Wood (cited in Lee & Bennett, 1985a) while speaking to the International Congress on Education, indicated how physical education should fit into the complete education of students. He suggested "physical education must have an aim as broad as education itself and as noble and inspiring as human life. The great thought in physical education is not the education of the physical nature, but the relations of physical training to complete education, and then the effort to make physical contribute its full share to the life of the individual, in environment, training, and culture" (p.22). With childhood obesity and heart disease in the U.S. leading the world in epidemic proportions, now more than ever, physical education must be included as part of the core curriculum. No other discipline can have more effect upon the physical aspects of the human body, healthy lifestyles, and enjoyment of lifelong activity. As states push for academic excellence, physical education must be required in order to contribute to the individual's well-being and avoidance of premature death resulting from physical inactivity.

REFERENCES

- Centers for Disease Control and Prevention. (1997). *CDC's guidelines for school and community programs promoting lifelong physical activity*. [On-line]. Available: <http://www.cdc.gov/nccdphp/dashlphactaag.htm>
- Gabbard, C. (2000). Physical education: Should it be in the core curriculum? *Principal* [On-line], 3. Available: <http://www.naesp.org/comm/polooc.htm>
- Glaser, N., & Jones, K.L. (1996). Non-insulin-dependent diabetes mellitus in children and adolescents. *Advanced Pediatrics*, 43, 359-396.
- Lee, M. & Bennett, B. (1985a). 1885-1900: A time of gymnastics and measurement, *Journal of Physical Education, Recreation and Dance* 56,(4), 19-26.

- McArdle, W.D., Katch, F.I., and Katch, V.L. (2000). *Essentials of exercise physiology* (2nd ed.). Philadelphia: Lippincott Williams & Wilkins.
- McNeil, A.W. (1987). Wellness programs and their influence on professional preparation. In J.D. Massengale (Ed.), *Trends towards the future in physical education* (pp 85-94). Champaign, IL: Human Kinetics.
- Medical Fitness Association. (2000, August 29). *Survey demonstrates significant growth in medical fitness industry* [On-line]. Available: <http://www.medicalfitness.org/news/story8.htm>
- Mokdad, A.H., Serdula, M.K., Dietz, W.H., Bowman, B.A., Marks, J.S., & Koplan, J.P. (1999). The spread of the obesity epidemic in the United States, 1991-1998. *Journal of the American Medical Association*, 282, 15 19-1522.
- Moran, R. (1999). The evaluation and treatment of childhood obesity. *American Family Physician*, 59, 859-873.
- National Association for Sport and Physical Education. (1993). *The shape of the nation survey: A survey of state and physical education requirements*. AAHPERD: Reston, VA.
- Pate, R.R., Pratt, M., Blair, S.N., et al. (1995). Physical activity and public health. A recommendation from the Centers for Disease Control and Prevention and the American College of Sports medicine. *Journal of the American Medical Association*, 273, 402-407.
- Southern, M.S., Hunter, S., Suskind, R.M., Brown, R., Udall, J.N., & Blecker, U. (1999). Motivating the obese child to move: The role of structured exercise in pediatric weight management. *Southern Medical Journal*, 92, 577-584.
- Styne, D.M. (1999). Childhood obesity: Time for action, not complacency. *American Family Physician*, 59, 758-760.
- Terry, C. and Crawford, S. (2000). Has the Surgeon General's report had any concrete beneficial effect on activity levels and health? *Journal of Physical Education Recreation and Dance*, 71(6), 10.
- U.S. Department of Health and Human Services. (1996). *Physical activity and health: A report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion.
- Whitaker, R.C., Wright, J.A., Pope, M.S., Seidel, K.D., & Dietz, W.H. (1997). Predicting obesity in young adulthood from childhood and parental obesity. *New England Journal of Medicine*, 337, 869-873.
- Wolf, A.M. & Colditz, G.A. (1998). Current estimates of the economic cost of obesity in the United States. *Obesity Research*, 6, 97-106.

George A. Langford and LaGary Carter teach within the department of Kinesiology and Physical Education at Valdosta State University (Georgia).