

**BUCHER AND THAXTON**



# **Physical education and sport**

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*with 59 illustrations*

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# Preface

Students majoring in physical education and sport, as well as practitioners in the field, are interested in knowing more about the future of their chosen field of endeavor. They want answers to such questions as "What potential does physical education and sport have as a profession in the 1980s?" "What areas of specialization represent the best professional opportunities?" "How can one become a leader in his or her profession?" and "What do futurists predict for physical education and sport in the years ahead?"

In addition to knowing more about the future of their profession, students and practitioners also want to know how they can render the most valuable service to their clientele. They want to know how to develop a sound philosophy of physical education and sport, use a systems approach in program development, teach scientifically so that out-

comes of learning can be predicted with more certainty, close the gap between research and practice, provide for the needs of handicapped persons, and conduct an educationally sound sports program.

This text provides students majoring in physical education and sport, as well as practitioners, with the answers to these questions. It is designed to challenge physical and sport educators to correct past professional weaknesses and to build a bright future for their field of endeavor. It indicates the steps that must be taken if physical education and sport is to achieve its destiny and become a more dynamic and respected profession. It represents a professional blueprint for the future.

**Charles A. Bucher**  
**Nolan A. Thaxton**

**Cover photo by Ron Edwards**

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**Part one**

# **PHYSICAL EDUCATION IN TODAY'S SOCIETY**



# 1 □ Physical education and sport's potential



Courtesy Westchester Co., N.Y., Department of Parks, Recreation and Conservation.

Today, as never before, physical education is being challenged. Opportunities are presenting themselves that will enable it to become one of the truly great professions. The services it has potential for rendering are in great demand. The public is spending millions of dollars to achieve health goals, many of which are closely related to physical education. Men and women want to control their

weight, understand scientific movement concepts, develop physical skills, flatten their stomachs, prevent heart attacks, understand their bodies, and stay healthy. Physical educators should play an active role in helping people to achieve such goals.

The public has never been more interested in health and fitness than it is today. Health care legislation is being proposed that could



#### 4 *Physical education in today's society*

cost as much as \$80 billion a year. Federal and state governments are allocating millions of dollars for physical education for handicapped persons. Nearly 100 million adults in the United States, 18 years of age and older, are now actively engaged in physical fitness activities. Membership in health spas increased by 25% in 1 year. An estimated 1300 books on fitness are currently in print. At least 50,000 United States firms spend an estimated \$2 billion on fitness and recreational programs for their employees. Millions of joggers are a common sight on the highways, streets, and sidewalks of the country. Athletic shoes are a big seller—\$13 million worth sold in 1 year. The membership rolls of Weight Watchers and stop-smoking groups are growing.

Physical education is being challenged. It is being challenged to play a more active and dynamic role in furthering the health and fitness of the nation. It is being challenged to become all that it is capable of becoming. The question is, Will physical education accept the challenge? Will this field of endeavor take advantage of the public's interest in health and fitness? Will it be looked on as a profession that can provide some of the critical health services the public is seeking? Will it become known and respected for the leadership it can provide?

The term *physical education* means training the physical, and equally important, educating people about their body and its needs. In other words, to meet the challenge and provide the health services the nation needs, physical education must be concerned not only with physical activities—games, dance, sports, and other forms of physical activity—but also with communicating to the public the biological impact that physical activity has on the human body. Furthermore, physical education, as used in this text, incorporates the term *fitness*. The statement by a joint committee of the American Medical As-

sociation and the American Association for Health, Physical Education, and Recreation in the May, 1964 issue of the *Journal of the American Medical Association* elaborates on the term *fitness*: “. . . fitness for effective living implies freedom from disease; enough strength, agility, endurance and skill to meet the demands of daily living; sufficient reserves to withstand ordinary stresses without causing harmful strains; and mental development and emotional adjustment appropriate to the maturity of the individual.” Thus in light of this statement, physical education is concerned with the country's fitness.

#### **WHY IS THERE A NEED FOR PHYSICAL EDUCATION TODAY?**

Why is it that so many people are jogging today? Why are new health clubs being opened at an increasing rate of speed? Why are so many companies developing corporate fitness programs for their employees? Why are aerobic dancing and yoga popular? Why is the public vitally interested in its health? Why are people becoming more involved in sports? Is it because clothes are more revealing today and exercise will help people to look halfway respectable? Is it because it is a passing fad? Is it because men and women are afraid of having a heart attack? Three reasons have been suggested.

