

National Association for Sport and Physical Education an association of the American Alliance for Health, Physical Education, Recreation and Dance NASPE Sets the Standard

NASPE Scope and Sequence of Fitness Education for PreK-12 Programs

NASPE Fitness Education Project: Introduction

In May, 2006, The National Association for Sport and Physical Education (NASPE) received funding from the Centers for Disease Control and Prevention (CDC), Division of Adolescent and School Health (DASH), to improve the quality and quantity of physical education and physical activity programs across the United States. The cooperative agreement project provides professional development, technical assistance, and resources to state and local education organizations, to assist them in improving their physical education and physical activity programs.

Fitness education is a critical component of a quality physical education program based on the National Standards for Physical Education (NASPE, 2004). Though many excellent fitness education resources exist, professionals in the field have expressed the need for a resource that defines the instructional scope and sequence of fitness education concepts and behavioral skills from elementary school through college, in physical education and health courses, to ensure appropriate instructional practices at all developmental levels. Through its cooperative agreement project, NASPE addressed the need to develop the guidance necessary for physical educators to provide the most developmentally appropriate fitness information across the educational continuum.

In 2009, after a competitive process, NASPE awarded funding to a team of content experts to develop a scope and sequence publication delineating what should be taught in fitness education to students in grades K-16. After an exhaustive analysis of existing resources and standards, the research team has completed this scope and sequence document.

The National Association for Sport and Physical Education (NASPE) produces and publishes high quality consensus documents for quality physical education, physical activity and sport. Each product published by NASPE is reviewed by experts to produce the most accurate, valuable information. NASPE also posts draft documents and seeks member input on these products. We invite your feedback, and encourage you to send comments in track changes or list-format with page/paragraph identifications to <u>fzavacky@aahperd.org</u> by **December 20, 2010**.

Chapter 1 Overview/Introduction

The NASPE Fitness Education project team is bringing together the best from the literature; professionals across the country who worked on the national, individual state standards and district curriculum materials; and content and pedagogy specialists to provide one comprehensive scope & sequence for fitness education (S&SFE) for the nation. Although the term fitness is used in many ways, in this project fitness education is defined as health-related fitness (HRF) education. (See page 3 for definition used in this project.) Overall, fitness education should incorporate an updated, coherent, and professionally defendable scope and sequence of how fitness content should be organized for purposes of instruction and learning. The S&SFE for PreK-16 programs provides guidance for physical education teachers and other relevant professionals making educational judgments about quality fitness programming. The contribution of project is substantial because in addition to creating a much needed K-12 S&SFE, PreK and college benchmarks were added to the curriculum framework. This addition will further refine the appropriate content at each level of education. Hopefully, this broader vision that starts earlier and continues through post secondary education will help to effectively foster physically active and fit citizens for our society.

Why is a clearly defined scope and sequence needed?

As is widely known, there are national physical education (NASPE, 2004) and health education (NHES, 2007) standards. These national standards were used by many states to develop individual state standards. Then why are additional guidelines concerning fitness education still needed? What is the relationship among physical education, health education, and fitness education? These questions need to be answered in order to better understand the desired S&SFE. Fitness education content is found separately in both health and physical education standards and curriculum. Fitness education is an important subset within health and physical education standards. Although similarities exist in some cases states have focused on different content in their state standards. NASPE has published national physical education curriculum standards with suggested sample outcomes at the 2nd, 5th, 8th, and 12th grades. However, to date, there is not a comprehensive national guideline for the fitness education. Teachers attempting to use current materials often feel that some content is not addressed and in some cases there are

redundancies across grade levels. Most importantly, students continue to graduate from high school without understanding the FITT principle, being able to plan an appropriate fitness program for themselves or valuing fitness. In addition the obesity rates in the country continue to rise indicating greater attention needs to be focused on this aspect of the curriculum. Accordingly there is a clear need for a S&SFE to provide core guidance for PreK-16 programs in order to promote excellence and equity of fitness education for all students. We believe that efforts to generate a national S&SFE are worthwhile because it will guide improved curriculum development, instruction, assessment and program evaluation. It also invites further reflection and research about the fundamental issues related to fitness education.

How should the S&SFE be used?

The purpose of S&SFE is to suggest what students should understand and be able to do at specific grade levels, focusing on helping students adopt a healthy lifestyle through PreK to 16th year of education. The development of the S&SFE is grounded in the assumption that a health-enhancing level of physical fitness is attainable for all students through regular engagement in moderate to vigorous physical activity, regardless of gender, age, ethnicity, and cultural background. As a result, the S&SFE is designed for all students. The content included in the S&SFE was holistically developed and all areas are important and should be included.

It is important to note from the outset that the S&SFE is geared to provide ample room for teaching innovation and creativity that are essential to fitness education. Physical education teachers, curriculum coordinators, fitness leaders, and administrators should use these materials as a framework outlining the desired outcomes of fitness education learning experiences. They are intended to be used as a framework for customizing content to meet the needs of students from a state, local or programmatic level. It would be an inaccurate assumption if the content of these materials were interpreted as a rigid, standardized delivery of fitness education because context, region, resources, facilities, and student expectations differ. Overall, the proposed S&SFE should be integrated into an existing physical education curriculum by having full or partial lessons that address this fitness content. For example, an entire lesson can be dedicated to the concept of energy balance. Fitness education can also be integrated into sport-oriented lessons, where the focus is volleyball, but the students are simultaneously learning how to improve muscular endurance by performing specific upper and lower body movements repeatedly. Measureable benchmarks represent the skills, knowledge, and values reflective of competence at a given point of time and can be utilized to develop curriculum or fitness specific courses.

The proposed organization of S&SFE

To date, the scope was determined by using descriptors and benchmarks taken in large part from an analysis of state standards with input from the project team. The sequence of fitness education, on the other hand, was organized by PreK-K, 1st -2nd, 3rd -5th (i.e., elementary school), 6th -8th (i.e., middle school), 9th -12th (i.e., high school), and 13th -16th (i.e., higher education). PreK is included due to the newly released important educational policy regarding PreK instruction (President's Early Learning Council, 2010), indicating that formal education begins at PreK. The reason for grouping PreK and K together was due to the unique learning characteristics and needs of this age level. Most teachers will agree that teaching Kindergarteners is significantly different from teaching 1st graders. By the same token, the inclusion of higher education is determined by the widely accepted belief that it is the end of schooling and should also be used to help combat obesity in the general population (American College Health Association, 2002). The grade grouping format was determined by three factors; (a) flexibility, (b) accountability, and (c) curriculum alignment. The first factor is flexibility. Grouping 2-3 grades together gives states and teachers a certain level of flexibility to decide how to teach fitness based on their specific resources. The second factor is the accountability provided by having periodic benchmarks identified. The third factor in the decision is that using the grouped grade levels mimics the NASPE curriculum standards document (NASPE, 2004).

In addition to the descriptors and benchmarks the project team would like to develop learning projects that will provide integrated activities to help reach and assess specific combinations of benchmarks. This project based approach will encourage instructors to teach fitness using a holistic way actively involving students in the educational process. In summary, the creation of the S&SFE means a beginning of defining how fitness education should be framed. The discussion about the S&SFE must and will continue.

While the project team believes that all the included topics and benchmarks are important to students, priority indices were developed to indicate the relative importance of topics identified in the analysis of state standards. This was done by considering the number of statements made about the topic, the number of states that had included that topic and percentage of the states that had standards at that grade level including that topic.

Chapter 2 Factors Determining the Development of the Scope and Sequence

Many factors have been taken into consideration in order to ensure the comprehensiveness of proposed S&SFE. We have sought to reflect the different interests and focuses of current fitness education. The development of the S&SFE is influenced by the following factors.

The definition of fitness education: The definition used in the project sets the foundation for the development of the S&SFE. Given that there was not a widely accepted definition of fitness education in the literature, the project team defined fitness education as follows.

Fitness Education is the instructional and learning process of acquiring values, knowledge, skills; experiencing regular participation in physical activity; and promoting healthy nutritional choices to achieve life enhancing health-related fitness.

Based on the definition, the S&SFE has the following features: (a) the S&SFE includes value, knowledge, skills, experience in physical activity participation, and choosing healthy diet; and (b) the overarching goal of fitness education is to achieve life enhancing health-related fitness, which is different from just participating in health-related fitness activities or achieving a high level of athletic skill. Although it is widely understood that individual's health-related fitness is determined by various factors, including genetic, environmental, and social factors, it is the philosophy of the project team that both "the process" of fitness education (i.e., physical activity participation) and "the product" of fitness education (i.e., fitness level) should be taken into consideration. This is why both physical activity and fitness are included in the S&SFE. Overall, the S&SFE in PreK-16 were developed based on the aforementioned fitness education definition.

