

COLLEGE AND CAREER READY:

Preparing Students in Fitness and Health Literacy

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The implementation of the language arts Common Core State Standards (CCSS; CCSS Initiative, 2010) is undergirded by the belief that students must be highly literate in many important areas to be successful in the 21st century. The standards are based on the idea that students who are “college and career ready” exhibit certain traits. These traits include having a base of knowledge across disciplines, being able to read and write in various disciplines, demonstrating independence in evaluating and critiquing texts and ideas within disciplines, and using evidence to support their ideas. Disciplinary literacy is vital because each discipline approaches the creation of knowledge in different ways and each has its own way of sharing that knowledge (Shanahan & Shanahan, 2014). Students must be given opportunities to learn how to read, write, think and speak within specific content areas.



Although literacy in science, history and technical subjects is addressed in the language arts standards, physical education literacy is not specifically mentioned. However, if the goal of the CCSS is to prepare students for life after high school — whether they are attending college or joining the work force — it is important that they are prepared to take charge of their health and fitness. Being college and career ready includes making sure that students leave school with the knowledge that the brain is affected by what the physical body does and the knowledge of how lifestyle choices can affect lifelong health. Although physical education's main goals center on movement and activity, these goals cannot be separated from the general goals of education or life (Buell & Whittaker, 2001).

Being literate in health, fitness and nutrition and using critical analysis to make decisions about one's health and fitness are paramount to students' future success in college and career. Providing students with opportunities to engage in authentic literacy tasks related to physical education content is critical to helping students learn and use content-specific information (Parsons & Ward, 2011). Additionally, opportunities to read about, write about and talk about fitness and health can contribute to students' overall comprehension, as well as their knowledge of the discipline (Cervetti & Hiebert, 2015). It is clear that physical education has an important role to play in the implementation of the ideals of the CCSS when one considers the importance of long-term health and fitness.

The CCSS were developed in response to the call for high school graduates to be better prepared for college and/or the workforce. The Council of Chief State School Officers and the National Governors Association began the development of the CCSS by first determining what literacy skills students needed to be successful after high school (CCSS Initiative, 2010). The College and Career Readiness Anchor Standards in each of the key areas of literacy (reading, writing, speaking, listening and language) broadly "lay out a vision of what it means to be a literate person in the twenty-first century" (CCSS Initiative, 2010, p. 3) and form the foundation for the CCSS.

Twenty-first-century graduates need to be able to "perform the critical reading necessary to pick carefully through the staggering amount of information available today in print and digitally" and "demonstrate the cogent reasoning and use of evidence that is essential to both private deliberation and responsible citizenship in a democratic republic" (CCSS Initiative, 2010, p. 3). To possess literacy skills that are applicable outside of the classroom walls, students must engage in a rigorous examination of texts and ideas, engage in research of various topics, and support their oral and written ideas with evidence (Lapp, Wise, & Johnson, 2012).

Literacy demands vary between disciplines, and teachers must know how to support students' literacy development within their specific content area. Physical education teachers need to consider what it means to be literate in the areas of health, nutrition and physical fitness and must understand how this literacy may affect students' ability to make informed decisions as adults. The SHAPE America – Society of Health and Physical Educators (2014) *National Standards & Grade-Level*

Outcomes for K–12 Physical Education specifically state what the physically literate individual should be able to do as a result of a physical education program. These competencies include "recognizing the value of physical activity for health, enjoyment, challenge, self-expression and/or social interaction" (SHAPE America, 2014, p. 5).

SHAPE America (2014) also supports and provides guidance for aligning the CCSS for language arts with standards for physical literacy. In fact, one focus of the new SHAPE America National Standards is "[i]ntegrating language that parallels the Common Core State Standards where possible" (2014, p. v). The National Standards include grade-level benchmarks that can be integrated naturally with the CCSS. See Table 1 for examples of activities aligned with the CCSS and the National Standards.

Preparing students for 21st-century literacy and life requires a schoolwide approach. Implementing the CCSS will be most successful when there is consistency throughout the school (Fisher & Frey, 2008). Using similar practices and terminology helps students understand expectations and builds literacy across disciplines. As these "transportable and transparent strategies" (Fisher & Frey, 2008, p. 27) are used throughout the school day and across grade levels, students hear similar vocabulary and are exposed to consistent instructional routines with which they become very familiar. Common practices across the curriculum allow for a quicker start to lessons and the reinforcement of thinking and literacy skills that will be used not only in school, but also throughout a student's life.

For example, when the "think, pair, share" strategy is used in all classes, students know what is expected when asked to turn and talk to their partner. In using this strategy, students learn how to share their thinking with others, as well as how to listen to others' ideas. Students will immediately know what to do when asked to complete an exit slip if this approach is used regularly in several different classes, and they will also understand that accountability for the day's lesson is expected. Physical education teachers should be an important part of the school team as they help design and implement strategies that can be used schoolwide. Table 2 offers suggestions for ways to incorporate general instructional strategies into physical education class to promote physical education literacy.