#### **The medical profession is giving support to physical education**

One important reason for the need for physical education today is that the medical profession is giving active support to matters with which physical educators are concerned. Today, it is difficult to find a doctor like Peter Steinchon of Hartford, Connecticut, who more than 30 years ago wrote the books *You Don't Have To Exercise—Rest Begins at 40* and *How to Stop Killing Yourself* (through an absence of exercise), or to hear statements like those expressed by Dr. Hutchins, former

president of the University of Chicago, who echoed the sentiments of many medical doctors when he pointed out that every time he had the urge to exercise he would lie down until the feeling passed.

Times have changed. The medical profession has spent considerable time over the years conquering communicable and other diseases. They have done an excellent job in eradicating pneumonia, tuberculosis, and scarlet fever. Now, however, they realize something else must be done if the health of the nation is to be improved. Some statements from eminent medical doctors support this premise. A doctor who was involved in the development of health policy of the Department of Health, Education and Welfare states, "Fitness can contribute as much to the nation's health (in the future) as immunization and sanitation advances have done in the past." Dr. Kenneth H. Cooper, who is well known for his work in the area of fitness, points out that such leading causes of death in Americans as heart disease, lung cancer, accidents, cirrhosis of the liver, and strokes are related to such things as lack of proper exercise, obesity, diet, and alcohol. He raises the question, "Are we actually killing ourselves?" Psychiatrists are emphasizing exercise and diet in treating such problems as chronic lethargy, mild depression, and frustration. Some state that they notice dramatic changes in their patients, including better health practices regarding eating, smoking, and drinking. They point out that people who are in good physical condition have a better self-image than persons who are in poor physical condition.

The medical profession today supports the professional goals that physical education is attempting to achieve. In many instances, physical educators are working side by side with medical doctors in schools, colleges, industry, sports medicine, and other programs that are actively involved in improving the

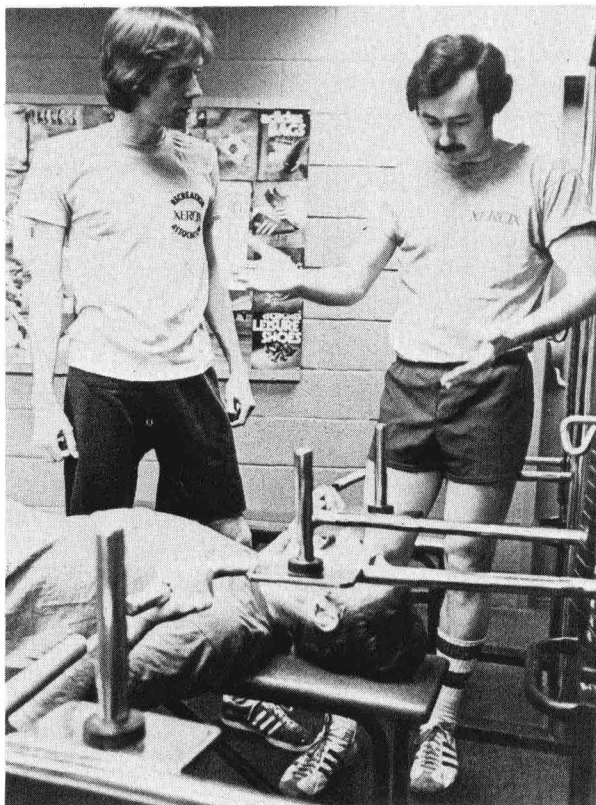
health of Americans. The membership rolls of such organizations as the American College of Sports Medicine include medical doctors and physical educators.

### **Emphasis is on preventive self-help medicine**

According to a representative of the American Medical Association, medical doctors can do something about 10% of the usual factors that determine a patient's state of health. However, it is pointed out that the remaining 90% are determined by factors over which doctors have little or no control. Such factors as exercise, smoking, drinking, and diet depend on the individual. This statement reinforces a premise that exists today, namely, that the best way to promote the health of the nation's population is to get Americans to do something for themselves. In the words of the United States Public Health Services Forward Plan for 1977-1981, "We believe it is more productive to focus our attention on the underlying conditions of preventable disease than to concentrate on the diseases themselves."