Current education reform: Education in general has undergone significant reform in order to meet new challenges encountered in modern society. Overall, the following two salient changes are noteworthy: (a) new methods of teaching and learning and (b) increased accountability. Specifically in terms of new methods of teaching and learning, there has been an evolution in the prevailing notions concerning how to teach health-related fitness (HRF), with a shift from programs designed merely to instill knowledge of HRF or produce fitness results without understanding of why they are important, to programs developed to teach various skills necessary to translate HRF knowledge into action. Self-management has become an important element of HRF education. In addition, there has been a growing recognition that fitness education is more effective when the home and other environmental settings are also addressed. As a result, the proposed S&SFE focuses on fitness enhancing behavioral changes taking into consideration family and environment.

Furthermore, in terms of increased accountability, in response to more than thirty years of concern about student achievement on both national and international assessments, the No Child Left Behind Act (NCLB, 2002) has led to an increased focus on establishing challenging standards, measuring student learning against those standards, and holding schools and local

education agencies accountable for student achievement (Kohi, McLaughin, & Nagie, 2006). Thus, the S&SFE has a built-in mechanism to begin to hold teachers and students accountable by providing benchmarks for grades PreK-K, 1st -2nd, 3rd -5th, 6th-8th, 9th-12th, & higher education.

Current fitness education realities across the nation: While the project team believes that the S&SFE should consider what will be needed in the future and guide the advancement of fitness education, it is equally important to take into consideration current practice of education in general, and fitness education in particular as the S&SFE must be useful by for professionals in the field of physical education. Therefore, the S&SFE needs to be created at a realistic level. In the course of development of the S&SFE input was invited at sessions at two national conferences (AAHPERD 2009 & 2010), one state Texas conference (TAHPERD, 2009), and two Texas meetings of district physical education coordinators (SEA conference 2009 & 2010). State standards were analyzed to identify relevant content and to inform the placement of benchmarks at particular grade levels. Members of the project team had extensive teaching experience at each of the different grade levels and so provided judgments when there was not clear agreement on placement of benchmark. Feedback from targeted reviewers with expertise in exercise physiology and pedagogy from different states with expertise at the different ages will be solicited during the NASPE review process and adjustments made where appropriate.

Consistency with the current center of disease control and prevention (CDC)'s physical activity recommendation, NASPE's endorsement of FITNESSGRAM, and national standards developed by other subject matters. In order to be consistent with the current efforts at physical activity promotion and NASPE's positions, the S&SFE incorporated the CDC's physical activity recommendations and FITNESSGRAM endorsed by NASPE in the physical activity and fitness planning, participation, and assessment benchmarks. In addition, project based instruction has presented a format for integrating subject matter across the curriculum into authentic learning projects. In addition, although each subject has its own designated content, all subject areas are connected in certain ways. For example, students need to possess computer skills before they can use computers to search for fitness information, services, and products. The learning project proposed earlier will offer a more holistic vision for the future, complementing other current efforts to promote health and fitness not only in fitness education but in other school subject areas as well. The earning projects to be developed will provide excellent opportunities for integration with math, language arts, social studies and science curricula.

Chapter 3 Methods Used to Develop the S&SFE

There have been several stages in generating the S&SFE. Different methods were employed based on the purpose of each stage. Below is the detailed information about each stage of development.

The first stage was geared toward the determination of the definition of fitness education as it provided a focus and delimitation of the project. Based on an extensive literature review and thorough discussion among the project team members, the aforementioned working definition of fitness education was developed.

The second stage focused on the examination of existing published materials, including fitness text books, and research on well known on fitness related programs such as SPARK, and CATCH. Given that there has been no comprehensive consensus document on what fitness content should be taught in each grade, a critical task for the project team has been to develop a list of content domains and sub-domains that have been included in fitness related texts and state physical education and health education standards. The project team was divided in four groups to accomplish the above tasks [i.e., elementary (i.e., PreK-5), middle school (i.e., 6th -8th), high school (i.e., 9th -12th), and higher education (i.e., 13th -16th)]. The resources examined were recently published fitness books from 2000 to the present. In addition, well-known existing fitness education program materials are also reviewed.

The third stage had two tasks: (a) investigation of individual state health and physical education standards and generation of the S&SFE for PreK-12; and (b) examination of online university fitness/wellness course syllabi and development of the S&SFE for higher education. Because the state physical and health education standards are complex in general, the entire project team was first focused on analyzing state standards.

State physical education and health education standard examination and the development of the S&SFE for PreK-12: Teams of professionals in each state have developed state standards and so reviewing their work and gathering input from all the state documents was considered essential. Thus, a tremendous amount of effort has been devoted to the examination of state physical and health education standards. In total, 48 out of 50 states have K-12 physical education standards that were currently accessible online. Using the aforementioned list of content domains, the project team worked to summarize the relevant content for each grade (i.e., K-12, etc.) included in state physical education standards and health education standards. Because 48 out of 50 states have physical education and/or health education standards and 11 team members coded the standards, team members coded an average of 5-6 states. The reliability of the data collection was tested three times at the beginning, middle, and end of the data collection, respectively. All inter-coder values were greater than .8, indicating acceptable reliability.

Once the available state standards were coded into the domains, the constant content comparison method was used to create themes (entitled sub-domains) of fitness content for each grade. Numerous discussions were held to reach a consensus on the sub-domains. Then the number of statements, number of states, and percent of states including content in each domain and sub-domain was calculated. Based on the results of examining state standards, current educational trends mentioned above and the project team's understanding of fitness education, a draft S&SFE was developed. This S&SFE will be compared and aligned with the NASPE documents (e.g. Moving to the Future: National Standards for Physical Education and PE Metrics sample performance outcomes).

Higher education fitness education and the development of the S&SFE for higher education: Fitness education in higher education is determined by each individual university rather than by state education agencies or standards. In contrast to the strategies used for analyzing K-12 programs, two different approaches have been employed to investigate the fitness education content in higher education. First, the content of published fitness/wellness textbooks for university students was examined. The textbooks were selected by searching websites of higher education and physical education publishers (i.e., Pearson Education, Prentice Hall, McGraw-Hill, Sage, and Human Kinetics), and The University of Texas at Austin library book catalog. The time frame for the published textbooks was set to within the last 10 years in order to include only the most up to date knowledge. In total, 24 textbooks were examined. Beginning with the most detailed tables of contents the frequencies of inclusion of content were computed. Second, fitness/wellness class syllabi and fitness/physical activity requirements for undergraduate general education were explored online. In terms of sampling, only state public universities were included. Course syllabi were obtained online or requested from one hundred state public universities (two per state). The team was successful in obtaining 60 usable documents so in total, 60 online fitness and/or wellness class syllabi with a list of content topics were examined. Then the frequencies of content covered in those syllabi were tallied. Based on the results of syllabi examination and the content included in the S&SFE for PreK-12, the higher education S&SFE was developed.

Debriefing and input. In qualitative research the term "peer debriefing" is used to ensure that credibility by the researcher exposing his/her thoughts about the data to searching questions by others (Lincoln & Guba, 1985). Hypotheses are questioned, alternate interpretations posed, next steps are questioned or suggested. The project team has attempted to employ these techniques in their weekly meetings. In addition the team would like to invite other professionals to serve in this role during the NASPE open review period. Thus, in addition to the open request for feedback during the general NASPE review period, requests with specified focus questions will be sent to a targeted panel of experts soliciting input for the proposed S&SFE. The final version of the S&SFE presented to the NASPE Delegate Assembly will incorporate information from the examination of texts and programs , examination of state standards, and expert review with final decisions being made by the project team.

Chapter 4. Specific Standards

The S&SFE was constructed primarily from an analysis and consolidation of the state standards reviewed. The priority index (scale of 1-5, highest) has been used to identify the content that appeared with the greatest frequency and thus deserves a certain level of importance. The higher the priority index (e.g. 5) the more energy that should be dedicated to ensuring that topic and its associated key concepts are well covered.

