

Addressing Fitness Issues in Physical Education

Many physical education teachers and school districts use fitness testing as a form of summative assessment of their students, especially at the middle and high school levels. Although fitness testing is important, grading students on how fit they are and how well they do is *not* a measure of learning. Yes, the psychomotor domain is important in physical education, and you want your students to be physically fit, but the focus of physical education is on student learning. As you can see in the *National Standards & Grade-Level Outcomes for K-12 Physical Education* (SHAPE America, 2014), fitness testing is not an outcome, although fitness testing is necessary to complete many of the outcomes, especially developing a personal exercise and fitness plan. The plan will inform you whether your students have learned the content in Standard 3, not how many laps they get in the PACER test or how many push-ups they complete in one minute.

Many physical education programs, particularly at the high school level, are becoming focused primarily on fitness and physical activity. In that way, physical education programs have started to model the health and fitness club mentality. Students develop their exercise plans and complete their exercises every single class. Although students need to learn how to develop an exercise plan and implement it, both in and outside school, physical education teachers need to create a physical education curriculum that aligns with all the standards and outcomes, not only Standard 3.

HIGH SCHOOL: GRADES 9-12

At the high school level, students are on the brink of becoming adults. They are taking on additional responsibilities, becoming more independent, and making most decisions and choices for themselves. These years are the last opportunity for teachers to educate students about the importance of being physically active and choosing to be lifelong movers. Before students graduate from high school, they need to be able to develop realistic exercise plans and know how to access locations and resources in their community that might be viable physical activity outlets for them.

Relative Emphasis

In high school physical education, across all grade levels, strong relative emphasis is placed on physical activity and fitness (refer to table 6.2). Throughout high school physical education, physical activity and fitness are important components of the curriculum as you prepare students to lead a physically active lifestyle as adults. At the high school level for Standard 3, SHAPE America's Grade-Level Outcomes focus on physical activity knowledge, engagement in physical activity, fitness knowledge, assessment and program planning, nutrition, and stress

management. All six categories are identical to the middle school grade band categories, but the expectations are higher and the content is more advanced.



At the high school level, it is important for students to complete a fitness test so they can use the results when they formulate their fitness plans.

Advice From the Field

FITNESS-ENHANCING PHYSICAL ACTIVITY

How do you educate your students about fitness and physical activity in your physical education curriculum?

Karen Bonnett, Woodrow Wilson High School (Beckley, West Virginia): All students and teachers in my county have iPads provided by the county to enhance instructional strategies. I have used iPads for student assignments that include downloading free fitness apps, using the app for physical activity outside of school, discussing the app features and success of the program, then deciding individually whether to keep that app and perform with it or to delete that app and try another physical activity or fitness app. The apps we try out include yoga, Pilates, CrossFit, and 7-minute workout. My students record their physical activities performed outside of PE class and have their parents sign the sheet as verification. I also assign a physical activity calendar to be completed for two periods of time during the semester. The first calendar goal is to record actual activity time in order to increase awareness of time students spend in physical activity. The second period of recording activity time is with the goal of increasing time spent in physical activity.

How do you educate students about engaging in fitness and physical activity outside of physical education and the school setting?

Shelly Hoffman, Franklin Elementary School (Wichita, Kansas): Because I get to see my students only twice a week for 45 minutes on each of their two days, it is very important to plant ideas and give them suggestions of how they can be active outside of physical education class. Because they have limited financial resources and limited access to equipment, and participation in club sports and activities rarely happens, this becomes very important in helping my students with ideas and avenues to achieve 60 minutes of physical activity daily. This factor alone prompts me to give my students ideas for movement opportunities. One way I try to help my students with this is to give them recess ideas and opportunities. We are landlocked in an inner-city school with a very small playground. I put out new equipment every so often to spark interest in students, and I constructed some simple outside fitness stations that I change every six weeks or so to keep them interested in that as well.

What advice do you have for other physical educators?

Diane Wyatt, Abilene Middle School (Abilene, Kansas): Know what is available in your community for students. Have fitness and wellness fairs in your schools. Have family fit and fun nights. Send out fitness calendars for families to use together. Put pictures or videos on your school website of what you are doing in your classes.

Content Examples

Content based on physical activity and fitness at the high school level is based on preparing high school students to engage in physical activity and fitness outside school. Teachers often tell students what to do, and most follow the instructions. But at the high school level, you want them to be independent learners so that they are able to create physical activity or fitness plans on their own. High school students are expected to develop a comprehensive physical activity

plan that has them setting goals, selecting activities to engage in, and using appropriate technique for the exercises. The focus is more inclusive regarding the engagement of physical activity outside school in addition to what occurs in physical education class. Besides developing a physical activity plan, high school students need to create a nutrition plan and formulate strategies to reduce stress. As a physical educator, you need to determine developmentally appropriate content and assessments to align with the standards and outcomes.

