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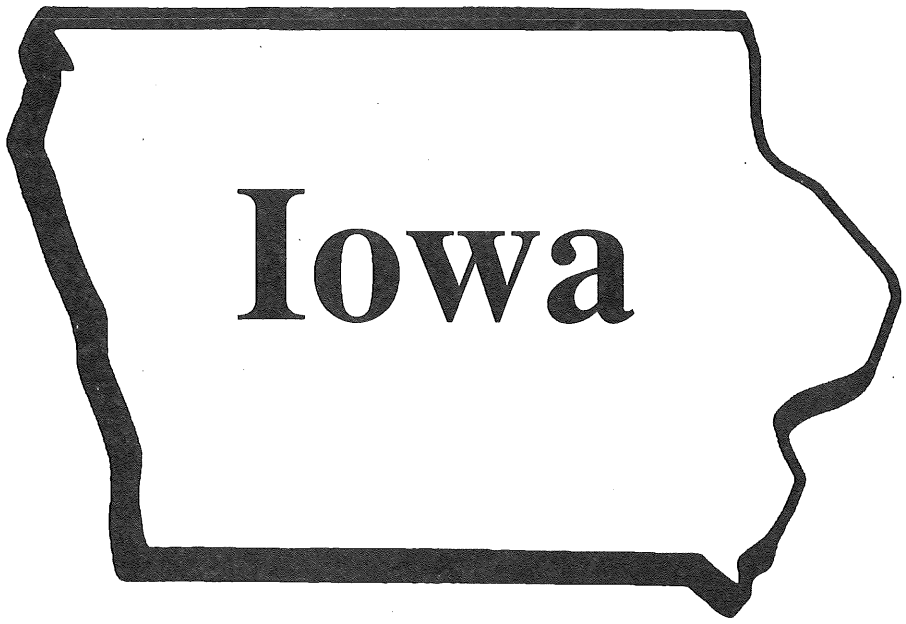
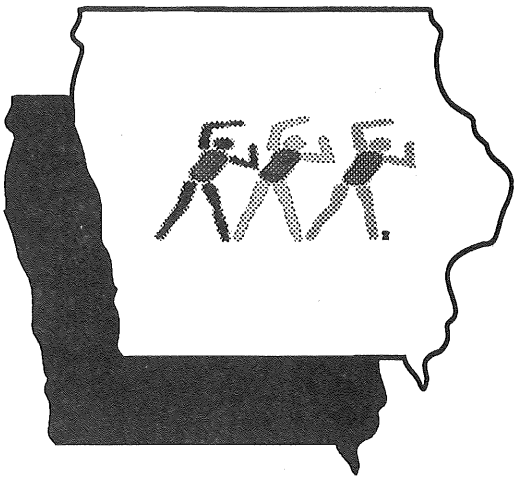


SHAPE of Iowa is a publication of the Iowa Association for Health, Physical Education, Recreation and Dance and the Iowa Department of Education

Introduction to the *SHAPE of Iowa*



The Iowa Association for Health, Physical Education, Recreation and Dance (IAHPERD), in cooperation with the Iowa Department of Education, is pleased to present to you the *SHAPE of Iowa*, a resource kit designed to help educators, coaches, and policy makers become better informed about health education, physical education and sport in Iowa. The materials contained herein provide information which will help you to design and deliver programs of high quality and to become an articulate spokesperson concerning health education, physical education, and sport. Combined with NASPE's *SPEAK* (Sport and Physical Education Advocacy Kit), you have the resources at your fingertips to be an effective professional and convince parents, administrators, legislators, boards of education, and community leaders across Iowa about the importance of health, physical education and sport.

This resource kit contains pertinant federal laws and guidelines which establish the framework for state and local initiatives in education and interscholastic sport. Iowa laws and regulations governing health education and physical education as well as interscholastic sports in Iowa are provided in considerable detail. Frequently asked questions regarding the interpretation of these laws and regulations are answered with a straight-forward, simple response. Current trends in educational programming, health objectives for the state, as well as health and fitness of Iowa children are also provided.

In order to assist you in developing programs of high quality, a variety of position papers and recommended program guidelines published by key national and state organizations are reproduced for your use. These position papers will not only aid you with program development, but will also provide you with powerful information and statistics that can be used when you have to defend your program or communicate to parents, education officials, and community leaders regarding health education, physical education and sport.

Lastly, an extensive listing of organizations and businesses supporting sport, health, and education, both in Iowa and throughout the nation, is provided for your use. These organizations may be able to provide additional information and resources. In addition, a listing of Iowa lawmakers provides a valuable resource for those seeking to influence legislation at both the state and federal level.

Acknowledgements

IAHPERD and the Iowa Department of Education appreciate the significant contributions of the following organizations and individuals for their assistance in the development and production of the *SHAPE of Iowa* manual.

SHAPE of Iowa Task Force:
Tony Giannetto, Shirley Ryan, Mary Thissen-Milder, & Larry Hensley

The Association for the Advancement of Health Education (AAHE) and the National Association for Sport and Physical Education (NASPE), both associations of the American Alliance for Health, Physical Education, Recreation, and Dance.

The Accreditation and Certification staff of the Iowa Department of Education.

Kim Laufenberg for manuscript preparation and layout of the manual.

This project was partially supported by an HIV Cooperative Agreement with the Iowa Department of Education from the Centers for Disease Control and Prevention (CDC).

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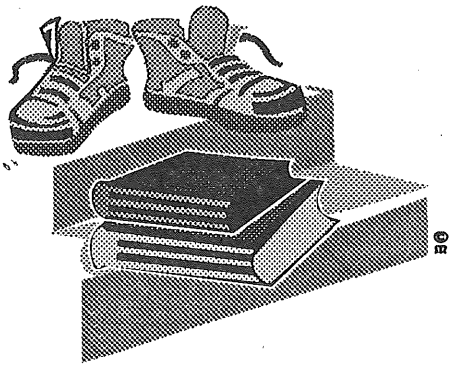

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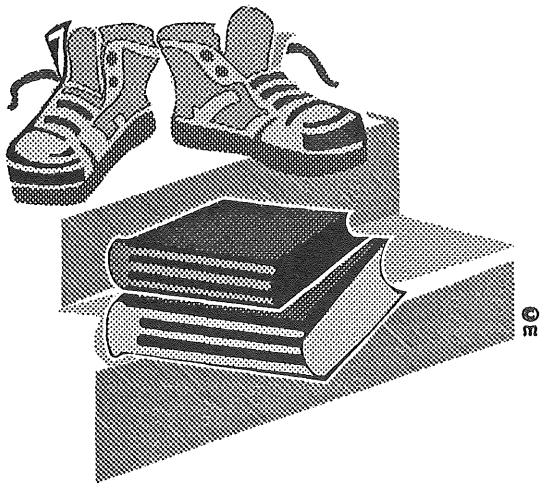

Part I

Introduction

Contents of Part I

Title 1
National Education Goals

Goals 2000: Educate America Act was signed into law by President Clinton on March 31, 1994. This landmark legislation provides a framework for helping teachers, schools, and parents bring about the kinds of changes needed to promote a world-class education for every child in America. At the heart of this legislation is the establishment of national education goals. The following is extracted from the March 21, 1994 Federal Register:

Sec. 101. Purpose

The purpose of the title is to establish National Education Goals.

Sec. 102. National Education Goals

The Congress declares that the National Education Goals are the following:

(1) School Readiness

(A) By the year 2000, all children in America will start school ready to learn.

(B) The objectives for this goal are that-

(i) all children will have access to high-quality and developmentally appropriate preschool programs that help prepare children for school:

(ii) every parent in the United States will be a child's first teacher and devote time each day to helping each parent's preschool child learn, and parents will have access to the training and support parents need: and

(iii) children will receive the nutrition, physical activity experiences, and health care needed to arrive at school with healthy minds and bodies, and to maintain the mental alertness necessary to be prepared to learn, and the number of low-birthweight babies will be significantly reduced through enhanced prenatal health systems.

(2) **School Completion**

(A) By the year 2000, the high school graduation rate will increase to at least 90 percent.

(B) The objectives for this goal are that-

(i) the Nation must dramatically reduce its school dropout rate, and 75 percent of the students who do drop out will successfully complete a high school degree or its equivalent.

(ii) the gap in high school graduation rates between American students from minority backgrounds and their non-minority counterparts will be eliminated.

(3) **Student Achievement and Citizenship**

(A) By the year 2000, all students will leave grades 4, 8 and 12 having demonstrated competency over challenging subject matter including English, mathematics, science, foreign languages, civics and government, economics, arts, history, and geography, and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our Nation's modern economy.

(B) The objectives of this goal are that-

(i) the academic performance of all students at the elementary and secondary level will increase significantly in every quartile, and the distribution of minority students in each quartile will more closely reflect the student population as a whole:

(ii) the percentage of all students who demonstrate the ability to reason, solve problems, apply knowledge, and write and communicate effectively will increase substantially:

(iii) all students will be involved in activities that promote and demonstrate good citizenship, good health, community service, and personal responsibility:

(iv) <u>all students will have access to physical education and health education to ensure they are healthy and fit:</u>

(v) the percentage of all students who are competent in more than one language will substantially increase; and

(vi) all students will be knowledgeable about the diverse cultural heritage of this Nation and about the world community.

(4) **Teacher Education and Professional Development**

(A) By the year 2000, the Nation's teaching force will have access to programs for the continued improvement of their professional skills and the opportunity to acquire the knowledge and skills needed to instruct and prepare all American students for the next century.

(B) The objectives of this goal are that-

(i) all teachers will have access to preservice teacher education and continuing professional development activities that will provide such teachers with the knowledge and skills needed to teach to an increasingly diverse student population with a variety of educational, social and health needs:

(ii) all teachers will have continuing opportunities to acquire additional knowledge and skills needed to teach challenging subject matter and to use emerging new methods, forms of assessment, and technologies:

(iii) States and school districts will create integrated strategies to attract, recruit, prepare, retrain, and support the continued professional development of teachers, administrators, and other educators, so that there is a highly talented work force of professional educators to teach challenging subject matter: and

(iv) partnerships will be established, whenever possible, among local educational agencies, institutions of higher education, parents, and local labor, business and professional associations to provide and support programs for the professional development of educators.

(5) Mathematics and Science

(A) By the year 2000, United States students will be first in the world in mathematics and science achievement.

(B) The objectives for this goal are that-

(i) mathematics and science education, including the metric system of measurement, will be strengthened throughout the system, especially in the early grades:

(ii) the number of teachers with a substantive background in mathematics and science, including the metric system of measurement, will increase by 50 percent: and

(iii) the number of United States undergraduate and graduate students, especially women and minorities, who complete degrees in mathematics, science, and engineering will increase significantly.

(6) Adult Literacy and Lifelong Learning

(A) By the year 2000, every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibility of citizenship.

(B) The objectives for this goal are that-

(i) every major American business will be involved in strengthening the connection between education and work:

(ii) all workers will have the opportunity to acquire the knowledge and skills, from basic to highly technical, needed to adapt to emerging new technologies, work methods, and markets through public and private educational, vocational, technical, workplace, or other programs.
(iii) the number of quality programs, including those at libraries, that are designed to serve more effectively the needs of the growing number of part-time and midcareer students will increase substantially:
(iv) the proportion of the qualified students, especially minorities, who enter college, who complete their degree programs will increase substantially: and
(v) schools, in implementing comprehensive parent involvement programs, will offer more adult literacy, parent training and life-long learning opportunities to improve the ties between home and school, and enhance parents' work and home lives.

(7) Safe, Disciplined, and Alcohol-and-Drug-Free Schools

(A) By the year 2000, every school in the United States will be free of drugs, violence, and the unauthorized presence of firearms and alcohol and will offer a disciplined environment conducive to learning.
(B) The objectives for this goal are that-
(i) every school will implement a firm and fair policy on use, possession, and distribution of drugs and alcohol:
(ii) parents, businesses, governmental and community organizations will work together to ensure the rights of students to study in a safe in a safe and secure environment that is free of drugs and crime, and that schools provide a healthy environment and are a safe haven for all children:
(iii) every local educational agency will develop and implement a policy to ensure that all students are free of violence and the unauthorized presence of weapons:
(iv) every local educational agency will develop a sequential, comprehensive kindergarten through twelfth grade drug and alcohol prevention education program:
(v) drug and alcohol curriculum should be taught as an integral part of sequential, comprehensive health education:
(vi) community based teams should be organized to provide students and teachers with needed support: and
(vii) every school should work to eliminate sexual harassment.

(8) Parental Participation

(A) By the year 2000, every school will promote partnerships that will increase parental involvement and participation in promoting the social, emotional, and academic growth of children.

(B) The objectives for this goal are that-

(i) every State will develop policies to assist local schools and local educational agencies to establish programs for increasing partnerships that respond to the varying needs of parents and the home, including parents of children who are disadvantaged or bilingual, or parents of children with disabilities:

(ii) every school will actively engage parents and families in a partnership which supports the academic work of children at home and shared educational decision making at school: and

(iii) parents and families will help to ensure that schools are adequately supported and will hold schools and teachers to high standards of accountability.

National Health Promotion and Disease Prevention Objectives

*The release of **Healthy People 2000** in September 1990 marked the beginning of a broad national strategy for achieving significant improvements in the health of all Americans over the next 10 years. Coordinated by the U.S. Public Health Service, **Healthy People 2000** is the result of an unprecedented cooperative effort among government, business, nonprofit organizations including representatives from NASPE and the other AAHPERD associations, and the scientific community. Forming the cornerstone of this effort is this set of national health promotion and disease prevention objectives for the year 2000.*

Three principal goals of ***Healthy People 2000*** were set:

- increase the span of healthy life for Americans
- reduce health disparities among Americans
- achieve access to preventive services for all Americans.

To help meet these goals, 300 specific objectives were identified in 22 separate priority areas. Quantifiable targets were set for improvements in health status, risk reduction, and service delivery to consolidate the gains made in the 1980s and extend the benefits of prevention to those groups who experience higher rates of morbidity, disability, and mortality than the general population. Organized under the broad approaches of health promotion, health protection, and preventive services, the national objectives chart a 10-year course for individual, collective, and environmental change. Listed are the School-Related Objectives beginning with those related to Physical Activity and Fitness.

School-Related Objectives

Physical Activity and Fitness Goals

1.1 Reduce coronary heart disease deaths to no more than 100 per 100,000 people.

1.2 Reduce overweight to a prevalence of no more than 20 percent among people aged 20 and older and no more than 15 percent among adolescents aged 12 through 19.

1.3 Increase to at least 30 percent the proportion of people aged 6 and older who engage regularly, preferably daily, in light to moderate physical activity for at least 30 minutes per day.

1.4 Increase to at least 20 percent the proportion of people aged 18 and older and to at least 75 percent the proportion of children and adolescents aged 6 through 17 who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.

1.5 Reduce to no more than 15 percent the proportion of people aged 6 and older who engage in no leisure time physical activity.

1.6 Increase to at least 40 percent the proportion of people aged 6 and older who regularly perform physical activities that enhance and maintain muscular strength, muscular endurance, and flexibility.

1.8 Increase to at least 50 percent the proportion of children and adolescents in first through 12th grade who participate in daily school physical education.

1.9 Increase to at least 50 percent the proportion school physical education class time that students spend being physically active, preferably engaged in lifetime physical activities.

Other School-Related Objectives

Nutrition

2.17 Increase to at least 90 percent the proportion of school lunch and breakfast services and child care food services with menus that are consistent with the nutrition principles in the "Dietary Guidelines for Americans."

2.19 Increase to at least 75 percent the proportion of the Nation's schools that provide nutrition education from preschool through 12th grade, preferably as part of quality school health education.

Tobacco

3.10 Establish tobacco-free environments and include tobacco use prevention in the curricula of all elementary, middle and secondary schools, preferably as part of quality, school health education.

Alcohol and Other Drugs

4.9 Increase the proportion of high school seniors who perceive social disapproval associated with the heavy use of alcohol, occasional use of marijuana, and experimentation with cocaine, as follows:

BEHAVIOR:	BASELINE 1989	TARGET 2000
Heavy use of alcohol	56.4%	70%
Regular use of marijuana	71.1 %	85%
Trying cocaine once or twice	88.9%	95%

4.10 Increase the proportion of high school seniors who associate risk of physical or psychological harm with the heavy use of alcohol, regular use of marijuana, and experimentation with cocaine, as follows:

BEHAVIOR:	BASELINE 1989	TARGET 2000
Heavy use of alcohol	44.0%	70%
Regular use of marijuana	77.5%	95%
Trying cocaine once or twice	54.9%	80%

4.11 Reduce to no more than 3 percent the proportion of male high school seniors who use anabolic steroids.

4.13 Provide to children in all school districts and private schools primary and secondary educational programs on alcohol and other drugs, preferably as part of quality school health education.

Family Planning

5.8 Increase to at least 85 percent the proportion of people aged 10 through 18 who have discussed human sexuality, including values surrounding sexuality, with their parents and/or have received information through another parental-endorsed source, such as youth, school or religious programs.

Violent and Abusive Behavior

7. 16 Increase to at least 50 percent the proportion elementary and secondary schools that teach nonviolent conflict resolution skills, preferably as part of quality school health education.

Education and Community-Based Programs

8.2 Increase the high school graduation rate to at least 90 percent, thereby reducing risks for multiple problem behaviors and poor mental and physical health.
Achieve for all disadvantaged children and children with disabilities access to high quality and developmentally appropriate preschool programs that help prepare children for school, thereby improving their prospects with regard to school performance, problem behaviors, and mental and physical health.

8.4 Increase to at least 75 percent the proportion of the Nation's elementary and secondary schools that provide planned and sequential kindergarten through 12th grade quality school health education.

Unintentional Injuries

9.18 Provide academic instruction on injury prevention and control, preferably as part of quality school health education, in at least 50 percent of public school systems (grades K through 12).

9.19 Extend requirements of the use of effective head, face, eye, and mouth protection to all organizations, agencies, and institutions sponsoring sporting and recreation events that pose risks of injury.

Oral Health

13.12 Increase to at least 90 percent the proportion of all children entering school programs for the first time who have received an oral health screening, referral, and follow up for necessary diagnostic, preventive and treatment services.
Note: School programs include Head Start, prekindergarten and first grade.

13.16 Extend requirements of the use of effective head, face, eye, and mouth protection to all organizations, agencies, and institutions sponsoring sporting and recreation events that pose risks of injury.

HIV Infection

18.10 Increase to at least 95 percent the proportion of schools that have age-appropriate HIV education curricula for students in 4th through 12th grade, preferably as part of a quality school health education program.
Note: Strategies to achieve this objective must be undertaken sensitively to avoid indirectly encouraging or condoning sexual activity among teens who are not yet sexually active.

Sexually Transmitted Diseases

19.12 Include instruction in sexually transmitted disease prevention to curricula of all middle and secondary schools, preferably as part of quality school health education.

Immunization and Infectious Diseases

20.11 Increase immunization levels as follows:
- Basic immunization series among children under age 2; at least 90 percent.
- Basic immunization series among children in licensed child care facilities and kindergarten through post secondary education institutions; at least 95%.
- Pneumococcal pneumonia and influenza immunization among non-institutionalized, high-risk populations, as defined by the Immunization Practices Advisory Committee: at least 60 percent.
- Hepatitis B immunization among high-risk populations, including infants of surface antigen-positive mothers to at least 90 percent; occupationally exposed workers to at least 90 percent; IV drug users in drug treatment programs to at least 50 percent; and homosexual men to at least 50 percent.

20.13 Expand immunization laws for schools, preschools, and daycare settings to all states for all antigens.

Healthy Iowans 2000

Health Promotion and Disease Prevention Goals for the State of Iowa

Physical Activity and Fitness
Chapter 1

1-1 Distribute information and promotional materials regarding the benefits of physical fitness to 60% of Iowa households, and increase the awareness of fitness activities available in the state, which will result in a 20% reduction in the number of Iowans with a sedentary lifestyle.

1-2 Have the Iowa Youth Fitness Task Force create an effective network consisting of a minimum of 20 members interested in the health, education, and physical fitness of Iowa youth and develop at least four programs to create public awareness of fitness levels, promote physical activity, and improve the quality and quantity of school and non-school programs by 1995.

1-3 Provide comprehensive information to 75% of Iowans on the availability of community fitness resources such as lighted, fenced, regulation-sized doubles tennis courts; supply detailed access information on community pools; and provide information on the network of local, county, and state multi-purpose trails that are available for a variety of exercise programs and activities by 1996.

1-4 Increase the percentage of worksites with physical fitness programs by the year 2000 based on the following targets:

- 20% of worksites with 50-99 employees;
- 35% with 100-249 employees;
- 50% with 250-749 employees;
- 80% with 750 or more employees.

1-5 Increase to at least 50% the number of children and adolescents in 1st through the 12th grade who participate in daily physical education at school.

1-6 Increase the amount of time that students spend being physically active to 50% of the time spent in physical education classes, preferably engaged in physical fitness activities that can be continued for life.

Nutrition
Chapter 2

2-1 Provide better information to the public regarding sound dietary practices to reduce morbidity and mortality from diet-related chronic diseases.

2-2 Reduce overweight to a prevalence of no more than 20% among people aged 20 and older.

2-3 Increase to at least 63% the proportion of mothers who breastfeed their babies in the early postpartum period and to at least 35% the proportion who continue breastfeeding until their babies are 5 to 6 months old.

2-4 Increase to at least 90% the number of Iowa schools implementing the *Nutrition Guidance for Iowa Schools*.

2-5 Increase to at least 75% the number of Child and Adult Care Food Program (CACFP) participants who are familiar with the *Dietary Guidelines for Americans,* and who will begin following them when planning menus.

2-6 Increase to at least 75% the number of Iowa schools that provide nutrition education from preschool through 12th grade; preferably, as part of a quality school health education.

2-7 Increase to at least 80% the receipt of home food services by people aged 65 and older who have difficulty in preparing their own meals or who are otherwise in need of home-delivered meals.

2-8 Provide nutrition screening to 90% of the elderly persons participating in health and nutrition programs such as the Iowa senior health clinics, congregate meal programs, and the home care aide programs.

2-9 Integrate the role of nutrition as it relates to health risks into the curricula for all health care professionals.

Tobacco
Chapter 3

3-1 Reduce cigarette smoking to a prevalence of no more than 18% among people aged 18 and older, and reduce the use of smokeless tobacco to less than 10% among males 18 through 24 years of age by the year 2000.

3-2 Reduce the frequency of cigarette smoking by children and youth so that by the year 2000 no more than 9% have become regular cigarette smokers by age 18.

Alcohol and Other Drugs
Chapter 4

4-1 Develop an interagency strategic plan to ensure provision of substance abuse services ranging from prevention through aftercare.

4-2 Assess current levels and increase services to underserved or high-risk populations by 5% in 1996 and by an additional 3% by the year 2000; services will include prevention,

intervention, treatment, and aftercare to these groups: women of child-bearing years; youth both in and out of school; minorities-nonwhite and non-English speaking; and adult clients involved with the justice system.

4-3 Reduce alcohol, tobacco, marijuana, and other drug use among Iowa youth (ages 12-18) by: 1) delaying the initial use of alcohol, tobacco, and marijuana among youth; 2) reducing casual, regular, and heavy use of alcohol, tobacco, marijuana, and other drugs among Iowa young people; and 3) lowering the incidence of multiple use (such as alcohol and other drugs) among those who are 14-18 years of age.

4-4 Increase substance abuse treatment serviced to pregnant substance abusers by 20% by 1995 and by an additional 20% by the year 2000.

Family Planning
Chapter 5

5-1 Reduce the incidence of pregnancies among adolescent women under age 18 to no more than 35 per 1,000.

5-2 Reduce the proportion of all unintended pregnancies by increasing from 24 to 40% the number of women at risk for unintended pregnancies who receive services from family planning agencies that contract with IDPH.

5-3 Reduce the percentage of Women, Infants and Children (WIC) enrollees with pregnancy intervals of less than 18 months from 30% to 20% by reducing the number of unintended pregnancies among WIC clientele.

5-4 Increase the percentage of women receiving preconception care and counseling from 25% to 100% of all initial family planning clients served by IDPH contract agencies.

5-5 Continue to provide risk assessment and education on HIV and other STDs to 100% of clients served by family planning agencies.

Mental Health and Mental Disorders
Chapter 6

6-1 Provide a comprehensive community-based system of services for all Iowans with a mental illness or disorder, emphasizing fixed points of responsibility, continuity of services, system coordination, standards, and local control.

6-2 Implement, in coordination with the Case Management Program for the Frail Elderly, a statewide mental health outreach program to educate, identify, and treat elderly persons with mental health problems in locations which are psychologically acceptable and physically accessible to them, such as in their homes.

6-3 Evaluate, educate, and treat children and their families, including 100% of those more seriously disturbed, and assure coordination among the educational, mental health, social services, and juvenile justice systems.

6-4 Reduce the rate of suicide to no more than nine per 100,000 people with special attention to high-risk populations such as farmers, students, and homemakers, as indicated in the following table:

Special Population Targets

Iowa Suicides	1985 Baseline Numbers	2000 Target Numbers
Farmers	45	25
Students age 15-19	33	15
Homemakers	29	15

6-5 Increase awareness among primary health care providers and community support system persons of available referral support and treatment services; improve their evaluation skills relating to the emotional functioning of their patients/clients; and increase their recognition of factors which lead to delayed access to mental health and emotional health services.

Violent and Abusive Behavior
Chapter 7

7-1 Maintain a homicide rate of less than 2.0 per 100,000 population.

7-2 Reduce weapon-related crimes in the state by 20%.

7-3 Establish a surveillance system to record all firearm-related deaths in Iowa by December of 1993.

7-4 Reduce Iowa's death rate due to firearms from 8.1 to 6.1 per 100,000 (by 25%), and reduce the injury rate due to firearms by 25% by the year 2000.

7-5 Begin the systematic identification of domestic violence as a factor in child physical/sexual abuse by December 1994.

7-6 Reverse the incidence of substantiated child abuse cases to less than 2% by reducing incidence in each main category of substantiated child abuse cases (physical, sexual, and denial of critical care), and for abuse-related deaths.

7-7 Improve identification of childhood deaths resulting from maltreatment.

7-8 Increase available county and state resources for battered women and their children so that no victims will be turned away and each county will be able to offer safe shelter.

7-9 Increase services to reach 6,000 survivors of sexual assault each year through sexual assault care centers.

7-10 Review, update, and develop existing hospital protocols for sexual assaults, develop protocols for domestic and elder abuse, and improve professional training and continuing education programs for the medical, social service, legal, and education professions.

7-11 Increase education and attention to the root causes of violence in society through development and use of public school curricula and public health/community education programs.

Educational and Community-Based Programs
Chapter 8

8-1 Assure that all disadvantaged children, as well as those with disabilities, have access to high quality and developmentally appropriate preschool programs to help prepare them for school, thus improving their prospects on good school performance, better mental and physical health, and greater social competence.

8-2 Increase the high school graduation rate to at least 90%, thereby reducing risks for later multiple problembehaviors and poor mental and physical health.

8-3 Implement the Iowa Comprehensive School Health Model by June of 2000 in 70% of Iowa school districts.

8-4 Establish commmunity health promotion programs that separately or together address at least three of the *Healthy People 2000* priorities and reach at least 90% of the state's counties by 1995.

8-5 Increase to at least 90% the proportion of people who are served by a local health department that is effectively carrying out the core functions of public health.

8-6 Increase to at least 90% the proportion of hospitals, health maintenance organizations, and large group practices that provide client education programs, and increase to at least 90% the proportion of community hospitals that offer community health promotion programs addressing the priority health needs of their communities.

8-7 Increase to at least 90% the proportion of people aged 65 and older who have the opportunity to participate in at least one organized health promotion program through a community-based setting that serves older adults.

8-8 Involve at least 10 Iowa television stations and 100 radio stations in partnerships with one or more community organizations to cover health problems addressed by the year 2000 objectives by 1995.

Unintentional Injuries
Chapter 9

9-1 Develop a trauma and emergency medical services system in Iowa.

9-2 Extend to all Iowans a trauma and emergency medical services (EMS) system that links together prehospital, hospital, and rehabilitation services by the year 2000.

9-3 Reduce deaths from falls and fall-related injuries to no more than 2.3 per 100,000 people.

9-4 Reduce nonfatal head injuries so that hospitalizations for this condition are no more than 53 per 100,000 people.

9-5 Reduce nonfatal spinal cord injuries so that hospitalizations.for this condition are no more than 4.5 per 100,000 population.

9-6 Begin data collection of secondary disabilities associated with injuries of the brain and spinal cord by September 30, 1993.

9-7 Reduce deaths caused by motor vehicle crashes to no more than 1.9 per 100 million vehicle miles traveled and 16.8 per 100,000 people.

9-8 Increase use of occupant protection systems, such as safety belts and child safety seats, to 85% of motor vehicles.

9-9 Reduce head injuries by increasing the use of helmets to at least 80% of motorcyclists and those using motorized bicycles, and to at least 50% of bicyclists.

9-10 Provide academic instruction on motor vehicle injury prevention throughout the public school system in kindergarten through grade 12 by the year 2000.

9-11 Reduce Iowa's fire death rate to less than one per 100,000 people.

9-12 Reduce the number of preventable deaths associated with recreation on Iowa lakes, rivers, farm ponds, and reservoirs from approximately 30 per year to 15 annually, and reduce the number of boating injuries from 50 each year to 20.

9-13 Reduce the number of preventable serious injuries, illnesses, and deaths associated with public swimming pools and spas by increasing compliance with state rules; swimming pools and spas are defined as any facility other than one intended for single-family use as stated in the *Code of Iowa* 135.I.1 and in the *Iowa Administrative Code* 641, Chapter 15.

9-14 Reduce the number of drowning deaths of children under the age of 5 occurring in residential or backyard pools to less than one per year by 1998.

9-15 Reduce unintentional childhood injuries in the state by organizing community-based injury prevention activity in 10 communities by 1996.

Occupational Safety and Health
Chapter 10

10-1 Develop and implement a comprehensive Iowa occupational safety and health plan for the identification, management, and prevention of leading work-related diseases and injuries in Iowa worksites.

10-2 Reduce deaths from work-related injuries to no more than four per 100,000 fulltime workers.

10-3 Reduce work-related injuries requiring medical treatment, lost time from work, or restricted work activity to no more than six cases per 100 fulltime workers.

10-4 Eliminate exposures which result in workers having blood lead concentrations greater than 25 micrograms per deciliter of whole blood.

Environmental Health
Chapter 11

11-1 Increase to at least 99% the number of public water supplies that meet the safe drinking water standards established by the Environmental Protection Agency.

11-2 Increase to at least 90% the number of private water supplies testing safe for bacteria and nitrate.

11-3 Protect public health by improving wastewater disposal in rural areas, in city and rural subdivisions, in small communities, and all other areas of the state not currently served by municipal wastewater treatment facilities.

11-4 Implement additonal standards as part of Iowa's Water Quality Standards for discharges into state waters to protect human health and aquatic life.

11-5 Determine the source of elevated levels of the insecticide, chlordane, and of the industrial compound, PCB, found in fish from the Cedar Lake at Cedar Rapids, the Des Moines River near Des Moines, and the Mississippi River near Davenport so that further action can be taken to reduce these levels.

11-6 Reduce risk to human health from s.urface water in 167 lakes designated for swimming.

11-7 Reduce the prevalence of blood lead levels greater than or equal to 10 micrograms/deciliter to no more than 1,000 children and to zero at the 25 micrograms/deciliter level.

11-8 Increase to 50% the number of homes tested for the presence of radon by the year 2000.

11-9 Provide better information to the public regarding indoor air quality.

11-10 Reduce to 20% or less the proportion of children 18 years of age and younger who are exposed to environmental tobacco smoke at home; also, reduce the rate of respiratory disease in children ages 1-14 to 1,000 per 100,000, and in children under 1 to 3,000 per 100,000.

11-11 Strengthen Iowa's Clean Indoor Air Act (Chapter 98A) to prohibit or more strictly limit smoking in the workplace and in enclosed public places; and slow the rise in lung cancer deaths to achieve a rate of no more than 42 per 100,000.

11-12 Maintain Iowa's compliance with all seven of the national primary ambient air quality standards and implement new requirements of the Clean Air Act of 1990.

11-13 Evaluate and, if necessary, eliminate significant health risks from the 20 existing hazardous waste sites and from the new National Priority List (NPL) proposed site.

11-14 Evaluate and, if necessary, eliminate significant health risks from an additional 400 hazardous waste sites in Iowa which are not on the National Priority List (NPL).

11-15 Reduce by 25% by January of 1994 and by 50% prior to January of the year 2000 the tons of solid waste sent to landfills.

11-16 Establish regional collection sites throughout the state to facilitate the collection of household hazardous waste and recyclable materials in all counties.

11-17 Establish a program to ensure that sentinel environmental diseases are reported as required by law and are adequately investigated.

Food and Drug Safety
Chapter 12

12-1 Eliminate all submerged inlets and plumbing cross-connections in dairy plants to reduce the risk of infections caused by the key foodborne pathogens found in raw milk.

12-2 Reduce the incidence of drug residues in milk to .01% of loads picked up in Iowa.

12-3 Maintain the low incidence of *Salmonella enteritidis* (SE) in Iowa.

12-4 Establish improved food handling practices within the food service industry, recognizing that regulatory staff and resources for contracts for this activity have been limited in the past five years.

12-5 Improve monitoring of multiple, concurrent medications (both prescription and over-the-counter drugs) for adverse drug reaction potential or loss of therapeutic benefit.

Oral Health
Chapter 13

13-1 Obtain baseline data on the status of Iowa residents' oral health and information on disease risk factors related to the *Healthy People 2000* oral health objectives.

13-2 Increase to at least 93% the proportion of people served by community water systems providing optimal levels of fluoride.

13-3 Reduce deaths due to cancer of the oral cavity and pharynx to no more than 10.5 per 100,000 men aged 45 through 74, and to 4.1 per 100,000 women aged 45 through 74.

13-4 Assure that 90% of low-income children who are entering school programs receive an oral health screening, referral, and necessary follow-up for diagnostic, preventive, and treatment services.

13-5 Reduce to no more than 20% the proportion of people aged 65 and older who have lost all of their natural teeth.

Maternal and Infant Health
Chapter 14

14-1 Reduce the infant mortality rate to no more than seven per 1,000 live births by reducing low birthweight to no more than five percent of live births and by increasing to at least 90% the proportion of all pregnant women who receive prenatal care in the first trimester of pregnancy.

Heart Disease and Stroke
Chapter 15

15-1 Reduce death and disability related to cardiovascular disease through reducing coronary heart disease deaths to no more than 75 per 100,000 people, and by reducing stroke deaths to no more than 11.5 per 100,000 people.

15-2 Establish and maintain a surveillance system that will give community-based screening programs the capability to monitor risk factors associated with cardiovascular disease by 1998.

Cancer
Chapter 16

16-1 Increase to at least 80% the proportion of women aged 40 and older in Iowa who have ever received a clinical breast examination and a mammogram, and increase to at least 60% those aged 50 and older who have received them within the preceding one to two years.

16-2 Increase to 100% by 1994 the proportion of facilities in Iowa performing mammography that are certified by a private organization or that meet specific state and federal rules regarding specific quality standards.

16-3 Increase to at least 95% the proportion of women aged 18 and older with an intact uterine cervix who have ever received a Papanicolaou (Pap) test, and to at least 85% those who have received a Pap test within the preceding one to three years.

16-4 Ensure that Pap tests meet quality standards by monitoring and certifying all cytology laboratories by 1994.

16-5 Reduce colorectal cancer deaths to no more than 13.2 per 100,000 people.

16-6 Increase to at least 60% the proportion of people of all ages who limit sun exposure, use sunscreens and protective clothing when exposed to sunlight, and avoid artificial sources of ultraviolet light.

16-7 Increase the awareness of the public and health care professionals regarding the new guidelines of the American Cancer Society and the American Urological Association for the cancer related checkup for prostate cancer.

16-8 Reverse the rise in cancer deaths to achieve a rate of no more than 130 per 100,000 people.

Diabetes and Chronic Disabling Conditions
Chapter 17

17-1 Provide each year throughout the decade at least six pediatric asthma self-management programs for families with asthmatic children.

17-2 Assist Iowans with chronic conditions to achieve and maintain maximum independence.

17-3 Implement the State Prevention of Disabilities Policy Council Act throughout the decade.

17-4 Provide a resource network of state and national expertise to assist employers in voluntary compliance with the Americans with Disabilities Act throughout the decade.

HIV Infection
Chapter 18

18-1 Provide timely HIV/AIDS education so that Iowa contains the spread of the disease.

18-2 Monitor the incidence of AIDS and other indicators of HIV infection in Iowa and in subpopulations in order to better plan, conduct, and evaluate prevention and treatment.

18-3 Implement the recommendations of the AIDS Services Task Force (January 1991) regarding services for persons with HIV/AIDS.

Sexually Transmitted Diseases
Chapter 19

19-1 Reduce gonorrhea to an incidence of no more than 70 cases per 100,000 population.

19-2 Reduce*Chlamydia trachornatis* infection to an incidence of no more than 160 cases per 100,000 people.

19-3 Maintain reported early syphilis incidence at the Fiscal Year 1990 rate of 2.5 cases per 100,000 and the reported incidence of congenital syphilis at less than one case per 100,000 by the year 2000.

19-4 Decrease the incidence of pelvic inflammatory disease (PID) due to STD to a case rate of 10 women per 100,000 population by the year 2000.

19-5 Increase condom use by five percent each year in STD/HIV clinic patients.

19-6 Include instruction in sexually transmitted disease prevention in the curricula at each grade level--elementary, middle and secondary schools-as part of a comprehensive health education program in 95% of Iowa schools by the 1995 school year.

Immunization and Infectious Diseases
Chapter 20

20-1 Reduce indigenous cases of vaccine-preventable diseases as follows: diphtheria, tetanus, polio, measles, rubella, and congenital rubella syndrome to zero cases, mumps to five cases, and pertussis to 10 cases.

20-2 Reduce to zero the number of infants developing hepatitis B from their carrier mothers.

20-3 Reduce bacterial meningitis to no more than 3.2 cases per 100,000 population.

20-4 Assure that at least 90% of Iowa children have completed the basic immunization series by 2 years of age.

20-5 Increase to 95% the number of community health sites that dispense information and education on immunizations.

20-6 Develop a statewide influenza and pneumococcal pneumonia program.

20-7 Screen 90% of naturalized citizens of Asian origin and their families for the presence of tuberculosis with skin test/chest radiograph, as appropriate.

Clinical Preventive Services
Chapter 21

21-1 Increase to at least 95% the proportion of Iowans who have a specific source of ongoing primary
care for coordination of their preventive and illness-related health care.

21-2 Explore by 1995 the development of a coordinated, comprehensive family-centered, private-public system of primary care for all Iowa children.

21-3 Improve access to health services for Iowa's rural citizens.

Surveillance and Data Systems
Chapter 22

22-1 Produce and disseminate annually data on the 18 national selected health status indicators for the state of Iowa and for each county, beginning in 1992.

22-2 Measure progress made toward meeting the state's high-priority goals in *Healthy Iowans 2000* beginning in 1993 with the collection, publication, and dissemination of related data.

Iowa Youth Risk Behavior Survey

Iowa Department of Education in cooperation with
Centers for Disease Control and Prevention
1991

The Iowa Youth Risk Behavior Survey (YRBS) is an ongoing survey conducted under the auspices of the Iowa Department of Education and is financially and technically supported by the Centers for Disease Control and Prevention (CDC). The Iowa YRBS is designed to collect information on health risk behaviors of Iowa residents under the age of 18 and to monitor the prevalence of these behaviors over time. This executive summary focuses on data collected during calender year 1991, the most recent report available.

Sample Demographics (N = 1773)

		N	Percent
Grade			
	9	478	27%
	10	510	29%
	11	425	24%
	12	339	19%
	Missing	21	1%
Race			
	White	1667	94%
	Black	16	1%
	Hispanic	18	1%
	Other	66	4%
	Missing	6	< 1%
Gender			
	Male	874	49%
	Female	889	51%

Personal Safety

Percent of sample using seat belts when riding in a car or truck.

	Males	Females	Total
Always	13%	17%	15%
Sometimes	24%	29%	27%
Never	14%	4%	9%

Twenty-three (23) percent of the 1773 students responded they carried a gun, knife, or club.

Four (4) percent of the 1773 students responded they had been in a fight in the past 30 days in which one of the persons fighting had to be treated by a nurse or doctor.

Fifty-eight (58) percent of the sample said they had not been in a fight in the past twelve months.

Thirty-eight (38) percent of the sample said their last physical fight was with a friend, boyfriend, girlfriend, date or family member.

Two (2) percent of the sample said their last physical fight was with a stranger.

Suicide

During the past 12 months 29 percent of the sample had seriously considered attempting suicide.

Twenty (20) percent of the sample said they had made a specific plan on how to commit suicide during the last twelve months.

Seven (7) percent of the sample said they had actually made one or more suicide attempts during the past 12 months.

Two (2) percent of the sample said their suicide attempt resulted in treatment by a doctor or nurse.

Substance Abuse

Five (5) percent of the sample said that in their lifetime they had used illegal drugs by injection.

Male and female use of drugs by injection was even with 5 percent for males and 5 percent for females.

Weight

Forty-seven (47) percent of the sample thought their weight was alright, 18 percent thought they were too thin, and 37 percent thought they were overweight.

Forty-five (45) percent of the sample responded they were trying to lose weight.