Summary of State Standard Priorities					
	Grades PreK – K				
Most Common Topics	Key Concepts	Priority Index ¹			
Health-related fitness knowledge	Give examples of active versus inactive behaviors	5			
Being physically active	Be physically active for more than 60 minutes per day with most at a moderate to vigorous level of intensity; participate in a variety of age-appropriate activities	4.3			
Benefits of physical activity & physical fitness	Understand that the body & brain need physical activity	3.85			
Safely engage in physical activity	Exhibit body control; wear protective equipment; care for equipment; demonstrate personal safety in school and the neighborhood; identify emergency situations	3.85			
Enjoyment of physical activity	Participate in activities that are enjoyable, have social benefits, and personal meaning; enjoy the challenge of movement	3.65			
Nutrition	Food is fuel; hydration; eat a variety of foods; food pyramid; eat healthy snacks; try new foods	3.65			
How body systems respond to physical activity engagement	How the heart, lungs, bones & muscles respond to running versus walking; locate the heart; show good posture	2.95			
Social interactions and respecting differences in	Demonstrate cooperation and consideration of others that	2.95			

a physical activity setting	maximizes activity time (e.g. sharing, taking turns)	
Planning for physical activity	Setting goals to be active at recess	2.25
Factors that influence physical fitness	Having a positive attitude; identify ways that family influences health; how TV/video influences physical activity engagement	1.8
Project: (to be added)		

	Summary of State Standard Priorities			
	Grades 1 – 2			
Most Common Topics Key Concepts				
Health-related fitness knowledge	Classify activities as light, medium, hard; heart rate; the health-related fitness components; physiological response to physical activity;	5		
Enjoyment of physical activity	Participate in activities with friends and family that are enjoyable, challenging, new, fun, and/or allow for self- expression	4.5		
Healthy body composition	Factors related to weight management (e.g., reducing how much you eat and increasing physical activity)	3.7		
Engaging in physical activity	Meet the CDC guidelines of 60 or more minutes of physical activity a day of moderate- or vigorous- intensity aerobic physical activity, including vigorous- intensity physical activity, muscle strengthening, and bone strengthening at least 3 days a week, respectively	3.7		
Benefits of physical activity & physical fitness	Makes heart & lungs stronger; sleep is important for health	3.7		

Steps in decision making	Take responsibility and make healthy choices;	3.25
Social interactions and respecting differences in a physical activity setting	Be cooperative in a fitness setting; encourage peers; share equipment	3.25
Safely engage in physical activity	Use equipment with proper technique; develop injury prevention strategies; water safety; heat/cold protection; identify emergency situations and know how to call 911	2.90
Muscular endurance and strength	Use own body weight as resistance	2.75
Nutrition	Balanced diet; nutrients including water; healthy foods; food pyramid; food label reading; plan a healthy snack	2.60
Project: (to be developed)		

NOTE: The priority index (scale of 1-5, highest) has been used to identify the content that appeared with the greatest frequency and thus deserves a certain level of importance. The higher the priority index (e.g. 5) the more energy that should be dedicated to ensuring that topic and its associated key concepts are well covered.

Summary of State Standard Priorities Grades 3 – 4 – 5					
Health-related fitness knowledge	Understand intensity; aerobic versus anaerobic; know the health-related fitness components; physiological responses to physical activity; effect of physical activity on body systems; heart rate	5			
Safely engage in physical activity	Adjust effort for safe play; be safe during leisure play	4.3			

Planning for physical activity	Track amount of weekly physical activity using assessment tools (e.g., journal, log, pedometer, and stopwatch)	4.3
Benefits of physical activity and physical fitness	Impact of regular physical activity on health (e.g. healthy weight, stronger heart, enhanced muscular strength and endurance, strong bones, healthy lungs, sick less often)	4.3
Being physically active	Meet the CDC guidelines of 60 or more minutes of physical activity a day of moderate- or vigorous-intensity aerobic physical activity, including vigorous-intensity physical activity, muscle strengthening, and bone strengthening at least 3 days a week, respectively	3.85
Respecting differences and responsible decision making in a physical activity setting	Show respect for persons of similar and different skill/fitness levels; encourage peers, respectful communication; refrain from put- downs	3.7
Nutrition	Benefits of healthy food consumption; nutrients; serving and portion size; food labels; nutritional value of foods	3.55
Fitness assessment and setting goals	Know the health-related fitness components and how they are measured	3.55
Enjoy physical activity engagement	Select activities to promote self-expression and social interaction; change lifestyle; emotions related to physical activity engagement	3.45
Project: (to be developed)		

Summary of State Standard Priorities

NOTE: The priority index (scale of 1-5, highest) has been used to identify the content that appeared with the greatest frequency and was identified by the most number and % of states and thus deserves a certain level of importance. The higher the priority index (e.g. 5) the more energy that should be dedicated to ensuring that topic and its associated key concepts are well covered.

	Grades 6 – 7 – 8			
Topics	Key Concepts			
Health-related fitness knowledge	Know how to use heart rate as a measure of intensity; reps, sets, eccentric, isometric, concentric terminology; describe training principles; muscular balance; agonist and antagonist muscles	4.8		
Planning for physical activity	Use available technology to monitor physical activity; create a physical activity plan taking into consideration personal preference, environment, and social interaction	4.35		
Being regularly physically active	Meet the CDC guidelines of 60 or more minutes of physical activity a day of moderate- or vigorous-intensity aerobic physical activity, including vigorous-intensity physical activity, muscle strengthening, and bone strengthening at least 3 days a week, respectively	4.35		
Health benefits of physical activity	Long term benefits of physical activity; physical inactivity and disease; physiological and psychological benefits	4.00		
Safety issues	Minimize risk of injury; adjusts equipment; prepared for climate; responds appropriate in emergency situations	4.00		
Responsible decision making	Steps in decision making; respecting differences;	3.90		
Factors that influence healthy choices	Fitness choices, peers, family, and body image influence as factors that influence fitness; cost/cultural/environmental; the role of media and technology in physical fitness; strategies to overcome barriers to making healthy choices	3.80		
Fitness assessments	Participates in fitness testing; uses results to set specific fitness goals	3.70		
Understanding the components of health fitness	Compare and contrast health related fitness components, healthy zones	2.60		
Accurate interpretation of health information	Identify myths, misinformation and stereotyping associated with health related fitness	2.50		

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Summary of State Standard Priorities					
	Grades 9 – 10 – 11 - 12				
Topics	Key Concepts	Priority Index			
Maintaining PA	Participate in daily health-enhancing and personally rewarding physical activities; Meet CDC guidelines 60 minutes/day of MVPA	5.0			
General health related fitness knowledge	Training principles impact physical fitness; application of principles of training and FITT; Physiological responses (energy expenditure, HR, respiratory rate, RHR)	4.65			
Factors that influence fitness behavior	Analyze how culture, family, peers support & challenge health beliefs, practices, and behaviors; influence of participation on fostering appreciation; impact of technology and media; policy; emotions & feelings; individual attitude, determination, motivation	4.45			
Benefits of PA and dangers of low/no PA	Evaluate benefits of regular participation on reduction chronic disease risks; interrelationship of physiological responses and physical, mental/intellectual, emotional, and social benefits	4.35			
PA/fitness/well ness plan	Design and critique a personal fitness plan, from established goals; apply FITT and training principles to the five HRF components; evaluate & modify plan to meet specific and/or changing needs; apply appropriate technology to achieve/maintain physical fitness; analyze daily health and fitness habits; effective and ineffective warm-up & cool-down techniques	4.1			
Safety issues with fitness	Select proper equipment and apply all appropriate safety procedures; identify risks; CPR/AED; First aid; impact of attitudes	4.0			

² *NOTE: The priority index (scale of 1-5, highest) has been used to identify the content that appeared with the greatest frequency and thus deserves a certain level of importance. The higher the priority index (e.g. 5) the more energy that should be dedicated to ensuring that topic and its associated key concepts are well covered.

Initiates positive social behaviors associated with physical activity;				
design strategies for a diverse group of individuals to encourage				
effective participation; analyze how cultural diversity enriches and				
challenges health behavior	3.9			
Analyze characteristics of sport and physical activities that are				
personally enjoyable, challenging and fulfilling; differentiate				
between intrinsic and extrinsic reasons for participating	3.6			
Self-assess health-related fitness status to establish personal fitness				
goals; meets criterion-referenced age- and gender-specific, health-				
related fitness standards for components of HRF	3.55			
Project: (To be developed)				
	 design strategies for a diverse group of individuals to encourage effective participation; analyze how cultural diversity enriches and challenges health behavior Analyze characteristics of sport and physical activities that are personally enjoyable, challenging and fulfilling; differentiate between intrinsic and extrinsic reasons for participating Self-assess health-related fitness status to establish personal fitness goals; meets criterion-referenced age- and gender-specific, health-related fitness standards for components of HRF 			

Health-Related Fitness Education Standards

(parallel the NASPE Content Standards)

Technique: Demonstrate competency in techniques needed to perform a variety of moderate to vigorous physical activities.