Physical education teachers can collaborate with classroom teachers so that fitness and health knowledge is reinforced in the classroom. Classroom teachers may be open to having students use their writing time, center time or other classroom segments to talk, read and write about what is being taught in physical education class. Journaling, for example, is a common practice in many K–12 classrooms. Classroom teachers may be very open to students using this time to complete responses to physical education questions and prompts. Asking students to do research and write reports is also common to language arts classrooms. Classroom teachers may encourage students to write reports on topics covered in physical education. Developmentally appropriate questions or research projects can be derived from state and national physical education standards related to the cognitive domain.

Table 1. Activity Examples Aligned with the CCSS and National Standards

CCSS Standard	National Standard	Activity
<p>Listening and Speaking (CCR SL4): Present information, findings and supporting evidence such that listeners can follow the line of reasoning and the organization, development and style are appropriate to task, purpose and audience.</p>	<p>S3.E1.5: Charts and analyzes physical activity outside physical education class for fitness benefits of activities.</p>	<p>Grade level: 3–5 Student keeps a log of activities done throughout the week outside of school. Student thinks about and discusses with the teacher whether more activity is needed to be healthy.</p>
<p>Listening and Speaking/Comprehension and Collaboration (CCR SL1): Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, while building on others' ideas and expressing their own ideas clearly and persuasively.</p>	<p>S3.E3.3: Describes the concept of fitness and provides examples of physical activity to enhance fitness.</p>	<p>Grade level: 3 In small groups, students discuss and demonstrate examples of physical activities they have learned about that enhance fitness.</p>
<p>Reading (CCR R7): Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.</p>	<p>S3M1.8: Identifies the five components of health-related fitness and explains the connections between fitness and overall physical and mental health.</p>	<p>Grade level: 6–8 Students will develop a fitness routine that includes exercises to enhance each of the five components, explain and demonstrate the routine, and then lead the class as they practice the routine.</p>
<p>Writing (CCR W7): Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.</p> <p>Listening and Speaking (CCR SL4): Present information, findings and supporting evidence such that listeners can follow the line of reasoning and the organization, development and style are appropriate to task, purpose and audience.</p>	<p>S3.H1.L2: Investigates the relationships among physical activity, nutrition and body composition.</p>	<p>Grade level: 9–12 Given the appropriate resources, students will research the relationship between activity, nutrition and body composition. Students will write up their results and come prepared to share what they learned.</p>

Note. CCSS = Common Core State Standards; CCR = College and Career Readiness.

Ideas for Integrating CCSS Standards

Daily instructional opportunities offer the potential for integrating the ideals of the CCSS into physical education class, without sacrificing the important goal of movement. The following ideas offer just a few possibilities for developing health and fitness literacy in physical education class:

- Problem-solving and team-building activities provide ways for students to collaborate using higher-level thinking and communication skills.
- Creating a personal fitness plan requires students to eval-

uate and apply knowledge about assessment results and achieving healthy levels of fitness.

- Asking students to analyze information on charts about physical education topics and then allowing them to share what they learned develops both literacy skills and knowledge of physical education content.
- Teaching students to read food labels and then asking them to make a decision about which food would be the healthiest choice develops analytical skills while they learn content that meets physical education and health standards.

Table 2. Instructional Strategies for Promoting Literacy

Strategy	Description	Example
Anticipation guide	Activity completed before and after a unit of study. It allows students to identify and discuss their thoughts on the topic. Activates background knowledge, increases interest in the topic, and helps the teacher identify student misconceptions.	Before beginning a unit or topic, pass out a guide with a few questions or statements to which students can agree or disagree. Have a short discussion in class in which students share their ideas. Do the same at the end of the unit to see if ideas have shifted.
Think, pair, share (or turn and talk)	Pair students up (or simply ask them to turn to a neighbor) to quickly discuss a question or information presented. After a minute or two, ask for volunteers to share what they discussed. This quick share stimulates their thinking before being expected to come up with an answer in front of the entire class. It also gives everyone an opportunity to share his/her thinking, even if it is just with one other person, and promotes collaboration.	During debriefing after problem-solving, team-building or adventure activities, ask students to turn to a partner and discuss a question related to the activity.
Word wall	Have vocabulary associated with the current unit of study displayed on a pocket chart in the gym. Refer to the words during class.	Point to the word as you say it and have students perform an action related to the word. Examples: Students point to the designated muscle on their body, do the designated fundamental motor skill, mimic performing a sport-related skill, or perform an exercise.
Question generation	Find ways to have students share their questions.	Ask students to write down and bring questions related to the topic to class. Address the questions during the warm-up.
Exit slips	Exit slips are quick ways for students to write a response to a prompt right before leaving class. They allow students to use writing to share their thinking and can be used as an assessment to see if there may be misconceptions, etc.	At the end of class, ask students to write down two or three things they learned in class today.
Class website	Create a website that includes the class procedures, vocabulary that has been introduced, cues for skills, directions and information about sports, activities, and fitness. Websites encourage reading and using digital text. Include places on the website where students can make contributions to content, thereby further developing their writing and research skills.	Collaborate with the technology teacher to find ways to combine learning new technology skills with physical education content knowledge.