Twenty-three (23) percent of the sample said they exercised and dieted during the last seven days to lose or to keep from gaining weight.

Two (2) percent of the sample said they had used diet pills and 2 percent had vomited to try to lose weight or to keep from gaining weight in the last seven days.

Exercise

Sixty-nine (69) percent of the sample said they participated in exercise such as basketball, jogging or other aerobic activity during three or more of the past 7 days.

Fifty-one (51) percent of the sample said they had done stretching exercises during 3 or more of the past 7 days.

Ninety-five (95) percent of the sample said they had participated in a physical education class one or more days in an average school week.

Seventy (70) percent of the sample said they had participated in at least 20 minutes of exercise or playing sports during an average physical education class.

HIV and AIDS Related Information

Eighty-four (84) percent of the sample said they had been taught about AIDS and HIV infection in school.

Fifty (50) percent of the sample said they talked about AIDS and HIV infection with their parents or other adults in their family.

Sexual Behavior

Forty-nine (49) percent of the sample said they had intercourse by grade 12. Thirty-one (31) percent of the 9th grade, 45 percent of the 10th grade, 56 percent of the 11th grade and 69 percent of the 12th grade, responded they had participated in sexual intercourse.

Fifteen (15) percent of the sample said they have had sexual intercourse with four or more partners during their life.

Percentages having four or more partners in their life by grade were as follows: Ninth grade, 9 percent; Tenth grade, 11 percent; Eleventh grade, 16 percent; Twelfth grade almost 26 percent.

Three (3) percent of the sample responded they had sexual intercourse with four or more persons in the last three months.

Five (5) percent of the sample said they had sexual intercourse when they were less than 13 years old.

Thirteen (13) percent of the sample said they or their partner had used alcohol or drugs the last time they had sexual intercourse.

Twenty-one (21) percent of the sample said they or their partner had used a condom to prevent sexually transmitted diseases the last time they had sexual intercourse.

Five (5) percent of the sample said they had been told by a doctor or nurse that they had a sexually transmitted disease.

National Baseline Data

Motor Vehicle Death Per 100,000
Age 15-24, 1987 36.9
(Healthy People 2000)

National YRBS data 1990 shows 20 percent of their 11,631 sample carried a gun, knife, or club.

Suicide per 100,000 age 15-19 10.3.
(Healthy People 2000 1987 data)

Healthy People 2000 1976-80 shows 15 percent of people 12-19 overweight.

Twenty-two (22) percent of people 6 and older engaged in 30 minutes of hard exercise 5 times a week (1985 data).

In 1989 66 percent of school districts required HIV education curriculum for students 4-12.
(Healthy People 2000)

By age 17 50 percent of girls and 66 percent of boys are sexually active.
(Healthy People 2000 - 1988 data)

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Current Status and Perceptions of Physical Education in Iowa

by

Mary Thissen-Milder, *Iowa Department of Education*

Over the past decade, Public Health Reports such as Code Blue: Uniting For a Healthier Youth (1990) and Healthy People 2000 (1989) have addressed the current health status of our youth and have indicated that the nation is facing an adolescent health crisis. The National Children and Youth Fitness Studies I and II, conducted by the U.S. Department of Health and Human Services (1985, 1987), have reported that the physical fitness levels of our nations youth to be extremely low. The Shape of the Nation Report by the National Association for Sport and Physical Education (NASPE, 1987) pointed out that an insufficient amount of time is committed to physical education in the large majority of states.

Present Iowa law requires a minimum of 50 minutes each week for physical education instruction at the secondary level. Iowa law does require physical education at the elementary level, but does not prescribe the number of minutes each week it must be offered. In addition, Iowa law allows students to be exempted from physical education for health, religious, athletic, and academic purposes. The concept of local control allows each school district to independently develop time requirements, curricular emphasis, departmental procedures, exemption policies, and interdisciplinary associations between physical education and other subject areas based upon cultural diversity, needs, and interests of the community.

A logical starting point for program evaluation and initiating change in physical education programs is the collection of baseline data regarding the current status of these programs and their policies and procedures In addition, it is desirable to determine the perceptions of practicing professionals towards these programs, their policies, and procedures. This study was undertaken to obtain comprehensive baseline information specific to Iowa which may be used by local districts, state agencies, and physical education professionals for programmatic evaluation of physical education programs.

Methods

The purposes of this study were: 1) to determine the status of selected physical education program policies and procedures in Iowa public schools, and 2) to identify the perceptions of designated respondents in these schools towards selected program policies and procedures. The questionnaire was designed to obtain separate data from elementary, middle/junior high, and high school levels. The population surveyed for this study included representatives of all 425 public school districts in the State of Iowa in the Fall of 1991. The Superintendent for each district was asked to designate the education professional from their district that had the most comprehensive knowledge of the K-12 physical education program and solicit their cooperation to complete and return the survey.

Findings

A total of 369 respondents returned the questionnaires. Respondents included 129 (35%) physical education department chairs, 85 (23%) curriculum directors, 74 (20%) secondary principals, 63 (17%) superintendents, and 18 (5%) elementary principals It is surprising to note that when school district superintendents were asked to designate the appropriate respondent with comprehensive knowledge of the K-12 physical education program that only approximately one-third of the respondents were physical education department chairs, while the remaining two-thirds of the respondents were superintendents, principals, or curriculum directors. Thus, the information represents the opinion of school administrative personnel to a greater extent than it does of physical education professionals.

Participating school districts were categorized into enrollment categories as defined by the Iowa Department of Education: (A) less than 400; (B) 400-599; (C) 600-999; (D) 1000-2499; and (E) 2500 and more. The results reported in this article are not broken-down according to enrollment categories. Specific enrollment category information will be available in the Fall of 1993.

Physical Education Programs

A survey entitled the "Shape of the Nation: A Survey of State Physical Education Requirements" conducted by NASPE in 1987 rank ordered the states based on the time required for physical education according to minimum legislative standards. Illinois ranked first in the nation by requiring daily physical education for all grade levels. Iowa ranked 39th in this survey (tied with Connecticut). The results of the present study indicate that physical education classes in Iowa are most frequently scheduled two times each week, regardless of grade level. However, it should be noted that at the high school level, three meetings in a six day cycle was an equally common practice. When asked what was the most appropriate schedule for physical education classes, respondents perceived either three times in a six day cycle or five times each week to be most appropriate (see Figure 1). Furthermore, these perceptions were consistent across grade levels. Actual

time for each class period consistently increased from an average of 31 minutes at the early elementary level to 47 minutes at the high school level. Overall, the respondents perceived that the most appropriate length of class should be approximately 5 minutes longer than presently exists at each grade level (see Figure 2). The shortest class period reported was 15 minutes at the elementary level, while the longest class period was reported to be 94 minutes at both the intermediate and high school levels. It was not surprising that the frequency of physical education class meetings was most most frequently reported to be either two times a week or three times in a six day cycle. It was disappointing, however, to note that a large proportion of the respondents indicated that this basically was an acceptable number of meeting times each week. Unfortunately, the typical practice in Iowa as described above is well short of the daily physical education that AAHPERD has recommended.

Physical education class is scheduled almost exclusively by grade level at the elementary level, but as students progress through middle school and high school, scheduling generally combines grades more and more until high school at which time classes were almost exclusively scheduled by combining grade levels. Respondents perceived that scheduling students separately by grade level is most appropriate for all grade levels. The fact that elementary and intermediate physical education are typically scheduled separately by grade level is reflective of the research that indicates the importance of grouping children by age and maturity level. High school physical education classes typically have multi-grade level representation which simplifies scheduling. However, results of this study indicated that respondents believed that high school physical education should be scheduled separately by grade level. Although the underlying basis for this belief is unknown, it may reflect the viewpoint that there are

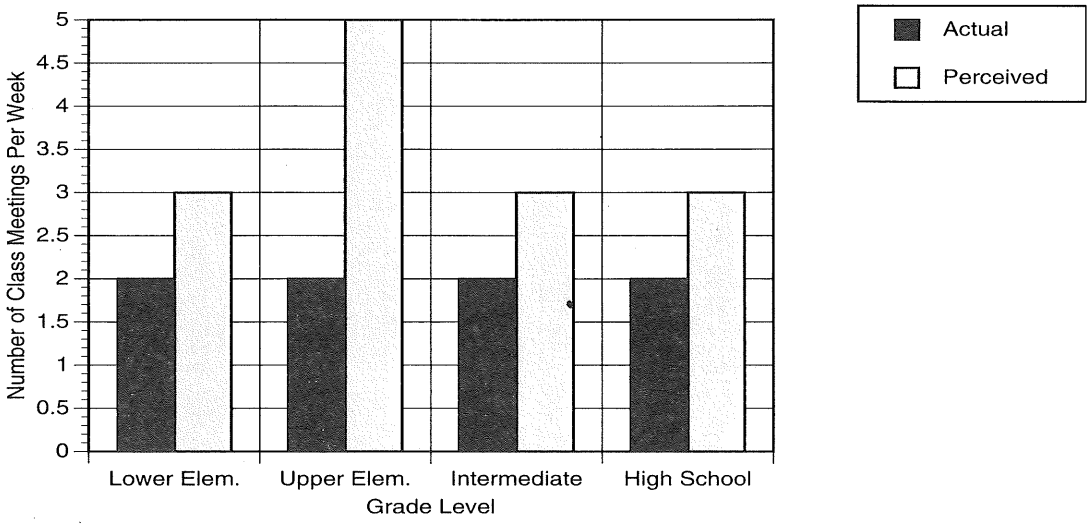

Figure 1. Actual and Desired Frequency of Physical Education Class Meetings

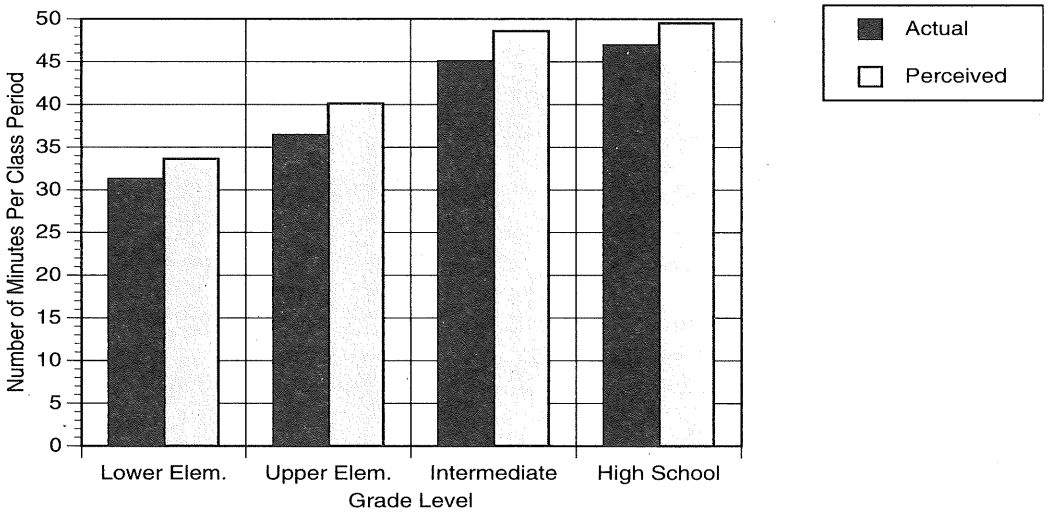

Figure 2. Actual and Desired Length of Physical Education Class Period

still substantial differences in skill and maturity level even in grades 9 through 12. In any regard, the current practice of combining grade levels for high school physical education is contrary to what the respondents of this survey believe is desirable.

The mean class size across all grade levels ranged from 22-26 students. The smallest class size reported was 1 student, while the largest class size reported was 85 students, both at the high school level. When asked what was the ideal class size, respondents reported a range from 20 - 24 students, approximately 2 students less than currently enrolled. In general, it appears that physical education classes enroll about the same number of students as do classes in other subject areas and that this number of students seems about right. However, the reader is cautioned to recognize that class size varies substantially according to the size of the school. These figures may be quite a bit different when broken-down by enrollment categories.

Programmatic Highlights: Typically in Iowa ...

Lower elementary physical education meets twice a week for approximately 30 minutes per period.

Upper elementary physical education meets twice a week for approximately 35 minutes per period.

Intermediate physical education meets twice a week for approximately 45 minutes per period.

High School physical education meets either two times each week or three times in a six day cycle for approximately 50 minutes per period.

Physical Education Curricular Offerings

Internal unrest exists within the physical education profession concerning the program direction of the field. The internal dilemma is evident by disagreement as to whether the curricular emphasis should be directed towards a fitness-oriented program, a lifetime-leisure oriented program, or a skill-oriented program.

Overall, curricular emphasis in Iowa physical education differed from developmental and movement education at the elementary level; health-related fitness, sports skills and developmental at the intermediate level; and lifetime leisure and health-related fitness at the high school. This was perceived by respondents to be appropriate. However, in addressing the question of the presence of a K-12 written curricular guide in physical education, respondents reported that K-12 written curriculum guides are present in approximately two-thirds of reporting school districts, which is a strong indication that one-third of the school districts in Iowa do not have a solid scope and sequence in their physical education curriculum. It is hard to justify the existence of programs when there is no written curriculum with program rationale and philosophy, as well as student objectives and goals. Respondents also reported that clearly defined outcomes in physical education are present in only approximately one-half of the reporting school districts; however, that was an understandable finding as student outcomes have only been promoted in this state for approximately five years. There is a strong hope among many professionals in physical education that with the development of the definition of a physically educated student and specified outcomes by grade levels for physical education by NASPE in 1991 that physical education programs will utilize these guidelines when developing physical education program outcomes for students.

It was encouraging to note that physical fitness testing is occuring in the majority of Iowa's schools either once or twice annually (80%); however, it was disappointing to note that there are still a significant number of schools that do not conduct physical fitness testing. A possible reason for schools not conducting this testing is that Iowa law specifies physical fitness must be taught at all levels, but does not require physical fitness testing. Approximately two-thirds of the reporting school districts reported they utilize some standardized fitness test. Respondents reported that the same fitness test was used throughout the school district in a little over half of the reporting school districts; that cumulative physical fitness records are maintained for 52% of the students; and that physical fitness records progress with each student from building to building within a school district in only 23% of the reporting school districts. These findings are also discouraging in that the documentation of youth physical fitness should be a priority in physical education programs, yet current practices are inconsistent with current national fitness trends and public interests.

Curricular Highlights: Typically in Iowa ...

Elementary physical education emphasizes developmental and movement education.

Intermediate physical education focuses on health-related fitness, sports skills, and developmental education.

High school physical education focuses on health-related fitness and lifetime physical activities.

Physical fitness testing occurs in most school distircts once or twice a year.

Physical fitness records do not follow a student throughout their school career.

Physical Education Administrative Policies

A variety of administrative practices have been enacted at the local district level to cover everything from absenteeism to grading policy. Considerable concernhas been expressed that the nature of some of these practices may be questionable. For instance, Hensley (1990) has written that the profession is struggling with issues of grading, assessment and evaluation, attendance, and required apparel for class as well as with curricular content.

According to the findings of this study, letter grading in physical education is the most prevalent grading method at the intermediate (74%) and high school (83%) levels, while some alternative method (44%) is at the elementary level (Figure 3). These practices were perceived by the respondents to be appropriate. Most students in high school receive credit from physical education for graduation (90%); yet it is interesting to note that only 83% reported that students must receive a passing grade in order to graduate. This policy indicates that some school districts have a low regard for the importance of the physical education program and may require attendance only because it is required by state law.This study also found that if letter grades were utilized by school districts, less than one-third (31%) of those school districts compute the physical education letter grade into the grade point average of students.

Policies requiring make-up for missing physical education classes for events such as unexcused absences, excused absences, school field trips, or personal appointments occur more frequently at the high school level than at the elementary level. This is not surprizing as research has indicated that attendance is usually a factor utilized in determination of letter grades of students in many physical education programs. This finding also indicates that attendance in physical education is considered by many physical education specialists to be extremely important. Respondents also reported that dress policies for class are most prevalent at the high school level (78%) and also is often a factor utilized in class make-up for physical education.

Selected Administrative Highlights: Typically in Iowa ...

Letter grading in physical education is most common at the high school and intermediate levels.

Alternative grading methods and pass/fail grading predominate at the elementary level.

High schools have written policies regarding absenteeism more frequently than intermediate or elementary schools.

Dress policies are most prevalent at the high school level.

Legislation Influencing Physical Education

Several states have legislation allowing students to be exempted from physical education for specified purposes. Iowa legislation allows exemptions from physical education for religious, health, academic, and athletic purposes. Medical or religious exemptions from physical education require that a written statement from the parent or guardian be filed with the school principal. High school students may utilize exemptions from physical education for athletics and be excused by the building principal for a maximum of one semester each year, but only during the time they are participation in an organized school sponsored athletic program. Exemptions

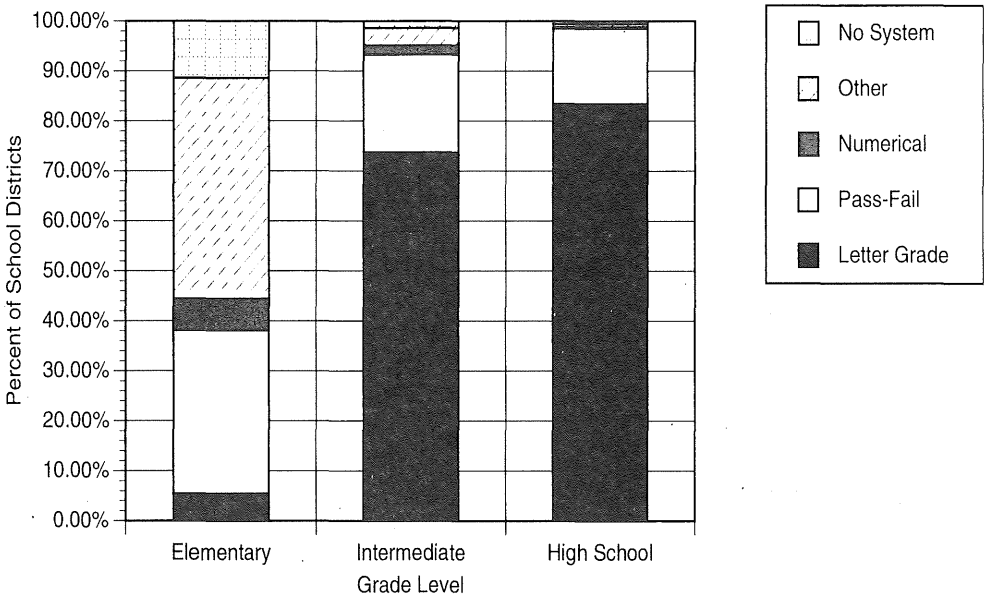

Figure 3. Grading Systems Used in Iowa Schools

from physical education for academics for high school seniors are available upon requests from the students and their parents to the building principal for any work study or cooperative program, and academic classes scheduled at the same time as physical education. There is no limit to the number of semesters exemptions from physical education for academic purposes. Students in grades nine through eleven may also exempt from physical education for the programs previously stated if the school district board of education has has provided for such a policy. (* the Iowa law changed after this study was conducted to allow seniors to utilize athletic exemptions).

It is encouraging that results of this study indicate the use of exemptions from physical education by students is minimal in Iowa, thus suggesting a strong commitment from school districts for physical education programs. Respondents indicated that exemptions for religious purposes from physical education were not being utilized (0% annual student usage) by 76% and less than 5% of the time by 23% of the reporting school districts. Exemptions for medical purposes from physical education were not being utilized (0% annual student usage) by 13% and less than 5% of the time by 78%. Exemptions for athletic purposes from physical education were not being utilized (0% annual student usage) by 78% and being utilized less than 5% of the time by 9% ; and exemptions for academic purposes from physical education were not being utilized (0% annual student usage) by 61% and less than 5% of the time by 28%. Figure 4 illustrates the use of various types of exemptions for physical education. It was perceived by 84% of the respondents that exemptions from physical education for athletics should not be allowed, and 83% perceived that exemptions from physical education for academic reasons should not be allowed.

Mainstreaming of special needs students is occuring at all levels of physical education, and it is encouraging to note the strong support of respondents for mainstreaming. However, respondents reported that physical educators were reported to be involved in the development of IEP's for special need's students approximately only one-half the time at all three levels. This practice eliminates the opportunity for physical educators to play an active role and gain an understanding of the goals and expectations of the student relative to the physical education program. This finding is also directly linked to the perception of the respondents that physical educators were adequately prepared to meet the needs of special needs students mainstreamed into their classrooms in a little over one-half the time at all three levels. This finding has direct implications toward physical education teacher preparation institutions and the need to place greater emphasis upon addressing the needs of special students in the area of physical education.

Legislative Highlights: Typically in Iowa ...

Exemptions from physical education for religious, medical, athletic, and academic reasons are infrequently utilized.

Survey respondents were overwhelming opposed to exemptions.

Mainstreaming of special needs students is occuring at all levels of physical education.

Only one of every two physical educators is adequately prepared to meet the needs of special needs students.a

Physical Education and Comprehensive School Health

Comprehensive school health is a multi-faceted, collaborative approach to developing the total well-being of youth.

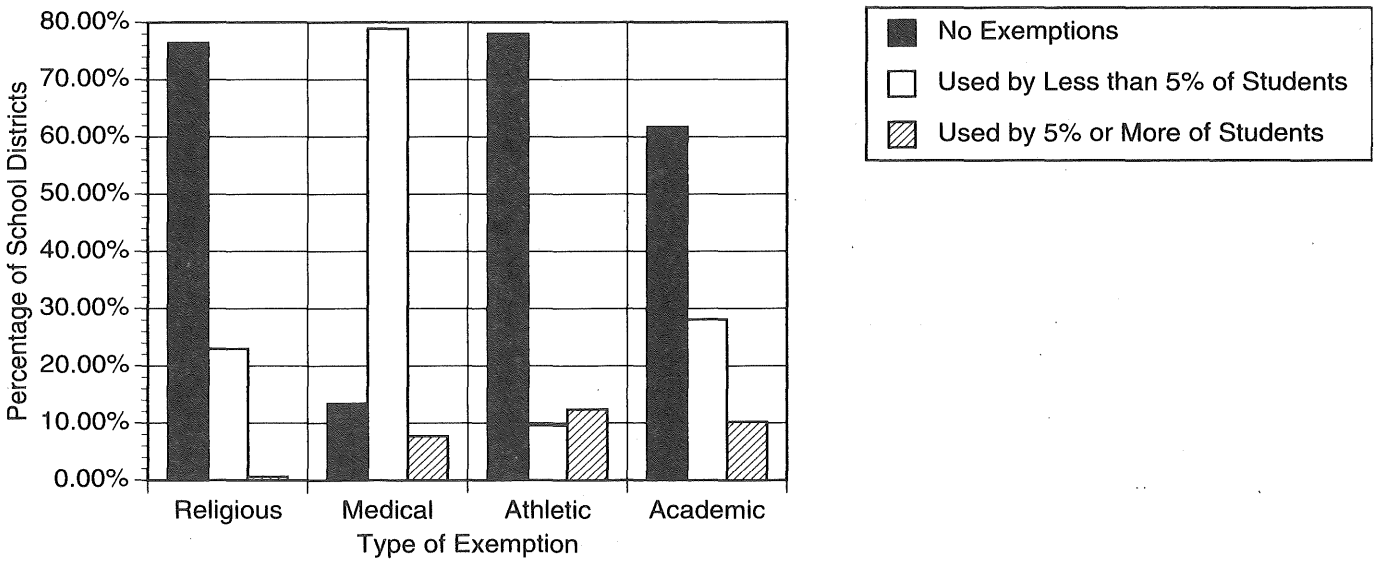

Figure 4. School Districts Use of Physical Education Exemptions

Components of the Iowa comprehensive school health model include curriculum, services, administration, community, and environment (Iowa Department of Education, 1991). The curricular areas of comprehensive school health includes disciplines with a vested interest in developing healthy youth such as physical education, health education, home economics, and science education.

Information was sought regarding both collaboration between physical education programs and comprehensive school health components. In addition, respondents were asked their opinion of the appropriateness of the relationship of the physical education program with the comprehensive school health components, namely, physical education, health education, health service, school guidance, school food service, home economics, community, and staff wellness. Findings revealed collaboration occuring between the physical education program and the other seven comprehensive school health components. The areas in which collaboration most frequently occurred were in the health education program (82.4%), the health services program (74.1%), and the school guidance program (63.0%). Respondents perceived that collaboration should occur between physical education and all the other seven comprehensive school health components.

It was interesting to note that there was a difference between the status and the perceptions of collaborative efforts between physical education and the other components of comprehensive school health among respondents. It is obvious that physical education programs need to begin more collaborative efforts with all components of comprehensive school health in order to be in compliance with the model being touted by the Iowa Department of Education. Furthermore, it is suggested that such involvement is a future direction that physical education programs should embrace in order to increase public awareness and support for the program.

Comprehensive School Health Highlights: Typically in Iowa ...

Physical education programs frequently collaborates with health education, school guidance, and health services.

Collaboration efforts frequently fall short of that which is desired by the Department of Education.

Additional collaboration with other components of comprehensive school health is deemed desirable.

Conclusions

The results of the present study of physical education programs in Iowa provide the basic information necessary to highlight the positive occurences in physical education and begin implementing change in programs that require more direction. Positive results of this study indicate that respondents perceived that the number of times each week physical education meet needs to increase and that the perception of utilization of exemptions from physical education are not appropriate. Such information is necessary in order to begin legislative changes that will enhance physical education in Iowa schools. It is also evident from the results of this study that K-12 curriculum development, student outcomes, and program policies and procedures in physical education all need to be reassessed at the district level to ensure program consistency and accountability.

References

Hensley, L. D. (1990) . Current measurement and evaluation practices in professional physical education. *Journal of Physical Education, Recreation, and Dance, 61*(3), 32-33.

National Association for Sport and Physical Education. (1987). *Shape of the nation: a survey of state physical education requirements*. Reston, VA: American Alliance for Health, Physical Education, Recreation, and Dance.

National Commission on the Role of the School and the Community in Improving Adolescent Health. (1990) . *Code blue: uniting for a healthier youth.* Alexandria, VA: National Association of State Boards of Education.

U.S. Department of Health and Human Services (1985) . Summary of findings from national children and youth study. *Journal of Physical Education, Recreation, and Dance, 56*(1), 43-90.

U.S. Department of Health and Human Services (1987). Summary of findings from national children and youth study II. *Journal of Physical Education, Recreation, and Dance, 58*(9), 49-96.

U.S. Department of Health and Human Services (1989) . *Healthy people 2000: national health promotion and disease prevention.* Washington D. C.: Government Printing Office.

Evaluating the Fitness of Iowa Children: Findings of the Iowa Youth Fitness Project

by

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Physical activity and physical fitness were identifed by the U. S. Department of Health and Human Services in its landmark report, *Promoting Health/Preventing Disease: Objectives for the Nation,* as one of the specific health objectives of the nation to be accomplished by the year 1990 (U. S. Public Health Service, 1980). That report set forth five specific objectives for the nation in the area of youth fitness. More recently, the sequel to this document, *Healthy People 2000,* (U. S. Public Health Service, 1990) again includes physical activity and fitness as one of the nation's priority health areas and lists 12 specific objectives related to physical activity and fitness.

The physical fitness of America's school-aged children has received considerable attention in the last decade. While the general public, and even some authorities, may support the notion that children represent the fittest segment of society, results from several national-scope research studies have suggested that our young people have shown little or no improvement in their level of physical fitness over the previous 20-25 years, and in some cases fitness levels have declined noticeably (Ross & Gilbert, 1985; Ross & Pate, 1987; President's Council on Physical Fitness and Sports, 1986; Updyke, 1989). Findings from the National Children and Youth Fitness Studies (NCYFS) I and II suggest that at all ages children are fatter today than comparably sampled children in the early 1960s. Furthermore, average scores on the mile-run test and the sit-up test were observed to be lower for 10 to18 year- olds than those reported for the 1980 sample used to develop norms for the AAHPERD Health-Related Physical Fitness Test (Pate, Ross, Dotson, & Gilbert, 1985; Ross, Dotson, Gilbert, & Katz, 1985; Ross & Pate, 1987; Ross, Pate, Lohman, & Christenson, 1987). Findings from the Chrysler-AAU report on physical fitness trends in American youth from 1980 to 1989 indicate a disturbing decline in cardiorespiratory endurance as measured by a distance run as well as significant increases in average body weight, particularly among older boys and girls. Others, however, suggest that the evidence is inconclusive and that all the hype regarding declining levels of youth fitness is exaggerated (Raithel, 1988; Corbin, 1991). For example, Looney and Plowman (1990) conducted a secondary analysis of the NCYFS data and found that the vast majority of the students were able to achieve the recommended standards for the individual tests, with 60% being able to pass at least 4 out of the 5 tests. Although there is not a consensus agreement among fitness authorities around the nation as to the severity of the problem, except perhaps for the fact that virtually everyone agrees that the youth today are generally heavier and fatter, media reports generally suggest that our children are fatter and less conditioned today than they were 20 and even 10 years ago. It is popular to point out that the adult fitness craze we have observed has failed to trickle down to the children. Whereas substantial information is available regarding the state of youth fitness at the national level, similar information does not exist for a representative sample of Iowa children. The only information currently available regarding the physical fitness status of Iowa children is anecdotal in nature or is based on fitness test results from selected schools. There has been no attempt to use a representative sample of Iowa children to create physical fitness norms or to evaluate the adequacy of the fitness levels of Iowa youth. Accordingly, a statewide effort to systematically collect baseline information which could be used as a benchmark for evaluating our children's fitness levels and could further serve to help evaluate both state education standards and local school programs is needed.

Methods

The Iowa Youth Fitness Project was designed with two primary purposes in mind: (1) to gather baseline data on the physical fitness status of a sample of students representative of Iowa school children and (2) to promote a heightened awareness of the importance of physical fitness and physical fitness testing among school officials, teachers, parents, and children throughout Iowa. This study was undertaken under the sponsorship of the Iowa Governor's Council on Physical Fitness and Sports with financial support provided by the Iowa Association for Health, Physical Education, Recreation and Dance (IAHPERD) and the University of Northern Iowa.

The study population included all 1st through 12th grade students enrolled in Iowa public and parochial schools during the 1991 spring semester. Excluded from the target population were gifted, exceptional or handicapped students. The selection of the participating schools was made using a multi stage cluster sampling procedure in which first school districts, then schools within districts, and lastly classrooms were selected. Since a primary purpose of the study was to be able to generalize the results to school children throughout Iowa, it was critically important that the students participating in the study were representative of youth throughout the state. Accordingly, strict sampling procedures were followed. From the initial sampling frame of 430 school districts, which included 1,812 schools that made up the Iowa K-12 educational system, 89 schools were selected to participate in the study. The superintendent of each of the selected school districts was initially contacted in order to explain the purpose of the study, the testing procedures to be utilized, and to ascertain the district's interest in cooperating in this project. Upon obtaining approval to utilize schools within the selected districts, building principals were contacted to further explain the project and to solicit their full cooperation. Of the schools initially selected, 79, representing 58 school districts, agreed to participate in the study and completed the testing during the prescribed time frame. This resulted in a sample of over 10,000 Iowa children participating in the physical fitness testing. As in previous large-scale surveys of this nature, the entire fitness testing was conducted in the regular physical education class period by the resident physical education teacher. In order to provide for consistency of test administration, standardized test directions and scoring procedures were adapted from AAHPERD's Physical Best program (1988) and the Fitnessgram (Institute for Aerobics Research, 1987) and then provided to each participating school in the form of a test manual. Furthermore, individualized training was provided to those school personnel uncertain about specific testing procedures. Standardized scoresheets were provided for the recording of test results. Upon completion of the testing and recording of the scores, scoresheets were then forwarded to the principal investigator for verification and subsequent data analysis. Each participating school was provided a master copy of a Participation Certificate which was signed by Governor Branstad, the Chair of the Governor's Council on Physical Fitness and Sports, and the Director of the Iowa Youth Fitness Project. This certificate could then be reproduced in the local schools and customized with each child's name who participated in the fitness testing.

The definition of physical fitness has evolved considerably over the last 35 years, as have the tests used to measure it. Physical fitness has generally been thought to be multifactorial in nature, related to an individual's capacity for movement and the ability to perform physical activity (Caspersen, Powell, & Christenson, 1985; Pate, 1991). Such broad definitions of physical fitness have been operationalized through the identification of a list of measurable components purporting to relate to the construct of physical fitness. The most commonly cited components of physical fitness generally fall into two groups: one related to health and the other related to skills which pertain to athletic performance (Pate, 1983). Although this classification should not be interpreted to mean that these groups of fitness components are mutually exclusive, it is important to recognize that there is not universal agreement on what constitutes physical fitness or how it should be measured. The health-related definition of physical fitness has gained considerable acceptance since the late 1970s and has served as the basis for national probability studies of physical fitness as well as regular fitness testing in the school setting. In fact, the most recent research findings have provided even stronger evidence

which relates physical fitness to one's health status, particularly cardiovascular health (Blair, Kohl, Paffenbarger, Clark, Cooper, & Gibbons, 1989). Components of health-related physical fitness commonly include: cardiorespiratory endurance, body composition, muscular strength and endurance, and flexibility (AAHPERD, 1980; Pate, 1983). It logically follows that any assessment of physical fitness must then include test items which measure the prescribed components of fitness as it has been operationalized.

Since a primary objective of this study was to assess the health-related physical fitness of Iowa children, specific test items were selected on the basis of: (1) validity - the test items purported to measure health-related fitness, (2) ease of administration, and (3) comparative purposes to national norms. The specific test items selected for the Iowa Youth Fitness Project (Table 1) consisted of four physical performance tests, including a 60-second modified sit-up test and either a pull-up test or a flexed-arm hang to measure muscular strength and endurance, a sit-and-reach test to measure flexibility of the lower back and hamstring muscles, and a one-mile run/walk (one-half mile run/walk was an option in grades 1-3) to measure cardiorespiratory endurance. Additionally, height and weight measurements along with triceps and calf skinfold measurements were used for assessing body composition. Although the test items were essentially the same as those prescribed by Physical Best (AAHPERD, 1988) or the Fitnessgram (Institute for Aerobics Research, 1987), no attempt was made to specify a particular test battery to be used, although participating schools were provided general information concerning four national fitness tests and where to write for additional information.

Table 1. Fitness Components and Related Test Items

Test Item	Fitness Component
One-Mile Run/Walk[a]	Cardiorespiratory endurance
Sit-and-Reach Test	Flexibility of lower back and hamstrings
Pull-Ups[b]	Arm and shoulder girdle muscular strength
Modified Sit-Up Test	Abdominal muscle strength and endurance
Triceps and Calf Skinfolds	Body Composition

[a] one-half mile-run was an optional test item for students in grades 1-3.
[b] flexed-arm hang was an optional test item for students unable to complete a single pull-up.

Results and Discussion

Testing was completed during May 1991, National Physical Fitness and Sport Month. A total of 10,004 students ranging in age from 6 to 19 participated in this phase of the fitness testing. It will be recalled that four separate performance tests, as well as measures of height, weight, and skinfold thicknesses were included in the test battery. Although school personnel responsible for the actual test administration were encouraged to have all participating children complete all components of the test battery, for a variety of reasons not every child was tested on every test item. For instance, a few schools had policies that precluded the taking of skinfold measurements on their students. It is also noted that spring 1991 was a period of extensive rain throughout the state which in some cases made the administration of the distance run test, which was generally completed on an outside track, impossible. Nevertheless, the obtained test scores are believed to represent the largest data base available on the physical fitness of Iowa children and, because of the strict sampling procedures used, should be generalizable to youth throughout the state.

Tables 2 and 3 provide basic summary statistics for each of the test items according to sex and age grouping. [Normative percentile rank standards for each sex and age group is currently being developed to represent much needed baseline information on the physical fitness of Iowa children and will be published in a subsequent article.] It should be noted, however, that since the testing was completed late in the school year, most of the children had had a birthday and reached the next age level. The implication of this is that the number of students in the 6-year-old age group was relatively small, thus restricting the generalizability of these data for that age group.

Table 2. Mean Scores for Boys on Iowa Youth Fitness Test

Test Item / Age (yrs)	6	7	8	9	10	11	12	13	14	15	16	17	18+
Situps (no)	27.1	27.5	33.2	34.3	36.3	41.2	44.0	46.8	50.6	49.5	48.9	50.8	50.6
Pull-ups (no)	1.7	2.1	2.4	2.4	2.3	2.8	2.8	3.5	5.0	6.1	6.6	8.2	8.4
Sit-and-Reach (cm)	27.4	27.4	27.0	26.5	26.3	25.2	25.2	25.4	27.5	30.5	31.3	31.3	32.2
1-Mile Run (min:sec)	-	10:32	10:01	9:57	10:04	9:28	8:59	8:40	8:06	7:50	7:52	7:43	7:52
Weight (lbs)	53.7	60.4	68.0	76.4	86.9	94.2	107.3	120.9	134.0	147.1	159.2	159.7	164.8
Height (in)	48.2	50.1	52.0	54.5	56.9	58.4	61.1	63.9	66.1	68.5	69.5	69.6	69.9
Body Mass Index	16.2	16.8	17.6	18.0	18.7	19.3	20.1	20.7	21.4	22.0	23.1	25.3	23.7
Skinfold Sum (mm) (Triceps + Calf)	18.1	18.8	19.6	21.9	25.5	26.7	26.2	25.5	24.6	22.3	24.5	21.2	20.9

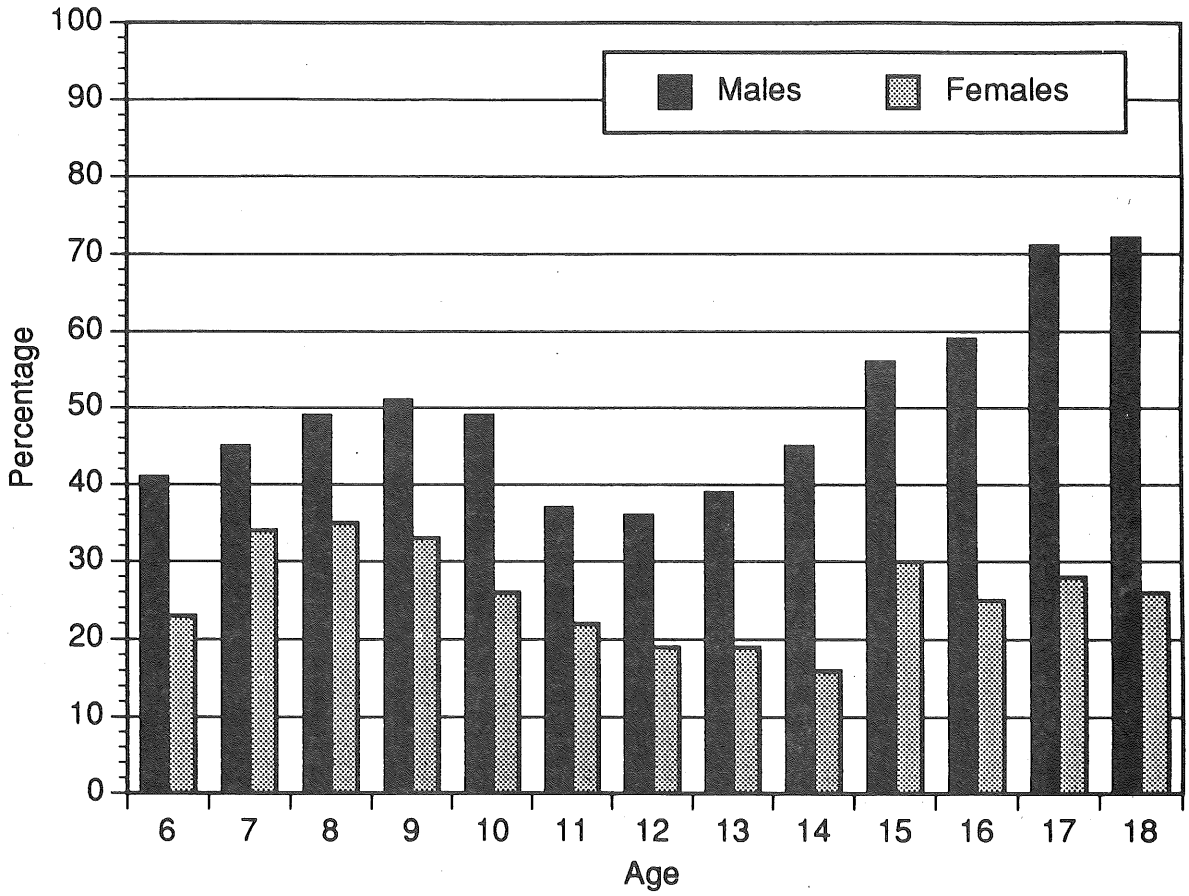
Table 3. Mean Scores for Girls on Iowa Youth Fitness Test

Test Item / Age (yrs)	6	7	8	9	10	11	12	13	14	15	16	17	18+
Situps (no)	23.7	27.9	30.3	32.0	34.2	37.4	40.2	41.3	42.2	41.4	41.1	41.8	42.7
Pull-ups (no)	1.4	1.5	1.2	1.5	1.2	1.0	0.9	0.7	0.8	1.0	0.9	1.0	1.2
Sit-and-Reach (cm)	28.5	29.8	30.4	30.2	30.3	29.8	31.0	32.4	33.8	36.2	36.0	35.6	36.1
1-Mile Run (min:sec)	-	11:11	11:08	10:50	10:59	10:31	10:13	9:58	10:08	10:26	10:48	10:22	10:48
Weight (lbs)	54.9	58.5	65.9	75.1	85.6	97.2	106.6	118.2	128.6	131.6	134.7	133.6	136.6
Height (in)	48.1	49.3	51.5	53.9	56.5	58.9	61.1	62.8	64.1	64.3	64.6	64.5	64.8
Body Mass Index	16.6	16.8	17.4	18.0	18.7	19.5	20.0	21.0	22.0	22.4	22.7	22.6	22.9
Skinfold Sum (mm) (Triceps + Calf)	21.1	21.6	23.5	26.1	27.6	28.5	29.6	31.8	35.8	33.6	33.9	33.5	32.5

Although the mean scores presented here compared to national norms should provide some basis for evaluating the fitness of Iowa children relative to the performance of other youth, physical fitness and measurement specialists have pointed out that, in theory, the use of criterion-referenced standards (CRS), where such standards or cut-off scores are indicative of "desirable health standards" that afford some protection against hypokinetic disease, may be a preferred method of interpreting youth fitness test scores (Blair, Falls, & Pate, 1983; Cureton & Warren, 1990; Looney & Plowman, 1990).