- Technique in developing cardiovascular fitness
- Technique when developing muscular strength and endurance activities
- Technique in developing flexibility
- Safety techniques

Knowledge: Demonstrate understanding of fitness concepts, principles, strategies, and individual differences needed to participate and maintain a health enhancing level of fitness.

- Benefits of physical activity/dangers of physical inactivity
- Basic anatomy & physiology
- Physiological responses to physical activity
- Components of health related fitness
- Training principles (frequency, intensity, time, type, overload, specificity, progression) & Workout elements
- Factors that influence physical activity choices

Physical Activity: Participate regularly in fitness enhancing physical activity.

- Physical activity participation (i.e., aerobic, muscular strength & endurance, bone strength, flexibility, enjoyment/social/personal meaning)
- Monitor physical activity & create a physical activity plan

Health-Related Fitness: Achieve and maintain a health-enhancing level of health-related fitness.

- Physical fitness assessment & analysis
- Setting goals & create a fitness improvement plan

- Work to improve fitness components
- Monitor & adjust plan
- Achieve goals

Responsible Personal and Social Behaviors: Exhibit responsible personal and social behaviors in physical activity settings.

- Social interaction/respecting differences
- Self-management
- Personal strategies to manage body weight
- Stress management

Values & Advocates: Value fitness enhancing physical activity for disease prevention, enjoyment, challenge, self-expression, self-efficacy, and/or social interaction and allocates energies toward the production of healthy environments.

- Values physical activity
- Advocacy-promoting healthy behaviors
- Fitness careers
- Occupational fitness needs

Nutrition: Strive to maintain healthy diet through knowledge, planning and regular monitoring.

- Basic nutrition and benefits of a healthy diet
- Healthy diet recommendations
- Assess diet
- Plan and maintain a healthy diet

Consumerism: Access and evaluate fitness information, facilities, products and services.

• Differentiate between fact and fiction regarding fitness products

Descriptor	PreK Benchmark	1-2- Benchmark	3-5 Benchmark	6-8 Benchmark	9-12 Benchmark	Higher Education
Technique in developing cardiovascular fitness	• demonstrate good body control when performing cardiovascula r activities	• demonstrate good body alignment and control in various cardiovascular activities (e.g. running, biking, swimming)	• demonstrate appropriate form (e.g. arm swing forward and back) and principles (e.g. pacing) in cardiovascular activities	• apply the appropriate form, speed and generation of force during cardiovascular activities	• apply rates of perceived exertion (RPE) & pacing	
Descriptor	PreK Benchmark	1-2- Benchmark	3-5 Benchmark	6-8 Benchmark	9-12 Benchmark	Higher Education
Technique when developing muscular strength & endurance		• perform muscular strength and endurance exercise (e.g. lifting sand bags, jumping, hopping)) mechanically correct	• demonstrate appropriate form when performing resistance activities (e.g., push-ups, crunches)	• analyze and differentiate basic musculoskeletal techniques (e.g. alignment, knee not in front of foot) necessary to participate safely in selected movement forms (e.g correct musculoskeletal errors while	• apply basic musculoskeleta l techniques necessary to participate in strength and endurance activities	

Technique: Demonstrates competency in techniques needed to perform a variety of moderate to vigorous physical activities.

Descriptor	PreK Benchmark	1-2- Benchmark	3-5 Benchmark	6-8 Benchmark	9-12 Benchmark	Higher Education
		• demonstrate ability to use own body as resistance in developing strength & endurance (e.g. hold body in plank position with body straight, animal walks)	• demonstrate the ability to stabilize the core when performing muscular strengthening and endurance activities	 demonstrate appropriate technique in resistance training using free weights (e.g. sand bells, bars, bands, homemade jug weights) 	• demonstrate proper machine adjustment and techniques on resistance training machines and proper use of free weights	
				performing stretching, yoga,		

Technique	• demonstrate	• demonstrate	• demonstrate	• demonstrate
when	appropriate	appropriate	correct techniques	proper
developing	technique	technique when	and methods of	alignment
flexibility	when	stretching (e.g.	stretching (e.g.	while
пехионну	stretching	avoid	alignment, no	stretching.
	major muscle	hyperextension	hyper-extension)	
	groups	of knees, knee		
	showing	in front of foot,		• demonstrate
	proper	back flexion,		variety of
	alignment and	back		appropriate
	stretching	hyperextension,		stretching
	without	pulling on		techniques
	bouncing, or	neck, stress on		(static, PNF,
	hyper-	medial knee		active isolated,
	extending	ligaments)		passive)
	joints.			
	• Know to perform stretching only after muscles are warm			
		• apply	• demonstrate the	• demonstrate
		understanding	difference	variety of
		that the	between dynamic	appropriate
		stretching is to	flexibility and	stretching
		develop and	static flexibility,	techniques
		maintain range	when to target	(static, PNF,
		of motion and	each in a workout	active isolated,

			is best done at the end of an activity time		and passive)	
Descriptor	PreK Benchmark	1-2- Benchmark	3-5 Benchmark	6-8 Benchmark	9-12 Benchmark	Higher Education
Safety techniques	• follow directions; use equipment; wear appropriate attire, and move safely in school and community	• apply safety strategies including using good body control, following safety signs and using equipment appropriately	 adjust effort to ensure safe play and use equipment appropriately identify safe & unsafe places to play such as a backyard & street 	• demonstrate appropriate etiquette, care of equipment, respect for facilities, and exhibit safe behaviors	 hold self and others responsible for following safety practices anticipate potentially dangerous consequences of participating in activities and contribute to the development and maintenance of rules and equipment use that provide for safe participation in physical activities 	

	• wear appropriate clothing; use protective equipment; and protect the body from weather conditions	• wear appropriate clothing for different weather conditions	 apply strategies for protection from cold, heat, and sun during activity (e.g. hydration and sunscreen) recognize signs of exhaustion 	 differentiate between the three different types of heat illnesses associated with fluid loss and their symptoms: (i.e. heat cramps, heat exhaustion, and heat stroke) and the appropriate first aid and prevention responses identify issues when exercising the cold such as frostbite, hypothermia and the appropriate prevention and first aid 	
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	• demonstrate and regularly use appropriate safety procedures in jogging, swimming, biking, and other fitness activities	follow appropriate safety	• analyze and regularly use appropriate safety procedures in fitness activities		
• unders the eff asthma breath	ects of symptoms of a on asthma and	and reducing	• know strategies for dealing with severe asthma attacks		
• identifiemerg situation how to 911)	ency emergency ons and situations and	how to get help (e.g. person collapses,	• identify emergency situations (e.g. choking, drowning,) and safe methods of responding to them (CPR [cardiopulmonary resuscitation] and universal precautions)	• earn certification for First-Aid, CPR and AED	



Knowledge: Demonstrates understanding of fitness concepts, principles, strategies, and individual differences needed to participate and maintain a health enhancing level of physical fitness.

Descriptor	PreK Benchmark	1-2- Benchmark	3-5 Benchmark	6-8 Benchmark	9-12 Benchmark	Higher Education
Benefits of physical activity/dangers of physical inactivity	• understand that the body & brain need physical activity for optimal function	• discuss benefits of being active and having a strong body (e.g. good posture, endurance, prevent injury, generate more force, more capable in play)	• identify the impact of regular physical activity on physical health. (e.g. healthy weight, stronger heart, enhanced muscular strength and endurance, strong bones, healthy lungs, sick less often)	• analyze the empowering consequences of being physically fit (e.g. improved cognition, stamina, confidence)	 compare and contrast the health- related benefits of various physical activities (e.g. which provide improved cognition, increased strength, flexibility, cardiovascular endurance, social interaction) explain the interrelationship of physical activity to physiological responses and physical, mental/intellectual, emotional, and social benefits 	
			• identify how	• explain the	•use available	

			inactivity can contribute to the development of disease (e.g. unhealthy weight, higher blood pressure, less lung capacity)	relationship between physical inactivity and chronic disease (e.g. obesity, diabetes, blood lipids high blood pressure, elevated cholesterol, heart disease and joint related diseases)	technology to search information from a variety of resources to describe risk factors to determine cause and effect relationships between lifestyle choices and disease	
be fro in in ph ac as an	entify the enefits om volvement daily nysical tivity such feel better id sleep etter	 describe how physical activity improves sleep and sleep helps the body be healthy identify positive feelings from regular participation in physical activity 	• identify personal psychological and social benefits gained from participating in regular physical activity (e.g. improved self-esteem, better sleep, improved ability to focus and concentrate.	 recognize physical activity as a positive opportunity for stress reduction and social interaction identify positive mental and emotional aspects of participation in a variety of physical activities 	• analyze the benefits of healthy lifestyle and consequences of poor nutrition and inactivity	• analyze possible life differences between unfit and fit individuals at different lifespan.