Seneca, a Roman senator and philosopher, said, "Man does not die, he kills himself." Today, a respected physician in the East states, "The automobile kills more people by depriving them of the opportunity to walk than it does by hitting them." Dr. Lawrence E. Lamb, who edits a health newsletter, states, "The leading causes of death and disability today are no longer infectious diseases caused by germs, but rather the products of our way of life." These statements indicate the need for preventive self-help medicine, of which physical education can play an important part.

For physical educators, preventive self-help medicine includes stressing the *education* in physical education. Many people who jog and engage in other forms of physical activity do so because they have been informed



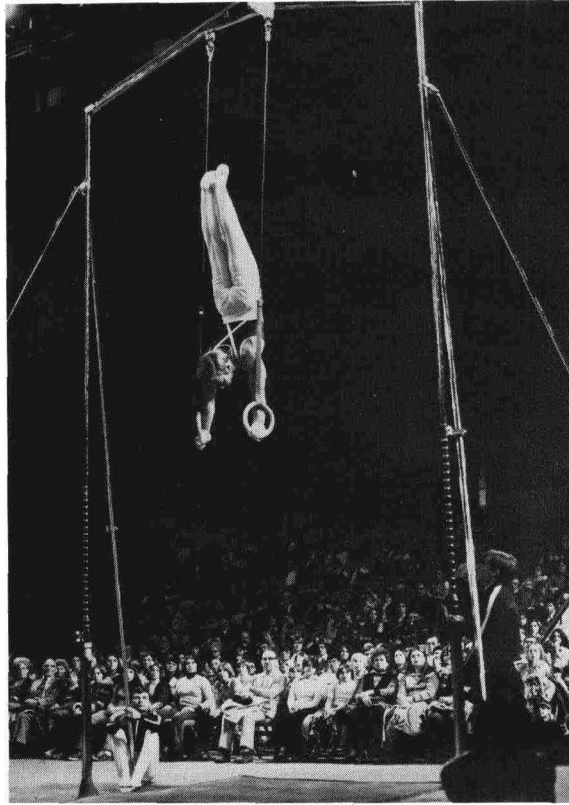
Courtesy Springfield College, Springfield, Mass.

about the importance of making physical activity a part of their life-style. Conversely, the reasons some people do not exercise is because they do not understand and appreciate the benefits of physical activity. As one uninformed person observed, "I look at joggers and see that pained expression on their faces and just know that such an activity has little value and can even be harmful to those who participate."

Physical education cannot be conducted in a vacuum. It cannot be limited to arms and legs and good intentions. There must be some understanding and appreciation for what muscular activity does for the human body, the contribution it makes to one's

physical, mental, and social welfare. Getting people to buy a pair of running shoes is not difficult. However, getting them to put the shoes on and jog regularly three times a week is another matter. There must be some inward motivation that gets them into action. *The catalyst is education.*

Physical education is essential. Usually, the reasons people do or do not exercise can be traced directly to a physical education program taught by instructors who failed to get at the *why* of the activity as well as the activity itself and who failed to emphasize and document the value of exercise as it relates to good health. The health of the nation depends on each individual's willingness to do



Courtesy Springfield College, Springfield, Mass.

something about his or her own health. As a result, the life each person saves may be his or her own.

### **Research findings support the need for physical education**

Many surveys, experiments, and studies have shown that adults who regularly engage in sports and fitness activities do not become ill very often, have greater productivity, are at work every day, and have fewer accidents than adults who do not engage in sports and fitness activities. Other research indicates many other benefits from participating in physical education programs.

One research study conducted by medical people and reported in the *New York Times*

involved a study of 17,000 Harvard University alumni. The study found that there were fewer heart attacks among those who engaged regularly in strenuous activities such as jogging, swimming, tennis, and mountain climbing than among those who were less active. This study suggested that strenuous, leisure time exercise has a definite protective effect even for the individual who has other characteristics such as high blood pressure or overweight that increase the risk of heart disease. This study also pointed out that the protective effect existed among those individuals who participated in intense physical activity for at least 3 hours a week. These people expended a total of 2000 or more calories each week through exercise.

Another study, also reported in the *New York Times*, involved 3600 longshoremen in San Francisco. This study, conducted over 22 years, found that longshoremen between 35 and 54 years of age who had very strenuous jobs had the lowest risk of fatal heart attacks of persons in the same occupation. Less active longshoremen had a three times greater risk of having a fatal heart attack.