Several authors (Hambleton, Swaminathan, Algins, & Coulson, 1978; Safrit, 1986; Cureton & Warren, 1990) have discussed the distinctions between a norm-referenced and criterion-referenced approach to evaluation and addressed the advantages and disadvantages of each. Currently there are three national youth health-related physical fitness testing programs that employ CRS - Physical Best (AAHPERD, 1988), Fitnessgram (Institute for Aerobic Research, 1987), and the Fit Youth Today program (American Health and Fitness Foundation, 1986). Even though there may be significant advantages in a criterion-referenced approach for evaluation, the greatest difficulty and major limitation associated with using CRS is determining valid cut-off scores. To date, only limited work has taken place to validate the CRS prescribed for the aforementioned tests. Nevertheless, in order to evaluate the physical fitness of Iowa children the test data presented here were compared to the CRS recommended by Physical Best (AAHPERD, 1988) as well as the normative standards developed from NCYFS I and II (Ross, Dotson, Gilbert, & Katz, 1985; Ross, Pate, Delpy, Gold, & Silvar, 1987). Readers should note that although the mean score on the various tests was presented in the preceding tables, the median score on each test was used for comparison to the NCYFS norms and the Physical Best CRS. This was because the median represents the middle score in the distribution of scores and is less influenced by extreme test scores that may be present in a skewed distribution. Specific test findings are presented below.

Figure 1. Percentage Meeting Physical Best CRS - Pull-ups

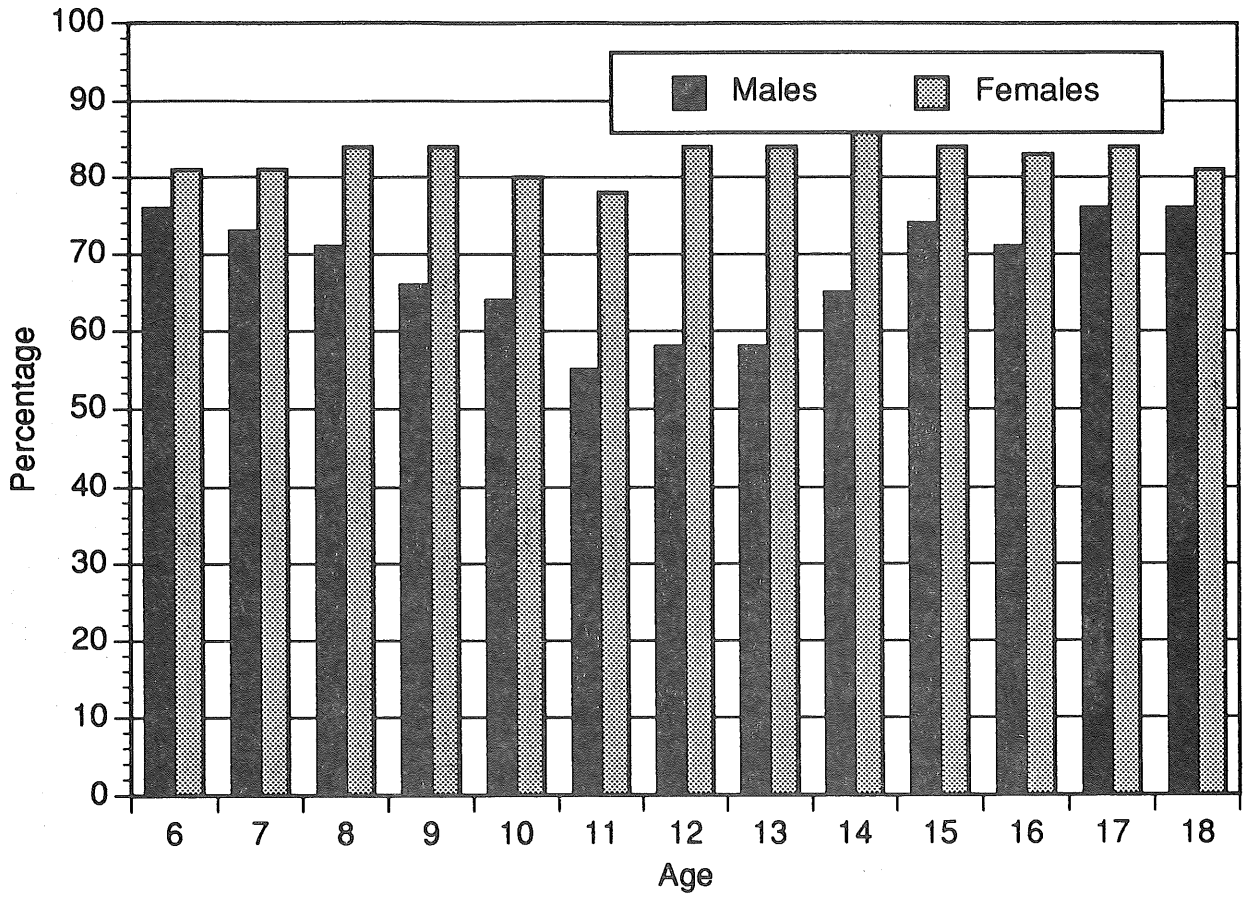


Pull-ups

The use of a pull-up test, or some variation thereof, has traditionally been used to measure upper body strength and endurance. Years of testing experience has revealed significant problems with the traditional pull-up, chin-up, and flexed-arm hang tests. Performance is markedly confounded by body weight, particularly at the low end of the strength scale, resulting in a substantial number of students unable to complete a single pull-up (Baumgartner, 1978). Despite these zero score problems, the pull-up

continues to be popular and is included as a test item in each of these national testing programs: Physical Best, Fitnessgram, President's Challenge and the Chrysler-AAU Test. Students were measured using the traditional pull-up test in which one's score was the number of times the student was able to raise the body from a hanging position until the chin was positioned over the bar. Time was not a consideration. With the exception of 10-year-old boys and 14-year-old girls, the median performance of Iowa youth was at or below the 50th percentile reported in the NCYFS norms. While the average score on the pull-up test hovered around one for Iowa girls, the median performance for girls was a score of zero for all age groups except 14 years of age. Figure 1 shows the percentage of Iowa children that successfully attained the recommended health standard on the pull-up test for their age and sex. Boys in the older age groups seemed to be performing better, yet only 72% of 18-year-olds reached the recommended standard. Updyke (1989) also noted better performance for older boys who participated in the Chrysler-AAU Testing Program. Clearly, Iowa children are substandard in arm and shoulder girdle strength and endurance as measured by the traditional pull-up test. The reasons for this performance is unknown, but it may be partially explained by increased body weight, a trend well-documented among American youth. (The present study used a test protocol which required the student to grasp the bar with the palms facing away from the body. The NCYFS administered the pull-ups with the palms facing the body, while the CRS are based on palms facing away from the body.)

Figure 2. Percentage Meeting Physical Best CRS - Sit-and-Reach

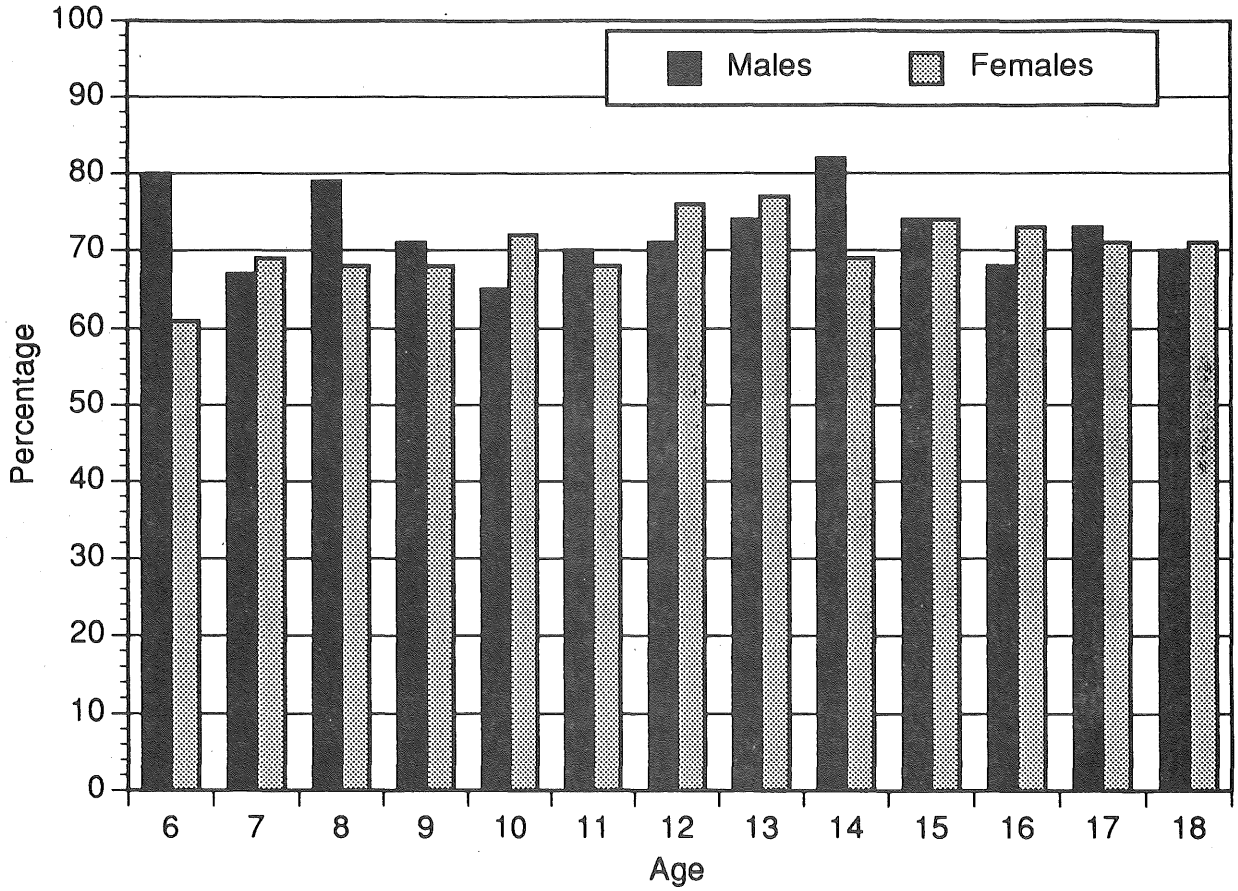


Sit-and-Reach

A sit-and-reach test was used to measure the flexibility of the lower back and hamstring muscles. This test can be administered using a variety of procedures, but basically involves having the student reach forward, sliding the fingertips along a measuring scale as far as possible without bending the knees. Testing apparatus consisted of either a specially constructed sit-and-reach box or an appropriately placed ruler across the top of a bench. A student's score was the most distant point reached across the

measuring scale and was recorded to the nearest centimeter. The 23 cm mark on the measuring scale was established as the zero point and coincided with the vertical plane against which the subject's feet rested. (If measurements were taken in inches they were converted to centimeters using a simple formula.) At every age level, girls, on the average, scored better than their male counterparts. This finding is consistent with other published reports regarding flexibility of the lower back and hamstrings. Furthermore, performance increased moderately for females until age 15, at which point performance seemed to level off. Boys, however, maintained about the same level of performance and even declined slightly through age 13, after which performance increased moderately. A similar developmental trend was noted in the NCYFS data (Pate, Ross, Dotson, & Gilbert, 1985). In order to compare these data on the sit-and-reach test to the norms from the NCYFS it was first necessary to convert all scores to the same scale used in that study. Results indicated that across all age levels, both Iowa boys and girls scored very close to the 50th percentile on the NCYFS norms. When compared to the Physical Best CRS, approximately 82% of the Iowa girls and 68% of the boys attained the recommended health standard (Figure 2). At every age level, the proportion of girls reaching the CRS approximated 80% or slightly higher. The proportion of boys reaching the recommended standards was more erratic across age levels, with a noticeable decrement in the 9 - 14 year old age range.

Figure 3. Percentage Meeting Physical Best CRS - Sit-ups

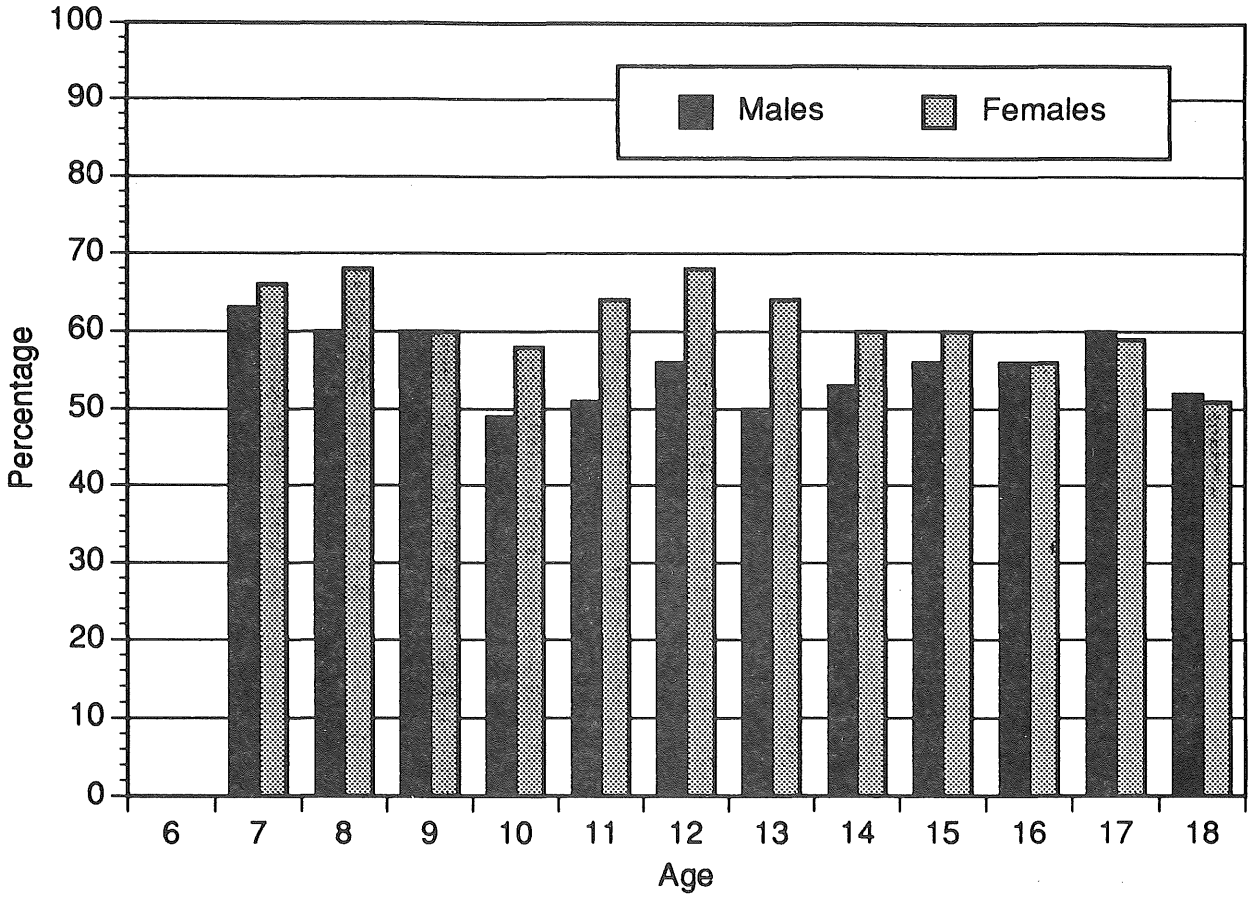


Sit-ups

Muscular strength and endurance of the abdominal muscles was measured using a 60-second bent-knee sit-up test. Students were required to fold their arms across their chest with their hands on the opposite shoulders while having their feet held in contact with the testing surface by a partner. A student's score was the number of sit-ups correctly completed in 60 seconds. As one would expect, the average performance of the boys was higher than that of the girls across the age range, with the performance difference increasing with age. Both boys and girls in the Iowa sample showed steady improvement in sit-up performance until age 14, at which point performance essentially plateaued.

This is generally consistent with the maturational trends reported by the President's Council on Physical Fitness and Sports (1986). The NCYFS norms show a similar maturational trend for girls, but show a steady improvement in performance for boys through age 17. Overall, performance on the sit-up test may represent the best news for Iowa children. Compared to the NCYFS norms, the median score for Iowa boys at every age level exceeded the 50th percentile, averaging around the 75th percentile. Likewise, the median score for Iowa girls at every age level also exceeded the 50th percentile on the NCYFS norms. Their performance would also average around the 75th percentile. When compared to the Physical Best CRS for the sit-up test, approximately 70% of all Iowa youth achieved the recommended standards for their age and sex (Figure 3). There were little differences between the proportion of girls and boys who reached the CRS. This finding is noteworthy since Looney and Plowman (1990) report that on the basis of a secondary analysis of the NCYFS data, more males than females achieved the acceptable level of fitness on the sit-up test.

Figure 4. Percentage Meeting Physical Best CRS - Mile Run

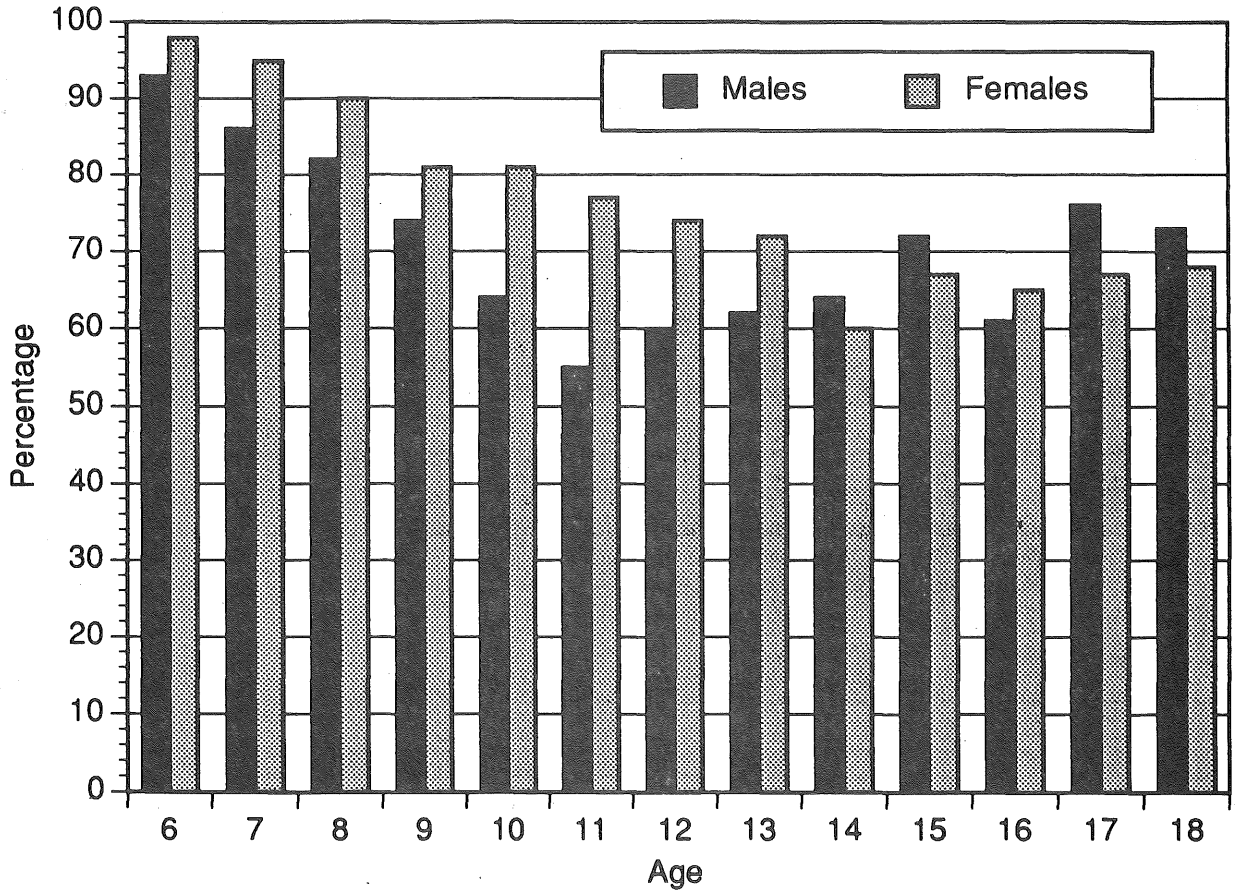


One-Mile Run

Cardiorespiratory function is generally identified by fitness experts as well as medical authorities, as the most important component of health-related physical fitness because of its relationship to the risk of heart disease, still the major cause of death in the U. S. In a laboratory setting, maximal oxygen uptake or aerobic capacity can be accurately determined by measuring the expired gases during an exercise bout. The use of a distance run test, such as the one-mile run, as an indirect measure of cardiorespiratory function is widely accepted in field settings and is included in all the major physical fitness test batteries. Students participating in the Iowa Youth Fitness Project were instructed to cover a one-mile distance in the shortest time possible by running and/or walking at the fastest pace that could be sustained throughout the distance. Time was scored in minutes and seconds. Results indicated that, on the average, boys were able to run the mile faster than girls at every age level. This difference increased from about 40 seconds at age 7 to almost 3 minutes at age 18. Boys' times generally improved

steadily through age 15, at which point they essentially leveled off. This is consistent with the NCYFS data which shows the plateau occurring at age 14. The President's Council on Physical Fitness and Sports (1986) reported a similar trend with the inflection point also occurring at age 14. Iowa girls, meanwhile, showed modest improvements in one-mile run time until age 13, at which point a general trend reversal occurred and performance actually declined. The NCYFS data shows improving performance for girls up to age 13, then a noticeable decline in the rate of improvement up to age 15, at which point the performance curve reversed itself. This same reversal of performance for girls was also noted to occur at about age 14 in the report released by the President's Council (1986). When compared to the NCYFS norms, the median performance on the mile-run by Iowa boys was just at, or slightly better than the 50th percentile, depending upon age. In most cases, the younger age boys performed relatively better than their older counterparts. Iowa girls, meanwhile, performed above the 50th percentile on the NCYFS norms at every age level, averaging just above the 60th percentile. Again, it was observed that the older girls, age 16 and up, performed at a relatively lower level, yet their performance was still better than the national average. Figure 4 shows the proportion of Iowa boys and girls at each age level that reached the Physical Best CRS for the mile-run. Approximately 56% of all Iowa boys and 61% of the girls attained the recommended health standards for the mile-run. As can be seen from the figure, at most ages, a higher percentage of girls than boys reached the recommended CRS. Of the students who participated in the NCYFS I and II, Looney and Plowman (1990) report that a higher percentage of males than females passed the Fitnessgram CRS for the mile-run. The proportion of males passing the Fitnessgram criteria ranged from a low of 65% to a high of 84%, depending upon age. The passing rate for females ranged from 44% to 85%. Although the CRS are not the same for Fitnessgram and for Physical Best at every age and sex level (Physical Best CRS are generally more stringent), these data from Iowa are of concern when one considers the importance of cardiorespiratory function to good health. From a public health perspective, it would be desirable to have a higher proportion of our children reach the recommended health standards.

Figure 5. Percentage Meeting Physical Best CRS - Sum of Skinfolds



Body Composition Measures

It has been well-established that obesity is associated with many risk factors of coronary heart disease, stroke, and diabetes. For optimal health, a proper balance of the amount of fat and lean weight must be maintained. Unfortunately, numerous research studies published in the 1980s have provided evidence which indicates that children are fatter and heavier today than children 20 years ago (Pate, Ross, Dotson, & Gilbert, 1985; Ross, Pate, Lohman, & Christenson, 1987; Gortmaker, Dietz, Sobol, & Wehler, 1987). In fact, this is one area in which all the authorities agree, children are fatter today! Although their use has been controversial and often criticized, skinfold measurements provide a practical method of assessing body composition, or relative body fatness. They have been shown to provide a more accurate estimate of body fatness than either height or weight independently, or in combination with one another, and are suitable to use in a field setting. The Iowa Youth Fitness Project utilized skinfold measurements recorded to the nearest millimeter at the triceps and calf sites. Slimguide Skinfold Calipers were provided at no expense to participating schools not having their own calipers. The resultant skinfold measurements were analyzed separately as well as in combination with each other. It is recalled that a larger skinfold measurement is indicative of a higher degree of body fatness. As expected, the average skinfold thickness measurements were greater for girls than boys at every age level. The magnitude of this difference increased with age. The mean sum of skinfold measurement for Iowa girls consistently increased up to age 14, after which the mean decreased slightly and then seemed to level off. Since the NCYFS did not utilize the calf skinfold except for ages 6 - 9, direct comparison with the sum of skinfolds was not possible. However, when considering the triceps skinfold alone, the NCYFS showed a pattern of increasing skinfold thickness until age 15, followed by a slight decrease and then a small gain in average skinfold thickness. This general trend appeared to be very similar to that found in the Iowa data. Iowa boys showed a pattern of increasing skinfold thickness (sum of skinfolds) from age 6 to a peak around 11 years of age. From that point the mean sum of skinfolds steadily decreased through age 18, with only a reversal of that trend occurring at age 16. This maturational pattern approximates that of the NCYFS data for triceps in which the peak occurred at age 12, with declining measurements thereafter. In comparing the triceps skinfold measurement of the Iowa data to the NCYFS norms, the Iowa girls were at or slightly above the 50th percentile at most ages, most notably through age 14. This is suggesting that at most ages the Iowa girls were comparable to the national sample in terms of body fatness, or perhaps slightly leaner. The Iowa boys, meanwhile, were at or slightly below the 50th percentile on the NCYFS norms at all age levels. The older boys generally scored below the national average, thus suggesting they were slightly fatter than the national sample of boys. Figure 5 illustrates the proportion of Iowa boys and girls at the various age levels who attained the health standards for sum of skinfolds as prescribed by Physical Best. In general, a slightly higher percentage of Iowa girls, approximately 76%, met the CRS than did the boys, of which 70% attained the suggested standard. It was of interest to note that the proportion of girls who attained the CRS generally declined with age. The same trend was apparent for boys up through age 11, at which time, probably due to the onset of puberty, the trend began to reverse. These findings would seem to indicate that the vast majority of young children have acceptable levels of fatness, but as they age, a smaller and smaller proportion of the children meet the recommended standards for body fatnesss. Although the specific reason for this generally negative trend is unknown, it may be related to a variety of lifestyle factors such as poor nutrition and inadequate physical activity.

The discussion of body composition would not be complete without considering total body weight, height, and some index of the ratio of height to weight. When compared to the 50th percentile in weight as reported by the National Center for Health Statistics, Iowa boys average weight was about 16 pounds heavier while Iowa girls were about 13 pounds heavier. Similarly, Iowa boys and girls were about 1.6 inches and 1.3 inches taller, respectively. Iowa children were both taller and heavier at every age and sex level than the children used to compile these national data, although the differences were appreciably greater, particularly for weight, from age 10 to about 14. This generally coincides with the age range in which fewer Iowa boys attained the recommended CRS for the combination of triceps and calf skinfold.

Body mass index (BMI), an alternative to estimating body composition based on the ratio of body weight (kg) to standing height (m^2) was also considered. Although widely used in epidemiological research, this method is not considered as good an indicator of body fatness as skinfold measures and it also presents difficulty in interpretation. Nevertheless, BMI may be useful in settings in which skinfold measurements are not possible. Since the NCYFS did not report norms for BMI, the only comparison made was with the Physical Best CRS. Overall, approximately 75% of both Iowa girls and boys reached the recommended health standard. There were essentially no differences between the proportion of boys and girls who attained the standards, and little differences across age level.

Conclusions

Overall, the findings presented here point to a mixed-bag of results. Compared to national norms, Iowa children performed significantly better on the sit-up test, were generally taller, heavier, and somewhat fatter, yet their overall physical fitness level was about average. It also appears that Iowa girls were somewhat fitter than their male counterparts. The proportion of Iowa children meeting the recommended health standards prescribed by the American Alliance for Health, Physical Education, Recreation, and Dance (AAHPERD, 1988) varied considerably from test to test. In general, it seems that a higher number of young children attain the recommended standards, then something seems to happen as they grow and mature that results in relatively fewer of the older children being able to perform up to standard. If this is true, the notion that *children* "...are probably the fittest age segment of society" (Simons-Morton , O'Hara, Simons-Morton, & Parcel, 1987, p. 297) should probably be revised to read *young children* when we speak of Iowa youth. Although the pull-up test is wrought with criticism, the relatively few Iowa children meeting minimal standards may be a source of concern in a largely rural state such as Iowa that is substantially dependent on an agricultural economy.

It is recalled that each criterion standard is intended to represent a level of fitness that affords some degree of protection against hypokinetic disease and that it is desirable that all youth attain these minimum levels of fitness behavior. Although much work needs to be done to validate the various standards, they do represent a benchmark upon which professionals may judge the health and fitness status of our children. Perhaps the greatest area of concern from a public health perspective was the relatively low percentage of Iowa youth, both boys and girls, but perhaps more so for boys, who attained the recommended health standards for cardiorespiratory fitness. With more and more evidence pointing to an association between lower levels of physical fitness and the incidence of coronary heart disease (Blair et al., 1989) , it behooves all those responsible for the well-being of Iowa children to heed this situation and take prompt and responsible action.

References

American Alliance for Health, Physical Education, Recreation, and Dance (1980). Health-related physical fitness test manual. Reston, VA: AAHPERD.

American Alliance for Health, Physical Education, Recreation, and Dance (1988). Physical best. Reston, VA.

American Health and Fitness Foundation (1986). Fit youth today. Austin, TX.

Blair, S. N., Falls, H. B., & Pate, R. R. (1983). A new physical fitness test. Physician and Sportsmedicine, 11, 87-91.

Blair, S. N., Kohl, H. W., Paffenbarger, R. S., Clarke, D. G., Cooper, K. H., & Gibbons, L. W. (1989). Physical fitness and all-cause mortality: A prospective study of healthy men. Journal of the American Medical Association, 262, 2395-2401.

Baumgartner, T. A. (1978). Modified pull-up test. Research Quarterly, 49, 80-84.

Caspersen, C. J., Powell, K. E., & Christenson, G. M. (1985). Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research. Public Health Reports, 100(2), 126-131.

Corbin, C. B. (1991, November). Keynote address presented at the meeting of the Iowa Association for Health, Physical Education, Recreation, and Dance, Waterloo, IA.

Cureton, K. J. & Warren, G. L. (1990). Criterion-referenced standards for youth health-related fitness tests: A tutorial. Research Quarterly for Exercise and Sport, 61(1), 7-19.

Gortmaker, S. L., Dietz, W. H., Sobol, A. N., & Wehler, C. A. (1987). Increasing pediatric obesity in the U. S. American Journal of Diseases of Children, 14(1), 535-540.

Hambleton, R. K., Swaminathan, H., Algina, J., & Coulson, D. B. (1978). Criterion-referenced testing measurement: A review of technical issues and development. Review of Educational Research, 48, 1-47.

Institute for Aerobic Research (1987). FITNESSGRAM user's manual. Dallas, TX: Institute for Aerobic Research.

Looney, M. A. & Plowman, S. A. (1990). Passing rates of American children on the FITNESSGRAM criterion-referenced physical fitness standards. Research Quarterly for Exercise and Sport, 61(3), 215-223.

Pate, R. R. (1983). A new definition of youth fitness. Physician and Sportsmedicine, 11, 77-83.

Pate, R. R. (1991). Health-related measures of children's physical fitness. Journal of School Health, 61(5), 231-233.

Pate, R. R., Ross, J. G., Dotson, C. O., & Gilbert, G. G. (1985). The new norms: A comparison with the 1980 AAHPERD norms. Journal of Physical Education, Recreation, and Dance, 56(1), 70-72.

President's Council on Physical Fitness and Sports (1986). PCPFS 1985 national school population fitness survey (Project No. 282-84-0086). Washington, D. C.: Department of Health and Human Services.

Raithel, K. S. (1988). Are American children really unfit? Physician and Sportsmedicine, 16(10), 146-154.

Ross, J. G., Dotson, C. O., Gilbert, G. G., & Katz, S. J. (1985). New standards for fitness measurement. Journal of Physical Education, Recreation, and Dance, -56(1), 62-66.

Ross, J. G. & Gilbert, G. G. (1985). The national children and youth fitness study I: A summary of findings. Journal of Physical Education, Recreation, and Dance, 56(1), 45-50.

Ross, J. G. & Pate, R. R. (1987). The national children and youth fitness study II: A summary of findings. Journal of Physical Education, Recreation, and Dance, 58(12), 51-56.

Ross, J. G., Pate, R. R., Delpy, L. A., Gold, R. S., & Silvar, M. (1987). New health-related fitness norms. Journal of Physical Education, Recreation, and Dance, 58(12), 66-70.

Ross, J. G., Pate, R. R., Lohman, T. G., & Christenson, G. M. (1987). Changes in the body composition of children. Journal of Physical Education, Recreation, and Dance, 58(12), 74-77.

Safrit, M. J. (1986). Introduction to measurement in physical education and exercise science. St. Louis: Mosby.

Simons-Morton, B. G., O'Hara, N. H., Simons-Morton, D. G., & Parcel, G. S. (1987). Children and fitness: A public health perspective. Research Quarterly for Exercise and Sport, 58, 295-302.

U. S. Public Health Service (1980). Promoting health/preventing disease: Objectives for the nation. Washington, D. C.: Government Printing Office.

U. S. Public Health Service (1990). Healthy people 2000: National health promotion and disease prevention objectives. Washington, D. C.: Government Printing Office.

Updyke, W. F. (1989). Fitness trends in a large population of 6-10 year old children 1980-1989. (A summary report of the Chrysler-AAU Physical Fitness Testing Program, Populars Building, Bloomington, IN).

Part II

School Rules of Iowa

Contents of Part II

School Rules of Iowa 1994

Education Program

281-12.5(256) **Education program.** The following education program standards shall be met by schools and school districts for accreditation with the start of the 1989-1990 school year.

12.5(3) **Elementary program, grades 1-6.** The following areas shall be taught in grades one through six: English-language arts, social studies, mathematics, science, **health**, human growth and development, **physical education**, traffic safety, music, visual art.

In implementing the elementary program standard, the following general curriculum definitions shall be used.

e. Health. Health instruction shall include personal health; food and nutrition; environmental health; safety and survival skills; consumer health; family life; substance abuse and nonuse, encompassing the effects of alcohol, tobacco, drugs, and poisons on the human body; human sexuality, self-esteem, stress management, and interpersonal relationships; emotional and social health; health resources; and prevention and control of disease, and thecharacteristics of communicable diseases, including acquired immune deficiency syndrome.

f. Physical education. Physical education instruction shall include movement experiences and body mechanics; fitness activities; rhythmic activities; stunts and tumbling; simple games and relays; sports skills and activities; and water safety.

12.5 (4) **Junior high program, grades 7 and 8.** The following shall be taught in grades 7 and 8: English-language arts, social studies, mathematics, science, human growth and development, physical education, music, visual art, family and consumer education, career education, and technology education. Instruction in the following areas shall include the contributions and perspectives of persons with disabilities, both men and women, and persons form diverse racial and ethnic groups, and shall be designed to eliminate career and employment stereotypes.

In implementing the junior high program standard, the following general curriculum definitions shall be used.

e. Health. Health instruction shall include personal health; food and nutrition; environmental health; safety and survival skills; consumer health; family life; substance abuse and nonuse, encompassing the effects of alcohol, tobacco, drugs, and poisons on the human body; human sexuality, self-esteem, stress management, and interpersonal relationships; emotional and social health; health resources; and prevention and control of disease and the characteristics of communicable diseases, including sexually transmitted diseases and acquired immune deficiency syndrome.

f. Physical education. Physical education shall include the fitness activities that increase cardiovascular endurance, muscular strength, and flexibility; sports and games; tumbling and gymnastics; rhythms and dance; water safety; leisure and lifetime activities.

12.5 (5) **High school program, grades 9-12.** In grades 9 through 12 a unit is a course or equivalent related components or partial units taught throughout the academic year as defined in subrule 12.5(18). The following shall be offered and taught as the minimum program: English-language arts, six units; social studies, five units; mathematics, six units as specified in subrule 12.5(5)"c"; science, five units; health, one unit; physical education, one unit; fine arts, three units; foreign language, four units; and vocational education, five units as specified in subrule 12.5(5)"i".

In implementing the high school program standards, the following curriculum standards shall be used.

e. Health (one unit). Health instruction shall include personal health; food and nutrition; environmental health; safety and survival skills; consumer health; family life; human growth and development; substance abuse and nonuse; emotional and social health; health resources; and prevention and control of disease, including sexually transmitted diseases and acquired

immune deficiency syndrome, current crucial health issues, human sexuality, self-esteem, stress management, and interpersonal relationships.

f. Physical education (one unit). Physical education shall include the physical fitness activities that increase cardiovascular endurance, muscular strength and flexibility; sports and games; tumbling and gymnastics; rhythms and dance; water safety; leisure and lifetime activities.

All physically able students shall be required to participate in the program for a minimum of one-eighth unit during each semester they are enrolled except as otherwise provided in this paragraph. A twelfth-grade student **may be** excused from this requirement by the principal of the school in which the student is enrolled under one of following circumstances:

(1) The student is enrolled in a cooperative, work-study, or other educational program authorized by the school which requires the student's absence from the school premises during the school day.
(2) The student is enrolled in academic courses not otherwise available.
(3) An organized and supervised athletic programs which requires at least as much time of participation per week as one-eighth unit of physical education.

Students in grades nine through eleven may be excused from the physical education requirement in order to enroll in academic courses not otherwise available to the student if the board of directors of the school district in which the school is located, or the authorities in charge of the school, if the school is a non-public school, determine that students from the school **may** be permitted to be excused from the physical education requirement.

A student may be excused by the principal of the school in which the student is enrolled, in consultation with the student's counselor, for up to one semester, trimester, or the equivalent of a semester or trimester, per year if the parent or guardian of the student requests in writing that the student be excused form the physical education requirement. The student seeking to be excused from the physical education requirement must, at some time during the period for which the excuse is sought, be a participant in an organized and supervised athletic program which requires at least as much time of participation per week as one-eighth unit of physical education. The student's parent or guardian must request the excuse in writing. The principal shall inform the superintendent that the student has been excused.

12.5(6) **Physical education and health courses exemption.** A pupil shall not be required to enroll in either physical education or health courses if the pupil's parent or guardian files a written statement with the school principal that the course conflicts with the **pupil's** religious beliefs.

Activity Program

281-12.6(256) **Activity program.** The following standards shall apply to the activity program of accredited schools and school districts.

12.6(1) **General guidelines.** Each board shall sponsor a pupil activity program sufficiently broad and balanced to offer opportunities for all pupils to participate. The program shall be supervised by qualified professional staff and shall be designed to meet the needs and interests and challenge the abilities of all pupils consistent with their individual stages of development; contribute to the physical, mental, athletic, civic, social, moral, and emotional growth of all pupils; offer opportunities for both individual and group activities; be integrated with the instructional program; and provide balance so a limited number of activities will not be perpetuated at the expense of others.

12.6(2) **Supervised intramural sports.** If the board sponsors a voluntary program of supervised intramural sports for pupils in grades seven through twelve, qualified personnel and adequate facilities, equipment, and supplies shall be provided. Middle schools grades below grade seven may also participate.

Rules for Licensure

14.18 **Area and grade levels of teaching endorsements.**

1. Teaching - Subject areas.

Endorsements	Grade levels	
	K-6*	**7-12****
Agriculture		X
Art	X	
Business-General		X
Business-Office		X
Business-Marketing/Management		X
Driver and Safety Education		X
English/Language Arts	X	X
Foreign Language	X	X
Health	X	X
Home Economics		X
Industrial Technology		X
Journalism		X
Mathematics	X	X
Music	X	X
Physical Education	X	X
Reading	X	X
Science:		
Basic	X	
Biological		X
Chemistry		X
Earth Science		X
General Science		X
Physical Science		X
Physics		X
Social Sciences:		
American Government		X
American History		X
Anthropology		X
Economics		X
Geography		X
History	X	
Psychology		X
Social Studies	X	
Sociology		X
World History		X
Speech Communication/Theatre	X	X

2. Teaching - Other Areas

Endorsements	Grade Levels			
	PK-K	**K-6***	**7-12****	**K-12**
Coach				X
School Media Specialist		X	X	X
General Elementary Teacher		X		
General PK-K Teacher	X			
ESL Teacher				X
Counselor		X	X	
Reading Specialist				X
School Nurse				X

* The holder of this endorsement may be assigned by local school board action to fulfill this assignment at the 7-8 grade level.