Physical Activity Knowledge

At the high school level, physical activity knowledge extends beyond the physical education class or school as you begin to educate students about factors that influence their knowledge about physical activity and their overall physical activity engagement. For example, students have access to technology that provides quick access to media, social media, and an array of commercials and advertisements that support or refute appropriate physical activity and fitness. Teachers often do not educate students to be critical consumers of what they see, read, and hear. By high school, students need to learn about the truths and myths regarding physical activity and fitness. They need to know how to analyze information they obtain from the media and the Internet. You should focus not only on the plethora of wrongful information and techniques available on the Internet but also on the abundance of apps and technological devices that may enhance engagement in physical activity. The idea is to provide students with appropriate physical activity knowledge and teach them to be critical consumers. After graduation, some high school students will remain in the area, but others will move away; some students will enter the workforce, whereas others will go to college or enlist in the military. Regardless of their intent or eventual outcome, you are responsible for providing learning opportunities about how and where to access physical activity facilities and groups, clubs, and recreational teams. Although students will not gain full awareness until they are out of high school, you should inform them how engagement in physical activity will influence all aspects of their health and wellness.

Engagement in Physical Activity

As with middle school students, the expectation for high school students is to engage in lifetime or fitness activities outside school at least a few times a week. Each student should self-select this engagement. The goal is for students to select a community event with a focus on physical activity, such as running or walking a 5K or participating in a dance performance, and develop a plan to prepare them to complete the event. Students can research local events during the lesson in which you instruct them how to access physical activity opportunities in various locations.

Fitness Knowledge

Fitness knowledge for high school students centers on the muscular strength and endurance health-related components of fitness, with some additional focus on cardiorespiratory endurance. Specifically, as already indicated, you want to prepare students to know how to develop a physical activity and fitness plan and properly perform each exercise. The goal is for graduating seniors to engage in physical activity as adults, but lack of appropriate knowledge can reduce their chance of being physically active. Many adults who are physically active join a gym, wellness center, or some form of health facility or buy equipment to create their own workout station at home. When performing strength-training exercises, using the appropriate technique is important, whether that is to complete a squat, push-up, or leg extension, which can be done on resistance-training machines or with free weights. Your instruction will be contingent on the equipment you have available, but you still need to educate students about the various types of strength-training exercises (isometric, isotonic, isokinetic) and specific techniques for a variety of exercises for each muscle group. Students should continue to learn about muscles and muscle groups, such as by knowing the names and locations of each major muscle, the importance of developing a balance of opposing muscle groups (e.g., biceps and triceps, quadriceps and hamstrings, pectorals and rhomboids and latissimus dorsi), and the various fiber types in each muscle (e.g., fast twitch versus slow twitch). With cardiorespiratory endurance, students should be able to measure their heart rate, calculate their target heart rate zone (THRZ), and be able to adjust their pacing or performance to remain in that THRZ if their heart rate is too low or too high. Students need to be aware of the energy systems they use (e.g., aerobic versus anaerobic, such as running versus biceps curl) based on the physical activity they select.

Assessment and Program Planning

As previously mentioned, at the high school level, students need to be able to develop a fitness program and an overall physical activity plan that they can implement not only while they are taking physical education class but also when they graduate and elect to attend

college or join the workforce (those who enter the military or play on a sport team will likely have a fitness or exercise program given to them). Students' physical activity plans should be based on fitness assessment scores, **SMART goals** (S = specific, M = measurable, A = attainable, R = relevant, T = timely) for improvement, specific fitness and physical activities performed within the health- and skill-related components of fitness, a log of activities completed to reach goals, a timeline of attaining the goals and completing the plan, and a postassessment. If high school students have the ability to create and implement a comprehensive physical activity plan, they will have the knowledge and skills they need to be physically active for a lifetime.

Nutrition

As discussed in this category at the middle school level, students need to understand the importance of balancing sufficient exercise with proper nutrition to be a healthy person. You will likely have to review the content that was taught at the middle school level, such as the food groups, reading food labels, and determining serving and portion sizes. Students need to have a sound understanding of nutrition in general and be able to apply it to physical activity and exercise. For example,

when should they consume food and beverage while preparing for or participating in exercise? What food and beverage should they consume to obtain the most energy and replenish after a workout? After students learn this information, they should develop a nutrition plan to maintain an appropriate energy balance for a healthy, active lifestyle.

Stress Management

At the middle school level, students began to learn about the positive and negative results of stress and began practicing some techniques to decrease their stress levels. Because learning how to navigate and negotiate stress is a life-long commitment, high school students should learn to identify various stress management strategies (especially because every person manages stress in a different way) and apply the strategies to learn which ones work best for them. Taking time away from performing physical activity in physical education class is problematic, but as indicated at the start of this section, the relative emphasis on fitness and physical activity at the high school level is the most emphasized standard of all five. At this age, physical education should focus on teaching students to be healthy and active holistically, going beyond the physical, because all aspects of life influence overall health and well-being.

KEY POINTS

- In a high school physical education curriculum (grades 9-12), strong relative emphasis is placed on physical activity and fitness.
- By high school, students need to know the truths and myths about physical activity and fitness. They should know how to analyze information they obtain from the media and the Internet.
- High school students should engage in lifetime or fitness activities outside school at least a few times a week and participate in a community-based physical activity event.
- Students should learn about the various types of strength-training exercises (isometric, isotonic, isokinetic) and the specific techniques for a variety of resistance-training exercises for each muscle group. They should know how to calculate heart rate and target heart rate zone.
- Students should develop a physical activity plan that is based on fitness assessment scores, SMART goals, activities to be performed, a log of activities completed, a timeline of attaining the goals and completing the plan, and a postassessment.
- Students should develop a nutrition plan to maintain an appropriate energy balance for a healthy, active lifestyle.
- Students should identify various stress management strategies and apply the strategies to learn which ones work best for them.