Descriptor	PreK Benchmark	1-2- Benchmark	3-5 Benchmark	6-8 Benchmark	9-12 Benchmark	Higher Education
Basic anatomy and physiology	• locate the heart and relate that it pumps blood throughout the body	• describe the basic features (e.g. size, location, function) of the heart and lungs	• explain role of lungs in providing O2 to the blood and collection of CO2 from the blood	• explain and label body systems that interact with each other (e.g., blood transporting nutrients from the digestive system)	• predict the impact of physical activity on the functioning of body systems	
		• identify major muscle groups	• understand what major muscles are used in basic exercises			
			• describe how muscles pull on bones to create movement and how muscles work in pairs by relaxing and contracting	• analyze which pair of muscles are involved in strength and endurance exercises	 discuss the importance of balancing the development of strength in opposing muscle groups (moved from anatomy) apply the concepts 	

				• analyze the difference between concentric, eccentric, and, isometric muscle contraction	of concentric, eccentric and isometric contraction to the use of major muscles in basic fitness activities	
		• explain benefits of good posture	• understand how to keep good posture and the relationship between organ health, core stability, and good posture	• evaluate strategies to keep good posture	• analyze personal posture and identify needs for improvement	
Descriptor	PreK	1-2-	3-5	6-8 Benchmark	9-12 Benchmark	Higher
	Benchmark	Benchmark	Benchmark			Education
Physiological responses to physical	• recognize that when you move fast your heart beats	• identify the physiological signs of moderate to vigorous	• define RHR and understand its relationship to level of	• identify the changes in physiological effects of physical activity	• analyze the long term effects of regular participation in moderate to	

activity	faster and you breathe faster	physical activity, such as increased heart rate, faster breathing, sweating and increase in body temperature	aerobic endurance	on the body as you enter puberty (e.g. increased sweating, body odor)	vigorous physical activities on the body systems (e.g. respiratory, cardiovascular, muscular system, skeletal system)
			• understand specific body responses to physical activity are related to individual levels of fitness	• understand physiological responses to physical activity associated with one's level of physical fitness and nutritional balance	 identify personal physiological responses to physical activity understand how and why adult patterns of physical activity participation change throughout life (i.e. identify the effects of age on the physiological response to physical activity)
			• distinguish between	• compare and contrast aerobic	• understand the energy forms used

Descriptor	PreK Benchmark	1-2- Benchmark	aerobic vs. anaerobic activities 3-5 Benchmark	vs. anaerobic activities and be able to distinguish between the two and provide examples of each 6-8 Benchmark	in aerobic and anaerobic activities 9-12 Benchmark	Higher Education
Components of health related fitness			• identify the five health related components of fitness (cardiovascul ar endurance, muscular strength, muscular endurance, flexibility, and body composition) and activities that can be used to develop each component	 compare and contrast health related fitness components (cardiovascular endurance, muscular strength, muscular endurance, flexibility, and body composition) distinguish between health related and skill related fitness 	• Explain how each of the health- related fitness components are improved through the application of training principles	

Descriptor	PreK Benchmark	1-2- Benchmark	3-5 Benchmark	6-8 Benchmark	 Compare and contrast skill related fitness with health related fitness 9-12 Benchmark 	Higher Edu.
Training principles (frequency, intensity, time, type,, overload, specificity, progression) & Workout elements out		• be able to classify activities into a "light, medium, hard" work level	• identify the terms frequency, intensity, time and type and use them in describing a physical activity	• describe training principles (frequency, intensity, time, type, overload, progression, specificity and how they are used to impact physical fitness	• be able to apply to frequency, intensity, time, and type to your workout based on strengths and weaknesses.	
			• define basic exercise terminology such as repetition and	• use the FITT principle (frequency, intensity, time and type) with		

			• distinguish between 3 parts of a workout (warm-up, workout, and cool down)	the terms repetition and set in describing a personal workout • self-initiate warm-up and cool down during activity times	• use available technology to analyze heart rate, and recovery time, distinguish between 3 parts of a workout (warm- up, workout, and cool down) on a heart rate graph	
Descriptor	PreK Benchmark	1-2- Benchmark	3-5 Benchmark	6-8 Benchmark	9-12 Benchmark	Higher Education
Factors that influence physical activity choices	• identify physical activities that are enjoyable	• describe physical activity preferences	• analyze personal physical activity preferences	 analyze the role of individual attitude, motivation, and self- determination in selecting fitness activities analyze 	• compare and contrast personal characteristics, and activity preferences changes over the life span	• analyze what factors can be altered through interventions

• identify ways tha family influence fitness a fitness decision	e friends influence nd fitness behaviors	 describe appropriate strategies to support fitness habits on a personal level describe how environment, lifestyle, family history, peers and other factors impact physical, social, mental and emotional health 	 preferences and change activities in ways that make them more enjoyable analyze factors that influence nutritional and fitness choices, including peers, family, and body image 	• explain immediate and long-term impacts of fitness decisions to the individual, family and community	• evaluate methods of changing health-related fitness factors
	• describe	• describe	• analyze factors	• evaluate the	• analyze factors
	environmental	institutional	that influence	influence of	that influence
	, community,	influences on	nutritional and	environment,	young adults'
	and culture	health and	fitness choices,	public health	nutritional and
	factors	fitness	including time,	policies,	fitness choices,
	influencing	behaviors of	cost/availability,	government	including time,

	fitness behaviors.	children/ such as offering after-school activities, community safety education programs, and a variety of nutritious foods at lunch	culture, and environment • understand effects of school policy on healthy or unhealthy eating and physical activity levels	regulations, research, and medical advances on personal and community health promotion and disease prevention	cost/availability , culture, and environment
• identify how screen time (TV & computer use) influence fitness and health behaviors	• describe how screen time (TV and computer use) and ads , influence fitness behaviors	• identify impact of media and technology on peer and family fitness behaviors, such as the use of Internet social networking sites, heart rate monitors, and crosswalk signals	• analyze effects of media and technology on school and community fitness behaviors	• evaluate the impact of technology, media, and advertisements on personal, family, and community fitness through physical activity	

Descriptor	PreK	1-2-	3-5 Benchmark	6-8 Benchmark	9-12 Benchmark	Higher Education
	Benchmark	Benchmark				
Physical	• meet the	• meet the	• meet the CDC	• meet the CDC	• meet the CDC	• meet the CDC
activity participation	CDC guidelines of 60 or more minutes of physical activity a day of moderate- or vigorous- intensity aerobic physical activity, including vigorous- intensity physical activity, muscle strengthening , and bone	CDC guidelines of 60 or more minutes of physical activity a day of moderate- or vigorous- intensity aerobic physical activity, including vigorous- intensity physical activity, muscle strengthening , and bone	guidelines of 60 or more minutes of physical activity a day of moderate- or vigorous- intensity aerobic physical activity, including vigorous- intensity physical activity, muscle strengthening, and bone strengthening	guidelines of 60 or more minutes of physical activity a day of moderate- or vigorous- intensity aerobic physical activity, including vigorous- intensity physical activity, muscle strengthening, at least 3 days a	guidelines of 60 or more minutes of physical activity a day of moderate- or vigorous-intensity aerobic physical activity, including vigorous-intensity physical activity, muscle strengthening, and bone strengthening at least 3 days a week, respectively	guidelines of 60 or more minutes of physical activity a day of moderate- or vigorous-intensity aerobic physical activity, including vigorous-intensity physical activity, muscle strengthening, and bone strengthening at least 3 days a week, respectively
	 strengthening at least 3 days a week, respectively participate on 	 strengthening at least 3 days a week, respectively participate in 	 at least 3 days a week, respectively participate in 	 participate in 	• participate in	• participate in