** The holder of this endorsement may be assigned by local school board action to fulfill this assignment at the 5-6 grade level.

14.19 **Requirements for an original teaching subject area endorsement.**

14.19(1) Baccalaureate degree from a regionally accredited institution.

14.19(2) Completion of an approved human relations component.

14.19(3) Professional education core: Completed course work or evidence of competency in:

a. Structure of American education.
b. Philosophies of education.
c. Professional ethics and legal responsibilities
d. Psychology of teaching.
e. Audiovisual/media/computer technology.
f. Evaluation techniques.
g. Human growth and development related to the grade level endorsement desired.
h. Exceptional learner (the program must include preparation that contributes to the education of the handicapped and the gifted and talented).
i. Classroom management with an emphasis related to the grade level endorsement desired.
j. Instructional planning and strategies for teaching related to the grade level endorsement desired.
k. Curriculum organization, development with an emphasis on the subject and grade level endorsement desired.
l. Completion of prestudent teaching field-based experiences.
m. Methods of teaching with an emphasis on the subject and grade level endorsement desired.
n. Student teaching in the subject area and grade level desired.

14.19(4) **Content.**

a. Completion of a thirty-semester-hour teaching major which must minimally include the requirements for at least one of the endorsement areas listed in rule 14.18, or
b. Successful completion of a national competency test in the subject area desired with a minimum score as established by the board of educational examiners, or
c. Successful completion of a competency test in the subject area desired in a state which accepts this completion as being sufficient for meeting the licensure requirements in that state.

14.21(9) **Health.**

K-6 and 7-12. Completion of twenty-four semester hours in health to include course work in public or community health, consumer health, substance abuse, family life education, mental/emotional health, and human nutrition.

14.21(15) **Physical Education.**

a. K-6. Completion of twenty-four semester hours in physical education to include course work in human anatomy, human physiology, movement education, adapted physical education, physical education in the elementary school, human growth and development of children related to physical education, and first aid and emergency care.

b. 7-12. Completion of twenty-four semester hours in physical education to include course work in human anatomy, kinesiology, human physiology, human growth and development related to maturational and motor learning, adapted physical education, curriculum and administration of physical education, assessment processes in physical education, and first aid and emergency care.

14.17 **Requirements for a substitute teacher's license.**

A substitute teacher's license may be issued to an individual who has met the following.

a. Has been the holder of, or presently holds a license in Iowa or some other state.

b. Has successfully completed all requirements of an approved teacher education program and is eligible for the provisional license, but has no applied for and been issued this license, or who meets all requirements for the provisional license with the exception of the degree but whose degree will be granted at the next regular commencement.

- A substitute license is valid for five years and for not more than ninety days of teaching during any one school year.

- The holder of a substitute license is authorized to teach in any school system in any position in which a regularly licensed teacher was employed to begin the school year.

- This license may be renewed by meeting requirements listed in 17.9.

Title IX
Education Amendments of 1972

Part 106-Nondiscrimination on the basis of sex in education programs and activities receiving or benefiting from federal financial assistance (May 9, 1980).

106.1 **Purpose and effective date.**

The purpose of this part is to effectuate title IX of the Education Amendments of 1972, as amended by Public Law 93-568,88 Stat. 1855 (except sections 904 and 906 of those Amendments) which is designed to eliminate (with certain exceptions) discrimination on the basis of sex in any education program or activity receiving Federal financial assistance, whether or not such program or activity is offered or sponsored by an educational institution as defined in this part. The effective date of this part shall be July 21, 1975.

106.2 **Definitions.**

(h). "*Recipient*" means any State or political subdivision thereof, or any instrumentality of a State or political thereof, any public or private agency, institution, or organization, or other entity, or any person, to whom Federal financial assistance is extended directly or through another recipient and which operates an education program or activity which receives or benefits from such assistance, including any subunit, successor, assignee, or transferee thereof.

106.34 **Access to course offerings.**

A recipient shall not provide any course or otherwise carry out any of its education program or activity separately on the basis of sex, or require or refuse participation therein by any of its students on such basis, including health, physical education, industrial, business, vocational, technical, home economics, music, and adult education courses.

(a) With respect to classes and activities in physical education at the elementary school level, the recipient shall comply fully with this section as expeditiously as possible but in no event later than one year from the effective date of this regulation. With respect to physical education classes and activities at the secondary and post-secondary levels, the recipient shall comply fully with this section as expeditiously as possible but in no event later than three years from the effective date of this regulation.

(b) This section does not prohibit grouping of students in physical education classes and activities by ability as assessed by objective standards of individual performance developed and applied without regard to sex.

(c) This section does not prohibit separation of students by sex within physical education classes or activities during participation in wrestling, boxing, rugby, ice hockey, football, basketball and other sports the purpose or major activity of which involves bodily contact.

(d) Where use of a single standard of measuring skill or progress in a physical education class has an adverse effect on members of one sex, the recipient shall use appropriate standards which do not have such effect.

(e) Portions of classes in elementary and secondary schools which deal exclusively with human sexuality may be conducted in separate sessions for boys and girls.

(f) Recipients may make requirements based on vocal range or quality which may result in a chorus or choruses of one or predominantly one sex.

106.41 **Athletics.**

(a) *General.* No person shall, on the basis of sex, be excluded from participation in, be denied the benefits of, be treated differently from another person or otherwise be discriminated against in any interscholastic, intercollegiate, club or intramural athletics offered by a recipient, and no recipient shall provide any such athletics separately on such basis.

(b) *Separate teams.* Notwithstanding the requirements of paragraph (a) of this section, a recipient may operate or sponsor separate teams for members of each sex where selection for such teams is based upon competitive skill or the activity involved is a contact sport. However, where a recipient operates or sponsors a team in a particular sport for members of one sex but operates or sponsors no such team for members of the other sex, and athletic opportunities for members of that sex have previously been limited, members of the excluded sex must be allowed to try-out for the team offered unless the sport involved is a contact sport. For the purposes of this part, contact sports include boxing, wrestling, rugby, ice hockey, football, basketball and other sports the purpose of major activity of which involves bodily contact.

(c) *Equal opportunity.* A recipient which operates or sponsors interscholastic, intercollegiate, club or intramural athletics shall provide equal athletic opportunity for members of both sexes. In determining whether equal opportunities are available the Director will consider, among other factors:

(1) Whether the selection of sports and levels of competition effectively accommodate the interests and abilities of members of both sexes;
(2) The provision of equipment and supplies;
(3) Scheduling of games and practice time;
(4) Travel and per diem allowance;
(5) Opportunity to receive coaching and academic tutoring;
(6) Assignment and compensation of coaches and tutors;
(7) Provision of locker rooms, practice and competitive facilities;
(8) Provision of medical and training facilities and services;
(9) Provision of housing and dining facilities and services;
(10) Publicity.

Unequal aggregate expenditures for members of each sex or unequal expenditures for male and female teams if a recipient operates or sponsors separate teams will not constitute noncompliance with this section, but the Assistant Secretary may consider the failure to provide necessary funds for teams for one sex in assessing equality of opportunity for members of each sex.

(d) *Adjustment period.* A recipient which operated or sponsors interscholastic, intercollegiate, club, or intramural athletics at the elementary school level shall comply fully with this section as expeditiously as possible but in no event later than one year from the effective date of this regulation. A recipient which operates or sponsors interscholastic, intercollegiate, club or intramural athletics at the secondary or post-secondary level shall comply fully with this section as expeditiously as possible but in no event later than three years from the effective date of this regulation.

Multicultural, Nonsexist Education: The Legal Authority

Iowa Code (Chapter 256.11)

The State Board shall promulgate rules to require that a multicultural, nonsexist approach is used by the schools and school districts. The education program shall be taught from a multicultural, nonsexist approach.

Iowa School Standards 281.12(8)

12.5 (8) Board of director's responsibility for ensuring multicultural, nonsexist approaches to educational programs. The board shall establish a policy to ensure the school district is free form discriminatory practices in its educational programs. In developing or revising this policy, parents, students, instructional and noninstructional staff, and community members shall be involved. In addition, each board shall adopt a written plan, to be evaluated and updated at least every five years, for achieving and maintaining a multicultural, nonsexist educational program. A copy of the plan shall be on file in the administrative office of the district. The plan shall include:

a. Multicultural approaches to the educational program. These shall be defined as processes which foster knowledge of, respect and appreciation for, the historical and contemporary contributions of diverse cultural groups to society. Special emphasis shall be placed on Asian Americans, Black Americans, Hispanic Americans, American Indians, and the handicapped. The program shall provide equal opportunity for all participants regardless of race, color, age national origin, religion, or handicap.

b. Nonsexist approaches to the educational programs. These shall be defined as processes which foster knowledge of and respect and appreciation for the historical and contemporary contributions of men and women to society. The program shall reflect the wide variety of roles open to both men and women and shall provide equal opportunity to both sexes.

The plan shall also include specific goals and objectives, with implementation timelines for each component of the educational program; specific provisions for the infusion of multicultural, nonsexist concepts into each area of the curriculum developed under the provisions of subrule 12.5 (16); a description of the inservice activities planned for all staff members on multicultural, nonsexist education, and evidence of systematic input by men and women, minority groups, and the handicapped in developing and implementing the plan. In schools where no

minority students are enrolled, minority group resource persons shall be utilized at least annually. A description of a periodic, ongoing system to monitor and evaluate the plan shall also be included.

12.5 (16) Curriculum development, review and refinement. The board shall adopt a policy outlining its procedures for developing, implementing, and evaluating its total curriculum. Each curriculum area shall have goals, suggested instructional activities, materials, and content; and expected student outcomes for each level of instruction. The policy shall identify valid, bias-free student assessment procedures and the progress for monitoring student progress.

The policy shall include procedures and timelines for reviewing each instructional program, with attention given to interdisciplinary teaching of higher order thinking skills, learning skills, and communication skills.

Physical Education Guidelines
for
Students Receiving Special Education

The importance of physical education was confirmed in the landmark federal legislation Public Law 94-142 (Education of All Handicapped Children Act of 1975) which mandated physical education as a required instructional area for all special education students. This has again been supported by more recent legislation, Public Law 101-476 (1990), otherwise known as the *Individuals with Disabilities Education Act* (IDEA). Public Law 101-476 changed all references from "handicapped children" to "children with disabilities" and forms of the word "handicap" to the appropriate form of the word "disability." In the document appropriate forms of the word "disability" will be used, including references in Title 34, C.F.R., Part 300.

Legislation

Federal and state legislation has mandated educational programs in the least restrictive environment for children with disabilities, ages 3 through 21 years of age. P.L. 101-476 (Individuals with Disabilities Act, 1990) has changed the term *handicapped children* to *children with disabilities* and added two new categories of disabilities to the previous list found in P.L. 94-142 (Education of All Handicapped Children Act of 1975). These two laws, and the implementation of the regulations and rules, use the term *disabled children* as meaning children evaluated as being:

Federal Classification	**Iowa Classification**
mentally retarded	mental disabilities (MD)
hard of hearing, deaf	hearing impairment (HI)
speech impaired	speech and language impairment (SL)
visually handicapped	visual impairment (VI)
seriously emotionally disturbed	behaviorally disordered (BD)
orthopedically impaired	physical impairment (PD)
other health impairment	physical impairment (PD)
deaf-blind	deaf-blind
multi-handicapped	severely disabled (SD)
specific learning disabilities	learning disabilities (LD)
autism	autism (pending)
traumatic brain injury	traumatic brain injury(pending)

Because of the impairments listed above, special education and related services are needed. The term *special education* as defined by the Title 20 U.S.C. 1401(a)(16)

means specially designed instruction, at no cost to the parents or guardians, to meet the unique needs of a child with a disability, including:

(A) instruction conducted in the classroom, in the home, in hospitals and institutions, and in other settings; and
(B) **instruction in physical education.**

Most of Iowa's special education students receive services through regular or special classes in the public schools. In fact, many of the students are being integrated, to the greatest extent appropriate according to their educational needs, with students that are not disabled. Integration or mainstreaming, when correctly implemented, requires a commitment and support form all school personnel - including physical education teacher. Since the number of students requiring special education in the public schools may increase in the years ahead, the classroom teacher and the physical education teacher must develop skills that are necessary to adequately and equitably respond to the needs of these students.

Federal Legislation

Title 34, C.F.R., §300.307 Physical Education

(a) ***General.*** Physical education services, specially designed if necessary, must be made available to every disabled child receiving a free appropriate public education.
(b) ***Regular physical education.*** Each disabled child must be afforded the opportunity to participate in the regular physical education program available to non-disabled children unless:
  (1) The child is enrolled full time in a separate facility; or
  (2) The child needs specifically designed physical education, as prescribed in the child's individualized education program.
  (c) ***Special physical education.*** If specially designed physical education is prescribed in a child's individualized education program, the public agency responsible for the education of that child shall provide the service directly, or make arrangements for it to be provided through other public or private programs.
  (d) ***Education in separate facilities.*** The public agency responsible for the education of a disabled child who is enrolled in a separate facility shall insure that the child receives appropriate physical education services in compliance with paragraphs (a) and (c) of this section.

Section 300.307(a) provides that "physical education services, specially designed if necessary, must be made available to every disabled child receiving a free appropriate public education." The following paragraphs (1) set out some of the different P.E. program arrangements for disabled students, and (2) indicate whether, and to what extent, P.E. must be described or referred to in an IEP.

a. Regular P.E. with non-disabled students. If a disabled student can participate fully in the regular P.E. program without any special modifications to compensate for the student's disability, it would not be necessary to describe or refer to P.E. in the IEP. On the other, if some modifications to the regular P.E. program are necessary for the student to be able to participate in that program, those modifications must be described in the IEP.

b. Specially designed P.E. If a disabled student needs a specially designed P.E. program, that program must be addressed in all applicable areas of the IEP (e.g., present levels of educational performance, goals and objectives, and services to be provided). However, these statements would not have to be presented in any more detail than the other special education services included in the student's IEP.

c. P.E. in separate facilities. If a disabled student is educated in a separate facility, the P.E. program for that student must be described or referred to in the IEP. However, the kind and amount of information to be included in the IEP would depend on the physical-motor needs of the student and the type of P.E. program that is to be provided.

Thus, if a student is in a separate facility that has a standard P.E. program (e.g., a residential school for the deaf), and if it is determined - on the basis of the student's most recent evaluation - that the student is able to participate in that program without any modification, then the IEP need only note such participation. On the other hand, if special modifications to the P.E. program are needed for the student to participate, those modifications must be described in the IEP. Moreover, if the student needs and individually designed P.E. program, that program must be addressed under all applicable parts of the IEP. (See paragraph "b", above.)

Title 34, C.F.R., §300.14(b)(2)

"Physical education" is defined as follows:

(i) The term means the development of:
- (A) Physical and motor fitness
- (B) Fundamental motor skills and patterns; and
- (C) Skills in aquatics, dance, and individual and group games and sports (including intramural and lifetime sports).

(ii) The term includes special physical education, adapted physical education, movement education, and motor development.

Administration

The administration of special education instructional programs in Iowa is a local district responsibility. The Special Education Directors and their designees in each

area education agency (AEA) are, however, charged with the responsibility of assuring that all special education students are provided with an appropriate program. A *free appropriate public education* is one that meets the letter and the spirit of federal and state legislation regarding the education of students with disabilities. This legislation requires that multidisciplinary teams, which include parents, determine what constitutes an appropriate program in the least restrictive setting for each student. Decisions regarding the physical education component of the instructional program is part of this multidisciplanary decision making. All appropriate staff members are to be included on the decision making team, either by being present at the meetings or by providing information ahead of time. In most cases, these teams should include the physical education teacher. The physical education teacher can:

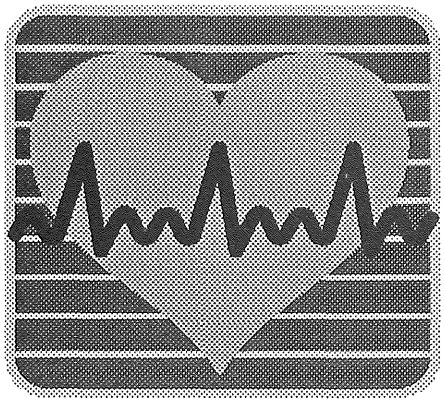
- enhance team decision making through adding to assessment information;
- discuss the continuum of program options for the provision of physical education; and,
- provide input as to the most appropriate program option for the student.

Documentation of the multidisciplanary team decisions must address the physical education component of the instructional program. The physical education program must be reviewed annually and during three year re-evaluation, with appropriate changes in program implemented subsequent to parental notification.

Area education agencies and the Department of Education have a shared responsibility to ensure that all special education programs in Iowa meet compliance with state and federal laws by conducting "compliance reviews" of local district special education programs at least every three years. Compliance reviews also assess the adequacy of the documentation of placement decisions as well as whether the process is based upon individual needs.

In a few AEAs, specialists in adapted physical education have been hired to assist local districts with improving the quality and the range of physical education options for special education students. These staff members assist local district administrators in recognizing areas of need in physical education and in planning strategies to address those needs through group inservice, curriculum development, development of support materials, individual teacher training and consultation. They may also assist in student assessment and program planning. In some AEAs, the adapted physical education staff also assist local districts by providing an adapted physical education class or individual student instruction.

Administrators in AEAs and local districts must work together to evaluate program effectiveness in the important area of physical education for students with disabilities. Renewed emphasis must be implemented to ensure that all special education students have appropriate physical education programs.



Part III

Comprehensive School Health Initiative

Contents of Part III

Iowa Department of Education

Position Statement on Comprehensive School Health

The health of students is a major concern of the Iowa Department of Education because the Department recognizes that a student must feel good in order to learn effectively. The Department's initiatives in the areas of human growth and development, early childhood education, K-12 comprehensive guidance programs, school health services, dietary guidance and home economics are in keeping with that philosophy.

Mission Statement of the Iowa Department of Education Regarding Comprehensive School Health

Our mission is to support health-promoting behaviors of students, teachers, and staff through curriculum and services in a safe emotional and physical environment. Iowa citizens must strive to build a healthy quality of life locally and nationally. Through the development of collaborative efforts among curriculum, community, administration and school health services, this effort will become a reality.

Objectives of the Iowa Comprehensive School Health Program

1. To identify components essential to comprehensive school health.
2. To promote collaboration among the identified areas of comprehensive school health.
3. To provide technical assistance to schools to create a school health program which is comprehensive.

To signify commitment to comprehensive school health in Iowa, the Department of Education will:

1. Design and disseminate introductory materials for comprehensive school health programs.
2. Collect and disperse empirical baseline data to determine the status of health education and comprehensive school health in Iowa.
3. Assess behaviors related to health risks bi-annually and disperse that data to local districts involved in comprehensive health programs.

4. Encourage collaboration among service providers, community agencies, local governments, parents, and communities in creating and promoting comprehensive school health programs.

5. Develop and provide appropriate training for teams of educators, administrators, school board members, health professionals, and parents using models that are knowledge-based and allow the practice of skills which will have an impact on student behavior.

6. Provide annual updates and technical assistance for identified personnel as comprehensive school health programs are implemented.

7. Involve parents and communities as integral parts of promoting and maintaining comprehensive school health.

8. Involve students as integral parts of promoting and maintaining comprehensive school health.

9. Keep abreast of new resources and distribute them to area education agencies and local school districts as they become available.

10. Renew a commitment to the long-term goals designed to reduce high risk behaviors as the data are monitored and compared to the most current state and national data.

What is Comprehensive School Health?

Comprehensive school health is a multifaceted, collaborative approach to developing the total well-being of individuals. A person's health encompasses the whole of his or her capacity for well-being. Developing overall wellness in students requires going beyond the traditional fragmented approach of offering health education, health services or a healthful environment. Today, school health programs are broadening their scope and working together to better serve youth.

While comprehensive school health programs vary according to community needs and desires, good programs share these common elements:

- they are carefully planned.
- they focus on modifiable risk factors which are known to be associated with health and the quality of life.
- they employ multiple methods and discipline approaches which are carefully orchestrated to address various needs and differences within target populations.
- those receiving the program are important contributors in the planning and delivery process.
- those responsible for the delivery of the program are competently trained.

Many states have developed comprehensive school health programs. In Michigan, the state board of education adopted the following position statement as the basis for the Michigan comprehensive school health program model:

The School Health Program is a composite of learning activities and experiences within the school setting that are directed toward developing an environment that protects and promotes the health of the students and the school personnel. A comprehensive school health program includes health education, health services and a healthful environment. The ultimate goal of the comprehensive school health program is to help young people to achieve their fullest potential by accepting responsibility for personal health decisions and practices, by working with others to maintain an ecological balance helpful to society and the environment and by becoming discriminating. consumers of health information, health services and health products.

In 1989, California launched its comprehensive school health initiative, *Healthy Kids, Healthy California*. It includes eight components: health education, physical education, health services, health promotion for staff members, nutrition services, counseling and psychological services, a safe and healthy school environment, and parent and community involvement. Montana's comprehensive *Health Enhancement* program combines the disciplines of health education and physical education. *The Healthy Kids; Healthy Nebraska* program uses the Lloyd Kolbe model of comprehensive school health and involves collaborative efforts between health education, health services, school health environment, integrated community and school health promotion efforts, school physical education, school food service, school counseling and a school-site

health promotion program for faculty and staff. The comprehensive school health education division involves nine components: personal health and physical fitness, mental and emotional health, prevention and control of disease, nutrition and weight control, accident prevention and safety, community and environmental health, consumer health, family education, and death and dying.

The Iowa Comprehensive School Health Program blends the best of these programs into one that is unique to Iowa. The Iowa model incorporates five major components: administration, community, curriculum and instruction, environment and school services.

The National Commmssion on the Role of School and the Community in Improving Adolescent Health, in its *Code Blue Report,* calls upon the nation to "recognize that adolescents will not achieve their potential if they have social, emotional, and physical health problems that interfere with their learning - and that they will cost society millions of dollars in medical and societal costs if tney continue to engage in health-risking behaviors. But to recognize the problem is not enough. Solutions will require commitment of the public and private dollars, and time and energy from individual Americans and many organizations and groups that work with teens. It is time to be frank: the future is bleak if we do not invest more in our nation's .greatest resource - our young people". The fragmented efforts of the past have not been effective in helping adolescents bring all the pieces together to be able to make healthy lifestyle choices. Comprehensive school health programs open new doors to bridging the gaps that have occurred in the past.

Steps in Implementing a Comprehensive School Health Program:

1. Determine the priority placed on health and well-being in the community.
2. Commit the school board and school administration to support the school health program.
3. Assess the needs and wants of the community.
4. Enlist community support and establish a school health advisory committee.
5. Assign a comprehensive school health coordinator.
6. Choose the right curriculum.
7. Train teachers and school staff members.
8. Link instruction with services.
9. Concentrate on a healthy school environment.
10. Plan for evaluation and accountability.

Iowa's Comprehensive School Health Model

The comprehensive school health program promotes optimal health and improved educational achievement for students in preschool through grade 12 and for school personnel.

The Iowa Comprehensive School Health model contains five components: administration, community, environment, cumculum/instruction and school services. All components are interrelated and interactive. The program is organized around assessment, development, implementation and evaluation. Each program is tailored to the unique needs of a school and community.

The administrative component is the foundation of the program. Local policy and procedures-supported by federal, state and local laws and regulations--are used to develop the mission, goals and objectives. The school board, administrators, personnel, parents, families and students establish program guidelines.

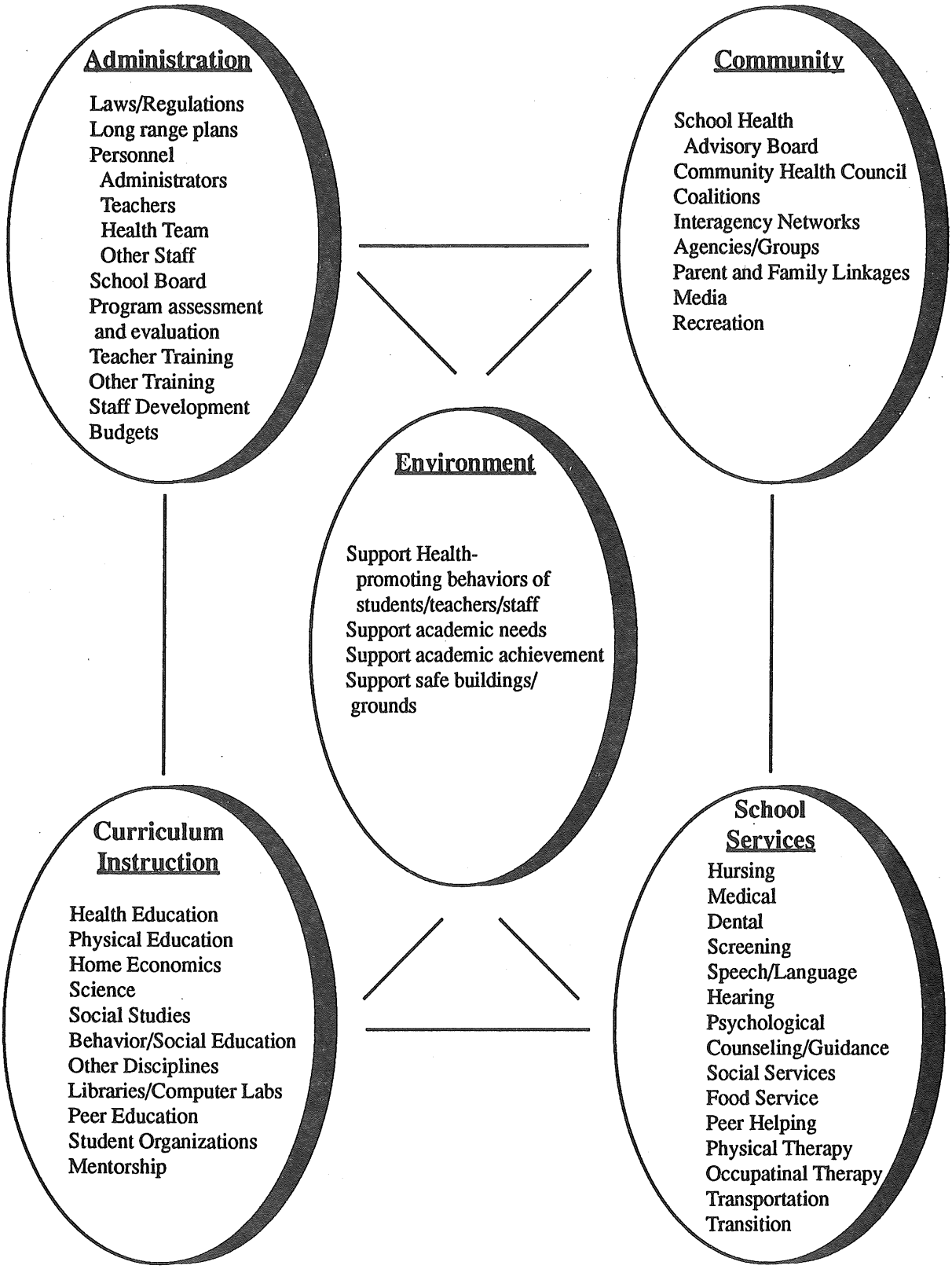
The community component encourages collaboration among local education, health and social service groups. Advisory boards, health councils, coalitions, interagency networks, parents, families, the media and others support, participate in and promote the school health program.

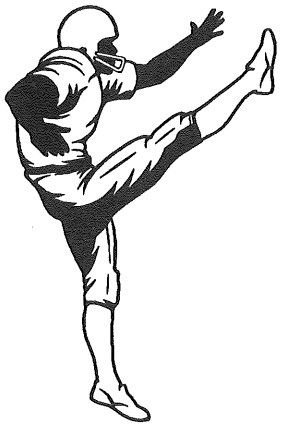
The environmental component promotes a healthy, safe and clean physical and emotional school environment. For both students and personnel, it supports health-promoting behaviors, diverse needs, academic and individual achievement and physical safety in buildings and on school grounds. The school environment sets the tone for healthy lifestyles of students and school personnel.

The curricular component includes formal health education instruction through health education, physical education, home economics, science, social studies and other related areas. The curriculum must be sequential from kindergarten through grade 12 and based and students' developmental needs. It must also be integrated and transdisciplinary if it is to truly help students learn the knowledge and skills to promote optimal physical, emotional and social health. As a result, students will be able to develop skills that allow healthy lifestyle choices.

The school services component strengthens and facilitates the educational process by modifying or removing health-related barriers to learning with individual students and by promoting optimal wellness for students and school personnel. School services provide: health assessment, planning, intervention, evaluation, management and referral; a direct link between school, community, families and students for access and continuity of health services; and instruction, counseling and guidance for students, parents, school personnel and others concerning health-related issues.

Iowa's Comprehensive School Health Model



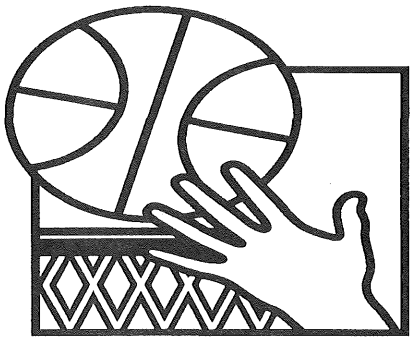


Part IV

Interscholastic Sports in Iowa

Contents of Part IV

Coaching Regulations



Athletic Coaching

Effective April 28, 1993, school districts may employ a person holding a coaching authorization as a head coach in any interscholastic athletic activity.

House File 275, signed by Governor Terry E. Branstad on April 28, 1993, states as follows:

> "The board of directors of a school district may employ for head coach of any interscholastic athletic activities or for assistant coach of any interscholastic athletic activity, an individual who possesses a coaching authorization issued by the board of educational examiners or possesses a teaching license with a coaching endorsement issued pursuant to chapter 272. However, a board of directors of a school district shall consider applicants with qualifications described below, in the following order of priority:
>
> 1. A qualified individual who possesses a valid teaching license with a proper coaching endorsement.
>
> 2. A qualified individual who possesses a coaching authorization issued by the board of educational examiners.
>
> Qualifications are to be determined by the board of directors or their designee or (sic) a case-by-case basis."

Therefore, the previous distinctions between the coaching endorsement and the coaching authorization have been eliminated.

Anyone holding a current, valid coaching authorization is eligible to serve as a head coach in any interscholastic athletic activity.

State of Iowa
BOARD OF EDUCATIONAL EXAMINERS
Licensure Bureau
Grimes State Office Building
Des Moines, IA 50319-0146

Coaching Endorsement Requirements

14.20 (1) **Athletic Coach. K-12.**

a. The holder of this endorsement may serve as a head coach or and assistant coach in kindergarten and grades one through twelve.

b. Program requirements.

(1) One semester hour college or university course in the structure and function of the human body in relation to physical activity.
(2) One semester hour college or university course in human growth and development of children and youth as related to physical activity.
(3) Two semester hour college or university course in athletic conditioning, care and prevention of injuries and first aid as related to physical activity.
(4) One semester hour college or university course in the theory of coaching interscholastic athletics.

Note: An applicant for the coaching endorsement must hold a teacher's license with one of the teaching endorsements.

Coaching Authorization Requirements

19.1 **Requirements.** Applicants for the coaching authorization shall have completed the following requirements:

19.1(1) Successful completion of one semester credit hour or ten contact hours in a course relating to knowledge and understanding of the structure and function of the human body in relation to physical activity.

19.1(2) Successful completion of one semester credit hour or ten contact hours in a course relating to knowledge and understanding of human growth and development of children in youth in relation to physical activity.

19.1(3) Successful completion of two semester credit hours or twenty contact hours in a course relating to knowledge and understanding of the prevention and care of athletic injuries and medical and safety problems relating to physical activity.

19.1(4) Successful completion of one semester credit hour or ten contact hours relating to knowledge and understanding of the techniques and theory of coaching interscholastic athletics.

19.2 **Validity**. The coaching authorization shall be valid for five years, and it shall expire five years from the date of issuance. The fee for the issuance of the coaching authorization shall be $15.

19.3 **Approval of courses**. Each institution of higher education, private college, or university, merged area school or area education agency wishing to offer the semester credit or contact hours for the coaching authorization must submit course descriptions for each offering to the board of educational examiners for approval. After initial approval, any changes by agencies or institutions in course offerings shall be filed with the board of educational examiners.

19.4 **Application process**. Any person interested in the coaching authorization shall submit records of credit to the board of educational examiners for an evaluation in terms of the required courses or contact hours. Application materials are available from the board of educational examiners or from institutions or agencies offering approved courses or contact hours.

19.5 **Renewal**. The authorization may be renewed upon application, $15 renewal fee and verification of successful completion of five planned renewal activities/courses relating to athletic coaching approved in accordance with guidelines approved by the board of educational examiners.

19.6 **Revocation and suspension.** Criteria of professional practice and rules of the board of educational examiners shall be applicable to the holders of the coaching authorization.

Student Eligibility Requirements

Overview

All student athletes are required to be passing at least 20 semester hours of work for the preceding semester, and also for the present semester, to be eligible for interscholastic athletics. Each member school may establish the method to be used in determining whether or not a student is passing in 20 or more semester hours. Some schools may circulate eligibility cards every week, every two weeks, or longer. The individual member school shall determine the method to be used to certify the academic eligibility of athletes. When the term "preceding semester" is used, it means the semester immediately preceding the semester in which the student desires to participate in athletics.

36.15(1) **Local eligibility and student conduct rules.** Local boards of education may impose additional eligibility requirements not in conflict with these rules. Nothing herein shall be construed to prevent a local school board from declaring a student ineligible to participate in interscholastic competition by reason of the student's violation of rules adopted by the school pursuant to Iowa Code Sections 279.8 and 279.9.

36.15(2) **Scholarship rules.**

a. All contestants must be enrolled and in good standing in a school that is a member or associate member in good standing of the organization sponsoring the event.
b. All contestants must be under 20 years of age.
c. All contestants shall be enrolled students of the school in good standing; they shall have earned 20 semester hours' credit toward graduation in the preceding semester and shall be making passing grades in subjects for which 20 semester hours' credit is given for the current semester as determined by local policy.

   The term "preceding semester" means that semester immediately preceding the semester the student wishes to participate in athletics. Twenty semester hours means four subjects of one period or "hour" each, daily, five times a week for one semester or the equivalent. To qualify under this rule, a "subject" must meet the requirements of 281-Subrules 12.5(18), 12.5(19), and 12.5(20). Course work taken under the provisions of Iowa Code Chapter 261C, postsecondary enrollments options, for which a school district or accredited nonpublic school grants academic credit toward high school graduation shall be used in determining eligibility.

Special education students shall not be denied eligibility on the basis of scholarship is the student is making adequate progress, as determined by school officials, towards the goals and objectives on the student's individualized education program.

No student of an "accredited school", within the meaning of Iowa Code Section 256.11(10), shall be denied eligibility if the student's school program deviates from the traditional two-semester school year.

d. A student who meets all other qualifications may be eligible to participate in interscholastic athletics for a maximum of eight consecutive semesters upon entering ninth grade for the first time. However, a student who engages in athletics during the summer following eighth grade is also eligible to compete during the summer following twelfth grade. Extenuating circumstances, such as health, may be the basis for an appeal to the Executive Board which may extend the eligibility of a student when it finds that the interests of the student and interscholastic athletics will be benefited.
e. If, for any reason, it is impossible for the student to make up incomplete work at the same school where the work was taken to meet the 20-semester-hour requirement, upon request by the local superintendent, the Executive Board can rule on the student's eligibility.
f. A student is academically eligible upon entering the ninth grade. No student shall be eligible to participate in any given interscholastic athletic sport if the student has engaged in that sport professionally.
g. No student who has been a member of a college squad or who has trained with a college squad or participated in a college contest shall be eligible for any athletic contest.
h. A student who is eligible at the close of a semester is academically eligible until the beginning of the subsequent semester. Twenty days of attendance in any semester, or participation in any part of an athletic contest on a team representing the student's school, shall be regarded as a semester of attendance and a semester of athletics.
i. A student may earn up to the equivalent of 10 semester hours for interscholastic eligibility purposes in a summer program operated by an accredited school; or with approval of a local board of education, by correspondence work recognized by national accreditation agencies; or voluntary courses of study provided by a member school. To utilize summer course work for the purpose of eligibility, the student must have been enrolled in the school in which the student wishes to participate in the sports program during the spring semester or quarter, the student must have been charged with a semester of eligibility, or any part thereof, by reason of having taken such summer school work.

j. A student who enters school after the second week of the semester shall be ineligible to participate in athletic contests during that semester except by permission of the Executive Board.
k. The local superintendent of schools, with the approval of the local board of education, may give permission to a dropout student to participate in athletics upon return to school if the student is otherwise eligible under these rules.

Physical Examinations

36.14(1) **Physical Examination.** Every year each student shall present to the student's superintendent a certificate signed by a licensed physician and surgeon, osteopathic physician and surgeon, osteopath, qualified doctor of chiropractic, qualified physician assistant, or advanced registered nurse practitioner, to the effect that the student has been examined and may safely engage in athletic competition.

Each doctor of chiropractic licensed as of July 1, 1974, shall affirm on each certificate of physical examination completed that the affidavit required by Iowa Code 151.8 is on file with Iowa Board of Chiropractic Examiners. Each physician assistant who performs examinations of athletes shall possess an approval certificate issued by the board of physician's assistant examiners, and shall conduct physicals under the statutory and regulatory terms established by Iowa Law and Administrative rules.

The certificate of physical examination is valid for the purpose of this rule for one calendar year. A grace period not to exceed 30 days is allowed for expired physical certifications.

Summer Camps and Nonschool Team Participation

36.15(6) **Summer camps and clinics and coaching contacts out of season.** School personnel, whether employed or volunteers of a member or associate member school shall not coach that school's student athletes in a sport for which the school personnel are currently under contract or are volunteers, outside the period from official first day of practice through the finals of tournament play except for ten total days during the summer following the end of the school year and before the next school year begins. A summer team or individual camp or clinic held at a member or associate member school facility shall not conflict with sports in season.

a. Notwithstanding the above limitations, a school's paid or volunteer coaches of golf, tennis, and swimming may coach that school's student athletes during the summer provided those coaching activities do not conflict with sports in season. Also notwithstanding the above limitations, a school's paid or volunteer wrestling coach may coach that school's student athletes in freestyle and Greco-Roman style wrestling for summer competition under conditions established by the director in cooperation with the Iowa High School Athletic Association.

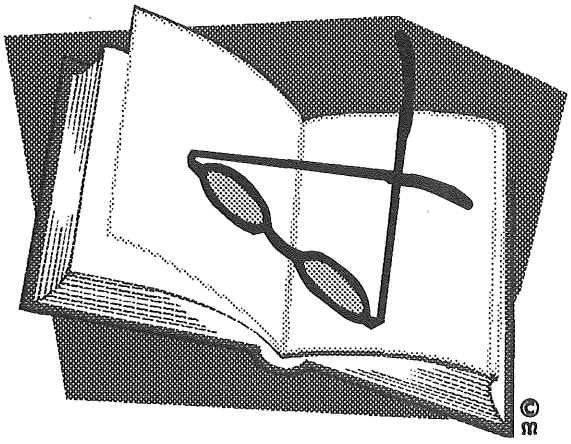
b. A member or associate member school may open it's gym or athletic facilities for the purpose of making recreational activities available for all students or the community. When students are participating in open gym in the hours immediately before or after school, school personnel shall be assigned to supervise. Open gyms are subject to the following restrictions:

    (1) The supervisor shall not engage in any type of coaching nor participate during supervision.
    (2) Attendance by students is voluntary.
    (3) Volunteer or paid coaches may not directly or indirectly require the attendance of students or require the performance of activities by students prior to the legal practice period for that coach's sport.
    (4) Open gym shall not be called or posted for specific sports.
    (5) An open gym notice shall be posted on the general student information bulletin and shall be signed or initialed by a school administrator other than the coach supervising the open gym.

c. Penalty. A school whose volunteer or compensated coaching personnel violate this rule is ineligible to participate in a governing organization-sponsored event in that sport for one year with the violator(s) coaching.

36.15(7) **Nonschool team participation.** A student who is participating in a sport sponsored by a governing organization may not participate in that sport as a member of a team in an outside school event or on a nonschool team during the same season during the school year, except as provided below. At the conclusion of the school sport season, that is, when a school is eliminated from tournament play, a student may then participate on a nonschool team without jeopardizing eligibility.

a. Exceptions. Notwithstanding subrule 36,15(7), a student may participate on a nonschool softball, baseball or swimming team sponsored by other than a registered governing organization while also participating in the same sport for the school but only with the permission of the school administration.
   Nothing in subrule 36.15(7) is to be construed to prohibit a student from participating in events including but not limited to the Iowa Games or from trying out for the United States Olympic team. A student athlete who desires to participate in these or similar events may compete with the knowledge and consent of the applicable governing organization.
b. Penalty. A student who participates in a sport in violation of this subrule shall be ineligible to participate on a school-sponsored team in that sport for 12 calendar months.



