
Physical Education Standards of Learning

for
Virginia Public
Schools



Board of Education
Commonwealth of Virginia

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Preface

The 2015 Physical Education Standards of Learning represent the Virginia Board of Education’s ongoing commitment to ensure rigorous, relevant physical education standards that reflect current disciplinary knowledge and research to prepare all students to be capable, responsible, and self-reliant citizens in a global society. Knowledge about human movement is fundamental to optimizing health and performance and preventing injury and illness. As the United States struggles to rein in its growing \$2.7 trillion healthcare bill, leading national public health, medical, and government organizations and agencies have called on schools to adopt more strategies to help children participate in high-quality physical education and physical activity to improve the public’s health and to prevent and control chronic diseases.

In an increasingly sedentary world, schools provide the best opportunity for a population-based approach to enhance the physical, mental, and social development of every child through learning and engaging in a variety of motor skills. In “Make a Difference at Your School,” Centers for Disease Control and Prevention (CDC) reviewed scientific evidence and included 10 school-based strategies to prevent obesity. One of the recommended strategies is implementation of a high-quality course of study in physical education as the cornerstone of a comprehensive approach to promoting physical activity through schools. This not only provides opportunities for students to be active during the school day, but also helps them develop the knowledge, attitudes, skills, behaviors, and confidence needed to be physically active for life.

The 2015 standards reflect a comprehensive approach to learning and more accurately describe the developmental nature of understanding human movement concepts and attainment of skills (Motor Skill Development). Student knowledge of anatomical structures and functions has been scaffolded to provide context for improving skills (Anatomical Basis of Movement). The inclusion of anatomy and physiology concepts extends health-education knowledge, helps students understand movement, and prepares students for biology and other courses related to health sciences. The topics of personal fitness planning and physically active lifestyles have been combined to reinforce and emphasize that a person cannot have personal fitness without a physically active lifestyle. The addition of the concept of energy balance is essential for understanding the need for caloric intake to support body functioning and caloric expenditure for optimal cognitive and physical performance and healthy weight. Understanding energy balance provides the foundational knowledge necessary to empower students to think critically about their nutrition and activity choices and changing needs throughout life. The CDC document lists “knowledge, attitudes, skills, behaviors, and confidence” as important for high-quality physical education programs, and these skills are reflected in the Social Development strand. The 2015 standards change the fourth strand from Responsible Behaviors to Social Development to shift the emphasis on compliant behaviors to a focus on the knowledge and skill sets that students need to communicate, collaborate with others, and to be contributing participants in the larger community.

INTRODUCTION

Physical education is an academic discipline that involves the study of human movement and its impact on health and quality of life. Physical education and physical activity have short- and long-term influences on the physical, cognitive, and psychosocial health and development of children and adolescents. Physical education in schools provides all students access to standards-based instruction that promotes health literacy, and the motivation to engage in the health-enhancing physical activity needed to achieve and maintain a balanced, healthy life. Physical education areas of study include human anatomy, physiology, exercise science, and kinesiology needed to apply discipline-specific biomechanical concepts critical to the development of physically literate individuals; psychology and socio-cultural analysis of functional fitness and sport; and other health-related fields in kinesiology.

The *Physical Education Standards of Learning for Virginia Public Schools* identify the academic content for the essential concepts, processes, and skills for physical education in kindergarten through grade twelve. These standards provide school divisions and teachers with a guide for creating aligned curricula and learning experiences in physical education to help students understand the benefits of achieving and maintaining a physically active lifestyle and learn the skills necessary for performing a variety of physical activities.

Physical education is unique in that it focuses on learning about and learning through physical activity. It offers many opportunities for students to build positive interpersonal relationships, improve self-esteem, communicate effectively, set goals, apply strategies to enhance performance, exercise self-management skills, collaborate, and develop a sense of social responsibility. It also provides a meaningful foundation for further study in preparation for careers related to the health sciences, sport and exercise science, education, recreation and leisure industries, physical performance, coaching, and fitness and community health management.

The physical education standards are grouped into five overarching content strands: Motor Skill Development, Anatomical Basis of Movement, Fitness Planning, Social Development, and Energy Balance. The standards in each strand are sequenced to progress in complexity from grade level to grade level. Achieving the performance expectations from the previous grade level serves as the foundation for attaining the benchmarks at the next level. The standards are intended to provide students with the necessary knowledge, processes, and skills to become physically educated, physically fit, socially competent, and able to make healthy choices for a lifetime.

Goals and Strands

The purpose of physical education is to develop physically-literate students – students who acquire the knowledge, processes, skills, and confidence needed to make healthy decisions and engage in meaningful physical activity both in the present and for a lifetime. As a result of physical education instruction, the student will be able to:

- Acquire, apply, and evaluate movement concepts and strategies to respond confidently, competently, and creatively in a variety of physical activity settings.
- Access, evaluate, and synthesize health-related information to protect, enhance, and advocate for health, well-being, safety, and participation in physical activity across a lifespan.
- Enjoy and engage in regular movement-based learning experiences and understand and appreciate their significance to personal, social, cultural, and environmental health practices and outcomes.