Physical Activity: Participates regularly in fitness enhancing physical activity.

a regular basis in flexibility exercises when the body is well warmed up	flexibility exercises when the body is well warmed up on a regular basis	flexibility exercises to target specific muscles after warmed up on a regular basis	flexibility exercises to target specific muscles after warmed up on a regular basis	flexibility exercises to target specific muscles afterwarmed up on a regular basis	flexibility exercises to target specific muscles after are warmed up on a regular basis	
• participate in activities with family that are enjoyable, challenging, fun, and/or allow for self- expression	• participate in activities with friends and family that are enjoyable, challenging, new, fun, and/or allow for self- expression, on a regular basis in and outside of school	• participate in physical activities that promote self- expression and provide opportunities for social and group interaction on a regular basis in and outside of school	• explore a variety of new, enjoyable. and challenging physical activities for personal interest, self- expression and social interaction in and out of school	• participate in daily health- enhancing and personally rewarding physical activities in and out of school	• participate in daily health- enhancing and personally rewarding physical activities during leisure time	
	• participate in activities outside of school such as active transport to school, chores at home	• participate in activities outside of school such as active transport to school, chores at home	• engage in lifestyle activities to increase physical activity (e.g., use stairs, bike to school, gardening)	• actively choose to engage in lifestyle activities to increase physical activity (e.g., use stairs, bike to school, gardening)	• develop a physically active lifestyle	
Descriptor	PreK	1-2-	3-5 Benchmark	6-8 Benchmark	9-12 Benchmark	Higher Education
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	Benchmark	Benchmark				
Monitor physical activity and create a physical activity plan	• set a weekly goal to be active at recess	• use a weekly or monthly activity calendar or plan to stimulate and monitor participation in physical activity outside of school with family members	 use available technology to monitor physical activity and set a personal fitness goal track amount of weekly physical activity using assessment tools (e.g., journal, log, pedometer, and stopwatch) 	• use available technology to monitor physical activity and create a physical activity plan taking into consideration personal preference, environment, and social interaction	• use available technology to monitor and develop a personalized physical activity plan to address deficiencies in physical activity level through the use of a pedometer, heart rate monitor, and/or a physical activity log, or other appropriate technology	• use available technology to self- monitor and develop short- and long-term personalized physical activity plans to address deficiencies in physical activity level through the use of appropriate technology

1-2-3-5 **Descriptor** PreK 6-8 Benchmark 9-12 Benchmark **Higher Education** Benchmark Benchmark **Benchmark Physical fitness** • self assess health • self assess • self assess health • participate in related fitness Fitnessgram® health related related fitness assessment and fitness using using a nationally using personally assessment analysis recognized health preferred heatlh-(e.g., muscular the Fitnessgram® related fitness related fitness strength, muscular (e.g., muscular assessment (e.g., tests and identify strength. muscular strength, the needs for endurance. cardiovascular muscular muscular improvement endurance. endurance. endurance, cardiovascular cardiovascular flexibility, and body endurance. endurance. composition) flexibility, and flexibility, and and identify body body composition) which scores and identify which composition) and identify the fall in the scores fall in the healthy zone meaning of healthy zone and and which each score in that need need relation to the improvement improvement criterion score and personal • use technology health (i.e. heart rate monitors. electrical impedience) to assess physical fitness • identify areas

Physical Fitness: Achieves and maintains a health-enhancing level of physical fitness.

			• recognize which test item is related to which fitness component		needed to be improved to meet personal goals (e.g. run in a 10K race) • understand differences between criterion and norm referenced standards	
Descriptor	PreK Benchmark	1-2- Benchmark	3-5 Benchmark	6-8 Benchmark	9-12 Benchmark	Higher Education
Set goals & create a physical fitness improvement plan			• analyze personal physical fitness assessment results and choose areas to focus on	• use available technology to analyze information gathered from fitness assessment to set individual SMART (specific, measurable, attainable, realistic, time delimited) goals	• use available technology to evaluate personal physical fitness assessment results and develop intermediate and long term fitness plans	• use available technology to analyze personal physical fitness assessment results and create intermediate and long term fitness plans

Descriptor	PreK Benchmark	1-2- Benchmark	3-5 Benchmark	development of strength in opposing muscle groups 6-8 Benchmark	9-12 Benchmark	Higher Education
Work to improve fitness components	•	Participate in targeted activities based on age and gender to improve each specific fitness component	• Participate in targeted activities based on age and gender to improve each specific fitness component	• Participate in targeted activities based on age and gender to improve each specific fitness component	• Participate in targeted activities based on age and gender to improve each specific fitness component	• Engage in preferred activities that can be used to enhance all five components of fitness
Descriptor	PreK	1-2-	3-5	6-8 Benchmark	9-12 Benchmark	Higher Education
	Benchmark	Benchmark	Benchmark			
Monitor & adjust plan			• monitor progress through periodic fitness tests and work out journals	• monitor progress through periodic fitness tests, activity journals, and computer software programs and make	• monitor improvement on the components of fitness using available technology and make adjustment as needed	• self-monitor improvement on the components of fitness using available technology and make adjustment as needed on a regular basis

				adjustments as necessary		
Descriptor	PreK	1-2-	3-5	6-8 Benchmark	9-12 Benchmark	Higher Education
	Benchmark	Benchmark	Benchmark			
Achieve goals			• meet the healthy zone in each of the Fitnessgram® assessment items	• meet healthy zone in each of the Fitnessgram® assessment items	• meet healthy zone tests in each of the Fitnessgram® assessment items	• meet healthy zone tests in each of the Fitnessgram® assessment items

Descriptor	PreK Benchmark	1-2- Benchmark	3-5 Benchmark	6-8 Benchmark	9-12 Benchmark	Higher Education
Social interaction/ respecting differences	• demonstrate cooperation and consideration of others that maximizes activity time (e.g. sharing, taking turns)	• demonstrate behaviors of a good fitness partner including being encouraging, cooperative and being willing to work with any partner	• show respect for persons of similar and different skill/fitness levels (e.g. encourage peers, respectful communicatio n, refrain from put-downs)	• participate respectfully and display sensitivity to the feelings of others while participating in fitness activities with students of different abilities, gender, skills, and cultures.	• invite and participate with others in physical activity regardless of varying skills, abilities, limitations, and cultural backgrounds	
			• recognize and experience physical activities and habits from diverse cultures	• analyze how cultural diversity enriches and challenges health behavior	• analyze the influences of participation in sport on developing appreciation of cultural, ethnic, gender, and physical diversity	
Descriptor	PreK	1-2-	3-5 Benchmark	6-8 Benchmark	9-12 Benchmark	Higher Education

Responsible Personal and Social Behaviors: Exhibits responsible personal and social behaviors in physical activity settings.

	Benchmark	Benchmark				
Self management	 describe times in the day you like to be active identify factors encourage you to keep active describe food you like most and chances you have to choose healthy foods 	describe ways to take personal responsibili ty for fitness behaviors (e.g. limit TV, choose to play with friends, or choose nutritious food)	 identify and use appropriate strategies to self-reinforce positive physical activity and eating behaviors attend feelings during and after physical activity and before, during and after eating and the use of information to modify physical activity and diet accordingly 	• describe ways to overcome emotional, time, access, and environmental barriers to meet/exceed national recommendatio ns for physical activity at least five days, preferable daily during the week.	 analyze barriers and appropriately modify physical activity plans as needed analyze characteristics of sport and physical activities that are personally enjoyable, challenging and fulfilling and choose activities accordingly 	• evaluate barriers and appropriately modify physical activity plans as needed

to by resp	onsible responsible ndividual for	• describe strategies that enhance achievement of goals (e.g. set appropriate goals, monitor/track behaviors, reinforce/rewar d small steps)	 identify and use appropriate strategies to self-reinforce positive fitness behaviors differentiate between intrinsic and extrinsic reasons for participating in physical activity and uses each appropriately 	• analyze how personal choices can impact long- term health	
		• accept responsibility for individual improvement of levels of physical activity and fitness	• accept responsibility for individual improvement of levels of physical activity and fitness	• accept responsibility for individual improvement of levels of physical activity and fitness	
Descriptor Prek Benc	hmark Benchmark	3-5 Benchmark	6-8 Benchmark	9-12 Benchmark	Higher Education