Part V

Position Papers

Contents of Part V

AHA Medical/Scientific Statement

Position Statement

Statement on Exercise

Benefits and Recommendations for Physical Activity Programs for All Americans

A Statement for Health Professionals by the Committee on Exercise and Cardiac Rehabilitation of the Council on Clinical Cardiology, American Heart Association

Gerald F. Fletcher, MD, Chairman; Steven N. Blair, PED; James Blumenthal, PhD; Carl Caspersen, PhD; Bernard Chaitman, MD; Stephen Epstein, MD; Harold Falls, PhD; Erika S. Sivarajan Froelicher, PhD, MPH, RN; Victor F. Froelicher, MD; and Ileana L. Pina, MD, Members

Regular aerobic physical activity increases exercise capacity and plays a role in both primary and secondary prevention of cardiovascular disease. [12] The known benefits of regular aerobic exercise and recommendations for implementation of exercise programs are described in this report. Inactivity is recognized as a risk factor for coronary artery disease.

Exercise training increases cardiovascular functional capacity and decreases myocardial oxygen demand at any level of physical activity in apparently healthy persons as well as in most patients with cardiovascular disease. Regular physical activity is required to maintain these training effects. The potential risk of physical activity can be reduced by medical evaluation, supervision, and education.[3]

Exercise can help control blood lipid abnormalities, diabetes, and obesity; in addition, aerobic exercise adds an independent, modest blood pressure-lowering effect in certain hypertensive groups. [4-6] There is a relation between physical inactivity and cardiovascular mortality, and inactivity is a risk factor for the development of coronary artery disease. [7-9] Modest levels of physical activity are beneficial. Results of pooled studies reveal that persons who modify their behavior after myocardial infarction to include regular exercise have improved rates of survival. [10-12]

Benefits of Exercise

Healthy persons as well as many patients with cardiovascular disease can improve their exercise performance with training. This improvement is the result of an increased ability to use oxygen to derive energy for work. Exercise training increases maximal ventilatory oxygen uptake by increasing both maximal cardiac output (the volume of blood ejected by the heart, which determines the amount of blood delivered to the exercising muscles) and the ability to extract oxygen from blood. Beneficial changes in hemodynamic, hormonal, metabolic, neurological, and respiratory function also occur with increased exercise capacity.

Exercise training results in decreased myocardial oxygen demands for the same level of external work performed, as demonstrated by a decrease in the product of heart rate X systolic arterial blood pressure (an index of myocardial oxygen consumption). These changes are also beneficial in patients with coronary artery disease, who after exercise training may attain a higher level of physical work before reaching the level of myocardial oxygen requirement that results in myocardial ischemia. [13]

Exercise training favorably alters lipid and carbohydrate metabolism,. The exercise-induced increase in high density lipoproteins is strongly associated with changes in body weight. [14] In addition, regular exercise in overweight women and men enhances the beneficial effect on blood lipoprotein levels of a low-saturated fat and low-cholesterol diet. [15]

Developing endurance, joint flexibility, and muscle strength is important in a comprehensive exercise program, especially as people age. However, static or isometric exercise alone is not known to lower cardiovascular risk. Patients with cardiovascular disease are usually asked to refrain from heavy lifting and forceful isometric exercises, although the use of light weights seems beneficial in developing muscle strength and joint flexibility. Careful isometric training alone or with aerobic training is generally safe and effective in patients with cardiovascular disease who are medically stable and are in a supervised program. [16-19]

Many activities of daily living require arm work more than leg work. Therefore, patients with coronary artery disease are advised to use their arms as well as their legs in exercise training. The arms respond like the legs to exercise training both quantitatively and qualitatively, although ventilatory oxygen uptake is less with arm ergometry and myocardial oxygen consumption may also be less because of decreased heart rate. Therefore, target heart rates are set at 10 beats per minute lower for arm training than for leg training. [20,21] Dynamic arm ergometry is usually well tolerated by patients with coronary artery disease; however, there may be an increased rise in blood pressure that may be of concern in certain subjects.

Maximal ventilatory oxygen uptake drops 5-10% per decade between the ages of 20 and 70,[19] and a lifetime of dynamic exercise maintains an individual's ventilatory oxygen uptake at a level that is higher than expected for any given age. There is some suggestion that the rate of decline of ventilatory oxygen uptake that normally occurs with age is less in persons who exercise compared with those who do not. [22-25] This issue requires additional study.

Middle-aged men and women who work in physically demanding jobs or perform moderate to strenuous recreational activities have fewer manifestations of coronary artery disease than their less active peers. [7,8] Meta-analysis studies of clinical trials reveal that medically prescribed and supervised exercise can reduce mortality rates of patients with coronary artery disease. [10-12] However, a unifactorial randomized controlled trial of exercise to study the development or progression of coronary artery disease has not been, and may never be, done because of the difficulty of maintaining controls and interventions, the necessity of modifying other risk factors, the confounding therapies known to affect survival, and major logistical and financial constraints.

Compared with the physical benefits of an aerobic training program, indications of psychological benefits are less convincing. However, one study revealed that exercise is associated with a number of psychological benefits, including reduced anxiety and depression and increased feelings of well-being. [26] Relatively few studies on the psychological effects of exercise among cardiac patients have been done, and in those studies conducted, there does not appear to be clear support for the beneficial effects of exercise on psychological functioning. [27] Participation in education and counseling groups as part of cardiac rehabilitation has been shown to improve patients' quality of life in a few well--designed randomized trials. [28-31] However, these studies have documented only modest improvements in psychological functioning. Even though such benefits remain to be more fully documented, one comprehensive review concluded that health professionals are under a general impression that exercise training may improve psychosocial function. [32]

One reason for the failure to find improvement in psychological functioning may be that the majority of cardiac patients function at a relatively high level. For example, in one study only depressed cardiac patients exhibited psychological improvements with exercise training. [33] There is also evidence that physical activity probably alleviates symptoms of mild and moderate depression and provides an alternative to alcoholism and substance abuse. [34]

Implementation of Exercise Programs

Persons of all ages should include physical activity in a comprehensive program of health promotion and disease prevention, and should increase their habitual physical activity to a level appropriate to their capacities, needs, and interest.

Activities such as walking, hiking, stair-climbing, aerobic exercise, calisthenics, jogging, running, bicycling, rowing, and swimming and sports such as tennis, racquetball, soccer, basketball and touch football are especially beneficial when performed regularly. Brisk walking is also an excellent choice. [35,36] The training effect of such activities is most apparent as exercise intensifies exceeding 50% of a person's exercise capacity. (Exercise capacity is defined as the point of maximal ventilatory oxygen uptake or the highest work intensity that can be achieved.) The evidence also supports the notion that even low-intensity activities performed daily can have some long-term health benefits and lower the risk of cardiovascular disease. [35,37,38] Such activities include walking for pleasure, gardening, yard work, house work, dancing, and prescribed home exercise. Low intensity leisure activities like walking, golf, badminton, croquet, shuffleboard, lawn bowling, and ping-pong are recommended for the elderly. For health promotion, dynamic exercise of the large muscles for extended periods of time (30-60 minutes, three to four times weekly) is recommended.

Physical activity has risks as well as benefits. Estimates of sudden cardiac death rates per 100,000 hours of exercise range from 0 to 2.0/100,000 in general populations and from 0.13/100,000 to 0.61/100,000 in cardiac rehabilitation programs. [39-41] Falls and joint injuries are additional risks associated with physical activity (especially in older women), but most of these are not likely to require medical treatment. The incidence of such complications is less in patients participating in lower-intensity activities like walking.

Medical Professionals

Preventive services are an important component of the national health agenda. Physicians have the opportunity and responsibility to promote regular exercise as well as the reduction of high blood pressure, management of abnormal blood lipids and prevention and cessation of smoking.

Many physicians do not have time to add preventive services to their schedules and may delegate the task to other members of the health care team. However, the physician must set the agenda, for staff members under a physician's supervision cannot deliver preventive services unless the physician defines the services as medically appropriate. The physician must not neglect this responsibility to promote regular exercise and other health promotion strategies.

Nurses, an integral part of the health care team, may assess physical activity habits, prescribe exercise, and monitor responses to exercise in healthy persons and cardiac patients. The services of physical and occupational therapists, exercise scientists, and other health professionals my also be useful. [42]

Patients with known or suspected cardiovascular, respiratory, metabolic, orthopedic, or neurological disorders should consult their personal physicians

before beginning or significantly increasing physical activity. Middle-aged or older sedentary individuals with symptoms of cardiovascular disease should also seek medical advice. In turn, physicians should give advice according to recommended guidelines for exercise in such patients. [19,41,43,44] In addition, physicians should encourage their more sedentary patients to adopt a more active lifestyle and emphasize the risks associated with inactivity. Walking should be advocated as a form of exercise. [36] Physicians should assess each patient's physical activity pattern and, with the support of other health professionals, prescribe and give advice about physical activity with the individual patients needs and capabilities in mind, providing systematic follow-up. A medical evaluation, including an exercise test, may be necessary for some persons but not for the apparently healthy subject less than 40 years old who has no coronary risk factors; the exercise test can also be an important basis for appropriate exercise prescription. In some instances it is recommended that patients with known cardiovascular disease undertake a prescribed, medically supervised exercise program to reduce morbidity (myocardial infarction or abnormal cardiac rhythms) and mortality. [44,45] Annual exercise testing is an important part of monitoring many patients with coronary artery disease.

Residency and fellowship training programs should prepare physicians to recommend proper exercise for their patients. An individual's customary physical activity level should be an integral part of a comprehensive medical history. [42,46-48] Professionals with a background in exercise science should work with medical personnel to establish appropriate exercise programs for persons with diagnosed health problems or who are at high risk for developing major health problems.

Parents

Parents should be aware of the health benefits of regular physical activity and of how exercise contributes to quality of life. They should be encouraged to incorporate physical activity into their daily lives and those of all family members. Moreover, parents should teach their children that proper physical activity is a basic component of normal healthy living. This commitment provides an incentive, sets an example, and creates in children a positive attitude toward physical activity. Parents and other family members should be encouraged to support each others exercise habits by sharing responsibilities such as child care, food preparation, and shopping. Families at high risk for cardiovascular disease may benefit from structured programs aimed at specific health behavior changes. [38]

Schools

Children should be introduced to the principles of regular physical exercise and recreational activities at an early age. Schools at all levels should develop and encourage positive attitudes toward physical exercise, providing

opportunities to learn physical skills and to perform physical activities, especially those that can be enjoyed for many years. The school curriculum should not overemphasize sports and activities that selectively eliminate children who are less skilled. Schools should teach the benefits of exercise and the development and maintenance of exercise conditioning throughout life.

Some studies demonstrate that such organized school programs are not only feasible but can also be successful. [49,50] In addition, these programs can be used to promote proper nutrition and cigarette smoking prevention and cessation.

Employers and Community Groups

Employers and community organizations should develop both short-term and long-term plans tailored to the needs of persons in the community and workplace. Communities should develop exercise programs using local club, park, recreational, church, and school facilities. There is increasing evidence that worksite programs with a comprehensive approach to employee health, including prevention and cessation of smoking, dietary intervention, and exercise, whether on-site or nearby, are not only effective in modifying coronary risk factors but can also help reduce absenteeism, accidents, health care costs, hospital admissions, and days of rehabilitation. [48] Baseline assessment of an employee's health status can be performed at a relatively low cost and may include an assessment of physical conditioning. Public health interventions in the workplace have resulted in an increase in vigorous physical activity by participating employees that is associated with increases in objective measurement of physical conditioning. [51] As health care costs continue to increase, these programs will become more attractive to both small and large businesses.

Insurance Industry

The insurance industry and the medical community are encouraged to engage in a collaborative effort to provide policyholders with exercise programs that meet American Heart Association standards. [19]

Additional Research and Future Issues

There is a large body of knowledge on exercise, but data on exercise and its effects on the cardiovascular system and long-term survival are limited. The responsibility for conducting research lies with government, private health agencies, the insurance industry, employers, universities, and medical schools.

Basic knowledge of the anatomic, biochemical. and physiological changes that result from various patterns of physical activity (acute and chronic, sustained and intermittent, isotonic and isometric, low-intensity and high intensity) in persons of different ages is needed, as is a determination of whether a certain

minimal intensity threshold of physical activity is required for benefit. The biomedical and economic impact of participation in specific exercise programs on coronary artery disease, peripheral vascular disease, and hypertension should also be evaluated. The psychosocial functioning of patients with coronary artery disease and the potential value of exercise in enhancing the quality of life of cardiac and other patients warrants further study. Future studies should include adequate numbers of women and the elderly to better meet research objectives.

Furthermore, the presence and extent of coronary risk factors in the disabled and in disadvantaged and minority groups need to be better identified and defined. Consequently, the effect that modifications like increases in physical activity would have on members of these groups should be explored, and large studies should also include a significant number of these persons.

Research should also be continued to establish the cost-effectiveness of physical activity programs for the enhancement of cardiovascular health, [52] with a focus on the type of promotional strategies required for initiating and maintaining physical activity (e.g., insurance incentives, health personnel, and media materials) as well as on the social context of such activity (e.g., industrial and business settings, rural and urban settings, schools, churches, and families).

Societal, cultural, and personal factors that affect development or maintenance of lifelong patterns of physical activity should be identified and incorporated into strategies of exercise promotion.

In summary, future development and study should be not only of the benefits of physical activity, but also of the methods used to facilitate the dissemination of the present and future body of knowledge to all members of society.

References

1. Morris CK, Froelicher VF: Cardiovascular benefits of physical activity. Herz 1991; 16: 222-236
2. Chandrasheckhar Y, Anand IS: Exercise as a coronary protective factor. Am Heart J 1991; 122: 1723-1739
3. Paffenbarger RS Jr, Hyde RT, Wing AL, Hsieh CC: Physical activity, all-cause mortality, and longevity of college alumni. N Engl J Med 1986; 314: 605-613
4. Martin JE, Dubbert PM, Cushman WC: Controlled trial of aerobic exercise in hypertension. Circulation 1990; 81: 1560-1567
5. Hagberg JM, Montain SJ, Martin WH 3rd, Ehansi AA: Effects of exercise training in 60- to 69-year-old persons with essential hypertension. Am J Cardiol 1989; 64: 348-353
6. Jennings GL, Deakin G, Dewar E, Laufer E, Nelson L: Exercise, cardiovascular disease and blood pressure. Clin Exp Hypertens (A) 1989; 11: 1035-1052
7. Powell KE, Thompson PD, Caspersen CJ, Kendrick JS: Physical activity and the incidence of coronary heart disease. Annu Rev Public Health 1987; 8: 253-287
8. Morris JN, Clayton DG, Everitt MG, Semmence AM, Burgess EH: Exercise in leisure time: Coronary attack and death rates. Br Heart J 1990; 63: 325-334
9. Blair SN, Kohl HW 3rd, Paffenberger RS Jr, Clark DG, Cooper KH, Gibbons LW: Physical fitness and all-cause mortality: A prospective study of healthy men and women. JAMA 1989; 262: 2395-2401
10. O'Connor GT, Buring JE, Yusuf S, Goldhaber SZ, Olmstead EM, Paffenbarger RS Jr, Hennekens CH: An overview of randomized trials of rehabilitation with exercise after myocardial infarction. Circulation 1989; 80: 234-244
11. Oldridge NB, Guyatt GH, Fischer ME, Rimm AA: Cardiac rehabilitation after myocardial infarction: Combined experience of randomized clinical trials. JAMA 1988; 260:945-950
12. Berlin JA, Coiditz GA: A meta-analysis of physical activity in the prevention of coronary heart disease. Am J Epidemiology 1990; 132: 612-628
13. Trap-Jensen J, Clausen JP: Effect of training on the relation of heart rate and blood pressure to the onset of pain in effort angina pectoris, in Larsen OA, Mairnborg RO (eds): Coronary Heart Disease. Baltimore, Md, University Park Press, 1971, pp 111-114
14. Tran ZV, Weltman A: Differential effects of exercise on serum lipid and lipoprotein levels seen with changes in body weight: A meta-analysis. JAMA 1985; 254: 919-924
15. Wood PD, Stefanick ML, Williams PT, Haskell WL: The effects on plasma lipoproteins of a prudent weight-reducing diet, with or without exercise, in overweight men and women. N Engl J Med 1991; 325: 461-466
16. DeBusk RF, Valdez R, Houston N, Haskell W: Cardiovascular responses to dynamic and static effort soon after myocardial infarction: Application to occupational work assessment. Circulation 1978; 58: 368-375
17. DeBusk RF, Pitts W, Haskell W, Houston N: Comparison of cardiovascular responses to static-dynamic and dynamic effort alone in patients with chronic ischemic heart disease. Circulation 1979; 59: 977-984
18. Ghilarducci LEC, Holly RG, Amsterdam EA: Effects of high resistance training in coronary artery disease. Am J Cardiol 1989; 64: 866-870
19. Fletcher GF, Froelicher VF, Hartley LH, Haskell SL, Pollock ML: Exercise standards: A statement for health professionals from the American Heart Association. Circulation 1990; 82:2286-2322
20. Frankiln BA, Hellerstein HK, Gordon S, Timmis GC : Cardiac patients, in Franklin BA, Gordon S, Timmis GC (eds): Exercise in Modern Medicine. Williams & Wilkins, Baltimore, Md. 1989, pp 44-80
21. Franklin BA, Vander L, Wrisley D, Rubenfire M: Aerobic requirements of arm ergometry: Implications for exercise testing and training. (abstract) Phys Sports Med 1983; 11:1
22. Astrand PO, Christensen EH: Aerobic work capacity, in Dickens F, Neil E (eds) Oxygen in the Animal Organism. Pergamon Press, New York, 1964, p 295

23. Hollmann W; Hochst - und Dauerleistungsfdhigkeit der Sportlers. Johann Ambrosius barth, Munich, 1963
24. Robinson S: Experimental studies of physical fitness in relation to age. Arbeitsphysiol 1938; 10:251
25. Rodahl K, Issehutz B Jr: Physical performance capacity in the older individual. in Horvath SM, Rodahl K (eds): Muscle as a Tissue. New York, McGraw-Hill Book Company, 1962, chap 15
26. Folkins Ch, Sime We: Physical fitness trainingand mental health. Arn Psychol 1981; 36:373-389
27. Emery CF, Pinder Sl, Blumenthal JA: PSychological effects of exercise among elderly cardiac patients. J Cardiopul Rehab 1989; 9:46-53
28. Williams Rb Jr, Haney TL Lee KL, Kong YH, Blumenthal JA, Whalen RE: Type A behavior, hostility, and coronary artherosclerosis. Psychosom Med 1980; 42;529-549
29. Shekelle RB, Gale M, Ostfeld A, Paul O: Hostility, risk of coronary heart disease, and mortality. Psychosom Med 1983; 45:109-114
30. Barefoot JC, Dalhstrom WG, Williams RB Jr: Hostility, CHD incidence, and total mortality: A 25-year follow-up study of 255 physicians. Psychosom Med 1983; 45:59-63
31. Ott CR, Sivarajan ES, Newton KM, Almes MJ, Bruce RA, Bergner M, Gilson BS: A controlled randomized study of early cardiac rehabilitation: The Sickness Impact Profile as an assessment tool. Heart Lung 1983; 12:162-170
32. Miller NH, Taylor CB, Davidsen BM, Hill MN, Kravitz BS: The efficacy of risk factor intervention and psychosocial aspects of cardiac rehabilitation. J Cardiopul Rehab 1991; 10:1998-2009
33. Hellerstein HK, Hornsten TR, Goldbarg AN, Burlando AG, Friedman EH, Hirsch EZ, Marik S: The influence of active conditioning upon subjects with coronary artery disease: A progress report. Can Med Assoc J 1967; 96:901-903
34. Taylor CB, Salis JF, Needle R:" The relation of physical activity and exercise to mental health. Pub Health Rep 1985; 100:195-202
35. Rippe JM, Ward A, Porcari JP, Freedson PS: Walking for health and fitness. JAMA 1988; 259:2720-2724
36. Duncan JJ, Gordon NF, Scott CB: Women walking for health and fitness: How much is enough? JAMA 1991; 266-3295-3299
37. Leon AS, Connett J, Jacobs DR Jr, Rauramaa R: Leisure-time physical activity levels and risk of coronary heart disease and death: The Multiple Risk Factor Intervention trial. JAMA 1987; 258:2388-2395
38. Slattery ML, Jacobs DR Jr. Nichaman MZ: Leisure time physical activity and coronary heart disease death: the US Railroad Study.Circulation 1989; 79:304-311
39. Haskell WL: Cardiovascular complications during exercise training of cardiac patients. Circulation 1978; 57:920-924
40. Van Camp SP, Peterson Ra: Cardiovascular complications of out-patient cardiac rehabilitation programs. JAMA 1986; 256:1160-1163
41. Koplan JP, SIscovick DS, Goldbaum GM: The risks of exercise: A public health view of injuries and hazards. Public Health Rep 1985; 100:189-195
42. Kottke TE, Solberg LI, Brekke ML: Initiation and maintenance of patient behavioral change: What is the role of the physician? J Gen Intern Med 1990; 5:562-567
43. Parmley WW: Position report on cardiac rehabilitation: Recommendations of the American College of Cardiology. J Am Coll Cardiol 1986; 7:451-453
44. American Association of Cardiovascular and Pulmonary Rehabilitation. Guidelines for Cardiac Rehabilitation Programs. Champaign, Ill. Human Kinetics Books, 1990, pp 1-107
45. Fletcher BJ, Llyod A, Fletcher GF: Outpatient rehabilitative trainingin patients with cardiovascular disease: Emphasis on training method. Heart Lung 1988; 17:199-205
46. Health and Public Policy Committee, American College of Physicians: Cardiac rehabilitation services. Ann Intern Med 1988; 109:671-673

-- SUMMARY STATEMENT --

Workshop On Physical Activity and Public Health

Sponsored By:
U.S. Centers for Disease Control and Prevention and
American College of Sports Medicine

In Cooperation with the President's Council on Physical Fitness and Sports

Regular physical activity is an important component of a healthy lifestyle -- preventing disease and enhancing health and quality of life. A persuasive body of scientific evidence, which has accumulated over the past several decades, indicates that regular, moderate-intensity physical activity confers substantial health benefits. Because of this evidence, the U.S. Public Health Service has identified increased physical activity as a priority in Healthy People 2000, our national health objectives for the year 2000.

A primary benefit of regular physical activity is protection against coronary heart disease. In addition, physical activity appears to provide some protection against several other chronic diseases such as adult-onset diabetes, hypertension, certain cancers, osteoporosis, and depression. Furthermore, on average, physically active people outlive inactive people, even if they start their activity late in life. It is estimated that more than 250,000 deaths per year in the U.S. can be attributed to lack of regular physical activity, a number comparable to the deaths attributed to other chronic disease risk factors such as obesity, high blood pressure, and elevated blood cholesterol.

Despite the recognized value of physical activity, few Americans are regularly active. Only 22% of adults engage in leisure time physical activity at the level recommended for health benefits in Healthy People 2000. Fully 24% of adult Americans are completely sedentary and are badly in need of more physical activity. The remaining 54% are inadequately active and they too would benefit from more physical activity. Participation in regular physical activity appears to have gradually increased during the 1960s, 1970s, and early 1980s, but has plateaued in recent years. Among ethnic minority populations, older persons, and those with lower incomes or levels of education, participation in regular physical activity has remained consistently low.

Why are so few Americans physically active? Perhaps one answer is that previous public health efforts to promote physical activity have overemphasized the importance of high-intensity exercise. The current low rate of participation may be explained, in part, by the perception of many people that they must engage in vigorous, continuous exercise to reap health benefits. Actually the scientific evidence clearly demonstrates that regular, moderate-intensity physical activity provides substantial health benefits. A group of experts brought together by the U.S. Centers for Disease Control and Prevention (CDC) and the American

College of Sports Medicine (ACSM) reviewed the pertinent scientific evidence and formulated the following recommendation:

- **Every American adult should accumulate 30 minutes or more of moderate-intensity physical activity over the course of most days of the week.** Incorporating more activity into the daily routine is an effective way to improve health. Activities that can contribute to the 30-minute total include walking up stairs (instead of taking the elevator), gardening, raking leaves, dancing, and walking part or all of the way to or from work. The recommended 30 minutes of physical activity may also come from planned exercise or recreation such as jogging, playing tennis, swimming, and cycling. One specific way to meet the standard is to walk two miles briskly.

- **Because most adult Americans fail to meet this recommended level of moderate-intensity physical activity, almost all should strive to increase their participation in moderate or vigorous physical activity.** Persons who currently do not engage in regular physical activity should begin by incorporating a few minutes of increased activity into their day, building up gradually to 30 minutes of additional physical activity. Those who are irregularly active should strive to adopt a more consistent pattern of activity. Regular participation in physical activities that develop and maintain muscular strength and joint flexibility is also recommended.

This recommendation has been developed to emphasize the important health benefits of moderate physical activity. But recognizing the benefits of physical activity is only part of the solution to this important public health problem. Today's high-tech society entices people to be inactive. Cars, television, and labor-saving devices have profoundly changed the way many people perform their jobs, take care of their homes, and use their leisure time. Furthermore our surroundings often present significant barriers to participation in physical activity. Walking to the corner store proves difficult if there are no sidewalks; riding a bicycle to work is not an option unless safe bike lanes or paths are available.

Many Americans will not change their lifestyles until the environmental and social barriers to physical activity are reduced or eliminated. Individuals can help to overcome these barriers by modifying their own lifestyles and by encouraging family members and friends to become more active. In addition, local, state, and federal public health agencies; recreation boards; school groups; professional organizations; and fitness and sports organizations should work together to disseminate this critical public health message and to promote national, community, worksite, and school programs that help Americans become more physically active.

The American College of Sports Medicine and the U.S. *Centers for Disease Control and Prevention, in cooperation with the President's Council on Physical Fitness and Sports, released this statement July* 29, 1993, *at the National Press Club in Washington, DC.*

NASPE Position Paper

Substitution of Activities for Instructional Physical Education Programs

It is the position of the National Association for Sport and Physical Education (NASPE) that quality instructional physical education is an integral and essential component of the education of American youth and should be provided for all students from pre-kindergarten through grade 12. NASPE believes that it is inappropriate to substitute activities that occur outside of the physical education curriculum for regular Participation in a well-planned instructional program. The objectives of co-curricular and extracurricular programs, as well as other academic subject areas, have distinctly different goals and objectives from curricular physical education. To allow varsity athletes, ROTC students, band members, students with exceptional talents, and others to substitute their experiences in these activities or community-based physical activity experiences for physical education prevents the student from the opportunity to achieve the fundamental goals of a quality instructional program in physical education.

As an integral element in a broad-based instructional program, the physical education curriculum should be based on sound principles of program design and implementation which include: 1) clearly defined program standards or outcomes; 2) a content framework teachers use to design physical education experiences; 3) effective use of teaching strategies to maximize student learning; and 4) appropriate assessment. It is incumbent upon physical education program planners to clearly define instructional outcomes that are unique to physical education. To assist school districts and teachers in making decisions regarding appropriate physical education instructional programs, NASPE has developed a set of twenty (20) program standards/outcomes clustered into five broad areas. Accordingly, a physically education person:

1. HAS learned skills necessary to perform a variety of physical activities.
2. DOES participate regularly in physical activity.
3. IS physically fit.
4. KNOWS implications of and benefits from involvement in physical activities.
5. VALUES physical activity and its contributions to a healthy lifestyle.

These standards/outcomes create a framework to guide the development of quality physical education programs. Students who complete quality physical education programs rounded on these outcomes develop the knowledge, skills, practices, and values that will serve them well across their lifetime as they incorporate regular physical activity into a healthy lifestyle. It is clear that activities occurring outside the physical education instructional program will not enable students to meet all of the standards/outcomes set forth for a physically educated person.

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NASPE Position Statement

Content Mastery for Teachers of Physical Education

The National Association for Sport and physical Education (NASPE) strongly endorses the establishment and maintenance of content mastery for teachers of physical education. Educational programs of high quality in all subject areas are predicated upon having competent, dedicated, and knowledgeable teachers who utilize appropriate instructional techniques and strategies. Physical education is no exception to this basic tenet. It is incumbent upon teachers of physical education to obtain sufficient preservice and inservice training to be able to deliver appropriate educational experiences for their students. Furthermore, school administrators and state departments of education should ensure that those persons hired to teach physical education possess appropriate certification and a contemporary knowledge base to teach in this specialized area. Knowledge of both the art and science of human movement is essential to the unique nature of physical education teaching. Consequently, expertise in the special areas of fundamental motor skills, games and sports, lifelong leisure activities, rhythms and dance, and exercise and health-related fitness founded upon an understanding of pedagogical physical education and the appropriate disciplinary knowledge is essential for teachers of physical education.

It is obligatory that schools hire certified teachers and assign them to teach in their area of certification. There is an increasing concern that hiring practices and teaching assignments are maintained without primary regard to the competence or commitment of the teacher to provide appropriate physical education instruction for students. Rather, secondary issues such as an individual's ability to coach a particular sport or willingness to teach additional courses tend to become the focus for hiring or making teaching assignments. A frequent practice has been to hire certified physical education teachers and subsequently assign them to teach health education. In many instances these physical education teachers have had insufficient professional preparation to provide appropriate instruction in health education. Without adequate professional preparation, content knowledge, and in some cases interest in health education, these teachers have been thrust into situations with little opportunity to provide appropriate health education instruction to students. Such practices are indefensible as part of an appropriate educational experience. Physical educators, like teachers in other subject areas, should be assigned to teach in their area of certification.

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NASPE Position Paper

The Role of the Teacher/Coach in Secondary Schools

Coaching of athletic teams in the secondary schools in this country is no longer provided exclusively by teachers of physical education. Athletic programs prompted by societal demands have become a powerful element in all secondary schools.

Proliferation, intensification, and staffing of the athletic program has produced a dilemma that is not easily resolved. Keeping the role of the physical educator, (or any other teacher), in perspective as it relates to the demands of the coaching assignment is fundamental to this dilemma.

The basic question then is, does quality physical education instruction have to be compromised at the expense of a quality athletic program? The following belief statements, recommendations and strategies for implementation may answer that question. These recommendations are directed towards those who make educational decisions for their communities.

Belief Statements

The physical educator should be held accountable to the same high standards of teaching as in any other instructional area. Coaching prowess is not to be allowed as an insulator from commitment to the physical education program. Performance should be comprehensively evaluated with superior teaching performance appropriately recognized.

Physical education classes and athletic programs must share the very same educational philosophy to which all school personnel are held accountable.

The role of coach is distinct from the role of the physical education teacher. While the two are similar in certain ways, disparities in the time necessary for each role, resources available for each role, recognition, goals, the performance abilities of each population and their expectations clearly differentiate between the two roles and argue for their separability.

Recommendations

Education - Undergraduate and graduate teacher education programs should consider the teaching and coaching roles. For example, time requirements, differential rewards available through each role, the varying expectations, support systems, and contrasting norms of behavior associated with the teaching 'and coaching role should be studied. Such study could complement a "coaching practicum" which should be part of the student's preparation for athletic coaching. Liberal Education-The broad scope of the educator's responsibilities requires a well-rounded education; that is, one which addresses values as well as technology, and the humanities as well as the arts.

The Time Factor - As cited in a survey by Locke and Massengale (1978), and confirmed by the National Federation of State High School Activities Association (1987), the most prevalent problem of the teacher/coach is the inordinate mount of time demanded by the responsibilities of both positions. Research indicates that time overload contributes to teacher/coach stress and anxieties which could affect job performance, i.e., teacher/coach burn-out and commitment to roles.

School administrators should carefully review and evaluate the number of contests, the length of season and off-season participation relative to educationally justifiable criteria. The philosophical position of the school district may warrant participation at a number less than the state maximums. Administration staffs need to explore creative methods to minimize the time commitment of the teacher/coach, i.e., not more than two coaching assignments, not more than one head coaching assignment, and the monitoring of assistant coach expectations. Administrators could also consider rotating departmental assignments with other qualified faculty members during coaching seasons to assure continual competency in teaching physical education. When financially feasible, a teacher/coach may have a reduced teaching load during the coaching season, e.g., a qualified physical education teacher shall be hired on a part-time basis.

Approved February 1988.

NASPE Position Statement

Exploitation of the Interscholastic Athlete

Currently, approximately five and one-half million boys and girls participate annually in the interscholastic sports programs offered by public and private high schools within the United States (National Federation of State High School Associations, 1991-1992). The popularity of interscholastic athletics has increased during the last decade, despite a reduction in the total number of students who are eligible for such activities (Snyder, T. and Hoffman, S., 1991). Inherent values associated with interscholastic sports, including such attributes as cooperation, loyalty, perseverance and leadership skills have elevated the prestige of high school athletics to the extent that they are the most sought-after extra-curricular activity among high school students (Carnegie Corporation of New York, 1992). Despite the continued popularity of interscholastic athletics, there is an increasing concern among educators, parents, physicians and school administrators that many of the current trends in high school sports are not defensible as part of an educational experience. (Dyment, 1988; Jess, 1979; Mclnally, 1985; Romaneck, 1989; Stone, 1988).

The exploitation of athletes, so commonly associated with intercollegiate athletics, is currently so pervasive in interscholastic programs that State Activity Associations are compelled to devote a substantial portion of their rules and regulations to the prohibition of such violations as illegal recruiting, ineligibility, undue influence, excessive awards, extended practices and seasons, and interstate all-star and postseason contests. The increasing commercialization of interscholastic athletics, exemplified by the televising of high school contests, regional and national all-star games and the dependence on professional fund-raisers for the support of the interscholastic programs all testify to the vulnerability of the interscholastic athlete to exploitation by those who have little or no interest in her/his academic achievement. The emphasis in interscholastic athletics should be on the educational, moral and ethical benefits to be derived. Attitudes and actions that enhance the chances of victory, but compromise the promotion of fair play and ethical conduct should not be tolerated.

Exploitation, within the context of this document, is defined as "any activities, actions or outcomes that detract from an athlete's opportunity to participate in safe and healthful practices and contests." Within this context, exploitation also includes monopolization of an athlete's time to the detriment of alternate experiences. Curtailment of educational and social opportunities because of obligations that include extended athletic practices, lengthy seasons and out-of-season requirements are all forms of exploitation.

Exploitation, as defined above, includes, but is not limited to the following:

- recruiting athletes or influencing them to transfer to another school for the purpose of athletic competition
- use of drugs to enhance athletic performance
- retaining or "red shirting" of athletes for the purpose of gaining greater maturity through an additional year of eligibility
- interstate televising of all-star contests and post-season playoff games
- employment of unethical or unqualified coaches
- requiring or permitting injured athletes to participate in practices or contests
- uncontrolled dependence on corporate sponsorship for the support of interscholastic programs
- use of live or same-day tape-delayed telecasts to recruit funds for or to enhance the appeal of interscholastic sports
- provision of awards to athletes by organizations other than the athletes' high schools
- falsifying academic records to gain or retain eligibility
- conducting practices and games beyond the limitations prescribed by the controlling organization
- solicitation of funds or products by athletes in order to defray the costs of their participation in interscholastic athletics
- requirements or restrictions on the out-of-season experiences of athletes

The justifiable existence of interscholastic athletics lies in the educational values obtained from them by the athletes. Whenever actions or events jeopardize these values, they must be curtailed or eliminated by those who control and regulate the programs. Any actions or events that distort or overemphasize the appropriate role of athletics in an interscholastic environment diminish their potential as a justifiable educational experience. The obligation to retain and restore the pure educational values of athletics is confounded by the inability of many school systems to provide adequate financial support for their interscholastic programs. Under such conditions, commercialism becomes an appealing option. Under these circumstances, it becomes the responsibility of those in positions of leadership to speak out in favor of appropriate practices and, perhaps more importantly, to condemn those actions or events in which the end justifies the means. Concurrently compromising the educational value of interscholastic athletics in order to emphasize winning is indefensible.

The exploitation of interscholastic athletes, in its many forms, has been addressed by numerous professional organizations, most notable among them, the American College of Sports Medicine, the American Academy of Pediatricians, the American Medical Association and the National Association of Secondary School Principals (See reference list of position stands). The statements of such groups, representing the collective wisdom based on science and experience, is only useful if it is accessible, acceptable and applied by those who conduct and supervise our interscholastic programs. The retention and/or restoration of educational values in interscholastic athletics remains a worthy objective.

To avoid or evade our responsibility in this area is unacceptable. Therefore, the National Association for Sport and Physical Education recommends that:

1. Boards of Education, superintendents of schools and principals, with input from athletic directors and coaches, must take full control of the interscholastic athletic programs within their school systems to ensure that the educational benefits of athletics receives the proper emphasis.

2. The beneficial and desirable outcomes of participation in interscholastic athletics become a part of the pre-service and in-service education of all interscholastic coaches and athletic directors.

3. The specific actions and events that deprecate the value of interscholastic athletics be enumerated and widely publicized so that they are accessible to parents, educators and concerned citizens.

4. Coaches be held accountable for the competencies enumerated in Coaching Certification: A Position Paper prepared by the *Joint Committee on Coaching Certification,* National Association for Sport and Physical Education and the National Association for Girls and Women in Sport.

5. All revenues associated with athletics, including those from booster club, gifts and commercial ventures be distributed according to the criteria established by the Board of Education.

6. The academic performance of athletes be reviewed each grading period to ensure that athletes are meeting the same academic standards as other students.

7. All administrators of interscholastic athletics read the Report on Intercollegiate Athletics by the Knight Commission, especially that portion directed at secondary-school officials (Knight Commission, 1992).

8. The National Federation of State High School Associations exert its influence to ensure that the exploitation of interscholastic athletes through commercial ventures is alleviated.

References

Beckham-Burnett, S. & Grana, W.A. (1987). Safe and Effective Weight Training for Fitness and Sport, Journal of Musculoskeletal Medicine, 4, 26-46.

Brady, T.LA., Chaill, B.R. & Bodnar, L.M. (1982). Weight Training-Related Injuries in the High School Athlete. American Journal of Sports Medicine, 10, 1-5.

Carnegie Corporation of New York, A Matter of Time: Risk and Opportunity in the Non-school Hours, Carnegie Council on Adolescent Development, New York, 1992.

Dyment, P.G. (1988). New Guidelines for sports Participation, The Physician and Sports Medicine, 16, 45-46.

Jesse, J.P. (1979). Misuse of Strength Development Programs in Athletic Training, The Physical and Sports Medicine, 7, 46-50, 52.

Jesse, J.P. (1977). Olympic Lifting Movements Endanger Adolescents. The Physician and Sportsmedicine, 5, 60-67.

Knight Foundation Commission on Intercollegiate Athletics, Keeping Faith with the Student-Athlete: A model for Intercollegiate Athletics, Report of the Knight Commission, 1992.

Kraemer, W.J., Fry, A.LC., Frykmand, P.N., Conroy, B. & Hoffman, J. (1989). Resistance Training and Youth. Pediatric Exercise Science, 1, 336-350.

McInally, P. (1985). Keeping Perspective in Sports. Athletic Business, 9, 10-16.

National Federation of State High School Association, 1991-92 Handbook, Kansas City, Missouri.

Romaneck, G. (1989). Teaching and Learning - Not Winning - Lie at Heart of High School Athletics. National Federation News 32.

Snyder, T.D. & Hoffman, S.A. (1991). Digest of Educational Statistics (NO. NCES91-697). U.S. Department of Education. Office of Educational Research and Improvement.

Stone, M.H. (1988). Implications for Connective Tissue and Bone Alterations Resulting from Resistance Exercise Training. Medicine and Science in Sports and Exercise, 20, S162-S168.

Position Statements by the American Academy of Pediatrics:

- Injuries to Youth Athletes. ***The Physician and Sports Medicine***. 9:107-110, 1981.
- Weight-training and weight lifting: Information for the Pediatrician. ***The Physician and Sports Medicine***. 11: 157-161, 1983.
- Risks in Long-distance Running for Children. ***The Physician and Sports Medicine.*** 10:82-86, 1982.

Position Stands by the American College of Sports Medicine:

- Proper and Improper Weight Loss Programs
- The Use of Anabolic-Androgenic Steroids in Sports
- Weight Loss in Wrestlers
- The Use of Alcohol in Sports
- The Participation of the Female Athlete in Long-distance Running

Developed by the NASPE Coaches Council, 1993

NASPE Position Paper

An Ethical Creed for Sport and Physical Educators within the National Association for Sport and Physical Education

Sport and physical educators in America value the dignity and worth of human sport performance and human movement. They are to increasing and refining knowledge about human movement and participation in sport and physical education and to using this knowledge for the promotion of human welfare. They are committed to the preservation of human rights and dignity within and around the sport experience, including the responsible and competent application of professional skill and knowledge for social, professional, and personal well-being.

Sport and physical educators realize that establishing and maintaining high standards is imperative for the profession. They recognize their own relative inadequacies with respect to such standards and they constantly work to improve and grow professionally. They teach, research, coach and serve using only the techniques, skills and information for which they are qualified through education and experience. Sport and physical educators develop and maintain current professional and scientific knowledge, and take an active interest in areas of the discipline outside their specialization.

Sport and physical educators are committed to the integrity of the profession. They strive to become consummate professionals by actively keeping body and mind in a functional unity and by seeking to present a model for excellence in moral values. A consummate sport and physical educator is an active and responsible member of the profession, dedicated to promoting knowledge, research and service.

Sport and physical educators are actively involved in the community. They understand that sport and human movement will improve only through the actions of knowledgeable, competent and prepared professionals. Sport and physical educators actively pursue these professional aims and abstain from knowingly misusing others for personal benefits. They realize the importance of their ethical duties and social responsibilities.

CANONS FOR THE PROFESSION

The following listing of canons, or principles, shall be considered as illustrative of professional integrity, and not exhaustive of ethically desired qualities. The canons are intended to note essential qualities of ethical conduct that may fall in four categories.