The National Aeronautics and Space Administration conducted a study in cooperation with the Heart Disease and Stroke Control Program of the Public Health Service that involved a three-times a week exercise program for 259 men, 35 to 55 years of age. The findings showed better job performance, improved stamina, weight loss, more attention to diet, and other benefits.

Such research is not confined to the United States. In France, the May-June, 1976 issue of *La gymnastique volontaire* cited research studies that proved the worth of physical education in that country. One study, for example, showed that 76% of the persons involved had more endurance, 25% had to see a doctor less often, and 75% believed that their social relationships were improved. Another study of a group of elderly people who participated in a physical education program showed that 97% reported physical improvement, 98% indicated improvement in their morale, and 60% noted psychomotor improvement.

Research in the Soviet Union, a country deeply involved in sports medicine, showed that working people who engage regularly in physical education are more productive, see a doctor less often, are less prone to industrial accidents, and have a lower absenteeism rate.

Many other research studies could be cited, but it is not necessary since they add up to the same conclusion—physical education is essential to the nation's health. Studies reveal that it builds such things as strength,

endurance, skill, and stronger organic systems of the body. It can also contribute to one's body image, mental and emotional health, and social relationships. Equally important, it contributes to the quality of life that each individual leads.

### **THE NEED FOR PHYSICAL EDUCATION IN TODAY'S MECHANIZED AND INDUSTRIAL SOCIETY**

There is a great need for physical education in today's mechanized and industrial society. This need exists among children and youth in society who need to possess physical skills and health knowledge prior to entering adult life. This need exists for all children and youth, whether they are normal or handicapped, skilled or unskilled. The need also exists in the adult population. Assuming that employees in American industry represent a cross section of the American adult population, the need for physical education is great. Some interesting statistics include:

1. Each year premature deaths (many caused by poor fitness) cost American industry \$25 billion and 132 million workdays of lost production.
2. Heart disease alone accounts for 52 million lost workdays each year.
3. Recruiting replacements for persons who suffer heart attacks alone costs industry \$700 million each year.
4. According to a government report, General Motors spends more on its employee health plan than it spends on purchasing steel from U.S. Steel, its principal supplier. Also, in 1 recent year health benefits added \$175 to the price of every car and truck manufactured by the company.
5. Backaches, often caused by muscular deficiencies, result in \$1 billion in lost production and one quarter billion dollars in workmen's compensation claims.

6. The rate of disability retirements among federal employees has increased by 170% since 1955.
7. Absenteeism in the executive branch of the government costs an estimated \$1.34 billion a year and 25 million lost workdays.
8. There are many hidden costs, for example, those persons who are ill do not recover as rapidly. Also, chronic fatigue results in an increase in the number of industrial accidents, inefficiency, and loss of production.

### THE CHALLENGE

Physical education is being challenged to achieve its destiny. Opportunities exist today, more than at anytime in its history, for this profession to be recognized and respected as being vital to the health and well-being of America. Physical educators are the professionals who can render the services and achieve the objectives the public is seeking.

The public must realize that there is no shortcut to fitness. There is no machine, muscle builder, magic diet, slant board, or pill that will do the job by itself. Instead, the road to fitness involves sound health habits and cutting down on such risk factors as lack of exercise, smoking, drinking, and a fatty diet. It means possessing knowledge about one's body and what it needs to thrive and prosper. It means becoming *physically educated*.

This text provides the guidelines and modus operandi for meeting the challenge. It includes a discussion of past accomplishments, objectives, challenging opportunities for the future, and the path to leadership. It indicates the need for developing a sound philosophy for one's profession. It provides the know-how for developing an instructional program that follows a systems approach. It shows how each individual can be helped,

whether young or old, handicapped or normal, weak or strong, male or female, dub or athlete. It tells how to make the teaching of physical education scientific rather than just an art. It stresses the need to close the gap between research and practice and how this can be done. It sets forth how sport can make its greatest contribution to the participant. This text provides a blueprint for the conscientious person who aspires to be a leader in the new physical education.

### DISCUSSION QUESTIONS AND EXERCISES

1. List some services that physical educators render today that are in public demand.
2. Cite evidence that clearly shows that the public is health and fitness minded today.
3. How is physical education being challenged in today's world?
4. In 250 words or less define the meaning of the term *physical education*.
5. What evidence is there to show that the medical and physical education professions are more closely allied today than ever before in history?
6. Define the term *self-help medicine*. What are some implications of self-help medicine for physical education?
7. Cite three research studies that support the value of physical education as a contributing factor in improving the nation's health.
8. Some people indicate that most adults are not physically fit. Cite evidence that supports or rejects this statement.
9. Outline what you believe are the essentials to becoming physically educated.
10. Why do you believe that it is an opportune moment for becoming a member of the physical education profession?