Personal	• identify	• identify	• describe the	• identify food	• apply appropriate	• analyze and
strategies to manage body weight	important strategies to control weight (e.g. be active, eat healthy)	factors related to weight management (e.g., reducing calories and increasing physical activity)	 relationship between caloric balance and weight gain or loss use a food log and activity log and or available technology to calculate energy balance 	choices or physical activity enhancements based on personal log that would create energy balance, weight loss, weight gain	strategies to ensure adequate sleep, apply food choices or physical activity enhancements based on personal log that would create energy balance, weight loss, weight gain	apply strategies that can be used to effectively manage personal body weight
			• identify	 discuss the difference between types of eating i.e. fueling for performance; emotional; social eating; eating while watching TV or sport events use available 	 identify the role of physical activity in increasing basal metabolic rate in improving energy balance use available 	• use available
			strategies for seeking help	technology to compare and	technology to apply strategies as	technology to seek help for

			for weight management	contrast various strategies for seeking help for weight management	needed for seeking help for weight management	weight management
Descriptor	PreK Benchmark	1-2- Benchmark	3-5 Benchmark	6-8 Benchmark	9-12 Benchmark	Higher Education
Stress Management	• identify factors related to happy or unhappy feelings	• recognize stress feelings and stressful situations	• analyze stressful feelings and situations and their impact on the body	• journal situations and behaviors which influence stress and how they impact the body	• journal situations and behaviors, which influence stress and effectiveness of physical strategies, used to deal with stress	• adjust self stress level as needed
		• describe and demonstrate appropriate strategies for dealing with stress (e.g. Know who to talk to if stressed, deep breathing)	 identify positive and negative results of stress and appropriate ways to deal with each predict how neglecting personal 	• compare and contrast a variety of personal coping and stress management strategies	• research physical activity and fitness effectiveness in coping with and overcoming feelings of stress.	

• practice strategies for dealing with stress such as deep breathing, guided visualization, aerobic exercise	• practice strategies for dealing with stress such as deep breathing, guided visualization, aerobic exercise	responsibilities may increase stress • practice strategies for dealing with stress such as deep breathing, guided visualization, aerobic exercise	• practice strategies for dealing with stress such as deep breathing, guided visualization, aerobic exercise	• practice strategies for dealing with stress such as deep breathing, guided visualization, aerobic exercise	

Values & Advocates: Values health related fitness for disease prevention, enjoyment, challenge, self-expression, self-efficacy, and/or social interaction and works for healthy environments.

Descriptor	PreK	1-2-	3-5 Benchmark	6-8 Benchmark	9-12	Higher
	Benchmark	Benchmark			Benchmark	Education
Values physical activity	• develop a positive attitude toward regular physical activity	• value physical activity and fitness for health, enjoyment, challenge, self- expression, and/or social interaction	 exhibit positive feelings/enjoyme nt about participation in physical activity Recognize that skill competency and fitness lead to enjoyment of movement and physical activity 	 choose activities that are personally rewarding evaluate the enjoyment, self-expression, challenge, and social benefits experienced by achieving one's best in physical activities 	• analyze the role of attitude, motivation, self-expression, challenge, social interaction and determination in achieving personal satisfaction from challenging physical activities	
	• Identify ways that becoming physically fit increases	• Describe ways that becoming physically fit increases	• Analyze ways that becoming physically fit empowers you	• Evaluate how becoming physically fit empowers you	• Value the ways becoming physically fit empowers you	

Descriptor	quality of life. PreK Benchmark	quality of life. 1-2- Benchmark	3-5 Benchmark	6-8 Benchmark	9-12 Benchmark	Higher Education
Advocacy Promoting healthy behaviors	• encourage family members to participate in fitness related activities	• identify ways to promote personal fitness in schools	• encourage and assist family members and peers to make positive health choices such as eat healthy foods and be physically active	• demonstrate ways to influence and support others in making positive fitness choices	• independently and/or cooperatively devise and implement a strategic plan that promotes communicates appropriate health or fitness issues or concerns to a target audience	• independently implement a strategic plan that promotes appropriate health or fitness
				• use available technology to identify community agencies that advocate for healthy individuals, families, communities and the environment	• know techniques for funding school, community and workplace physical activity programs	• apply techniques to seek funding campus fitness programs

		• use available technology to demonstrate ways to advocate and convey accurate fitness information about the benefits of choosing foods and increasing one's physical activity	• use available technology to coordinate with others to advocate for improving personal, family, and community fitness	• use available technology to engage and support the improvement and implementation of fitness related policies in family, school, and communities
	• act as a positive role model for fitness in school	• act as a positive role model for fitness in family	• act as a positive role model for fitness in community	 influence and support others in making appropriate fitness related decisions. participate as knowledgeable,
				reflective, creative, and critical members of a variety of fitness

						communities
Descriptor	PreK Benchmark	1-2- Benchmark	3-5 Benchmark	6-8 Benchmark	9-12 Benchmark	Higher Education
Fitness careers		• discuss the influence that fitness professionals have on personal health (e.g. doctors, PE teachers)	• identify various physical education/fitness careers and services locally	 explore career opportunities in the health- related fitness profession and these roles in meeting the needs of the fitness consumer explore the personal attributes required for selected physical education/fitne ss careers 	 analyze health and fitness- related careers and evaluate personal compatibility journal professional responsibilities and opportunities for employment in professions associated with physical activity 	
Descriptor	PreK Benchmark	1-2- Benchmark	3-5 Benchmark	6-8 Benchmark	9-12 Benchmark	Higher Education
Occupational				• discuss	• for sedentary	

fitness needs		components of	careers create a	
		health & skill-	fitness/wellness	
		related fitness	plan that could	
		necessary for	be used to	
		successful and	maintain health	
		safe	related fitness	
		performance in		
		various		
		occupations		
			• analyze	
			components of	
			health & skill-	
			related fitness	
			necessary for	
			successful and safe	
			performance in various	
			occupations	
			occupations	
			• identify	
			questions to	
			ask employers	
			about support	
			of healthy	
			lifestyles in	
			potential jobs	

Descriptor	PreK Benchmark	1-2- Benchmark	3-5 Benchmark	6-8 Benchmark	9-12 Benchmark	Higher Education
Basic nutrition & benefits of a healthy diet	 describe the importance of food as fuel identify characteristi cs of food including , smell, taste, color texture know where food comes from (e.g. plants not stores) 	• describe how a balanced and nutritious diet is related to weight, energy, appearance, health	• describe the benefits of consuming water, fruits, vegetables, grains, and calcium-rich foods, decreasing fat intake, and moderating sugar intake	• describe the relationship between poor nutrition and health risk factors	• analyze the importance of nutrition on health and well-being	
	• demonstrate the ability to select healthy snacks	• identify foods to avoid and foods to encourage	• identify criteria for healthy and unhealthy foods and appropriately categorize common items	• evaluate the prevalence, causes, and long-term consequences of unhealthy eating	• assess the benefit of consuming adequate amounts of Vitamins, Minerals, fiber, folic acid, and	

Nutrition: Strives for a healthy diet through knowledge, planning and regular monitoring.

		• recognize that sugar, salt and fat can make a healthy food less healthy	• identify strategies for dealing with personal food preferences, restrictions, and barriers		water and identify foods that contain high amounts of each nutrient	
			 understand the definition of a calorie as a unit of energy identify foods that are sources of the major nutrients carbohydrates, protein, fat, vitamins, minerals, water 	• identify the caloric content, benefits, and daily recommendatio ns for fats, proteins, and carbohydrates	 describe how nutrients are released, absorbed, utilized and excreted by the body discuss the effects of supplements on the body 	
Descriptor	PreK Benchmark	1-2 Benchmark	3-5 Benchmark	6-8 Benchmark	9-12 Benchmark	Higher Education
	Denchmark	Denchmark			Denchmark	Education
Healthy diet recommendat	• understand the	• correctly classify foods	• identify the number of daily	• identify foods within each of	• describe federal dietary	• evaluate the recurrent
ions	importance of eating a variety of	into appropriate food pyramid	required servings from each of the six groups on the	the basic food groups and select	guidelines, food groups, nutrients, and	healthy recommendatio ns and

foods	groups	food guide pyramid and the recommended serving sizes	appropriate servings and portions for his/her age and physical activity levels	serving sizes for healthy eating habits	guidelines of a nutritious diet
• accept opportunitie s to drink water (before, during, after physical activity)	• identify water as an essential nutrient	• identify the recommended amount of water to be consumed each day	 explain the needs and benefits of hydration during physical activity. recognize factors that can affect hydration status i.e. clothing, weather, helmets, etc. 	 summarize the effects of hydration and dehydration on physical and mental performance, the risks of dehydration, and how to maintain hydration. know to use body weight and urine color to monitor hydration status 	
	• recognize that food and drinks have a nutrition	• demonstrate the ability to interpret nutrition information (i.e.	• compare and contrast nutrient information on	• draw conclusions from food labels for	