CANON 1. A SPORT AND PHYSICAL EDUCATOR IS RESPONSIBLE TO THE GREATER COMMUNITY BY BEING INVOLVED WITH HEALTH, FITNESS, SPORT PARTICIPATION AND MOVEMENT.

a. A sport and physical educator promotes the general welfare of society,

b. A sport and physical educator regards service to others as a primary progressional goal.

c. A sport and physical educator is actively and responsibly involved in community issues for the betterment of sport and physical education.

CANON 2. A SPORT AND PHYSICAL EDUCATOR SERVES AS A MORAL AND PHYSICAL ROLE MODEL.

a. A sport and physical educator embodies a unified practice of physical, spiritual, and mental fitness.

b. A sport and physical educator practices reasonable, sensible, and responsible health practices with regard to nutrition and the use of tobacco, alcohol, and other drugs.

c. A sport and physical educator practices moral principles in everyday conduct and strives to maintain the highest standards of integrity and propriety.

   i. A sport and physical educator is honest and does not lie, cheat or steal.

   ii. A sport and physical educator is respectful of all peoples.

   ii. A sport and physical educator is fair and just in dealing with all other individuals, including students, peers, administrators, and the general public.

CANON 3. A SPORT AND PHYSICAL EDUCATOR IS COMPETENT.

a. A sport and physical educator is educated at an accredited college or university in both the arts and sciences of human movement.

b. A sport and physical educator is an active learner attending workshops, conventions, conferences and inservice programs as a continuing professional practice.

c. A sport and physical educator reads and studies current literature in and about the professional and the disciplines within the profession on a continuing basis.

CANON 4. A SPORT AND PHYSICAL EDUCATOR IS A PROFESSIONAL WITH SPECIFIC OBLIGATIONS TO STUDENTS, CLIENTS AND PEERS.

a. A professional sport and physical educator is academically responsible to peers, students, clients and other professionals.

   i. A sport and physical educator recognizes the primary responsibility to serve students and clients in an efficient manner.

   ii. A sport and physical educator makes every effort to help students and clients to achieve their potential.

   iii. A sport and physical educator respects the confidentiality and privacy of students, clients and peers.

   iv. A sport and physical educator sets reasonable and fair fees commensurate with the service performed when working in a private or commercial setting.

   v. A sport and physical educator organizes materials and information when teaching, coaching, presenting or conducting research.

   vi. A sport and physical educator is prepared punctual when working in the field of human movement and sport.

   vii. A sport and physical educator is committed to critical examination of all issues relating to human movement, while being tolerant of other professional points of view.

   viii. A sport and physical educator meets professional obligations in a timely fashion.

b. A sport and physical educator is an active and supportive member of professional organizations, such as the National Association for Sport and Physical Education.

   i. A sport and physical educator seeks to promote the goals and ideals of the profession.

   ii. A sport and physical educator actively seeks involvement in professional organizations.

In summary, a sport and physical educator should be recognized as an honest, responsible, and fair individual who acts in best interests of students, clients, the profession, and the society- at-large.

NASPE Philosophy Academy March, 1993

Benefits of Physical Education to the Elementary School Student

A POSITION STATEMENT

of the

California Association for Health, Physical Education, Recreation and Dance

Quality physical education programs, particularly for the elementary school student, can enhance all aspects of development. Areas of specific contribution include:

• **Academic performance** - Aerobic activity can ".....increase vigor and promote clear thinking." In addition, "involvement in physical activity can positively affect grade scores of students in primary schools." (International Society of Sport Psychology, p. 179 + 180) Regular physical activity also makes children more alert and energetic which improves their capacity to learn (AAHPERD).

• **Health** - "Nearly forty percent of children age five to eight have health conditions that significantly increase their risk of early heart disease." (AAHPERD) "A primary benefit of regular physical activity is protection against heart disease." Physical inactivity appears to contribute to coronary risk factors like obesity, high blood pressure, and elevated blood cholesterol. In addition, physical activity appears to provide some protection against several other chronic diseases like certain cancers, ostetoporisis, and depression. Not surprisingiy, " ..... physically active people outlive inactive people..." (U.S. Centers for Disease Control and Prevention and American College of Sports Medicine, 1993, p.7) For all of these reasons, the American Heart Association has stated. "Children should be introduced to the principles of regular physical activity and recreational activities at an early age. Schools at all levels should develop and encourage positive attitudes toward physical exercise, providing opportunities to learn physical skills and to perform physical activities, especially those that can be enjoyed for many years (American Heart Association, 1992).

• **Weight control** - About 25% of American youth are overweight (American Health Foundation, 1993) and percent body fat significantly impacts health. Active participation in physical education increases energy expenditure and helps control excessive food intake and body fat levels. Significant reductions in percent body fat have been noted in studies examining the effect of physical education programs on the body fat levels of both boys and girls (Vogel, 1986). This is particularly important because studies examining secular trends have shown 54 and 39 percent increases in obesity among 6-11 and 12-17 year-olds (Gottmaker. Dietz, Sobol, & Weber, 1987) and a two percent increase in children's overall body fat over that last twenty to thirty years (Pate & Shephard, 1989).

• **Physical fitness** - By introducing children to developmentally appropriate, theoretically based, programs in physical education, students learn the principles and skills necessary for implementing and maintaining a physical activity regimen. This education is integral to the child's development as it has the potential to improve short term fitness (flexibility, cardiovascular endurance, muscular endurance, muscular strength, and body composition) while establishing a basis for the maintenance of fitness through life. "Increased physical fitness improves heart/lung function, reduces body fat, and decreases the risk of diseases associated with unhealthy lifestyles. "Improved physical fitness also enhances "school morale, class behavior, ..." and is an "... alternative to drugs for today's youth." (National Fitness Leaders Association, 1990)

• **Movement knowledge/Motor skill development** - Motor skill development is one of the most efficient and sustainable ways to develop physical fitness. The Council on Physical Education for Children has stated, "Optimal development of the musculoskeletal and cardiorespiratory systems is enhanced through children's regular involvement in planned programs designed by professional educators to maximize movement skill development through sequenced instruction." "By conducting regular, vigorous physical education programs and helping children become skillful in a variety of movement forms fitness is built." (Council on Physical Education for Children, 1992, p. 6) Furthermore, the early establishment of movement skill facilitates the acquisition of more complex skills introduced later. It also allows children to feel competent in movement which motivates them to, be more physically active in their leisure time.

• **Self esteem** - "Self-esteem is the value we place on ourselves and our self-image." (Gruber, 1985. p.30) According to a quantitative review of over a hundred studies conducted within the last twenty years, "... directed play and physical education programs contribute to the development of self-esteem in elementary school children." (p. 42) This research also concluded that the greatest gain in self esteem was found in those children with the greatest need for improvement. The positive attitudes developed through proper physical education experiences "... may be the prime determiner of future behavior." (p. 42)

• **Stress management** - Like adults, children and adolescents experience stress in their daily lives. Physical activity is a positive method for coping with this stress. "Aerobic activity reduces anxiety, depression, tension, and stress..." Physical activity can also be "...as effective as different forms of psychotherapy and that exercises have had an anti depressive effect on patients with mild to moderate forms of depression." (International Society for Sport Psychology, p. 180)

• **Social development** - Research has found that participation in games, sports, and play seems to be related to children learning to "fit into" their society by learning social expectations. These activities also enhance the child's social mobility which can affect such long-term endeavors as educational aspiration and achievement. Furthermore, through participation and appropriate instruction in physical activities moral ideals and attitudes concerning fair play are shaped (Coakley, 1993).

General Statement

The above mentioned benefits can be achieved through quality physical education programs. For optimum results programs should be regular, frequent, developmentally appropriate, success oriented, and instructed by trained physical education teachers. Research has shown that competent teachers credentialed in physical education provide the best physical education. However, providing classroom teachers with special training has also proven beneficial. According to one study comparing physical education specialists and specially trained classroom teachers with classroom teachers who had not received special in servicing in physical education, trained teachers provided more and better quality instruction spending over three times more class time on instruction in fitness activities and over twice as much time on skill drills. In addition, students of trained teachers were twice as likely to be "very active" (Mckenzie, Sallis, Faucette, Roby, & Kolody, 1993). Increased emphasis on the quantity and quality of physical education programs is in direct compliance with Healthy People 2000 our national strategy for improving the health of all Americans over the next ten years. Specifically, Healthy People 2000 seeks to increase the propotion of: 1) children and adolescents in first through twelfth grade who participate daily in school physical education, and 2) school physical education class time that students spend being physically active, preferably engaged in lifetime physical activities. According to the American Academy of Pediatrics (1992), "The inclusion of a national health objective calling for daily physical education classes underscores the importance of frequent physical education."

References

American Academy of Pediatrics (1992). Press release: Physical education - the tacts. Elk Grove Village, IL: AAP.

American Alliance for Health, Physical Education, Recreation, and Dance. It's time to stop shortchanging our children: Making the case for daily physical education. Reston, VA: AAHPERD.

American College of Sports Medicine (1993). News release: Experts release new recommendation to fight America's epidemic of physical inactivity. Indianapolis: American College of Sports Medicine.

American Heart Association , Committee on Exercise and Cardiac Rehabilitation of the Council on Clinical Cardiology (1992). Statement on exercise: Benefits and recommendations for physical activity programs for all Americans. Circulation, 86, 340-344.

American Health Foundation (1993). News Release. New York, NY: AHF.

Coakley, J. (1993). Socialization and sport. In R.N. Singer, ,M. Murphey, & L.K. Tennant (Eds.), Handbook of research on sport ps Vchology (pp. 571586). NY: Macmillan.

Council on Physical Education for Children (1992). Guidelines for elementary physical education. Reston, VA: National Association for Sport and Physical Education

International Society for Sport Psychology (1992). Physical activitv and Psychological benefits. The Physician and Sportsmedicine, 20, 179-184.

Gottmaker, S.L., Dietz, W.H., Sobol, A.M., & Weber. C.A. (1987). Increasing pediatric obesity in the U.S. American Journal of Diseases in Children, l4, 535-540.

Gruber, J.J. (1985). Physical activity and self-esteem development in children: A meta-analysis. The Academy Papers, 19. 30-48.

National Fitness Leaders Association (1990). Youth fitness: Information and tips to achieve a healthier lifestyle. Chantilly, VA: NFLA.

McKenzie, T.L., Sailis, J.F., Faucette, N., Roby. J., & Kolody, B. (1993). Effects of a curriculum and inservice program on the quality and quantity of elementary physical education classes. Research Quarterly for Exercise and Sport, 64, 178-187.

Pate, R.R, & Shephard, R.J. (1989). Characteristics of physical fitness in youth. In C.V. Gisolfi & D.R. Lamb (Eds.), Perspectives in exercise science and sports medicine (pp. 1-46). Indianapolis: Benchmark.

United States Centers for Disease Control and Prevention and American College of Sports Medicine (1993). Summary Statement: Workshop on physical activity and public health. Sports Medicine Bulletin, 28, 7.

Vogel, P.G. (1986). Effects of physical education programs on children. In V. Seefeldt (Ed.), Physical activity and well being (pp. 456-509). Reston VA: American Alliance for Health, Physical Education Recreation, and Dance.

NASPE/NAGWS Position Paper

Athletic Trainers in US High Schools

This paper was prepared by the National Council of Athletic Training (NCAT) for parents, coaches and others interested in improving health care for high school athletes. The information provided can be used to open dialogue with school board members and other key decision makers capable of effecting change.

Many parents, coaches, and school administrators first become concerned about health care for athletes when someone they know, or someone they are responsible for suffers a sports injury. Statistics on the frequency and severity of athletic injuries nationwide indicate cause for immediate concern and action on the part of all those involved with high school athletics.

An estimated 5.8 million interscholastic athletes are participating in athletic programs at approximately 20,000 high schools in the United States. The National Athletic Trainers Association (NATA) Injury Surveillance Study conducted in 1986 revealed that 37 percent of one million high school football players were sidelined by injury at least once during the 1986 season. Twenty-three percent of 441,000 high school girls who played basketball were injured one or more times in 1986-87. According to the National Center for Catastrophic Sports Injury Research (1993), including multiple injuries, the injury toll among high school athletes today is at two million.

Generally speaking, 80 percent of high school sports injuries are minor in nature (precluding participation seven days or less), while two percent are major (precluding participation for three weeks or more). On average, 49 interscholastic athletes sustain fatal or catastrophic (often paralyzing)injuries annually.

While the majority of sports injuries are minor, an injury toll of two million warrants the attention of school administrators and parents of student athletes. An independent survey revealed that 97 percent of coaches and athletic directors, those who work most closely with interscholastic athletes "see the need for certified athletic trainers at the high school." Only 21 percent of those polled reported having NATA certified trainers on staff, however, owing largely to "budget constraints."

Nationally, less than 10 percent of all US high schools with athletic programs have NATA certified athletic trainers on staff.

Lack of funds is often cited as the primary reason for not having as athletic trainer on staff. With this in mind, NCAT offers the following suggestions:

- Help your state approve a licensing law for athletic trainers

- Encourage your state department of education to appoint a sports medicine director to work with the high school athletic association and the state athletic trainers association

- Encourage your local school district to fund and implement the hiring of NATA certified or state licensed trainers in one of the following ways:

    - full time trainer with no teaching responsibilities
    - teacher/trainer
    - permanent substitute/trainer
    - assistant athletic director/trainer
    - nurse's office assistant/trainer
    - part-time trainer
    - sports medicine center/clinics; or
    - shared trainer

Based on the belief that all athletes deserve the best medical treatment available, and the information presented in this paper, the National Council of Athletic Training recommends that all high schools with an athletic program, take steps toward hiring NATA certified or state licensed athletic trainers.

Approved, June 1987; Reviewed and reaffirmed, 1993

NCAT is structure of the National Association for Girls and Women in Sport, and the National Association for Sport and Physical Education

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Association for the Advancement of Health Education

Position Statement

A POINT OF VIEW FOR HEALTH EDUCATION

Health education does not stand alone. It is related to education generally. Issues of philosophy which affect education are necessarily related to health education.

Educators in all fields continue to discuss the need for a clearly defined educational philosophy. Health educators are no exception. All wish to provide better direction for the total educational process and its component programs. A philosophy of education is basic to the systematic development of health education programs and objectives. A philosophy should provide a foundation for values. The philosophy accepted by teachers, school groups, or others concerned with the health education of all persons should guide program development. As this process occurs a philosophy of health education will emerge.

The discussion which follows is intended to stimulate and give direction to thinking about a philosophy of health education. It represents an effort to synthesize a series of beliefs about the nature of health, education, schools, communities, people and society into a coherent and reasonable philosophy of health education.

A STATEMENT OF POSITION

Health education as both process and program, influences individual, family and societal development, knowledge, attitudes and behavior. It seeks the improvement of individual, family and community health. Because the emphasis is upon health, both the process and the program may be said to originate in an understanding of the nature of health as it relates to humans as individuals or in groups.

The term "health" does not relate to a wholly measurable quality or condition. It can best be described in terms of the degree to which the aggregate powers of the human, and in a larger sense, the societal organism are able to function. Heretofore the term became fully meaningful only when one was confronted with its opposite, i.e. disease or defect. With a wider acceptance of the term wellness, definitions began appropriately to expand beyond their former narrow limits.

The newer concept of health embraces the entire being. The individual is not a composite of separate entities, such as body, mind and spirit, arranged in presumed ascending order of importance. The individual is a multi-dimensional entity, with each component - chemical, physical, spiritual, intellectual, or emotional - existing as an element within a complex of interrelationships. Nor is the individual a passive participant in the wellness process. Good health requires positive efforts directed toward total well-being. These efforts have larger

potential for success when operating in a socio-political system which prizes individual, family and societal well-being. Individual attempts to enhance one's one well-being. Conversely, society bears a responsibility to promote the well-being of all individuals as well.

In the normal course of events, people seek to establish and preserve wholeness, individually and in groups. They strive to maintain this integrated state against the adversities of life. They will resist disease or retardation in growth, in order not only to preserve life, but, equally, to gain the opportunity to realize their potentialities. When doing so in a socio-political system which supports and applauds this activity, societal health is enhanced. Successful outcomes provide the attainment of both self-identification and recognition through the most complete development of all personal powers.

Education in health, then, helps individuals seek that which moves them toward and optimal stage of wellness. It means also to aid individuals and families in avoiding the depressing effects of economic deprivation, the lack of balance, the disease and the accidents of life.

The purposes of health education do not stand apart from the purposes of education itself. Education is more than a conservation process. There is more to be accomplished than passing on the values of the culture from generation to generation. Conservation is included to be sure; but education is also concerned with the exploration and growth, the re-evaluation and the reconstruction of values. Education is not concerned merely with knowledge in order to develop responsible and responsive personal, family and collective behaviors.

The central emphasis in all of education must be the fostering of each individual's ability to think independently. Children must come to live their own lives with some measure of responsibility if they are to grow into responsible adults. The closer the school can bring them to the establishment of their own value structure, the better prepared they will be to meet the demands of life and contribute to the well being of society. It has been said that the liberal (or general) education should provide enlarged opportunities for mature personal development, for those experiences by which student gain a deepened insight into the nature of man an dthe environment. This emphasis is appropriate not only for school situations for young people but in educational settings outside schools and with adult populations as well. There is a clue here for health education. It has no purpose beyond that of helping individuals and society progressivley build a more comprehensive and definite scheme of values as they participate reflectively in activities designed to advance them toward optimal wellness.

The ultimate goal of health education, therefore, is to liberate an individual's potential strengths, energies and creative powers so that personal actions become deeply satisfying and humanly constructive. Its concern for knowledge is for the purpose of liberating the individual from the confining limits of ignorance, unhealthful practice or prejudice through the insights which knowledge and understanding generate. Health education will be successful to the degree that it enables individuals to use knowledge in ways that transform aimless habits into intelligently directed actions. It is difficult to expect that individuals can accomplish this end in a societal frame which provides confusing and mixed messages. It thus is a goal for health education to provide learners with the skills to judge messages received in terms of their potential benefit to self and society. It is also a goal to provide criticism of such mixed messages in public forums.

Paradoxically, educators must teach individuals to look beyond health as an end or goal and to utilize health as a means used in the achievement of life's goals. Though health itself may be quantitatively evaluated bio-chemically, health status is merely a reflection of the qualitative measure of one's functional abilities. It can only be used as a qualitative measure of functional ability. Wellness is, in this functional sense, a means, not an end. The end may involve greater societal well being.

Health is a personal and societal matter. Health education, therefore, must become a part of the experience of each learner and extend itself into the surrounding society. For health education to indeed take place, health must eventually become a directing factor in one's ever-present lifestyle. The subject matter of health education must be established and taught within the context of students' lives, not treated as something to be transmitted simply because it is available. Knowledge about the structure and physiology of the human body, for instance, is of value in teaching solutions only when it contributes to the understanding or solution of individual and group human problems and thus fosters the enrichment of human development and learning.

This makes health education a hazardous undertaking in some respects but no more so than any other form of formal education. There are risks involved in having learners treat subject matter as personal and relevant to the current situation. They may focus to a greater than appropriate extent on themselves and their ills. They may become critical of their elders, of government policy, of business practices. If, as noted before, the subject matter of health education is established and taught in the context of the lives the students live and the society within which they live them, the educational process will contribute to the development of social values which will in turn maximize the development of social values which will in turn maximize the development of individuality and independent thinking. The risk seems worth taking.

Truth revealed today may be the falsehood or misconception of the future. Information which is available today may be obsolete tomorrow. Hence, the principal purpose to which health education should be directed is that of equipping students to cope with the inescapable elements of change cultivating the ability to resolve the problems which change inevitably will produce.

This does not mean that what is known is ignored. What is known should be taught in a manner that facilitates an understanding of current realities. At the same time, health educators should foster a willingness among students to accept today's information as usable, but anticipate later discoveries, perceptions or political realities may significantly change the usefulness of that knowledge. Students will gain their security, finally, not in given and fixed bodies of knowledge, but in the skill of knowledge acquisition and the ability to apply it.

Educators may be seriously tempted to become reformers, dictators of moral behavior or authorities on what is deemed to be the proper ends for the good life. If individuals are to be "free", their educational experience must help them become so. Freedom involves freedom of choice - of both means and ends; hence individuals must be given an opportunity to choose - choose which information to believe, which behaviors to perform. If not given such opportunities to make up their own minds, to select their own methods, and to choose their own ends; they may revolt, become apathetic, or deliberately live in opposition to what is known and what it taught. They need to be informed, not threatened. Learners need to be aided in the solution of their problems, nor forced to accept an imposed solution. Of equal

importance is that they be equipped to do problem solving for themselves and society as new situations confront them over time.

Health educators must resist, an over dependence upon authority, just as they must resist the notion that the truths of today need never again be re-examined. They must do this is order to help students use knowledge in making their choices, which in turn will cause the learners to engage in experimentation and evaluation throughout their lifespan.

APPLICATION TO SCHOOL HEALTH PROGRAMS

To apply the foregoing to program planning, the ultimate goal for health education should be kept in mind. The attainment of this goal requires a comprehensive school health program...

- a program that emphasizes broad based constructive action in the shaping and reshaping of human lives for better health, rather than a program aimed solely at the acquisition of knowledge about health;
- a program of broad curricular scope and methodological diversity, rather than a program focused on narrow topical coverage or limited methodology;
- a program that is not static and fixed, but a program that is dynamic and evolves over the years;
- a program that moves forward and alters its structure as experiences and research point out improved ways to accomplish the goal...
- a program which invites participation in its design and delivery from all actors in the school and community including students, employees, citizens.

The general framework for such a program should include, but not be limited to:

1. Health instruction as an integral part of the administrative context and curriculum is recognized as a part of the general education of all students at every level. It is not peripheral to the central purpose of education. Through its organized approach, it presents to the student consecutive experiences in knowledge and practice which not only are valuable in isolation, but also aids the student in the reception, assimilation and application of other subject matter.

2. Experiences, which enable individuals to develop their abilities for such action toward improved health, grow out of the discovery and appraisal of personal and societal health needs. These include the many elements in school life, such as student-teacher relations, class scheduling, ventilation, lighting, fire hazards, traffic safety as well as all environmental quality within and outside the school and many additional elements that have a bearing upon the welfare of students.

3. Consideration should be given to student needs as they relate to personal, medical and psychological needs. After such needs are determined through the health services, psychological needs. After such needs are determined through the health services, psychological services, guidances, or the environmental health program; education

programs concerning general health, disease control and prevention, dental care, mental health, health appraisal, nutrition, substance abuse, and environmental health may be developed.

4. Health education does not confine its activities to children, but extends beyond the educational setting to the home, community and into adult life. Many community agencies supplement the school and college in their educational efforts.

5. Because the outcomes of the total program of health education are dependent upon the talents of may health and educational personnel working together in a cooperative manner to achieve common goals, a wide variety of persons within both the school and community should participate as educators.

6. The individual is responsible for the creation and maintenance of conditions which contribute to personal health and to the health of others. In a democracy, individuals should not seek to escape such responsibilities, but to become actively involved in the promotion of, in the words of the United Nations, "Health for All by the Year 2000". Education is the key to informed individual and group action. Group action is important in motivating individuals to solve their own problems, and in getting them involved in the solution of societal health problems.

7. Adequate financial support to provide the required personnel and materials to achieve the ultimate goals of health education is necessary.

8. The ultimate value of health education cannot be measure by ordinary standards or in ordinary periods of time. One bit of health information properly applied may save a life in the present or forty years later. That single life may be so valuable to society that this health education learning may be of greater value than any other bit of learning that individual may have experienced.

Approved, AAHE Board of Directors, October, 1991

Association for the Advancement of Health Education

Position Statement

COMPREHENSIVE SCHOOL HEALTH

Statement

The current and future health status of students can be enhanced by providing a comprehensive school health program. A comprehensive school health program includes an organized set of policies, procedures, and activities designed to protect and promote the health and well being of students and staff. The school health program which traditionally focused on providing students a healthful school environment, health services and health education has been expanded to include all areas Of the school program which can enhance the well-being of students and staff: physical education, food service, guidance and counseling, school psychology, social work, and an employee health promotion program. Ideally, the school professionals will coordinate and integrate their programming activities with each other and with the community health promotion activities.

Rationale

Healthy children learn better. Children who adopt health enhancing behaviors invest in their current and future health status. Providing comprehensive school health education facilitates the attainment of the goal of schooling; an educated populace whose health permits continued productivity through the lifespan.

Approved, AAHE Board of Directors October 1991

1900 Association Drive, Reston, Virginia 22091 • (703) 476-3437

Association for the Advancement of Health Education

Position Statement

TEACHER CERTIFICATION FOR HEALTH EDUCATION

Statement

Since school health education is a fundamental and indispensable component of basic education, AAHE strongly supports the need for certified teachers in health education. Standards for health education in each state should be the equivalent standards for any other teaching area in terms of adherence to professional standards of preparation. Further, all persons teaching health education at the secondary level or higher, should be required by the State Department of Education to have separate certification in health education. All early childhood and elementary teacher candidates should show evidence of professional preparation in health.

Rationale

The rapidly increasing cost of health care delivery in the United States can largely be attributed to the major emphasis on treatment and tertiary care. Health professionals agree that primary or preventive care represents the most effective answer-economically and in terms of better health for all Americans.

Health education is a fundamental ingredient in the prevention formula. It can facilitate a personal and community responsibility for the prevention of disease and disability and the promotion of well-being. Most causes of premature death and infirmity can be prevented by positive health practices and appropriate health care. Strong evidence through nationwide research shows that comprehensive, sequential, articulated health education programs taught by qualified individuals who follow the curriculum bring about healthy lifestyles, either changing poor health behaviors or strengthening strong health behaviors.

The field of health education has become more complex and demanding in recent years. With the development of strong emphasis on comprehensive school health programs which require articulation among the several areas in school health and with community agencies, the demand for specialization in school health education is even stronger.

Recognition of the importance of school health education has been expressed through endorsements by health-related professional associations as well as legislative action.

Approved, AAHE Board of Directors, October, 1991

1900 Association Drive, Reston, Virginia 22091 • (703) 476-3437

Association for the Advancement of Health Education

Position Statement

SCHOOL HEALTH INSTRUCTION

Statement

A planned, sequential curriculum in health education throughout the K-12 school years is necessary to help attain the objective of education: an educated populace whose health permits continued productivity throughout the lifespan. Health education is one component of the comprehensive school health program. It includes the development, delivery, and evaluation of a planned instructional program and other activities for students, their parents and the school staff. It is designed to influence the health knowledge, attitudes, and skills of these individuals. The health education curriculum will involve the identification of specific units for the health education classroom describing content, learning activities, and evaluation activities; and the coordination and integration of health content with other subject matter areas. The curriculum should be developed by school personnel and curriculum directors who work closely with parents, individuals from voluntary and official health agencies, and when available, with consultants from the state and national level. Those who teach health education should have a genuine interest in the field of health education and have teacher certification in health education.

Rationale

Lifestyle, what people do or don't do, is the most important variable influencing the health of young people. In 1987, almost 70 percent of all deaths, and an unmeasured amount of morbidity and disability, among young people aged one through 24 were due to only four causes of death: motor vehicle crashes (33%), all other accidents (15%), homicide (10%), and suicide (10%). These problems result from a limited number of behaviors including (1) failure to use seat belts; (2) drinking or drug use and driving; and (3) drinking or drug use that contributed to injuries. In addition, the leading causes of all deaths in 1987 were heart disease (36%) and malignant neoplasms (22%). These health problems result to a significant degree from a limited number of behaviors established during childhood and youth. The use of tobacco and alcohol; excessive consumption of fat, calories, and sodium; and insufficient consumption of fiber; and insufficient exercise contribute to these problems. Schools can provide systematic, age-appropriate, and multiculturally-sensitive instruction within the context of a comprehensive health education program in order to insure that children and youth adopt those behaviors known to promote a healthy lifestyle.

Approved, AAHE Board of Directors October 1991

1900 Association Drive, Reston, Virginia 22091 • (703) 476-3437

Association for the Advancement of Health Education

Position Statement

AIDS/HIV INFECTION EDUCATION WITHIN THE SCHOOL

Statement

Given that one of the only ways to prevent the spread of HIV (human immunodeficiency virus) infection and AIDS (acquired immunodeficiency syndrome) is education, instruction on this topic should be an integral part of the total educational process for all students beginning in the third grade. Instruction in the schools about HIV infection should be placed within the context of a comprehensive health education program. The sequential instruction concerning HIV-infection and AIDS can most logically fall within the following content areas which are part of a comprehensive health education program: Prevention and Control of Disease; Prevention of Substance Use and Abuse, and Understanding Human Sexuality. In addition to providing HIV infection education and AIDS education within the context of a health education program, the school system should integrate instruction on this topic in the guidance and health services programs as well as other academic disciplines. Further, students should be encouraged to provide peer instruction on the topic utilizing a variety of instructional formats: theater, rap groups, one on one counseling, hot lines, media, or small group discussion. All school personnel should receive in-service training about the prevention and treatment of HIV infection and AIDS. Further, a school-community team including parents, educators, health professionals, and community leaders should be formed to address the problems of HIV infection in the local community as well as implement specific strategies to prevent the spread of HIV infection among youth.

Rationale

HIV infection and AIDS are widespread in the United States. Over one million persons are infected with HIV and over 160,000 persons have been diagnosed with AIDS. HIV infection and AIDS affect physical, mental, social, and spiritual health and have an adverse effect on family life and work. They also adversely impact upon a wide variety of social, economic, and health institutions. Tragically, HIV infection and AIDS strike many young adults.

Approximately 20 percent or 32,000 persons aged 20-29 have been diagnosed with AIDS. Some proportion of these persons were infected with HIV while in high school. The two major health behaviors that contribute to the transmission of HIV infection are unprotected sexual intercourse and sharing of injected needles/drugs. Current estimates indicate that 46 percent of high school seniors are sexually active. While there are over 300,000 high school students who have tried heroin, it is not known how may youth inject drugs such as steroids.

Approved , AAHE Board of Directors, October, 1991

Association for the Advancement of Health Education

Position Statement

SMOKING AND TOBACCO USE EDUCATION:

THE SCHOOL'S RESPONSIBILITY

All published reports subsequent to the report of the Surgeon General's Committee, Smoking and Health, published in 1964, are abundantly clear in their indictment of cigarette smoking as a health hazard to both men and women. The schools should accept responsibility for providing smoking and tobacco use education programs and practices consistent with current information. Teachers, as well as other school personnel who share in the education of children and youth, have a role in educating about smoking, tobacco use and health.

If quality education about smoking and health is to become a reality, it is imperative that it be an outgrowth of a comprehensive health education program which begins at the primary level. The effectiveness of later educational efforts related to smoking behavior in large measure will depend upon the nature as well as the quality of the primary school health program.

A program of health instruction throughout the primary grades should emphasize experiences that provide opportunities for pupils to develop foundations essential to self-understanding, self-acceptance, and appreciation for the quality of life.

In the intermediate grades a clearly identified segment of the school day should be devoted to a health instruction program in which the content focuses on the effective physical, social, and mental functioning of the human organism. Children and youth should be given opportunities to study many health behaviors in which they are or will be involved, including smoking and tobacco use. The instructional program should encourage the student to make and test personal decisions and to evaluate alternatives.

Instruction at the junior and senior high school levels should provide opportunities to explore in depth the psychological, physiological, and sociological factors involved in making wise decisions about smoking (including the impact of smoking on the non-smoker and the unborn child).

Some significant psychological factors which may, or may not, encourage youth to start smoking are peer acceptance, perception of self-worth, mimicking the adult, and effect of advertising. So as to maximize effectiveness, programs should be planned and implemented on the basis of these. and other socio-psychological components.

Professional preparation of teachers should include education about smoking, tobacco use and health. Further, in -service training programs should be organized to improve competencies

for teaching smoking and health education. These programs should include emphasis upon improving attitudes and cultivating decision-making skills as well as presenting factual information.

Frequently, educational efforts begin with example. There is no doubt that school personnel serve as models which children emulate. The school's fundamental responsibility in providing an effective smoking and tobacco use educational program should reflect behavior by all school employees which will positively reinforce the goals of the health education program. All school personnel who smoke should take appropriate action to provide exemplar image consistent with current facts on smoking and health (i.e. refrain form smoking on school premises).

The Association for the Advancement of Health Education recommends that all schools take appropriate steps to establish policies and practices consistent with current information on the hazards of cigarette smoking, including:

1. Assuming responsibility for curriculum experiences in smoking and tobacco use which are timely, stimulation, and provide accurate information as an integral part of the ongoing comprehensive health instruction program, kindergarten through twelfth grade.
2. Providing appropriate in-service training opportunities for school personnel, classroom instructional resources, and consultative services to teachers.
3. Maintaining a physical and emotional school atmosphere that positively reinforces the objectives of the comprehensive health instruction program.
4. Encouraging staff and adult visitors to the school to realize the exemplar role they play and the importance of compliance with smoking rules and regulations.
5. Recognizing that parent example, pupil-peer relationships, and other community influences are important in the development desirable health behavior.
6. Utilizing classroom situations as well as learning experiences in other curricular and extracurricular activities to reinforce the educational process.
7. Emphasizing the exemplar role of all school faculty and staff in relation to smoking and tobacco use on school property.
8. Adopting "no smoking policies" for all groups utilizing school facilities.
9. Abolishing student and faculty smoking facilities.

Approved, AAHE Board of Directors, October 1991

1900 Association Drive, Reston, Virginia 22091 • (703) 476-3437

Association for the Advancement of Health Education

Position Statement

SCHOOL HEALTH AND SUBSTANCE ABUSE PREVENTION EDUCATION

Statement

Substance abuse education must be an integral part of the total education process. Programs should be planned through cooperative efforts of school personnel, students, parents, and other community representatives. Sequential K-12 instruction should be placed within the context of a comprehensive health education program, with appropriate learning activities permeating all other disciplines, including the guidance and health services programs. The instructional program should focus on understanding oneself and others (physically, emotionally, socially, intellectually, and spiritually). Additional emphasis should be placed on the development of refusal decision-making and, social skills, as well as providing opportunities for peer led instruction and counseling. The school program should be linked to a broader substance abuse prevention community program with efforts directed toward all channels: the workplace, community agencies, home, and the media. The content of a comprehensive health education program should include the potentially constructive consequences of medically authorized drug use, as well as the harmful consequences of drug abuse. Objectives for each level, K-12, should be established for the substance abuse education program and should form the basis for continuous and ongoing evaluation. Specific challenges schools must consider, are developing programs for students at high risk, tailoring programs to meet the needs of local students, and basing programs on criteria identified in effective programs.

Rationale

While children and youth in our society reflect the problem our nation has with alcohol and other drug abuse, a public interest in substance abuse education has re-emerged. There is evidence that cognitive approaches alone, effective approaches alone, affective approaches in combination with cognitive approaches, self-esteem enhancement, scare tactics, and "Just Say No" programs do not work. Peer programs are dramatically more effective than knowledge only or affective only programs. Prevention theorists suggest that the school system should be central in all prevention efforts with booster programs provided in addition to the K-12' health education curriculum. Further, schools must provide teacher training programs, utilize peer-led programs, focus on students at high risk, provide programming on "new" drugs, focus on social skill training and promote community wide efforts. Alcohol use and abuse should be a major consideration in any comprehensive approach.

Approved, AAHE Board of Directors October 1991

1900 Association Drive, Reston, Virginia 22091 • (703) 476-3437

Physical Education in the Schools

A Position Statement by the Iowa Association for Health, Physical Education, Recreation, and Dance (IAHPERD)

Physical Education is Basic in the School Curriculum

Research findings clearly demonstrate that regular exercise, from early childhood throughout life, is a primary factor in maintaining health and enriching the quality of life. Physical activity has long been regarded as necessary for the normal growth and development of children and youth. Regular exercise is now recognized by the medical profession as a major factor in the prevention of cardiovascular disorders which claim more lives each year than any other form of illness. Exercise has also been shown to be effective in relieving tensions, thereby promoting relaxation and the reduction of stress in our highly technical society. Physical education is the *only* offering in the school curriculum which provides *all* children and youth the opportunity to develop movement skills in physical activities through which they may currently acquire and maintain throughout life the physical fitness essential to their health and well being. Although physical education also makes significant contributions to the psychological, mental, and social development of children and youth, its unique contribution to the total offerings in the school is the immediate and future enhancement of the health and well-being of the students through physical activity. It is this unique contribution which mandates that physical education be regarded as basic in the school curriculum and taught by well qualified and certified personnel.

Physical Education Should Be Required Daily for All Children From Kindergarten through Grade 12

Research findings show that regular participation in various physical activities results in well-defined physiological adaptations in the body. When regular participation is discontinued, these adaptations reverse and the body degenerates to its former physiological state. Similarly, skill in any motor activity can only by acquired through regular practice; discontinuation of practice sessions results in loss in the motor skill in question. Hence, to profit from the benefits of exercise and to develop movement skills in physical activities suitable for life-long participation, all students must be enrolled each year throughout their school careers (i.e., elementary school, junior-high school, senior-high school) in daily physical education classes.

Interscholastic Athletics is not an Appropriate Substitute for Physical Education

Although programs of interscholastic athletics in the schools may meet the immediate movement and exercise needs of the participants during their season of competition, such programs do not accomodate *all* of the students. Interscholastic athletic programs are inherently selective in nature. The larger the enrollment of a school, the smaller the percentage of students who can participate in interscholastic athletics. Further, the team sports which comprise the major part of any interscholastic athletics program are not activities in which students will be able to participate throughout their adult years. The only offering in the school which provides for both current and future exercise needs of all students is physical education.

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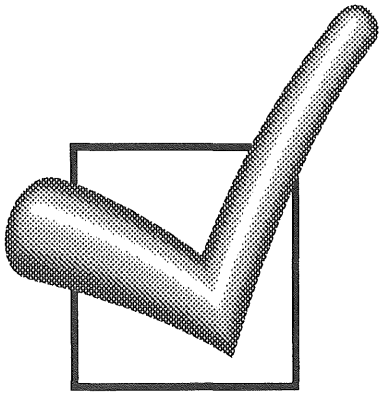

Part VI

Recommended Program Guidelines

Contents of Part VI

Guidelines for Elementary School Physical Education

A Position Statement
of the
National Association for Sport and Physical Education (NASPE)

developed by the

Council on Physical Education for Children
1994

Statement

This position paper is a guide for teachers, administrators, curriculum planners, and educational consultants, as they develop programs of physical education for elementary school children. This position paper represents the thinking of many people closely working with children. It reflects the most current thinking about elementary school physical education. It also reflects current federal legislation regarding equity for all children regardless of race, creed, sex, or conditions of disability.

Foreword

Physical Education is an integral part of the total educational program. An outcome-based, developmentally appropriate program offers a unique contribution in the development of knowledge, understanding, and positive attitudes concerning human movement as well as physical fitness. The degree of success the elementary child experiences in work and play is influenced by her/his ability to execute movement patterns effectively and efficiently. Through movement, impressions about self and environment are formed. To become a fully functioning individual, the child needs many opportunities to participate in well-conceived, well-taught learning experiences in physical education. Achieving this objective requires identification of the essential characteristics of a quality daily program of physical education for the elementary schools.

In the continuing quest to make physical education experiences more relevant and personal to children, new developments in learning theories, structuring of the subject matter, and new perceptions concerning growth and development of children must be constantly considered, evaluated, and implemented. The teacher plays a vital role in the success of the physical education program and priority should be given to employing a qualified elementary school physical education teacher to maximize student learning and achievement.

The Child

We believe that:

1. Each child is a unique individual with a differing rate of development in physical, mental, emotional, and social needs;

2. Each child has differing abilities and aptitudes for learning motor skills. The rate and style at which motor skills are mastered differs among children and within each child from time to time;

3. Every child has the right to experience success in physical education;

4. Each child should have continuous and progressive learning experiences in physical education;

5. Through the teaching of carefully planned and purposeful physical education experiences, the child:

    a. increases understanding of self and environment;
    b. becomes more proficient in motor skills and general body management, thus allowing more active participation in a variety of life experiences;
    c. improves in muscular strength, muscular endurance, flexibility, agility, balance and coordination, cardiovascular/respiratory function, and in knowledge and understanding of how these factors relate to lifelong health and physical fitness;
    d. gains a positive attitude toward physical activity.

The Teacher

We believe that:

1. Teachers of elementary school physical education must be able to integrate knowledge and understanding of human movement, child growth and development, and current learning theories in order to provide meaningful physical education experiences;

2. Elementary school physical education teachers must be able to work effectively with children by observing, assessing, and refining children's motor performance in addition to other aspects of their development;

3. Elementary school physical education teachers should be involved, contributing members of the school. The teacher should keep abreast of trends, issues, and new developments by reading, in-service workshops, and participation in local, state, and national professional organizations;

4. Physical education teachers and classroom teachers should work together to develop an in-depth understanding of children in order to provide a program which is commensurate with the needs of each child;

5. When classroom teachers have the full responsibility for the total education program, including physical education, they should be provided with regular access to resource people who are qualified by education and experience to give leadership and guidance pertaining to elementary school physical education in areas such as selection of content, progression and continuity, etc.