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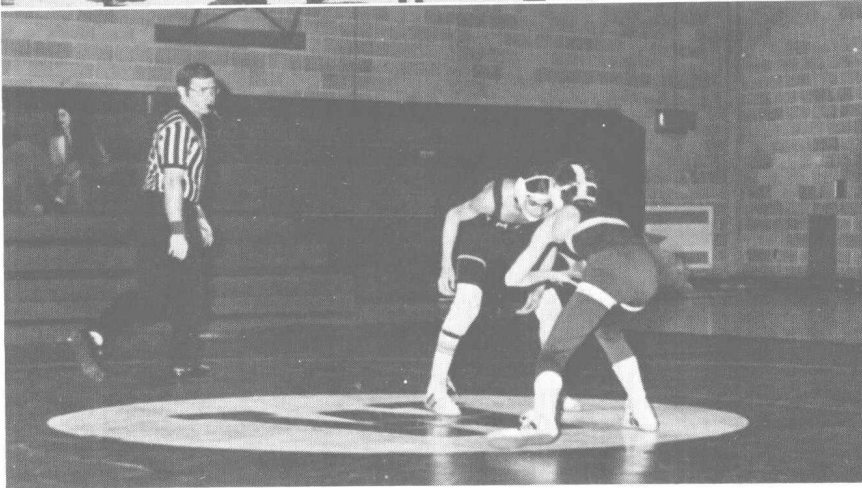
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## 2 ☐ Physical education and sport: past and present

**A**



**B**



**A**, From Library of Congress photographic collection. **B**, Courtesy Woodlands High School, Hartsdale, N.Y.



Students in classes at an eastern university have frequently been asked to graphically analyze the historical progress and growth of physical education. The students were instructed to depict historical milestones in physical education together with the rationale for their selection. These milestones were to represent periods in history when physical education had its greatest respect, public recognition, and growth. Students pictured physical education historically as having various peaks of accomplishment and growth. There was no unanimous agreement as to when physical education had achieved its most prestige.

Some students pointed out that physical education has reached its highest point in present times. To support this belief, they listed such reasons as physical education has finally gained maturity, become more professional, developed into a discipline, and developed a solid scientific foundation to support its worth. The students also pointed out that today physical education provides programs for many segments of the population, including females, handicapped persons, employees in industry, and elderly persons. The students also believed that today there is considerably more public interest in physical fitness than at any other period in history.

One group of students believed that the establishment of the President's Council on Physical Fitness and Sports and its accomplishments have been the high point in the history of physical education. These students believed that the establishment of the Council resulted in a much greater emphasis on physical education programs in general and particularly in the schools. The Council gave and is giving support to many research projects, has created demonstration centers, has enlisted the help of corporations and other segments of society, has stimulated the interest of presidents of the United States, and has provided national exposure for this pro-

fession. These students also believed that the Council, through its many endeavors, set off a chain of events that led to the current fitness boom in the United States, from which physical education has received many benefits.

A few students cited the period from 1776 to 1839 as being the high point of physical education, primarily because of Per Henrik Ling and his work at the Central Institute of Gymnastics in Sweden. The part of Ling's philosophy that stressed that physical activity should be prescribed on the basis of individual differences particularly seemed to capture the admiration of these students. Indeed, they believed this philosophy helped to change the thinking of many educators and physical education leaders in the years following Ling's death.

A significant number of students selected the Renaissance period between the fourteenth and sixteenth centuries as the most notable time for physical education accomplishments. Many outstanding leaders, such as Rousseau, Locke, and Rabelais, gave support to physical education. The circulation of the blood, for example, was traced by Harvey (1578-1657), and Vesalius (1514-1564) founded the science of anatomy. At this period in history, society became interested in and wanted to know how the body could best be maintained. The emphasis was on living in the present rather than preparation for the hereafter, as had been the case in the years preceding the Renaissance. Scientists were interested in improving the quality as well as the length of life.

The period that received the most support from students as representing the pinnacle of physical education's respect and accomplishment was the time of the ancient Greeks. No country in history, these students pointed out, has held physical education in higher respect and contributed more to the growth of the profession than did ancient Greece, as