The content of the Standards of Learning for physical education is organized around the following five essential strands of health and physical development and application:

1. *Demonstrate competence in motor skills and movement patterns needed to perform a variety of physical activities. (Motor Skill Development)*

This strand focuses student learning on the development and demonstration of competence in motor skills and a variety of movement forms, increasing the likelihood of participation in physical activities. Students will have movement experiences that build competent and confident movers through acquisition, performance, and refinement of movement skills in a variety of developmental, tactical, and cooperative activities. Movement competence is defined as the development of sufficient skill and ability to ensure successful performance in a variety of physical activities. In the elementary years, students develop maturity and adaptability in the use of fundamental motor skills and patterns that are then further refined and combined during the middle school years. As motor patterns become more refined and proficient throughout the middle years, they can be transitioned into specialized skills and patterns and used in more complex learning settings. High school students will demonstrate a level of competence in several physical activities that they are likely to continue beyond graduation.

2. *Apply knowledge of the structures and functions of the body and how they relate to and are affected by human movement to learning and developing motor skills and specialized movement forms.*
(Anatomical Basis of Movement)

This strand focuses student learning on understanding basic anatomy and physiology along with movement concepts and principles, to improve motor skills. While the skilled-movement goal involves learning how to perform physical activities skillfully, this goal directs students toward learning about movement. Concepts and principles from various fields of study support skillful movement performance. These fields of study include motor control, exercise physiology, and biomechanics/kinesiology. Active learning experiences will connect the anatomical content with activities being performed. Elementary students establish basic musculoskeletal vocabulary and use simple concepts as they develop their movements. Middle school students learn and apply more complex concepts of human movement. High school students develop a working knowledge of human anatomy and physiology concepts and principles, enabling them to independently apply concepts in order to acquire new skills or enhance existing skills.

3. *Achieve and maintain a health-enhancing level of personal fitness.* **(Fitness Planning)**

This strand focuses student learning on understanding the relationship between a health-enhancing level of physical fitness and the prevention of chronic disease. The intent is for students to explain the importance of fitness and active lifestyles, to be able to evaluate personal fitness levels, and to create an appropriate fitness plan with goals, activities, and timelines that will maintain and improve their levels of physical fitness. Recommended criterion-referenced wellness testing includes Progressive Aerobic Cardiovascular Endurance Run (PACER), cadence push-ups, cadence curl-ups, back-saver sit and reach, and trunk lift. Elementary students become aware of health-related fitness components (aerobic capacity, muscular strength and endurance, flexibility, and body composition), and engage in a variety of physical activities, and develop a basic fitness plan. Middle school students continue to learn about the components of fitness: how they are developed and improved, how they interrelate, and how they contribute to overall fitness to develop and implement a personal fitness plan. High school students plan, implement, evaluate, and modify a personal, goal-driven fitness plan that enables them to achieve and maintain the level of fitness needed to meet their personal goals for various work-related, sport, and leisure activities.

4. *Demonstrate the aptitude, attitude, and skills to lead responsible, fulfilling, and respectful lives.*
(Social Development)

This strand focuses student learning on the skills and behaviors that lead to personal and group success in physical activity, both in school and settings outside of school. Students will explain and apply skills for communication, cooperation, conflict resolution, goal setting and attainment, critical and creative thinking, resilience, and self-directed learning. Students will explain and demonstrate the

importance of and ability to be safe in a variety of activities. Elementary students recognize and use rules and procedures, focus on safety, respect similarities and dissimilarities, and cooperate with others. Middle school students participate cooperatively with others and understand reasons for rules and procedures. High school students initiate and exhibit responsible behaviors and positively impact the behaviors of others in physical activity settings inside and outside of school.

5. *Explain the importance of energy balance and nutritional needs of the body to maintain optimal health and prevent chronic disease. (Energy Balance)*

This strand focuses student learning on energy balance (nutrition and fitness concepts – functional fitness) and explains the importance of energy balance for physical health and chronic disease prevention. This includes physical activity guidelines, types of physical activity needed for energy balance, importance of physical activity, health-related components of fitness, nutrition guidelines, meal planning, screen time, and sleep. Elementary students understand the basic nutrition and fitness concepts of energy balance. The middle school student will extend learning of energy balance, to include nutrition, fitness concepts, physical activity, health-related components of fitness, nutrition guidelines, meal planning, screen time, and sleep and will explain the connection to personal health and fitness. The high school student will explain the importance of energy balance and nutritional needs of the body to maintain optimal health and prevent chronic disease for the present and into the adult years.

The combination of these five strands leads students toward being able to lead an active, healthy lifestyle skillfully, knowledgeably, responsibly, and vigorously.

Safety

Safety must be given the highest priority in implementing the K-12 instructional program for physical education. A safe learning environment is essential to a successful program. Indoor and outdoor equipment and facilities should be inspected on a regular basis, and teachers should be prepared for any potential emergency. Correct and safe techniques, as well as wise selection of activities, resources, materials, and learning experiences appropriate to age levels, must be carefully considered for every instructional activity. Safe physical education learning environments require thorough planning, careful management, and constant monitoring of student behaviors and activities. Class enrollment should not exceed the designated capacity for the activity or classroom space.