- Allowing groups of students to create a new game along with rules and strategies for playing it demands many skills, including writing and communication.
- Task or station cards require both reading and interpretation skills.

Many activities can be used across grade and literacy levels with small adjustments to make them developmentally appropriate. For example, pictures might be used when doing an activity on making healthy food choices with students who are not yet fluent readers. A student at any age can think and talk

Classroom teachers may be open to having students use their writing time, center time or other classroom segments to talk, read and write about what is being taught in physical education class.

about game rules, fitness choices, responsibility or any other topic regardless of their reading and writing abilities. Two specific instructional strategies that can be implemented to meet both the CCSS and the National Standards are journaling and problem-based learning.

Journaling

In an effort to promote literacy in daily physical education, students can keep a physical education journal. This journal could be a spiral-bound notebook that is kept in the classroom or with the students daily. Students are given a prompt or “Question of the Day” to write about either at the beginning of class or at the end. Sample questions include:

- What are your fitness goals for this week?
- What happened in class today that made you feel excited about physical activity?
- In what ways have you improved your cardiovascular fitness? How do you know?
- Describe one negative emotion that you had to deal with in class today. How did you handle it?
- How did you show that you were a responsible citizen in class today?

When grading the journal entries, check to be sure that students are supporting their statements with facts and providing reasons for their comments. Grade the students’ work with an emphasis on content rather than grammar or spelling. State and national physical education standards can provide guidance for developmentally appropriate cognitive and affective learning objectives that can be met through journaling (e.g., CC.L.6, CC.W.4, S3.E3.K–S3.E3.5 and S3.E5.3–S3.E5.5b). For younger students (kindergarten–first grade), the teacher may need to ask the question or provide prompts to stimulate thinking. Drawing pictures is an appropriate response for those who are not yet writing. (Activity adapted from *Active Bodies, Active Brains* by Clancy, 2006.)

Problem-based learning

Teaching students the components of health-related fitness through problem-based learning can also meet various standards and learning objectives (CC.L.6, CC.SL.1–4, S3.E3.K–S3.E3.5 and S3.E5.3–S3.E5.5b). Students discuss the components (i.e., cardiorespiratory fitness, muscular strength, muscular endurance, flexibility and body composition) among themselves while giving definitions and suggesting activities that can be performed to increase fitness in each component. Spend an appropriate amount of time per component to ensure that students understand the components fully.

For primary school students. Hang posters on the wall with the names/pictures of each component on them. Have pictures related to each component and scatter them around on the gym floor. For example, a picture of a heart or of a child running might be used for cardiovascular fitness. A picture of a child doing push-ups might be used for muscular strength, or a picture of a child touching her toes might be used for flexibility. Working in groups within a designated amount of time, students will match the pictures to the correct component. The teacher will need to provide appropriate support in this activity for young children who are not yet reading. As a conclusion, ask students to come up with and then share activities that will increase fitness in each component.

For middle- and upper-grade students. Divide students into groups of four to five. Students will work collaboratively to create an exercise routine that includes all health-related components (except body composition). For body composition, students will explain to other groups the definition of body composition, ways to measure body composition, and what is necessary to maintain a healthy body composition. Give students an adequate amount of time to do the research and prepare their routines before asking them to present to the rest of the class. Students will complete a survey after each routine. Questions on the survey will help to determine whether or not the students felt like they received an adequate workout to improve all areas of health-related fitness (see Figure 1 for a



	Agree	Disagree	Not Sure	Why?
Routine contained all the components of health-related fitness.				
Routine was presented well.				
Routine was easy to follow.				
Routine was fun.				
I would complete this routine outside of class.				

Figure 1. Sample survey for a problem-based learning activity

sample survey). Completing a survey or other such culminating activity will encourage metacognition about personal fitness.

Conclusion

The goal of the CCSS is to produce adults who demonstrate independence, have strong content knowledge, and value evidence (CCSS Initiative, 2010). Physical education can contribute to all of these characteristics by incorporating higher-level thinking skills that are connected to physical activity, health, fitness and nutrition and can prepare students for a healthy life. Just as students are learning disciplinary thinking strategies in science and history, they must be taught how to think in physical education class to be ready to make informed decisions about their fitness and health as adults. Students need to learn to make sense of the contradictory information that is presented in many different formats (print, digital, television, social media, etc.). They must also know how to thoroughly research a topic that is important to their well-being and be able to adequately express their thoughts about the topic (e.g., when discussing personal health with a doctor).

Supporting this type of development in students may mean that teachers have to do things differently. The same skills will be taught and students will still be engaged in activity, but teachers must move from being the ones doing all the thinking and instructing to expecting students to be more intellectually engaged in the learning process. Physical education teachers are well positioned to support the College and Career Readiness Standards of the CCSS by preparing students to become literate adults who know how to live a healthy and active life.

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