Teacher Preparation/Staff Development

We believe that:

1. Professional preparation for the elementary school physical education teacher should focus on the child in preschool through grade six. The curricula should result in the prospective teacher being competent in:

    a. understanding child growth and development, with an emphasis on motor development;
    b. a knowledge of and appreciation for the structure and function of human movement;
    c. observing and assessing children and their movements;
    d. the knowledge and assessment of health-related and skill-related aspects of physical fitness;
    e. a knowledge of learning processes, teaching strategies, and factors that affect motor learning;
    f. developing curriculum with emphasis on curriculum designs and strategies appropriate for elementary school programs;
    g. assessing and working with children who have special needs;
    h. personal skills and teaching skills in the content area of fundamental movement patterns, games/sports, dance/rhythm, and gymnastics to meet the needs and interests of children in preschool through grade six;

2. In addition, teacher preparation/staff development will provide:

    a. laboratory and field experiences that are directed and supervised throughout the teacher preparation program;
    b. opportunities to become acquainted with a variety of elementary school organizational structures and the administration of physical education within those settings. The professional preparation curricula should culminate in certification specific for teaching children in the elementary grades;

3. Preparation for the classroom teacher should include understanding of the relationship of physical growth and motor development to the total development and learning experience of the child. Course work in movement skills, methods, and content of elementary school physical education programs should be required. Laboratory assignments which provide for experiences with children. Teachers in the field should be involved in the planning of such programs;

4. Continuous staff development opportunities should be provided to meet the individual needs of educators concerned with physical education programs for children. Teachers in the field should be involved in the planning of such programs;

5. Personnel concerned with teacher preparation and staff development in physical education should have continuous interaction with children. They need also to be aware of current research and legislation and interpret them for application.

Instructional Program

We believe that:

1. A developmentally appropriate, outcome-based program of physical education should be designed to help each child become a more self-directed, self-reliant, and fully functioning individual;

2. A comprehensive physical education program for all children has as its foundation learning experiences which are designed to help each child develop efficient, effective, and expressive movement situations. Such experiences should serve the divergent needs of all pupils. All programs should allow for the developmental needs of each child;

3. Physical fitness is one of the important outcomes of a quality physical education program. Children derive immediate health benefits from sustained participation in vigorous physical activity. Optimum development of the musculoskeletal and cardiorespiratory systems is enhanced through children's regular participation in planned programs designed by professional physical educators. By integrating physical fitness into the broad range of activities which children enjoy, a bond is established between gaining or maintaining fitness and having fun while playing alone or with friends. This positive approach to pursuing fitness within children's movement forms, in addition to focusing on the fitness outcomes, is central to the pursuit of a lifetime of physical activity. The physical educator provides opportunity for cognitive learning about physical fitness. Through activities which explore the various kinds of fitness, levels of fitness, and means for attaining, maintaining and measuring fitness, children become familiar with those key concepts which will

help them make wise decisions in the future about their own participation in physical activities. By conducting regular, vigorous physical education programs and emphasizing skill instruction children become skillful movers and fitness results. When professional educators share accurate information about fitness, they equip children with the tools for healthful living as they develop the skills, attitudes and knowledge essential for making intelligent choices about their future;

4. The instructional program should include learning experiences which will help each child develop skill in fundamental movement patterns, games/sports, dance, gymnastics, and aquatics. The program should be designed to:

   a. provide specific outcomes in the psychomotor, cognitive, affective areas;
   b. develop motor skills and efficient movement patterns;
   c. encourage vigorous activity and help each child achieve the highest level of physical and health-related fitness of which he/she is capable;
   d. help develop an understanding and appreciation of movement as a participant as well as an observer;
   e. emphasize safety practices;
   f. foster creativity and encourage expression and communication in movement;
   g. promote self-understanding and acceptance;
   h. promote social interaction;
   i. help each child learn how to manage risk-taking and other challenges.

These include teacher-directed as well as self-directed learning. If learning is to be personalized and also concerned with the cognitive and affective domains, decision-making must be shared by the teacher and the learner.

Assessment

We believe that:

1. Assessment must be a continuous and vital part of the physical education program in order to evaluate student progress, achievement of learning outcomes, and the total physical education program. Assessment provides information to guide program and lesson planning and improve teaching. It is used to determine and clarify purposes and to assess individual student progress toward achieving program objectives and individual goals. The assessment process:

   a. should be utilized for diagnostic/prescriptive teaching;
   b. is essential in the guidance of children toward the attainment of acceptable goals and in motivation of children and teachers to effect needed improvement;

c. provides the basis for evaluating the behavioral response of the learner in relation to the planned learning experiences and the development of learning experiences and the development of learning experiences to follow;
d. should be utilized as one means of describing the program to parents and the community in order to provide for a better understanding of educational values and outcomes;

2. A variety of techniques should be used for determining individual differences and needs of elementary school children. Such techniques should include the use of class discussion, knowledge testing, anecdotal records, and assessment of motor skill development and health-related fitness when appropriate, as well as teacher observation of attitudes and feelings;

3. It is more important to review each child's progress than to consider the child's rank in relation to other children and/or national norms;

4. Provision should be made for periodic evaluation of the total physical education program by teachers, administrators, parents, and other qualified individuals. Particular attention should be given to student achievement and the philosophy, instruction, facilities, equipment, administrative support, and allocation of school resources that support the full development of students' potential.

"Program Appraisal Checklist for Elementary School Physical Education Programs" (1994), developed by NASPE/COPEC, will be useful as an assessment tool.

<u>Organization/Administration</u>

We believe that:

1. Pupils in elementary school should participate in an instructional program of physical education for a minimum of 150 minutes per week in addition to time allotted for free and/or supervised play. House Concurrent Resolution 97 (the Senate concurring) of the 100th Congress was passed to encourage state and local governments and local educational agencies to provide high quality daily physical education programs.

   The following considerations should be made in scheduling physical education instruction:

   a. to best serve the growth, development, and activity needs of children, a daily program is necessary;
   b. the length of the class period must be appropriate to the needs and maturation of the learner, with 30 minutes as a suggested minimum;

c. the time allocated for instruction should be exclusive of time used for dressing, showering, recess, free and/or supervised play periods, and noon-hour activities;

2. Groupings for instruction in physical education should reflect the intent of Title IX regulations;

3. The physical education program should reflect the intent of Public Law 94-142 and Section 504 of Public Law 93-112;

4. The physical education class size should be consistent with those of other subject areas and/or self-contained classes. Class groupings must be flexible enough to provide for differences in interests, levels of maturity, size, abilities, and needs;

5. Consideration of the teaching load is crucial to effective, high quality teaching. Personnel responsible for scheduling must consider the following factors:

   a. the physical education teacher needs time to plan as well as to teach the program, to coordinate the total program, to consult with teachers, principals, resource teachers, and parents, and to work with children needing additional help;
   b. teachers who travel between schools during the day should be given adequate time for travel and preparation to ensure that they can function effectively as members of the teaching teams in the schools to which they are assigned;
   c. the number of preparations, classroom set-up, length of class periods, number of children with whom the teacher will come in contact per day/per week, total number of classes, and the number of hours in the school day should be the criteria for determining teaching load. It is highly desirable to reserve at least five minutes between classes to enable the teacher to talk to individual students, make teaching notes, change equipment, confer with the classroom teacher, and to adjust from the group leaving to the group arriving. Consideration should be given to scheduling primary and intermediate classes in teaching blocks for better utilization of instructional time and organization of equipment.

6. Students and teachers should be appropriately dressed for the types of activities being conducted. Concern for freedom and quality of movement, and safety, should influence the type of attire worn.

Equipment and Facilities

We believe that:

1. Boards of education, through their regular school budget, should provide:

    a. funds for the purchase and maintenance of physical education supplies and equipment;
    b. physical education facilities for school and community use;

2. Standards for the purchase of supplies and equipment should be developed jointly by the physical education teachers and the school administrators;

3. If children are to be physically active and fully involved in the learning situation, ample equipment and supplies that vary in size, texture, etc. for each child are as essential as pencils and books. One ball, one rope, etc. per child is necessary for maximum learning to take place;

4. Sufficient indoor and outdoor facilities and equipment should be provided in each elementary school and should be assigned primarily for physical education activities. Apparatus should be selected or designed for its developmental and educational value. It is equally important to provide adequate space for proper and safe storage of equipment;

5. School and community facilities and programs should be planned and used to supplement one another in serving children's needs;

6. "All-weather surfaces" should be provided and a portion properly marked with circles, lines, courts, etc. to permit participation in a wide variety of activities appropriate for various age levels;

7. Natural play areas should be retained/designed to permit creative and exploratory types of play. Grassy and hilly areas are as important as all-weather surfaces;

8. Plans for new physical education facilities are the responsibility of the community as well as the school, and should be developed in cooperation with physical education teachers, principals, and other resource persons.

School Related Programs

We believe that:

1. The physical activity needs of elementary school age children can best be served through a program of instruction in physical education supplemented

by other opportunities for participation provided by school, home, and community;

2. Enrichment programs should provide opportunities for further development of knowledge and skills gained in the instructional physical education program during such periods as recess, noon hour, and extended school-day programs. The program should be varied in content and organization to provide for all levels of skill;

3. Intramural programs for continued participation in games, recreational sports, dance/rhythms, gymnastics, and other activities should be offered to all children. This program usually starts in the intermediate grades as the children's desire for participation and group identification begins to emerge.

References

Gabbard, C. (1992). *Lifelong Motor Development.* IA: W.C. Brown Publishers

Gabbard, C., Le Blanc, B. & Lowy, S. (1994). *Physical Education for Children.* NJ: Prentice-Hall

Graham, G., Holt/Hale, S. & Parker, M. (1993). *Children Moving: A Reflective Approach to Teaching Physical Education.* CA: Mayfield Publishing Co.

Haywood, K. (1993). *Life Span Motor Development.* IL: Human Kinetics Publishers

Kirchner, G. (1992). *Physical Education for Elementary School Children.* IA: W.C. Brown

Nichols, B. (1994). *Moving and Learning.* St. Louis: Mosby

Thomas, J., Lee, A., & Thomas, K. (1988). *Physical Education for Children: Concepts into Practice.* IL: Human Kinetics Publishers

(1994). *Teaching for Outcomes in Elementary Physical Education: Benchmarks and Beyond.* IL: Human Kinetics Publishers

Resources

Published by NASPE/AAHPERD to support quality physical education programs.

Developmentally Appropriate Physical Education Practices for Children, COPEC position paper, 1992.

Outcomes of Quality Physical Education Programs, 1992. A nationally endorsed guide that gives direction to physical education leaders for development of standards for student achievement.

Physical Best, 1989. AAHPERD guide to physical fitness education and assessment.

For further information contact NASPE at 1900 Association Dr., Reston, VA 22091

Guidelines
for
Middle School Physical Education

A Position Statement
of the
National Association for Sport and Physical Education (NASPE)

developed by the

Middle and Secondary School Physical Education Council
1992

Introduction

In 1991, the Middle and Secondary School Physical Education Council, in conjunction with the Council on Physical Education for Children, undertook the task of revising these guidelines. Appreciation is extended to the writers, editors, and revisers of the original and the revised editions for their time, efforts, and expertise. It is believed that implementation of the following guidelines should result in sound and enable physical education programs in the middle schools.

The Middle School

The current concept of the middle school began in the late 1950's and emerged as a popular alternative to the junior high school. The rationale supporting the middle school philosophy is based on a concern for the special needs and interest of 10 to 14 year old students and the failure of the junior high school to meet the needs of children of this age.

Program Characteristics

The middle school program is designed to provide variations in instructional modalities to meet the different learning styles and developmental rates of middle school-aged youth. The middle school program should be characterized by:

1. A home base and teacher for every student, to provide the continuing guidance and assistance to help students with daily decision making.

2. Balanced learning opportunities addressing the three major goals of the middle school: (a) personal development of the between-ager, (b) continued learning skills, and (c) effective use of appropriate knowledge.

3. An instructional design focused on individual progress, with many curricular options and with individualized instruction in appropriate areas.

4. The use of interdisciplinary team arrangement for cooperative planning, instructing, and evaluating.

5. A wide range of exploratory activities that promote socialization, develop interest, and enrich leisure time.

Characteristics of Middle School Students

It is difficult to describe or categorize the clientele of the middle school in a concise statement. This period of transition is one of stresses and strains, of upheaval in the physical, emotional, social, and intellectual worlds. This is a period of great physical change, of uneven growth, of wide variations among children in height, weight, and physical maturity. The following descriptors help us understand the characteristics of the middle school student.

Physically:

- needs to master a new physical body that may experience great physical change and uneven growth.
- faces the task of role identification.
- may experience a sense of physical inadequacy.

Emotionally:

- tries to cope with physical and hormonal changes that provoke feelings of love, fear, and anger.
- needs to establish a positive self-concept.
- needs success and recognition as an individual.

Socially:

- seeks peer acceptance and approval.
- needs to establish a personal value system.
- needs guidance to establish independence.
- needs to belong to a group.

Intellectually:

- is responsive to new ideas and experiences.
- has a new intellectual prowess.
- can now handle abstract concepts.

The above characteristics, though not unique to the middle school aged youth, tend to be more apparent in children of the middle school. Regardless of the student's ability level, educational situations should be structured to meet their specific needs. We believe that physical education in the middle school can help students develop an understanding of their changing bodies and personalities and how these changes affect their relationships with others.

Goals of the Instructional Program

The Physical Education Outcomes Committee of the National Association for Sport and Physical Education was charged with the responsibility to define the "physically educated student", i.e., the desired characteristics of students who complete appropriately designed and conducted school physical education programs. The Committee (1991) has completed a definition of the physically educated student and has identified the outcomes that clarify and amplify this definition. For each of the five parts of the definition (HAS, IS, DOES, KNOWS, VALUES) there are twenty attendant outcomes. Benchmarks were also developed for grades K, 2, 4, 6, 8, 10, and 12 but will not be identified in this document. The benchmarks suggest when assessment might occur and what might be assessed.

A Physically Educated Person:

- HAS learned skills necessary to perform a variety of physical activities.
  1. ...moves using concepts of body awareness, space awareness, effort and relationships.
  2. ...demonstrates competence in a variety of manipulative, locomotor and non-locomotor skills.
  3. ...demonstrates competence in combinations of manipulative, locomotor and non-locomotor skills performed individually and with others.
  4. ...demonstrates competence in many different forms of physical activity.
  5. ...demonstrates proficiency in a few forms of physical activity.
  6. ...has learned how to learn new skills.
- IS physically fit
  7. ...assesses, achieves and maintains physical fitness.
  8. ...designs safe, personal fitness programs in accordance with principles of training and conditioning.
- DOES participate regularly in physical activity.
  9. ...participates in health enhancing physical activity at least three times a week.
  10. ...selects and regularly participates in lifetime physical activities.
- KNOWS the implications of and the benefits from involvement in physical activities.
  11. ...identifies the benefits, costs and obligations associated with regular participation in physical activity.
  12. ...recognizes the risk and safety factors associated with regular participation in physical activity.
  13. ...applies concepts and principles to the development of motor skills.
  14. ...understands that wellness involves more than being physically fit.
  15. ...knows the rules, strategies and appropriate behaviors for selected physical activities.
  16. ...recognizes that participation in physical activity can lead to multicultural and international understanding.
  17. ...understands that physical activity provides the opportunity for enjoyment, self-expression and communication.
- VALUES physical activity and its contribution to a health lifestyle.
  18. ...appreciates the relationships with others that result from participation in physical activity.
  19. ...respects the role that regular physical activity plays in the pursuit of life-long health and well-being.
  20. ...cherishes the feelings that result from regular participation in physical activity.

The Curriculum

Physical Activity programs should be comprehensive and well-balanced for the purpose of enhancing the psychomotor, cognitive, and affective development of individuals through the means of body movement. It has been long recognized that middle school students need quality physical experiences on a regular basis. The unique contribution of movement to the development of youth indicates that the middle school curriculum should provide for systematic instruction in a wide variety of activities. These offerings should include activities and concepts in the areas of conditioning and physical fitness, individual and dual sports, team sports, gymnastics, rhythms and dance, track and field, aquatics, and outdoor activities.

These physical education experiences must be planned and implemented in ways that will maximize the potential contribution to the overall goals of education. Basic concepts in physical education should be identified and integrated through a wide variety of activities. Therefore, we believe that middle school physical activity programs should:

- allow students to participate in physical education on a regular basis equivalent to five times per week.
- have philosophy and program goals consistent with the educational goals of the school system and that reflect the needs of middle school students.
- represent a transitional progression from the elementary program to the high school program by providing the opportunity to participate in short exploratory units as well as longer units of instruction.
- have specific instructional objectives for each activity.
- have each activity developed on a continuum so that students can progress on an individual basis.
- provide a variety of physical education activities for all students regardless of their level of physical development.
- allow students to assess and evaluate their physical and social selves.
- provide opportunities for the remediation of motor and fitness skills.
- provide experiences that would promote motor skill development and fitness.
- provide opportunities for students to be more self-directing in the selection of and performance in activities.

- reflect a multi-media, multi-space approach with opportunities for individual learning in skill acquisition and fitness development.

- provide for interaction and coordination with other disciplines in the school curriculum.

- provide the concepts and skills to pursue personal wellness for a lifetime.

- develop skills that would enable them to apply technology to the development of personal wellness.

- develop an appreciation of physical activity and it's effect on total well being.

The Teacher

Preparation of teachers should include courses and teaching experiences that pertain to the education of middle school students. The in-service education program for physical education teachers is imperative to assure skilled and knowledgeable teachers to administer the varied program required for middle schools. Administrative support is necessary to encourage and to provide opportunities to attend workshops, meetings, and conventions which keep physical education personnel current on materials and information.

Educational programs should prepare teachers who:

- have an understanding of the middle school concept

- possess teaching certification in physical education.

- avoid gender role discrimination and gender stereotyping by grouping students according to interest and ability levels.

- understand the physical, social, emotional, and intellectual characteristics that are unique to middle school youth.

- possess a positive self-concept and demonstrate respect for the dignity and worth of all individuals.

- have knowledge and skills of developmentally appropriate practices to work with students on a one-to-one basis.

- are familiar with a wide variety of skills and activities in order to implement the exploratory qualities of the program.

- apply various teaching styles and modify rules, equipment, and instructional stations to conform to the needs of the learner.

- continually strive to increase their knowledge and understanding to meet the changing needs of middle school students and their learning environment.

- can interact with students and fellow teachers in a way that is supportive of the special needs of the middle school student.

- will assume leadership in providing for the expanded physical activity experiences for all students in the school.

- are able to interpret the goals and objectives of the activity programs to students and their parents.

- use instructional strategies based upon the developmental and skill level of the student as well as the nature of the activity.

- are able to maintain and manage record-keeping systems for planning sequential instruction.

Student Health And Safety

It is essential that the following standards be met in order to ensure the health and well-being of all students:

- The teacher should plan and direct class activities that take into account the safety of all students.

- Students should wear clothing appropriate to the activity. Showering and change of clothing should be encouraged after participation in vigorous physical activity.

- Student scheduling should take into account such factors as physical maturation and skill development levels. Size and strength considerations should be taken into account for competitive situations.

- Teachers should receive and report pertinent student medical information.

- Continuous supervision should be provided in all activity areas and in the locker rooms.

- Each school system should have a written policy on providing emergency first aid and reporting accidents to parents and school authorities.

- Daily maintenance services of all facilities and equipment must be provided for the health and safety of students.

Scheduling, Time Allotment, And Class Size

Scheduling, time allotment, and class size are factors that affect the health, safety, extent of participation, activities offered, and expected student performances. The following standards should be met:

- A daily instructional period (or equivalent) of directed physical education should be provided for all middle school students. The period should be of sufficient length for meaningful learning to occur.

- The instructional program should be planned to provide maximum involvement and for optimal achievement by all students.

- Class size in physical education should be commensurate with academic class sizes.

Facilities, Equipment, And Supplies

Facilities, equipment and supplies are of utmost importance in conducting a comprehensive program of physical education in the middle school. The following standards are basic to all programs:

- In the planning of facilities, all staff members should be consulted to ensure the functional value of the teaching stations. Careful planning is required so that ample and safe space allocations can be made for a varied, comprehensive, and evolving physical education program. The activities offered and the number of students served should determine the space requirements of the physical education activity areas.

- Facilities, supplies, and equipment should be provided for the instructional program in accordance with the needs, interests, and number of students to be served.

- School and community facilities should be planned and used to supplement and complement each other in meeting the needs of the students and the community.

- The school should provide towels, soap, showers, and sanitary, secure dressing facilities with adequate maintenance. This includes adequate shower and locker room facilities.

- The physical education program should have enough equipment to provide each student with an opportunity to actively participate throughout the entire class period.

Measurement And Evaluation

Measurement involves the systematic collection of data. Evaluation is the process of interpreting data for individual students and the overall program. Achievement of course and program objectives should be measured and curricular decisions should be based on the evaluation of the information gathered. The recommendations listed below provide a process of measurement and evaluation to assess knowledge, learning, and experience in physical education. The process of measurement and evaluation should be a means of helping students to further realize their potential. It should also help educators to evaluate and direct programs.

- Evaluation of students within the psychomotor, cognitive, and affective domains should be based on valid, reliable, and objective measurement.
- Formative evaluation of students should provide progress of student learning in relation to selected individualized criteria.
- Summative evaluation of students should assist in grading.
- Evaluation of students' performance should serve as a guide to instructional planning.
- Evaluative criteria should be criterion-based and focus on changes in an individual's performance.
- Program evaluation should be used as a means of interpreting the physical education program to school and community.
- Program evaluation should serve as an indicator of quality of instruction.

For further information contact NASPE at 1900 Association Dr., Reston, VA 22091

Guidelines
For
Secondary School Physical Education

A Position Statement
of the
National Association for Sport and Physical Education

developed by the

Middle School and Secondary School Physical Education Council
1992

Forward

In an increasingly complex, technologically advancing society, a student's most pressing need is to develop the skills and attitudes necessary for a productive and health quality of life. This publication focuses on the need for and the role of the physical educator in developing and implementing programs that prepare students to meet those challenges.

It is the physical educator's role to serve as an exemplary instructor who plans and provides relevant physical education activities for secondary school students that positively impact their knowledge, values and attitudes. When physical educators succeed in helping students integrate what they learn with what they feel and with what they care about, they also succeed in making the school experience a meaningful one, and contribute to the student's appreciation and promotion of a healthy lifestyle.

Guidelines For Secondary School Physical Education

These guidelines are intended to provide direction for the development of a sound, comprehensive program of secondary school physical education. These statements reflect the beliefs of the Middle and Secondary School Physical Education Council of the National Association for Sport and Physical Education.

The philosophy, content, and objectives presented are meant to assist in the planning, implementation and evaluation of exemplary secondary school physical education programs. The position set forth assumes that secondary school students have been involved in appropriate developmental learning experiences in elementary school physical education.

Goals Of The Instructional Program

The Physical Education Outcomes Committee of the National Association for Sport and Physical Education was charged with the responsibility to define the "physically educated student", i.e., the desire characteristics of students who complete appropriately designed and conducted school physical education programs. The Committee (1991) has completed a definition of the physically educated student and has identified the outcomes that clarify and amplify this definition. For each of the five parts of the definition (HAS, IS, DOES, KNOWS, VALUES) there are twenty attendant outcomes. Benchmarks were also developed for grades K, 2, 4, 6, 8, 10, and 12 but will not be identified here. The benchmarks suggest when assessment might occur and what might be assessed.

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  4. ...demonstrates competence in many different forms of physical activity.
  5. ...demonstrates proficiency in a few forms of physical activity.
  6. ...has learned how to learn new skills.
- **IS** physically fit
  7. ...assesses, achieves and maintains physical fitness.
  8. ...designs safe, personal fitness programs in accordance with principles of training and conditioning.
- **DOES** participate regularly in physical activity.
  9. ...participates in health enhancing physical activity at least three times a week.
  10. ...selects and regularly participates in lifetime physical activities.
- **KNOWS** the implications of and the benefits from involvement in physical activities.
  11. ...identifies the benefits, costs and obligations associated with regular participation in physical activity.
  12. ...recognizes the risk and safety factors associated with regular participation in physical activity.
  13. ...applies concepts and principles to the development of motor skills.
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- **VALUES** physical activity and its contribution to a healthful lifestyle.
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  19. ...respects the role that regular physical activity plays in the pursuit of life-long health and well-being.
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The Curriculum

The secondary school physical education curriculum should be planned to meet the following standards:

- Students should be given the opportunity to participate in physical education on a regular basis equivalent to five times per week.
- The instructional program in physical education should not be confused with various co-curriculuar activities such as marching band, cheerleading, drill team, ROTC, or athletics.
- Instructional activities should be selected to realize the potential of achieving established program goals.
- Instructional activities should follow a scope and sequence within each unit of instruction, as well as from unit to unit, and year to year.
- Students should be introduced to a variety of physical activities to enable all students to meet appropriate individual goals.
- The curriculum should be structured to include a variety of fitness activities to enable all students to meet appropriate individualized health-related fitness standards.
- Students should have opportunities to develop intermediate and advanced skills in personally selected activities.
- Students should have opportunities to develop participatory skills in adventure and other challenge activities.
- Students should be self-directed in conducting their individual lifelong physical activity programs.
- Students should have opportunities to develop skills that would enable them to apply technology to the development of personal wellness.

The Teacher

Educational programs should be conducted by certified physical education teachers who:

- Serve as positive role models of personal health, fitness, skill, and enjoyment of participating in physical activities.

- Are knowledgeable in curriculum and instruction, demonstrate sportsmanship, and sensitivity to students' needs.

- Know and apply effective teaching strategies that provide maximum student time on task.

- Apply various teaching methods and instructional strategies that personalize physical education classes and allow students to attain optimum personal growth.

- Provide for equitable instruction and participation with regard to the individual needs of the student.

- Demonstrate professional commitment through membership and involvement in professional organizations and other enrichment experiences.

- Plan program activities that promote understanding of cultural diversity.

- Accommodate the needs of exceptional students in regular physical education classes.

- Understand that the instructional program and athletics are separate and distinct and strive to keep a balanced perspective between the dual role of teaching and coaching.

- Use recognized assessment and evaluation instruments in planning for accountability of the instructional program.

- Apply technology in their teaching on a regular and continuing basis.

Student Health And Safety

It is essential that the following standards be met in order to ensure the health and well-being of all students:

- The teacher should plan and direct class activities that take into account the safety of all students.

- Students should wear clothing appropriate to the activity. Showering and change of clothing should be encouraged after participation in vigorous physical activity.

- Student scheduling should take into account such factors as physical maturation and skill development levels. Size and strength considerations should be taken into account for competitive situations.

- Teachers should receive and report pertinent student medical information.

- Continuous supervision should be provided in all activity areas and in the locker rooms.

- Each school system should have a written policy on providing emergency first aid and reporting accidents to parents and school authorities.

- Daily maintenance services of all facilities and equipment must be provided for the health and safety of students.

Scheduling, Time Allotment, And Class Size

Scheduling, time allotment, and class size are factors that affect the health, safety, extent of participation, activities offered and expected student performance. The following standards should be met:

- A daily instructional period (or equivalent) of directed physical education should be provided for all secondary school students. The period should be of sufficient length for meaningful learning to occur.

- The instructional program should be planned to provide maximum involvement and for optimal achievement by all students.

- Class size in physical education should be commensurate with academic class sizes.

Facilities, Equipment, And Supplies

Facilities, equipment, and supplies are of utmost importance in conducting a comprehensive program of physical education in the secondary school. The following standards are basic to all programs:

- In the planning of facilities, all staff members should be consulted to ensure the functional value of the teaching stations. Careful planning is required so that ample and safe space allocations can be made for a varied, comprehensive, and evolving physical education program. The activities offered and the number of students served should determine the space requirements of the physical education activity areas.

- Facilities, supplies, and equipment should be provided for the instructional program in accordance with the needs, interests, and number of students to be served.

- School and community facilities should be planned and used to supplement and complement each other in meeting the needs of the students and the community.

- The school should provide towels, soap, showers, and sanitary, secure dressing facilities with adequate maintenance. This includes adequate shower and locker room facilities.

- The physical education program should have enough equipment to provide each student with an opportunity to actively participate throughout the entire class period.

Measurement And Evaluation

Measurement involves the systematic collection of data. Evaluation is the process of interpreting data for individual students and the overall program. Achievement of course and program objectives should be measured and curricular decisions should be based on the evaluation of the information gathered. The recommendations listed below provide a process of measurement and evaluation to assess knowledge, learning, and experience in physical education. The process of measurement and evaluation should be a means of helping students to further realize their potential. It should also help educators to evaluate and direct programs.

- Evaluation of students within the psychomotor, cognitive, and affective domains should be based on valid, reliable, and objective measurement.

- Formative evaluation of students should provide progress of student learning in relation to selected individualized criteria.

- Summative evaluation of students should assist in grading.

- Evaluation of students' performance should serve as a guide to instructional planning.

- Evaluative criteria should be criterion-based and focus on changes in an individual's performance.

- Program evaluation should be used as a means of interpreting the physical education program to school and community.

- Program evaluation should serve as an indicator of quality of instruction.

For further information contact NASPE at 1900 Association Dr., Reston, VA 22091

Developmentally Appropriate Physical Education Practices for Children

A Position Statement
of the
National Association for Sport and Physical Education (NASPE)

developed by the

Council on Physical Education for Children
1992

Introduction

As we enter the 21st century the importance and value of regular physical activity has been recognized as never before. Accompanying this recognition is the awareness that childhood is the time to begin the development of active and healthy lifestyles.

Children do not automatically develop the skills, knowledge, attitudes, and behaviors that lead to regular and enjoyable participation in physical activity. They must be taught. The responsibility for this instruction is vested primarily in physical education programs in the schools.

In recent years a growing body of research, theory, and practical experience has sharpened our understanding about the beneficial aspects of physical education programs for children-- and those that are counterproductive. The purpose of this document is to describe, in a very straightforward way, practices that are both developmentally and instructionally appropriate and inappropriate for children in pre-school and elementary school physical education programs.

Quality Physical Education for Children

The Council on Physical Education for Children (COPEC) of NASPE, the nation's largest professional association of children's physical education teachers, believes that quality, daily physical education should be available to all children. Quality physical education is both developmentally and instructionally suitable for the specific children being served. Developmentally appropriate practices in physical education are those which recognize children's changing capacities to move and those which promote such change. A developmentally appropriate physical education program accommodates a variety of individual characteristics such as developmental status, previous movement experiences, fitness and skill levels, body

size, and age. Instructionally appropriate physical education incorporates the best known practices, derived from both research and experiences teaching children, into a program that maximizes opportunities for learning and success for all children. The outcome of a developmentally and instructionally appropriate program of physical education is an individual who is "physically educated".

In 1990, the National Association for Sport and Physical Education (NASPE) defined a physically educated person as one who:

- **HAS** learned the skills necessary to perform a variety of physical activities
- **DOES** participate regularly in physical activity
- **IS** physically fit
- **KNOWS** the implications of and the benefits from involvement in physical activities
- **VALUES** physical activity and its contributions to a healthful lifestyle

Appropriate physical education programs for children provide an important first step towards becoming a physically educated person.

Premises of Physical Education Programs for Children

In any discussion of physical education programs for children there are three major premises that need to be understood.

1. Physical education and athletic programs have different purposes.

Athletic programs are essentially designed for youngsters who are eager to specialize in one or more sports and refine their talents in order to compete with others of similar interests and abilities. Developmentally appropriate physical education programs, in contrast, are designated for every child-- from the physically gifted to the physically challenged. The intent is to provide children of all abilities and interest with a foundation of movement experiences that will eventually lead to active and healthy lifestyles-- athletic competition may be one part of this lifestyle, but it is not the only part.

2. Children are not miniature adults.

Children have very different abilities, needs, and interests than adults. It is inadequate simply to "water down" adult sport or activity programs and assume that they will be beneficial. Children need, and learn from, programs that are designed specifically with their needs and differences in mind.

3. Children in school today will not be adults in today's world.

More than ever before we are in a time of rapid change. Consequently, educators have the challenge of preparing children to live as adults in a world that has yet to be clearly defined and understood. The only certainty is that they will have different opportunities and interests than currently exist. Contemporary programs introduce children to the world of today, while also preparing them to live in the uncertain world of tomorrow. In brief, they help them learn how to learn-- and to enjoy the process of discovering and exploring new and different challenges in the physical domain.

Tomorrow's physical activities may look quite different from today's. Present programs need to prepare children with basic movement skills that can be used in any activity, whether it be popular today or yet to be invented. Mastery of basic skills encourages the development and refinement of more complex skills leading to the ultimate enjoyment of physical activity for its own sake.

Intended Audience

This document is written for teachers, parents, school administrators, policy makers, and other individuals who are responsible for the physical education of children. It is intended to provide specific guidelines that will help them recognize practices that are in the best interests of children (appropriate) and those that are counterproductive, or even harmful (inappropriate). It needs to be understood that the components described in this booklet are, in actuality, interrelated. They are separated here only for purposes of clarity and ease of reading. It should also be understood that these components are not all-inclusive. They do represent, however, most of the characteristics of appropriate programs of physical education for children.

APPROPRIATE AND INAPPROPRIATE PHYSICAL EDUCATION PRACTICES

Component: Curriculum

Appropriate Practice: The physical education curriculum has an obvious scope and sequence based on goals and objectives that are appropriate for all children. It includes a balance of skills, concepts, games, educational gymnastics, rhythms and dance experiences designed to enhance the cognitive, motor, affective, and physical fitness development of every child.

Inappropriate Practice: The physical education curriculum lacks developed goals and objectives and is based primarily on the teacher's interests, preferences, and background rather than those of the children. For example, the curriculum consists primarily of large group games.

Component: **Development of movement concepts and motor skills**

Appropriate Practice: Children are provided with frequent and meaningful age appropriate practice opportunities that enable individuals to develop a functional understanding of movement concepts (body awareness, space awareness, effort and relationships) and build competence and confidence in their ability to perform a variety of motor skills (locomotor, nonlocomotor, and manipulative).

Inappropriate Practice: Children participate in a limited number of games and activities where the opportunity for individual children to develop basic concepts and motor skills is restricted.

Component: **Cognitive development**

Appropriate Practice: Physical education activities are designed with both the physical and the cognitive development of children in mind. Teachers provide experiences that encourage children to question, integrate, analyze, communicate, apply cognitive concepts, and gain a wide multi-cultural view of the world, thus making physical education a part of the total educational experience.

Inappropriate Practice: Instructors fail to recognize and explore the unique role of physical education, which allows children to learn to move while also moving to learn. Children do not receive opportunities to integrate their physical education experience with art, music, and other classroom experiences.

Component: **Affective development**

Appropriate Practice: Teachers intentionally design and teach activities throughout the year that allow children the opportunity to work together to improve their emerging social and cooperation skills. These activities also help children develop a positive self-concept. Teachers help all children experience and feel the satisfaction and joy that results from regular participation in physical activity.

Inappropriate Practice: Teachers fail to intentionally enhance the affective development of children when activities are excluded which foster the development of cooperation and social skills. Teachers ignore opportunities to help children understand the emotions they feel as a result of participation in physical activity.

Component: Concepts of fitness

Appropriate Practice: Children participate in activities that are designed to help them understand and value the important concepts of physical fitness and the contribution they make to a healthy lifestyle.

Inappropriate Practice: Children are required to participate in fitness activities, but are not helped to understand the reasons why.

Component: Physical fitness tests

Appropriate Practice: Ongoing fitness assessment is used as part of the ongoing process of helping children understand, enjoy, improve and/or maintain their physical health and well-being. Test results are shared privately with children and their parents as a tool for developing their physical fitness knowledge, understanding and competence. As part of an ongoing program of physical education, children are physically prepared so they can safely complete each component of a physical test battery.

Inappropriate Practice: Physical fitness tests are given once or twice a year solely for the purpose of qualifying children for awards or because they are required by a school district or state department. Children are required to complete a physical fitness test battery without understanding why they are performing the tests or the implications of their individual results as they apply to their future health and well-being. Children are required to take physical fitness tests without adequate conditioning (e.g. students are made to run a mile after "practicing" it only one day the week before.)

Component: Calisthenics

Appropriate Practice: Appropriate exercises are taught for the specific purpose of improving the skill, coordination, and/or fitness levels of children. Children are taught exercises that keep the body in proper alignment, thereby allowing the muscles to lengthen without placing stress and strain on the surrounding joints, ligaments and tendons (e.g., the sitting toe touch).

Inappropriate Practice: Children perform standardized calisthenics with no specific purpose in mind (e.g., jumping jacks, windmills, toe touches). Exercises are taught which compromise body alignment and place unnecessary stress on the joints and muscles (e.g., deep-knee bends, ballistic (bouncing) stretches, and standing straight-legged toe touches).

Component: Fitness as punishment

Appropriate Practice: Fitness activities are used to help children increase personal physical fitness levels in a supportive, motivating, and progressive manner, thereby promoting positive lifetime fitness attitudes.

Inappropriate Practice: Physical fitness activities are used by teachers as punishment for children's misbehavior (e.g., students running laps, or doing push-ups, because they are off-task or slow to respond to teacher instruction).

Component: Assessment

Appropriate Practice: Teacher decisions are based primarily on ongoing individual assessments of children as they participate in physical education class activities (formative evaluation), and not on the basis of a single test score (summative evaluation). Assessment of children's physical progress and achievement is used to individualize instruction, plan yearly curriculum and weekly lessons, identify children with special needs, communicate with parents, and evaluate the program's effectiveness.

Inappropriate Practice: Children are evaluated on the basis of fitness test scores or on a single physical skill test. For example, children receive a grade in physical education based on their scores on a standardized fitness test or on the number of times they can continuously jump rope.

Component: Regular involvement for every child

Appropriate Practice: Children participate in their regularly scheduled physical education class because it is recognized as an important part of their overall education.

Inappropriate Practice: Children are removed from physical education classes to participate in classroom activities and/or as a punishment for not completing assignments, or for misbehavior in the classroom.

Component: Active participation for every child

Appropriate Practice: All children are involved in activities that allow them to remain continuously active. Classes are designed to meet a child's need for active participation in all learning experiences.

Inappropriate Practice: Activity time is limited because children are waiting in lines for a turn in relay races, to be chosen for a team, or because of limited

equipment or playing games such as Duck, Duck, Goose. Children are organized into large groups where getting a turn is based on individual competitiveness or aggressive behavior. Children are eliminated with no chance to reenter the activity, or they must sit for long periods of time. For example, activities such as musical chairs, dodge ball and elimination tag provide limited opportunities for many children, especially the slower, less agile ones who actually need the activity the most.

Component: Dance/Rhythmical experiences

Appropriate Practice: The physical education curriculum includes a variety of rhythmical, expressive, and dance experiences designed with the physical, cultural, emotional, and social abilities of the children in mind.

Inappropriate Practice: The physical education curriculum includes no rhythmical, expressive, or cultural dance experiences for children. Folk and square dances (designed for adults are taught too early or to the exclusion of other dance forms in the curriculum or are not modified to meet the developmental needs of the children.

Component: Gymnastics

Appropriate Practice: Children are encouraged to sequentially develop skills appropriate to their ability and confidence levels in non-competitive situations centering around the broad skill areas of balancing, rolling, jumping and landing, and weight transfer. Children are able to practice on apparatus designed for their confidence and skill level, and can design sequences which allow for success at their personal skill level.

Inappropriate Practice: All students are expected to perform the same pre-determined stunts and routines on and off apparatus, regardless of their skill level, body composition, and level of confidence. Routines are competitive, are the sole basis for a grade, and/or must be performed solo while the remainder of the class sits and watches.

Component: Games

Appropriate Practice: Games are selected, designed, sequenced, and modified by teachers and/or children to maximize the learning and enjoyment of children.

Inappropriate Practice: Games are taught with no obvious purpose or goal, other than to keep children "busy, happy, and good."

Component: Rules governing game play

Appropriate Practice: Teachers and/or children modify official rules, regulations, equipment and playing space of adult sports to match the varying abilities of the children.

Inappropriate Practice: Official, adult rules of team sports govern the activities in physical education classes, resulting in low rates of success and lack of enjoyment for many children.

Component: Forming teams

Appropriate Practice: Teams are formed in ways that preserve the dignity and self-respect of every child. For example, a teacher privately forms teams by using knowledge of children's skill abilities or the children form teams cooperatively or randomly.

Inappropriate Practice: Teams are formed by "captains" publicly selecting one child at a time, thereby exposing the lower-skilled children to peer ridicule. Teams are formed by pitting "boys against the girls," thereby emphasizing gender differences rather than cooperation and working together.

Component: Gender directed activities

Appropriate Practice: Girls and boys have equal access to individual, partner, small group, and team activities. Both girls and boys are equally encouraged, supported and socialized towards successful achievement in all realms of physical activities. Statements by physical education teachers support leadership opportunities and provide positive reinforcement in a variety of activities that may be considered gender-neutral.

Inappropriate Practice: Girls are encouraged to participate in activities that stress traditionally feminine roles, whereas boys are encouraged to participate in more aggressive activities. Boys are more often provided with leadership roles in physical education class. Statements by physical education teachers reinforce traditional socialization patterns that provide for greater and more aggressive participation by boys and lesser and more passive participation by girls.

Component: Number of children on a team

Appropriate Practice: Children participate in team games (e.g. 2-3 per team), that allow for numerous practice opportunities while also allowing them to learn about the various aspects of the game being taught.

Inappropriate Practice: Children participate in full sided games (e.g., the class of 30 is split into two teams of 15 and these two teams play each other) thereby leading to few practice opportunities.

Component: Competition

Appropriate Practice: Activities emphasize self-improvement, participation, and cooperation instead of winning and losing. Teachers are aware of the nature of competition and do not require higher levels of competition from children before they are ready. For example, children are allowed to choose between a game in which score is kept and one that is just for practice.