While no comprehensive list exists to cover all situations, the following should be considered to minimize potential safety problems.

- Appropriate supervision should be provided at all times.
- Rules and routines should be established to ensure the safety of each student.
- All students should wear footwear that is supportive, secured to the foot, and that provides good traction.
- There should be obstacle-free space and buffer zones between courts/playing areas and/or teaching stations.
- Walls behind all baskets in a gymnasium should have matting affixed to them.
- Field space should be routinely inspected for obstacles and safety hazards. Any found should be reported immediately for repair or removal.
- Courts should be swept regularly and kept free of dirt and dust.
- Appropriate safety equipment should be worn during instruction, practice, and activity (e.g., shin guards, goggles).
- Adequate space should be provided for activity and number of participants.
- Equipment should be age-appropriate and modified equipment should be used when appropriate.
- Equipment should be inspected prior to each class session, or at least daily, depending on use.

- Unused equipment should be removed from playing areas.
- Students should engage in proper warm-ups and cool-downs.
- First-aid supplies, emergency contact information, and injury control protocols should be readily accessible.

Grade Four

In grade four, students make continuous progress across all fundamental motor patterns. Proficient movement patterns are possible as students combine locomotor and manipulative skills in increasingly complex situations. Students create sequences in educational dances and gymnastics. They apply movement concepts and principles and knowledge of anatomical structures in individual movement performances, and tactical strategies in modified activities. Fitness assessment is appropriate at this grade level, and students interpret the results of their assessments and set personal goals based on the results. Students exhibit appropriate etiquette, integrity, and conflict-resolution skills; and they apply proper rules and procedures.

Motor Skill Development

- 4.1 The student will refine movement skills and demonstrate the ability to combine them in increasingly complex movement environments/activities.
- Demonstrate mature form for specialized locomotor, non-locomotor, and manipulative skill combinations in game and modified sports activities, to include overhand throw and catch with a partner while moving, overhand throw to a target for distance, dribbling and passing soccer ball with varying speed while moving, dribbling with non-dominant/non-preferred hand walking and dominant/preferred hand at various speeds, catching thrown objects, striking a ball with short-handled and long-handled implement, and underhand volley/strike.
 - Create and perform a partner dance sequence with an apparent beginning, middle, and end that integrates shapes, levels, pathways, and locomotor patterns.
 - Create and perform a continuous educational gymnastic sequence that combines four or more of the following movements: traveling, balancing, rolling, and other types of weight transfer.
 - Demonstrate the use of pacing, speed, and endurance in a variety of activities.
 - Demonstrate the ability to self-pace in a cardiovascular endurance activity.
 - Provide appropriate feedback to a peer to improve performance.
 - Create and perform a jump-rope routine (self-turn or long rope).

Anatomical Basis of Movement

- 4.2 The student will identify major structures and begin to apply knowledge of anatomy to explain movement patterns.
- Identify and describe the major components of the cardiorespiratory system, to include heart, lungs, and blood vessels.
 - Identify major muscle groups, to include deltoid and gluteal.
 - Identify major components of the skeletal system, to include sternum, vertebrae, patella, and phalange.
 - Locate radial and/or carotid pulse.
 - Identify the bones and muscles needed to perform one fitness activity and one skilled movement.
 - Identify the concept of closing space during movement sequences.

Fitness Planning

- 4.3 The student will apply knowledge of health-related fitness, gather and analyze data, and set measurable goals to improve fitness levels.
- Describe the components of health-related fitness and list associated measurements (cardiorespiratory endurance/aerobic capacity, muscular strength and endurance, flexibility, body composition).
 - Analyze baseline data from a standardized health-related criterion-referenced test (Virginia wellness-related criterion-referenced fitness standards, CDC guidelines).
 - Create a SMART (specific, measurable, attainable, realistic, timely) goal for at least one health-related component of fitness to improve or maintain fitness level.

- d) Identify activities that can be done at school and activities that can be done at home to meet fitness goals.
- e) Analyze post-fitness testing results, and reflect on goal progress/attainment.

Social Development

- 4.4 The student will demonstrate positive interactions with others in cooperative and competitive physical activities.
- a) Identify a group goal and the strategies needed for successful completion while working productively and respectfully with others.
 - b) Identify and demonstrate conflict-resolution strategies for positive solutions in resolving disagreements.
 - c) Define *etiquette* and demonstrate appropriate etiquette and application of rules and procedures.
 - d) Define *integrity* and describe the importance of integrity in a physical activity setting.

Energy Balance

- 4.5 The student will explain the nutrition and activity components of energy balance.
- a) Identify the number of calories per gram of fat (9), protein (4), and carbohydrates (4).
 - b) Explain the uses of salt and sugar and the harm of excessive salt and sugar intake.
 - c) Describe how the body uses each macronutrient (fat, protein, carbohydrates).
 - d) Calculate the calories per gram of macronutrients for a variety of foods.
 - e) Explain the importance of hydration.
 - f) Compare different hydration choices.
 - g) Explain the role of moderate to vigorous physical activity (MVPA) for energy balance.