label and examine it to locate specific components (e.g. servings per container, calories)	food labels)	food labels (on products, at fast food restaurants) to make informed decisions regarding healthy food choices	calories, nutrient density, types of fats, empty calories, and makes recommendatio ns on healthy choices	
	• identify how peers and the media influence the development of eating disorders	• describe causes, symptoms, consequences, and treatments for the three most common eating disorders such as bulimia, anorexia nervosa, and binge eating	 differentiate between different eating disorders and the resulting symptoms and effects on healthy growth and development discuss psychological implications associated with eating disorders identify resources for seeking help for people with 	

					eating disorders	• evaluate resources for seeking help for people with eating disorders
Descriptor	PreK	1-2-	3-5 Benchmark	6-8 Benchmark	9-12	Higher
	Benchmark	Benchmark	$\wedge V$		Benchmark	Education
Assess diet	• identify fruits and vegetables eaten	• count the servigs of fruits and vegetables eaten in a day	• record eating habits and compare personal food choices to the food pyramid	• use available technology to compare food log to food pyramid recommendatio ns	 use available technology to assess and analyze personal nutritional needs, preferences and practices design a personal nutrition log 	• use available technology to evaluate diet and identify deficiencies on a regular basis.

					that documents food intake, calories consumed, energy expended through physical activity, and nutritional needs and analyze the results	
Descriptor	PreK	1-2-	3-5 Benchmark	6-8 Benchmark	9-12	Higher
	Benchmark	Benchmark			Benchmark	Education
Plan and maintain a healthy diet	• Be open to trying new foods	 plan a healthy meal or snack demonstrate healthy nutrition choices for meals and snacks 	 plan a day of healthful balanced meals and snacks select healthy foods from a fast food restaurant menu 	 create and implement a healthy meal plan for your physical activity level using the Food Guide Pyramid and Dietary Guidelines develop strategies to balance healthy 	 set a personal goal based on a dietary analysis to enhance health and track progress toward the goal describe how to 	• implement a diet plan to achieve energy balance.

		food, snacks,	adjust your diet	
		and water	to	
		intake along	accommodate	 document
		with daily	changing levels	personal diet
		physical	of activity or to	modifications
		activity	meet their	
			nutritional	
			needs	

Descriptor	PreK	1-2-	3-5 Benchmark	6-8 Benchmark	9-12	Higher
	Benchmark	Benchmark			Benchmark	Education
Differentiate between fact and fiction regarding fitness products	Benchmark	 Benchmark understand that advertisement s are created to sell products but that because they are advertised doesn't mean they are good for you 	 identify content of advertisements related to fitness behaviors & products (e.g., fast food, candy, milk) use technology to identify sources of and characteristics of valid health information distinguish between myth, fact and opinion related to health information and fitness products 	• use available technology to identify myths, misinformation and stereotyping associated with health related fitness (e.g., false advertising, spot reducing)	 Benchmark use technology to distinguish between facts and myths regarding nutrition practices, products, and physical performance analyze advertised diet plans for feasibility, caloric intake and promotion of physical activity distinguish between factual and fictitious ideas about 	 Education search and analyze fitness products, and resources available in the community analyze the cost and accessibility of fitness services demonstrate the ability to access school and community fitness services for self and others

Consumerism: Accesses and evaluates fitness information, facilities, products and services.

62 NASPE Fitness Education Scope & Sequence Grant (Cont.)

Chapter 5. Realizing the Scope and Sequence of Fitness Education

The S&SFE will not be effective if the in-service professional training, and necessary resources are not in place. The following specific recommendations were made to facilitate the S&SFE implementation process.

In-service training and online modules. The most recent knowledge skills, and technology related to fitness education have been included in the S&SFE and many in-service teachers may not feel well prepared to teach them. Therefore, NASPE needs to add to Physical Best PIPEline workshops and develop a series of online teaching modules to help in-service teachers to update their pedagogical and subject matter knowledge and skills. Teacher training institutions will need to integrate this information into ongoing training program.

Resources. Each physical education program has to have the basic resources to implement the S&SFE effectively. It is unrealistic to expect physical education teachers to deliver quality fitness education when there is a lack of fundamental resources. It is recommended by the project team that secondary schools should have a weight training room with basic equipment for fitness instruction. A list of specific equipment and technology needed to effectively provide for instruction and learning should be gathered and shared.

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63 NASPE Fitness Education Scope & Sequence Grant (Cont.)

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Glossary

Assessment- Interpretation of measurements quality.

Benchmark: A measure against with which performance is compared.

Body Composition- The proportion of fat-free mass (e.g., muscle, bone, vital organs, and tissues) to fat mass in the body.

Cardiovascular Endurance- A health-related fitness component that relates to the ability of the circulatory and respiratory system to supply oxygen during sustained physical activity.

Centers for Disease Control And Prevention (CDC)- Federal agency within the United States Public Health Service responsible for tracking disease incidence and taking action to control the incidence of such diseases.

Components of health-related physical fitness- Muscle strength, muscle endurance, aerobic capacity, flexibility, and body composition.

Criterion-referenced standards- pre-set, and expert-determined standards to evaluate performance competencies.

Dehydration- The loss of water and important blood salts, such as potassium and sodium that are essential for vital organ functions.

Descriptors: Indicators used to specify categories of teaching content.

Exercise- Planned, and structured body movement done to improve or maintain physical fitness.

Fitness Tests- tests that are designed to evaluate physical fitness. The components of fitness tests depends on what types of fitness are assessed.

FITT- Fitness, Intensity, Time, and Type of activity.

Flexibility-The ability of the joints, muscles and tendons to move freely with their full range of motion.

Healthy heart rate zone- A range of <u>heart rate</u>s that maximizes health improvement while minimizing risk of cardiac malfunction.

Health related fitness- State of physical and mental well-being that allows the body to perform daily tasks efficiently. Measure of the state of the body in areas related to health which usually include cardio-vascular endurance, muscular strength, muscular endurance, flexibility & body composition

65 NASPE Fitness Education Scope & Sequence Grant (Cont.)

Glossary (Cont.)

Health related fitness test – A means of determining the quality of health-related fitness. There are two nationally available youth fitness test batteries: FITNESSGRAM and The President's Challenge.

Heart Rate- Number of times the heart beats per minute.

Large-muscle groups. Muscles that have a large mass relative to other muscle groups in the body. Examples of large-muscle groups are the muscles in the upper arms, back, and legs.

Manipulative Activities- Activities involve the use of equipment such as kicking, jump roping, and passing.

Moderate Activity- physical activity requiring or involving the use of great energy or effort at or 50-75% of max. heart rate. Brisk walking, hiking, and riding a bike on level terrain are examples of moderate physical activity.

Muscular Endurance- The ability of a muscle or muscle group to perform repeated contractions at a certain pace.

Muscular Strength- The amount of force exerted or resistance overcome by a muscle for a single repetition.

Scope- The breadth of content

Sequence- The order in which content is presented

Skill related fitness- ability to perform the elements of agility, balance, speed, and coordination.

Standards- Statements of specific expectations.

Physical Activity- Bodily movement produced by the contraction of skeletal muscles that results in energy expenditure. It is a broader term than exercise.

Physical fitness- state of physical well-being that allows the body to perform daily tasks efficiently. The terms of health-related fitness and physical fitness are exchangeable.

Standards- expectation of learning outcomes.

Target heart-rate zone. A safe range of activity intensity that can be used to most effectively enhance the level of aerobic capacity. A targeted heart-rate zone is expressed as percentages of a person's <u>maximum heart rate</u> (HRmax).

Glossary (Cont.)

Understanding- Insight into key ideas, as reflected in thoughtful and effective use of knowledge and skills in varied situations.

Vigorous Activity- physical activity requiring or involving the use of great energy or effort at or more than 75% of max. heart rate.

Warm-up exercises- Low-intensity exercises that prepare the muscular/skeletal system and heart and lungs (cardiorespiratory system) for high-intensity physical activity.

Work out- A session of exercise or practice to improve fitness.

67 NASPE Fitness Education Scope & Sequence Grant (Cont.)

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