Inappropriate Practice: Children are required to participate in activities that label children as "winners" and "losers." Children are required to participate in activities that compare one child's or team's performance against others (e.g., a race in which the winning child or team is clearly identified).

Component: Success rate

Appropriate Practice: Children are given the opportunity to practice skills at high rates of success adjusted for their individual skill levels.

Appropriate Practice: Children are asked to perform activities that are too easy or too hard, causing frustration, boredom, and/or misbehavior. All children are expected to perform to the same standards with no allowance for individual abilities and interests.

Component: Class size

Appropriate Practice: Physical education classes contain the same number of children as the classrooms (e.g., 25 children per class).

Inappropriate Practice: Children participate in a physical education class that includes more children than the classroom. (For example, two or more classrooms are placed with one certified teacher and one or more teacher aides.)

Component: Days per week/length of class time

Appropriate Practice: Children are given the opportunity to participate daily in scheduled, instructional physical education throughout the year, exclusive of recess. Length of class is appropriate for the developmental level of the children.

Inappropriate Practice: Children do not receive daily, instructional physical education. Children's age and maturational levels are not taken into account when physical education schedules are developed.

Component: Facilities

Appropriate Practice: Children are provided an environment in which they have adequate space to move freely and safely. Both inside and outside areas are provided so that classes need not be canceled, or movement severely limited, because of inclement weather.

Inappropriate Practice: Physical education classes are regularly held in a school hallway or in a classroom thereby restricting opportunities to move freely and without obstructions.

Component: Equipment

Appropriate Practice: Enough equipment is available so that each child benefits from maximum participation. For example, every child in a class would have a ball. Equipment is matched to the size, confidence and skill level of the children so that they are motivated to actively participate in physical education classes.

Inappropriate Practice: An insufficient amount of equipment is available for the number of children in a class, (e.g., one ball for every four children). Regulation or "adult size" equipment is used which may inhibit skill development, injure, and/or intimidate the children.

Component: PE and recess

Appropriate Practice: Physical education classes are planned and organized to provide children with opportunities to acquire the physical, emotional, cognitive, and social benefits of physical education.

Inappropriate Practice: "Free-play," or recess, is used as a **substitute** for daily, organized physical education lessons. Free play, in this case, is characterized by a lack of goals, organization, planning and instruction.

Component: Field days

Appropriate Practice: The field day, if offered, is designed so that every child is a full participant and derives a feeling of satisfaction and joy from a festival of physical activity. Opportunities are provided for children to voluntarily choose from a variety of activities that are intended purely for enjoyment.

Inappropriate Practice: Field days, if offered, are designed so that there is intense team, group, or individual competition with winners and losers clearly identified. One or two children are picked to represent an entire class, thereby reducing others to the role of spectator.

COPEC Project Committee:

George Graham, Coordinator
Virginia Tech University

Rosie Castenada
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Human Kinetics Publishers

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University of Wisconsin-Madison

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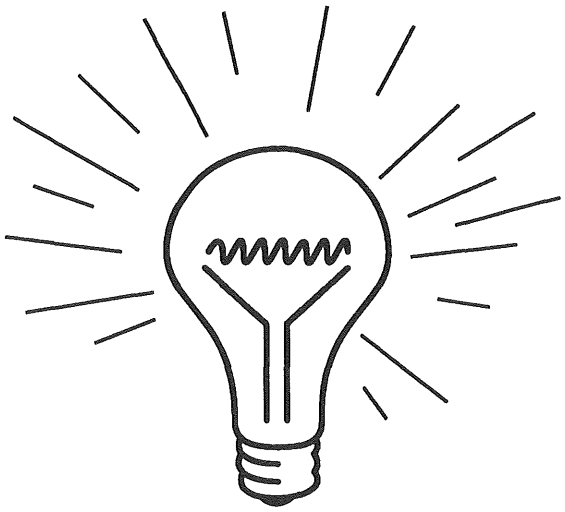
Virginia Tech University

For further information contact NASPE at 1900 Association Dr., Reston, VA 22091



Part VII

Frequently Asked Questions

Contents of Part VII

Questions & Answers

Iowa Physical Education Legal Mandates

Q **Is physical education required at the elementary level in Iowa?**

Yes. The following areas shall be taught in grades one through six: English-language arts, social studies, mathematics, science, health, human growth and development, physical education, traffic safety, music, and visual art. *Section 256.11, Iowa Code and 1994 School Rules of Iowa, Chapter 12.5(3).*

Q **Is physical education required at the junior high level in Iowa?**

Yes. The following shall be taught in grades seven and eight: English-language arts, social studies, mathematics, science, health, human growth and development, physical education, music, visual art, family and consumer education, career education and technology education. *Section 256.11, Iowa Code and 1994 School Rules of Iowa, Chapter 12.5(4).*

Q **Is physical education required at the high school level in Iowa?**

Yes. The following shall be offered and taught as the minimum program: English-language arts, six units; social studies, five units; mathematics, six units as specified in subrule 12.5(5)"c"; health, one unit; physical education, one unit; fine arts, three units; foreign language, four units;. . . . *Section 256.11, Iowa Code and 1994 School Rules of Iowa, Chapter 12.5(4).*

Q **Is there a mandated number of minutes per week required for elementary physical education?**

No, however the state average is approximately 60 minutes over two periods.

Q **Is there a mandated number of minutes per week required for junior high physical education?**

No, however the state average is approximately 90 minutes over two periods.

Q **The school rules state that one unit of physical education must be taught at the high school level. What is the definition of a "unit"?**

In grades 9-12 a unit is a course or equivalent related components or partial units taught throughout the academic year as defined in subrule 12.5(18). *1994 School Rules of Iowa, Chapter 12.5(5).*

Unit: A unit is a course which meets one of the following criteria: It is taught for at least 200 minutes per week for 36 weeks; it is taught for the equivalent of 120 hours of instruction; or it is an equated requirement as a part of an innovative program filed in subrule 12.1(6). A fractional unit may be calculated in a manner consistent with this standard. Multiple section courses taught at the same time in a single classroom situation by one teacher do not meet this definition for the assignment of a unit of credit with the exception that the third and fourth years of a foreign language may be taught at the same time by one teacher in a single classroom situation each yielding a unit of credit. *1994 School Rules of Iowa, Chapter 12.5(18).*

Q **How much student time is required for high school physical education?**

All physically able students shall be required to participate in the program for a minimum of one-eighth unit during each semester that they are enrolled except otherwise provided in this paragraph. *Section 256.11, Iowa Code and 1994 School Rules of Iowa, Chapter 12.5(5)"f".*

Q **How much time is "one-eighth of a unit"?**

One-eighth of a unit is equivalent to 50 minutes per week per semester.

Q **Can a school district "double up" on physical education one semester, and not offer it the other semester?**

No. The law specifies that students must be enrolled in physical education during each semester that they are enrolled . . . .

Iowa Physical Education Curricular Mandates

Q **What curriculum standards does Iowa require for high school physical education?**

Physical education (one unit). Physical education shall include the physical fitness activities that increase cardiovascular endurance, muscular strength and flexibility; sports and games; tumbling and gymnastics; rhythms and dance; water safety; leisure and lifetime activities. *1994 School Rules of Iowa, Chapter 12.5(5)"f".*

Q **Do all these activities need to be taught every year?**

No. These activities must all be addressed throughout the high school experience.

Q **Do I have to have a pool to teach water safety?**

No. If a school district has a pool available, they may utilize it to meet this requirement; however, water safety refers to basic water safety concepts that can be addressed through many dry land activities. Good sources for dry land activities include the DNR "Fish Iowa" project, the DNR Project Wild Aquatic program, or Red Cross Water Safety curriculum.

Q **If you do have a pool, and are teaching swimming to satisfy this requirement, what certification is required for the instructor?**

The Board of Education Examiners does not have certification requirements for teaching a swimming unit; however, certification rules for teaching swimming are developed by the Iowa Department of Public Health in a document entitled "Swimming Pool Rules". Each structured swimming program such as lap swim, competitive swimming, water exercise classes, swim lessons, and physical education classes shall be supervised by an instructor provided that they are, a lifeguard, or have current certification from the American Red Cross in Emergency Water Safety, standard first aide, and CPR or the equivalent as approved by the Department, or have a lifeguard on duty. More information can be attained from Bill Permar, at the Iowa Department of Public Health at 515-281-3032. *Iowa Swimming Pool Rules; 15.4(5)"d"(6).*

Q **Do I have to include physical fitness testing within my curriculum?**

No. That is a local choice.

Iowa Physical Education Exemption Allowances

Q **What types of exemptions are allowed under the school rules of Iowa for Physical Education?**

Religious Exemption - Physical education and health exemption. A pupil shall not be required to enroll in either physical education or health courses if the pupils parent or guardian files a written statement with the school principal that the course conflict with the pupil's religious beliefs.

Medical Exemption -

Athletic and Academic Exemptions - A twelfth grade student may be excused from the physical education requirement by the principal of the school in which the student is enrolled under one of the following circumstances:

(1) The student is enrolled in a cooperative, work study, or other educational program authorized by the school which requires the student's absence from the school's premises during the school day.

(2) The student is enrolled in an academic course not otherwise available.

(3) An organized or supervised athletic program which requires at least as much time participation per week as one-eighth unit of physical education.

Students in grades nine through eleven may be excused from the physical education requirement to enroll in academic courses not otherwise available to the student if the board of directors of the school district in which the school is located, or the authorities in charge of the school, if the school is a nonpublic school, determine that the students from the school may be permitted to be excused from the physical education requirement.

A student may be excused by the principal of the school in which the student is enrolled, in consultation with the student's counselor, for up to one semester, trimester, or the equivalent of a semester or a trimester, per year if the parent or guardian of the student requests in writing that the student be excused from the physical education requirement. The student seeking to be excused from the physical education requirement, must, at some time period during which the excuse is sought, be a participant in an organized athletic program which requires at least as much time of participation per week as one-eighth unit of physical education.

The student's parent or guardian must request the excuse in writing. The principal shall inform the superintendent that the student is excused. *Section 256.11, Iowa Code and 1994 School Rules of Iowa, Chapter 12.5(5)"f".*

Q **Can a school district question the student's utilization of a religious exemption?**

No. Religious beliefs are a personal choice and not to be questioned.

Q **Can a school district question the student's utilization of a medical exemption is signed by a physician?**

No. Not if the medical exemption is signed by a physician.

Q **Do school districts have to allow for religious or medical exemptions?**

Yes. This is required by *School Rules of Iowa, Chapter 12.5(6).*

Q **Do school districts have to allow for athletic or academic exemptions?**

No. That is a local district decision.

Q **Define "academic course not otherwise available".**

An academic course is a course in which credit is offered. "Not otherwise available" means the course must be in direct conflict with physical education and cannot be taken at any other time during the day.

Q **Is there a semester limit for seniors taking academic exemptions?**

No.

Q **Is there a semester limit for seniors taking athletic exemptions?**

No.

Q **Who makes the final determination if a senior academic or athletic exemption is available?**

The local administrator, in consultation with the guidance counselor. The request must be in writing from the student's parent or guardian.

Q **Is there a semester limit for students in grades 9-11 for academic exemptions from physical education?**

No.

Q **Who determines if academic exemptions are available for students in grades 9-11?**

The Board of Education of the school district.

Q **Is there a semester limit for students in grades 9-11 taking athletic exemptions?**

Yes. Athletic exemptions are available for up to one semester, trimester, or the equivalent of a semester or trimester each year.

Q **Can a student exempt out of second and third quarters if they play basketball or they wrestle?**

Yes. It is a local school district choice if the students are out the entire semester, or return to physical education at the conclusion of the season.

Q **When do athletic exemptions begin and end each semester for students?**

Athletic exemptions may be utilized only during the semester that they are actively participating in an organized athletic program. It is a local school district choice if the students are out the entire semester, or return to physical education at the conclusion of the season.

Q **If a student utilizes an academic or an athletic exemption and consequently drops the course, or quits participation in the athletic season, or in the case of spring athletics, exempts out in January and does not go out for the spring activity in March, what are the consequences for the student?**

This is a local school district policy decision. There must be a plan to deal with this situation.

Q **Who makes the final determination if athletic exemptions are available for students?**

The local administrator, in consultation with the guidance counselor. The request must be in writing from the student's parent or guardian.

Q **Theoretically, may a student in Iowa exempt from physical education every semester using academic exemptions?**

Yes. If the school board of the district allows academic exemptions for students in grades 9-11 and the administrator does in grade 12.

Q **Theoretically, may a student in Iowa exempt from physical education every semester using a combination of athletic and academic exemptions?**

Yes. If the local administrator, in consultation with the counselor and having written permission from the student's parent or guardian, allow athletic exemptions, and if the school board of the district allows academic

exemptions for students in grades 9-11 and the administrator does in grade 12.

Iowa Physical Education Teaching Endorsements

Q **What are the minimum content requirements for teaching endorsements in physical education teacher endorsement required in Iowa for instruction in elementary physical education.**

14.19 Requirements for original teaching subject area endorsements

14.19(1) Baccalaureate degree from a regionally accredited institution.
14.19(2) Completion of an approved human relation component.
14.19(3) Professional education core: Completed coursework or evidence in competence in:

a. Structure of American education
b. Philosophies of education
c. Professional ethics and legal responsibilities
d. Psychology of teaching
e. Audiovisual/media/computer technology
f. Evaluation techniques
g. Human growth and development related to the grade level endorsement required
h. Exceptional learner (the program must include preparation that contributes to the education of the handicapped and the gifted and talented)
i. Classroom management with an emphasis related to the grade level endorsement desired
j. Instructional planning and strategies related to the grade level endorsement desired
k. Curriculum organization, development with and emphasis on the subject and grade level desired
l. Completion of prestudent based teaching experience
m. Methods of teaching with and emphasis on the subject and grade level endorsement required
n. Student teaching in the subject area and grade level endorsement desired

14.19(4) Content

a. Completion of a thirty-semester-hour teaching major which must minimally include the requirements for at least one of the endorsement area listed in rule 14.18 or
b. Successful completion of a national competency test in the major subject area with a desired minimum score as established by the board of educational examiners, or
c. Successful completion of a competence test in the subject area desired in a state which accepts this completion as being sufficient for meeting the licensure requirements in that state.

14.21 Physical Education

a. K-6 Completion of twenty-four semester hours in physical education to include course work in human anatomy, human physiology, movement education, adaptive physical education, physical education in the elementary school, human growth and development of children related to physical education, and first aide and emergency care.
b. 7-12 Completion of twenty-four hours in physical education to include course work in human anatomy, kinesiology, human physiology, human growth and development related to maturational and administration of physical education, assessment processes in physical education, and first aide and emergency care.

Q **Is physical education teacher certification or endorsement required in Iowa for instruction in elementary physical education?**

Yes

Q **Is physical education teacher certification or endorsement required in Iowa for instruction in junior high physical education?**

Yes

Q **Is physical education teacher certification or endorsement required in Iowa for instruction in high school physical education?**

Yes

Coeducational Physical Education

Q **Are all physical education classes required to be coeducational?**

Yes. A recipient shall not provide any course or otherwise carry out any of its educational program or activity separately on the basis of sex, or require or refuse participation therein by any of its students on such basis including health, physical education, industrial arts, business, vocational, technical, home economics, music, and adult education classes.

With respect to classes and activities in physical education at the elementary level, the recipient shall comply fully with this section as expeditiously as possible but in no event later than one year from the effective date of this regulation. With respect to physical education classes and activities at the secondary and post secondary levels, the recipient shall comply fully with this section as expeditiously as possible but no later than three years from the effective date of this regulation. *Title IX, Educational Amendment in 1972: 106.34*

Q **Is ability grouping of physical education students prohibited?**

No. (b) this section does not prohibit grouping of students in physical education classes and activities by ability as assessed by objective standards of individual performance developed and applied to without regard to sex. *Title IX, Educational Amendment in 1972: 106.34*

Q **Is separation by gender prohibited during specific contact activities?**

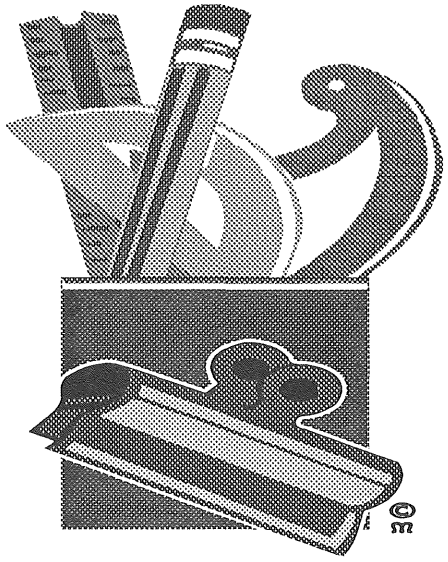
No. (c) This section does not prohibit separation of students by sex within physical education classes or activities during participation in wrestling, boxing, rugby, ice hockey, football, basketball, and other sports the purpose or major activity of which involves bodily contact. *Title IX, Educational Amendment in 1972: 106.34*

However, separation may only occur during the actual contact play; not during warm-up, lecture, or non-contact drill work.

Q **Is student choice of physical education activities appropriate under Title IX?**

Yes. However, if choice leads to an inequity in gender representation, then either recruitment of the underrepresented gender must occur or choice is to be eliminated.

(d) where use of a single standard of measuring skill or progress in a physical education class has an adverse effect on members of one sex, the recipient shall use appropriate standards which do not have such an effect. *Title IX, Educational Amendment in 1972: 106.34*



Part VIII

Resource Guide

Contents of Part VIII

Resources

The following is a list of resources related to and supporting sport, health education, and physical education. In addition, governmental officials and agencies responsible for public policy affecting these areas are also listed. The resources listed are by no means all of the resouces available, nor does inclusion in this section of *SHAPE of IOWA* constitute an endorsement of the products or services provided.

Iowa Sport, Health, and Education Non-profit Organizations

Iowa Assoc. for Health, Physical Education, Recreation and Dance (IAHPERD)
School of HPELS
University of Northern Iowa
Cedar Falls, IA 50614
Larry Hensley, Exec. Director
(319) 273-6442

Iowa Governor's Council on Physical Fitness & Sports
% Tim Lane
1304 42nd Street
Des Moines, IA 50311
Tim Lane, Chair
(515) 281-7833

American Heart Association, Iowa Affiliate
1111 Ninth St., Suite 280
Des Moines, IA 50314
Dave Trzeciak, Development Director
(515) 244-3278

Iowa Department of Education
Grimes Office Building
Des Moines, IA 50319
Mary Thissen-Milder, HPER Consultant
(515) 281-4804

Iowa Department of Public Health
Lucas Office Building
Des Moines, IA 50319
Tim Lane, Physical Activity Consultant
(515) 281-7833

Iowa Assoc. for Supervision and Curriculum Development
P. O. Box 883
Ames, IA 50010
Tom Budnik, Exec. Director
(515) 270-9030

Iowa Assoc. for The Education of Young Children
3706 Cedar Heights Dr.
Cedar Falls, IA 50613
Linda Christensen, President
(319) 232-4529

Iowa Association of School Boards
700 Second Avenue, Suite 100
Des Moines, IA 50309
T. E. Davidson, Exec. Director
(515) 288-1991

Iowa Coalition for Comprehensive School Health
Iowa Medical Society
1001 Grand Avenue
West Des Moines, IA 50265
Sandy Nichols
(515) 223-1401

Iowa Girls' High School Athletic Union
2900 Grand Avenue
Des Moines, IA 50312
E. Wayne Cooley, Exec. Secretary
(515) 288-9741

Iowa High School Athletic Association
P. O. Box 10
Boone, IA 50036
Bernie Saggau, Exec. Director
(515) 432-2011

Iowa Park and Recreation Association
2118 S. Riverside Drive
Iowa City, IA 52246
Pat Flemming, Exec. Director
(319) 339-7288

Iowa State Education Association
4025 Tonawanda Dr.
Des Moines, IA 50312
Fred Comer, Exec. Director
(515) 279-9711

School Administrators of Iowa
4500 Westown Parkway, Suite 140
P. O. Box 65578
West Des Moines, IA 50265
(515) 224-3370

Iowa PTA
610 Merle Hay Tower
Des Moines, IA 50310
Christine Higgs, Office Mgr.
(515) 276-1019

Central Iowa Wellness Council
6000 Westown Parkway, Suite 350E
West Des Moines, IA 50266
Kerry Juhl, Exec. Director
(515) 223-2910

Iowa AAU
3021 38th St.
Des Moines, IA 50310
Robert Utter, Chairman
(515) 255-6966

Iowa Games
P. O. Box 2350
Ames, IA 50010
Jim Hanifan, Exec. Director
(515) 292-3251

Iowa Senior Games
713 8th St.
West Des Moines, IA 50265
(515) 277-6026

Iowa Law Makers

Iowa Senators:

Charles Grassley
135 Hart Senate Office Building
Washington, DC 20510
(202) 224-3744

Tom Harkin
531 Hart Senate Office Building
Washington, DC 20510
(202) 224-3254

Iowa Representatives:

Tom Latham
416 Cannon House Office Building
Washington, DC 20515
(202) 225-5476

Jim Leach
2186 Rayburn House Office Building
Washington, DC 20515
(202) 225-6576

Jim Lightfoot
2444 Rayburn House Office Building
Washington, DC 20515
(202) 225-3806

Jim Nussle
308 Cannon House Office Building
Washington, DC 20515
(202) 225-2911

Greg Ganske
1108 Longworth House Office Building
Washington, DC 20515
(202) 225-4426

Governor Terry Branstad
State Capitol
Des Moines, IA 50319
(515) 281-3282

To write your legislators address your letters to:
The Honorable (House)
Senator (or State Representative)
State Capitol
Des Moines, IA 50319

To telephone your legislators:
Senate (515) 281- 3371
House (515) 281-3221

To obtain a copy of a bill or amendment write or call:
Public Information Office
State Capitol
Des Moines, IA 50319
(515) 281-5129

Iowa Businesses Supporting Sport, Health, and Physical Education

American Athletic, Inc.
200 American Avenue
Jefferson, IA 50129
(515) 386-3125

Eddie Bowers Publishers
2600 Jackson St.
Dubuque, IA 52001
(319) 588-2411

Brown & Benchmark Publishing
2460 Kerper Blvd.
Dubuque, IA 52001
(800) 338-5371

Kendall Hunt, Publishers
4050 Westmark Dr. Box 1840
Dubuque, IA 52004
(319) 589-1000

Heartland Fitness, Inc.
2816 Apollo St.
Cedar Falls, IA 50613
Lynn Allen, President
(319) 277-5961

National Organizations and Businesses

AAHPERD
1900 Association Dr.
Reston, VA 22091
Exec. Vice-President - Gil Brown
(703) 476-3404
Membership - Donna Loy
(703) 476-3424
Constituent Services - Suzie Crouch
(703) 476-3455
AAHE - Becky Smith, Exec. Director
(703) 476-3441
AAALF - Jan Seaman, Exec. Director
(703) 476-3431
AALR - Chris Smith, Exec. Director
(703) 476-3471
NDA - Rebecca Hutton, Exec. Director
(703) 476-3421
NAGWS - vacant, Exec. Director
(703) 476-3453
NASPE - Judy Young, Exec. Director
(703) 476-3410

Aerobics and Fitness Assoc. of American
15250 Ventura Blvd. Suite 200
Sherman Oaks, CA 91403
(818) 905-0040

American Cancer Society
1599 Clifton Rd. NE
Atlanta, GA 30329
(800) 227-2345

American College of Sports Medicine
P. O. Box 1440
Indianapolis, IN 46206
Jim Whitehead, Exec. Director
(317) 637-9200

American Lung Association
1740 Broadway
New York, NY 11019
(212) 315-8700

American Heart Association
7272 Greenville Ave.
Dallas, TX 75231
(214) 706-1165

American School Health Association
P. O. Box 708
Kent, OH 44240
(216) 678-1601

Association for Supervision and Curriculum Development
1250 N. Pitt Street
Alexandria, VA 22314
(703) 549-9110

Council for Exceptional Children
1920 Association Dr.
Reston, VA 22091
(703) 620-3660

Crysler Fund - AAU Physical Fitness Program
Populars Building
400 E. 7th Street
Bloomington, IN 47405
(800) 258-5497

Every Child A Winner
Education Excellence, Inc.
P. O. Box 141
Ocilla, GA 31774
Martha Owens
(912) 468-7098

Fitnessgram
Cooper Institute for Aerobics Research
12330 Preston Road
Dallas, TX 75230
Marilu Meredith, Program Director
(800) 635-7050

Flaghouse, Inc.
150 North MacQuesten Parkway
Mt. Vernon, NY 10550
(800) 793-7900

GOPHER Sport
2929 West Park Drive
Owatonna, MN 55060
(800) 533-0446

Hershey's Nat'l Track and Field Youth Program
Hershey Foods Corporation
100 Crystal A Drive
Hershey, PA 17033
Jim Johnson, National Youth Director
(717) 534-7636

Human Kinetics Publishers
P. O. Box 5076
Champaign, IL 61825
(217) 351-5076

McDonald's Educational Resource Center
P. O. Box 8002
St. Charles, IL 60174
(800) 627-7646

National Association of Elementary School Principals
1615 Duke Street
Alexandria, VA 22314
(703) 684-3345

National Association of Secondary School Principals
1904 Association Dr.
Reston, VA 22091
(703) 860-0200

National Education Association
1201 16th Street NW
Washington, DC 20036
(202) 822-7764

National Middle School Association
4807 Evanswood Drive, Suite 101
Columbus, OH 43229
(614) 848-8211

National Youth Sport Coaches Association
2611 Okeechobee Road
West Palm Beach, FL 33409
Mike Pfahl, Exec. Director
(305) 684-1141

President's Council on Physical Fitness and Sports
701 Pennsylvania Avenue NW - Suite 250
Washington, DC 20004
Sandy Perlmutter, Exec. Director
(202) 272-3427

President's Challenge Fitness Test
Populars Building
400 E. 7th Street
Bloomington, IN 47405
(800) 258-8146

Sportime
One Sportime Way
Atlanta, GA 30340
(404) 449-5700

Sporting Goods Manufactors Association
200 Castlewood Dr.
North Palm Beach, FL 33408
(407) 842-4100

United States Olympic Committee
Department of Education
1750 E. Boulder St.
Colorado Springs, CO 80909
Tom Crawford, Director of Education
(719) 632-5551

Women's Sport Foundation
Eisenhower Park
East Meadow, NY 11554
Donna Lopiano, Exec. Director
(800) 227-3988

1995 Legislative Directory

SENATORS

LEG DIST	NAME/ADDRESS	PHONE	PARTY
1	**Steven D Hansen** 3401 Military Road Sioux City IA 51103	712-258-8094	D
2	**Brad C Banks** 18686 Echo Road Westfield IA 51062	712-568-2494	R
3	**Wilmer Rensink** 3828 Hickory Ave Sioux Center IA 51250	712-722-4010	R
4	**John P Kibbie** 4285 440th Ave Emmetsburg IA 50536	712-852-4140	D
5	**Mary Lou Freeman** 311 West Lake Shore Dr Storm Lake IA 50588	712-732-3781	R
6	**Wayne D Bennett** 402 Zobel Ln Ida Grove IA 51445	712-364-4117	R
7	**Rod Halvorson** 1030 N 7th St Fort Dodge IA 50501	515-576-7920	D
8	**Berl E Priebe** 2106 100th Ave Algona IA 50511	515-295-7058	D
9	**Stewart Iverson Jr** 3020 Dows-Williams Rd Dows IA 50071	515-852-3350	R
10	**Merlin E Bartz** RR 1 Box 17 Grafton IA 50440	515-748-2724	R
11	**John W Jensen** 1331 120th St Plainfield IA 50666	319-276-4445	R
12	**Donald Redfern** 315 Clay St Cedar Falls IA 50613	319-277-6830	R
13	**Jim Lind** 720 Prospect Blvd Waterloo IA 50701	319-234-1817	R
14	**Larry Murphy** 531 6th St NW Oelwein IA 50662	319-283-4255	D
15	**Allen Borlaug** PO Box 333 Protivin IA 52163	319-569-8687	R
16	**Lyle E Zieman** PO Box 368 Postville IA 52162	319-864-3909	R
17	**Tom Flynn** 21367 Girl Scout Rd Epworth IA 52045	319-557-7877	D
18	**Michael W Connolly** 3458 Daniels St Dubuque IA 52002	319-556-6217	D
19	**Sheldon Rittmer** 3539 230th St DeWitt IA 52742	319-659-3486	R
20	**Jack Rife** 804 5th St, Apt 5 Durant IA 52747	319-785-6502	R
21	**Maggie Tinsman** 3541 E Kimberly Road Davenport IA 52807	319-332-5522	R
22	**Patrick J Deluhery** 11839 100th Ave Davenport IA 52804	319-381-1477	D
23	**Mary Neuhauser** 3485 G Richard Cir Iowa City IA 52440	319-338-6070	D
24	**Richard F Drake** 420 Parkington Dr Muscatine IA 52761	319-263-2573	R
25	**Robert Dvorsky** 515 6th Ave Coralville IA 52241	319-351-0988	D
26	**Mary A Lundby** 1240 14th St Marion IA 52302	319-377-6673	R
27	**Wally E Horn** 101 Stony Point Rd SW Cedar Rapids IA 52404	319-366-4949	D
28	**Andy Mc Kean** 509 S Oak Anamosa IA 52205	319-462-4485	R
29	**Dennis H Black** 5239 E 156th St Grinnell IA 50112	515-527-3172	D
30	**Emil J Husak** 2108 Hwy E 43 Toledo IA 52342	515-484-2158	D
31	**Johnie Hammond** 3431 Ross Rd Ames IA 50014	515-292-2275	D
32	**Randal John Giannetto** 123 S 10th St Marshalltown IA 50158	515-753-6106	D
33	**William D Palmer** 460 Hawthorn Cir Pleasant Hill IA 50317	515-265-3437	D
34	**Tony Bisignano** 2618 E Leach Des Moines IA 50320	515-244-9206	D
35	**Dick L Dearden** 3113 Kinsey Des Moines IA 50317	515-262-1203	D
36	**Elaine Szymoniak** 2116 44th St Des Moines IA 50310	515-279-3115	D
37	**Mary E Kramer** 1209 Ashworth Rd West Des Moines IA 50265	515-224-7613	R
38	**O Gene Maddox** 9759 Elmcrest Dr Clive IA 50325	515-225-1390	R
39	**Joann Douglas** RR 1 Box 5 Adair IA 50002	515-742-5558	R
40	**Albert G Sorensen** 1004 Hancock Dr Boone IA 50036	515-432-4089	D
41	**Nancy Boettger** 926 Ironwood Rd Harlan IA 51537	712-744-3290	R
42	**Michael E Gronstal** 220 Bennett Ave Council Bluffs IA 51503	712-328-2808	D
43	**Derryl McLaren** RR 1 Box 220 Farragut IA 51639	712-385-8279	R
44	**Leonard L Boswell** RR 1 Box 130 Davis City IA 50065	515-442-3895	D
45	**Bill Fink** 379 S-23 Hwy Carlisle IA 50047	515-989-4133	D
46	**Patty Judge** R R 3, Box 207-10 Albia IA 52531	515-932-7098	D
47	**Don E Gettings** 513 Lynwood Cir Ottumwa IA 52501	515-684-4254	D
48	**H Kay Hedge** RR 1 Box 39 Fremont IA 52561	515-933-4723	R
49	**Tom Vilsack** 402 N Main Mt Pleasant IA 52641	319-385-8118	D
50	**Eugene S Fraise** 1699 280th Ave Ft Madison IA 52627	319-528-6176	D

REPRESENTATIVES

LEG DIST	NAME/ADDRESS	PHONE	PARTY
1	**Ronald W Nutt** 3711 Cheyenne Blvd Sioux City IA 51104	712-239-3428	R
2	**Steven H Warnstadt** 4628 Central St Sioux City IA 51108	712-239-4098	D
3	**Christopher C Rants** 2740 S Glass St Sioux City IA 51106	712-274-8874	R
4	**Ralph Klemme** RR 4 Box 107 Le Mars IA 51031	712-533-6364	R
5	**Kenneth Veenstra** 216 Arizona Ave SW Orange City IA 51041	712-737-2331	R
6	**Richard Vande Hoef** 1833 100th Ave Harris IA 51345	712-349-2312	R
7	**John M Greig** 3971 182nd St Estherville IA 51334	712-362-3330	R
8	**Bill Salton** RR 2 Box 45 Ruthven IA 51358	712-426-4031	R
9	**Dan Huseman** 6144 Y Ave Aurelia IA 51005	712-434-5880	R
10	**Russell Eddie** 1101 Pierce Dr Storm Lake IA 50588	712-732-4834	R
11	**James A Meyer** 1854 280th St Odebolt IA 51458	712-668-4184	R
12	**Don Gries** 412 Oak Ave Charter Oak IA 51439	712-678-3698	R
13	**Michael Cormack** 245 Ave N W Ft Dodge IA 50501	515-955-3747	R
14	**Norman Mundie** RR 4 Box 78 Ft Dodge IA 50501	515-972-4283	D
15	**Dolores M Mertz** 1002 70th Ave Ottosen IA 50570	515-887-2952	D
16	**Clifford O Branstad** 43772 140th Ave Thompson IA 50478	515-584-2854	R
17	**Russell W Teig** 3581 Little Wall Lake Rd Jewell IA 50130	515-827-5258	R
18	**Steve Sukup** 2258 240th St Dougherty IA 50433	515-794-3478	R
19	**Gary Blodgett** 1050 Meadow Lake Dr Mason City IA 50401	515-424-5156	R
20	**Dennis May** RR 1 Box 165 Kensett IA 50448	515-748-2373	D
21	**Robert Renken** RR 1 Aplington IA 50604	319-347-2766	R
22	**Bob Brunkhorst** 419 3rd Ave SW Waverly IA 50677	319-352-0552	R
23	**William G Witt** PO Box 506 Cedar Falls IA 50613	319-266-8831	D
24	**Donald E Hanson** 3511 Monticello Ave Waterloo IA 50701	319-233-4593	R
25	**Don Shoultz** 295 Kenilworth Rd Waterloo IA 50701	319-235-1920	D
26	**Patricia Harper** 3336 Santa Maria Dr Waterloo IA 50702	319-233-2106	D
27	**Joseph M Kremer** 1217 250th St Jesup IA 50648	319-827-6921	R
28	**Charles Hurley** 12227 G Ave Fayette IA 52142	319-425-3633	R
29	**Deo Koenigs** RR 2 Box 36A Osage IA 50461	515-983-4435	D
30	**Keith W Weigel** PO Box 189 New Hampton IA 50659	515-394-3919	D
31	**Chuck Gipp** 1517 185th St Decorah IA 52101	319-382-5419	R
32	**Roger A Halvorson** PO Box 627 Monona IA 52159	319-539-2221	R
33	**Joe Ertl** 507 13th Ave SE Dyersville IA 52040	319-875-8579	R
34	**Jerry Cornelius** 31578 150th St Bellevue IA 52031	319-672-3463	R
35	**Pam Jochum** 2368 Jackson Dubuque IA 52001	319-556-6530	D
36	**Pat Murphy** 1770 Hale St Dubuque IA 52001	319-582-5922	D
37	**Clyde E Bradley** 835 Blackhawk Lane Camanche IA 52730	319-259-1233	R
38	**C Arthur Ollie** 413 Ruth Pl Clinton IA 52732	319-243-5477	D
39	**Dan Boddicker** 1052 195th St Tipton IA 52772	319-886-2389	R
40	**Steven E Grubbs** 5524 Appomattox Rd Davenport IA 52806	319-386-1229	R
41	**David A Millage** 3077 Willowwood Dr Bettendorf IA 52722	319-332-8723	R
42	**James Van Fossen** 2802 Middle Rd Davenport IA 52803	319-355-7776	R
43	**Mona Martin** 1504 W 29TH ST Davenport IA 52804	319-391-7350	R
44	**Neil P Harrison** 1011 S Stark St Davenport IA 52802	319-323-5760	R
45	**Minnette Doderer** 2008 Dunlap Ct Iowa City IA 52245	319-337-9282	D
46	**Mary Mascher** 1110 De Forest St Iowa City IA 52245	319-339-6859	D
47	**Barry Brauns** 2381 Blue Heron Ave Conesville IA 52739	319-725-6441	R
48	**James F Hahn** 805 W 4th St Muscatine IA 52761	319-263-1208	R
49	**Richard Myers** 9 Woodland Hgts NE Iowa City IA 52240	319-351-7794	D
50	**Lynn S Schulte** 208 3rd Ave S Mt Vernon IA 52314	319-895-6514	R
51	SPECIAL ELECTION TO BE HELD	000-000-0000	
52	**Ron J Corbett** 1517 D Ave NE Cedar Rapids IA 52402	319-365-8187	R

LEG DIST	NAME/ADDRESS	PHONE	PARTY
53	**Philip E Brammer** 3942 Sherman St NE #28 Cedar Rapids IA 52402	319-396-5670	D
54	**Richard V Running** 16 Roxbury Dr NW Cedar Rapids IA 52405	319-362-3835	D
55	**Chuck Larson** 3355 Riverpointe Cir NE Cedar Rapids IA 52411	319-393-6330	R
56	**Jerry Welter** RR 1 Box 224 Monticello IA 52310	319-465-3793	R
57	**Paul A Bell** 611 E 17th St N Newton IA 50208	515-792-9514	D
58	**Danny C Carroll** 244 400th Ave Grinnell IA 50112	515-236-7043	R
59	**Phillip Tyrrell** 222 N Mill North English IA 52316	319-664-3075	R
60	**William Brand** 3910 Hwy V18 Chelsea IA 52215	319-472-4506	D
61	**Cecelia Burnett** 1904 Douglas Ave Ames IA 50010	515-232-2516	D
62	**Bill Bernau** 2340 Knapp St Ames IA 50014	515-292-3563	D
63	**Teresa Garman** RR 2 Ames IA 50010	515-232-8650	R
64	**Beverly J Nelson** 3107 Fieldcrest Ct Marshalltown IA 50158	515-753-0690	R
65	**Jeffrey M Lamberti** 1117 NW Greenwood St Ankeny IA 50021	515-965-1067	R
66	**Larry Disney** 4909 Pine Valley Dr Pleasant Hill IA 50317	515-265-2605	R
67	**Matt Mc Coy** 1311 Porter Ave Des Moines IA 50315	515-288-2605	D
68	**Michael J Cataldo** 1608 Virginia Ave Des Moines IA 50320	515-282-4325	D
69	**John H Connors** 1316 E 22nd St Des Moines IA 50317	515-262-3345	D
70	**Ed Fallon** 1321 8th St Des Moines IA 50314	515-243-8828	D
71	**Tom Baker** 1336 Chautauqua Pkwy Des Moines IA 50314	515-283-0541	D
72	**Jack Holveck** 2007 47th St Des Moines IA 50310	515-277-5064	D
73	**Betty Grundberg** 224 Foster Dr Des Moines IA 50312	515-277-8760	R
74	**Libby Jacobs** 808 58th St West Des Moines IA 50266	515-223-1225	R
75	**Janet Metcalf** 12954 NW 29th Dr Des Moines IA 50325	515-276-8428	R
76	**Steven W Churchill** 6140 Nottingham Johnston IA 50131	515-254-9173	R
77	**David Lord** 1250 K Cir Perry IA 50220	515-465-2960	R
78	**Dwight Dinkla** 221 S 12th St Guthrie Center IA 50115	515-747-8447	R
79	**Michael J O'Brien** 1145 Montana Ln Boone IA 50036	515-432-5382	D
80	**Jim Drees** RR 2 Box 111 Manning IA 51455	712-669-3413	D
81	**Jack Drake** 52462 Juniper Rd Lewis IA 51544	712-784-3538	R
82	**Donna M Hammitt** 211 N 1st Ave Logan IA 51546	712-644-2156	R
83	**Linda Nelson** 231 Midland Dr Council Bluffs IA 51503	712-328-8837	D
84	**Brent Siegrist** 714 Grace St Council Bluffs IA 51503	712-323-1098	R
85	**Hubert Houser** RR 1 Box 143 Carson IA 51525	712-486-2597	R
86	**Dick Weidman** PO Box 483 Griswold IA 51535	712-778-2653	R
87	**Effie Lee Boggess** RR 3 Box 25 Villisca IA 50864	712-826-8239	R
88	**Horace Daggett** 400 N Bureau Creston IA 50801	515-782-4006	R
89	**Brian Coon** 540 Ninth Carlisle IA 50047	515-989-3843	R
90	**David Schrader** RR 2 Monroe IA 50170	515-259-2882	D
91	**Richard Arnold** RR 2 Box 149 Russell IA 50238	515-535-6313	R
92	**Keith A Kreiman** RR 2 Bloomfield IA 52537	515-664-2811	D
93	**Michael J Moreland** 2716 Clearview St Ottumwa IA 52501	515-684-8136	D
94	**Jerry D Main** P O Box 515 Fairfield IA 52556	515-472-9072	R
95	**Harold Van Maanen** 410 Liberty St Pella IA 50219	515-944-5394	R
96	**Sandy Greiner** 1005 Hwy 92 Keota IA 52248	515-636-2293	R
97	**Dave Heaton** 510 E Washington St Mt Pleasant IA 52641	319-385-9342	R
98	**Philip Wise** 503 Grand Ave Keokuk IA 52632	319-524-3643	D
99	**Rick Larkin** 1304 Avenue B Ft Madison IA 52627	319-372-8764	D
100	**Dennis Cohoon** Midtown Gardens #46 Burlington IA 52601	319-752-5057	D