In this section, we begin in Chapters 1 through 3 by describing the goals, national standards, and significance of physical education, including a brief history of this field, and then provide an overview of the movement approach that constitutes the curricular and instructional model presented in this text. In Chapters 4, 5, and 9, we describe the development, learning, and motivation theories that support our approach. We describe instruction in Chapters 6, 7, 8, 10, and 13, thereby linking instruction to how children learn and develop. Chapters 11 and 12 discuss teaching social responsibility, emotional goals, and respecting and valuing diversity. Planning, assessment, and their links to national standards are discussed in Chapters 14 and 15. Section I is followed by descriptions of the content of the curricular and instructional model, including the sample lesson plans presented in Sections II, III, and IV. As part of these discussions, we link the content to the theoretical support, national standards, and instructional methods discussed in Section I.
Physical Education Goals, Significance, and National Standards

PRE-READING REFLECTION
1. Did you enjoy physical education at each level: elementary, middle, and high school?
2. Was the program at each level an instructional program in which the teacher taught you skills, or did you just play games and sports?
3. Did you have any health-related physical fitness lessons? If so, did you enjoy them?

OBJECTIVES
Students will learn
1. Until the early twentieth century, physical fitness was the goal of physical education.
2. In the twentieth century, games, sports, dance, and outdoor recreational activities became prominent goals.
3. In the 1960s, motor, cognitive, social, and emotional goals to help the child develop into a fully functioning person became important.
4. All three types of goals—(a) health-related physical activity; (b) sports, dance, and recreational activities; and (c) cognitive, social, and emotional goals—are important today.
5. “The goal of physical education is to develop physically literate individuals who have the knowledge, skills, and confidence to enjoy a lifetime of healthful physical activity” (Society of Health and Physical Educators [SHAPE], 2014, p. 11).
6. To achieve this goal, SHAPE has set five national standards.
7. Teachers have differing value orientations. Their unique orientations affect the extent to which they emphasize different goals.
8. Physical education is significant because it teaches about and provides health-related physical activity and fitness, which benefit health, and because it teaches sports, dance, outdoor, and recreational activities, which are significant cultural activities.
**KEY TERMS**

- Breach of duty
- Damage
- Disciplinary mastery value orientation
- Duty
- Ecological integration value orientation
- Friedrich Ludwig Jahn
- Gymnastics wars
- Johann Christoph Friedrich Guts Muths
- Learning process value orientation
- *mens sana en corpore sano*
- Negligence
- Per Henrik Ling
- Proximate cause
- Self-actualization value orientation
- Social responsibility value orientation

**A Brief History of Physical Education**

History can help you understand which curriculum goals have guided and continue to guide our field, why educators considered these goals beneficial, and why new perspectives emerged. Studying history also can help you appreciate the long, proud heritage of physical education. Finally, knowing your historical knowledge can help you prepare for teacher certification tests, which often include historical questions.

**Early Greek and Roman Influences**

Until the 1900s, many physical educators were physicians, and all physical education was called gymnastics. The aim of this field was to improve health and correct physical ailments. Greek and Roman physicians were the first to develop these physical education programs, which still influence our field today—although we no longer exercise naked, as was the practice then. These historical figures used the term *gymnastics* to describe their activities because they conducted their programs in a gymnasium (Freeman, 2012).

The physician Galen (who lived from circa 130 to 200 A.D.) was the first writer to develop a medical gymnastics program to improve health, although the belief that exercise is connected to health dates back in written records at least to Hippocrates (for whom the physicians’ Hippocratic Oath is named) in the fifth century B.C. (Gerber, 1971). Galen’s gymnastics program included exercise, wrestling, throwing the discus, climbing ropes, carrying heavy loads, running, shadow boxing, and exercising with a small ball. In some European countries today, people exercise with small balls in ways similar to Galen’s program, even though this program originated 1,800 years ago (Gerber, 1971). Likewise, today we continue to promote the ancient Greek and then Roman ideal of *mens sana en corpore sano* (a strong mind in a healthy body) (Patterson, 1998).

**German Gymnastics**

**Guts Muths: The Grandfather of Physical Education**

The modern era of physical education began in Germany in the late 1700s, as part of a movement led by Johann Christoph Friedrich Guts Muths (1759–1839) (Gerber, 1971). Guts Muths was a physical education teacher who taught and wrote about his work for more than 50 years (Freeman, 2012). Historians call him the grandfather of physical education. Guts Muths provided individualized gymnastics programs for students, focusing on wrestling, running, leaping, throwing, balancing, climbing, lifting, skipping rope, swimming, dancing, hiking, and military exercises (see Figure 1.1). He also included games that contributed to building strength, speed, and flexibility.

**Jahn: The Father of Physical Education**

Born in Prussia, Friedrich Ludwig Jahn (1778–1852) is considered the father of physical education and modern gymnastics. Influenced by the ideas of Guts Muths, he was a leader in developing “German gymnastics” and *Turnverein* (gymnastics clubs) in Germany.
societies). So-called Turners (i.e., gymnasts) exercised on the horizontal and parallel bars, vaulting horse, balance beam, climbing ropes, and ladders; they also participated in wrestling, hoop and rope jumping, throwing, running, broad jumping, pole vaulting, and lifting weights (Gerber, 1971; Lumpkin, 1986). Gymnastics was seen primarily as a means of developing fitness (Patterson, 1998). The military, for example, used gymnastics for training troops—the horse apparatus was modeled after live horses used in the cavalry. Even by the early 1900s, some horse apparatus still had the front end pointed up and the tail end pointed down.

**Jahn’s Arrest for Teaching Physical Education**

At one point, the German government arrested Jahn because it perceived him to be a political threat. Jahn and his followers conducted German gymnastics outdoors in large groups (of approximately 400 people). The Turnverein societies promoted German nationalism, and the Turner motto translated into “Gymnasts are vigorous, happy, strong, and free” (Gerber, 1971, p. 131). Because these organizations promoted nationalism and freedom, the government attempted to stop Turnverein activity. Nevertheless, Turnverein societies continued to operate “underground” in some German states, and German immigrants brought the system to the United States, where it soon spread. At the Chicago World’s Fair in 1893, for example, 4,000 Turners demonstrated large group gymnastics activities (Gerber, 1971).

**Swedish Gymnastics**

The second major influence on the modern era of physical education was the Swedish system of gymnastics developed by **Per Henrik Ling** (1776–1839). Like the German system, the Swedish system promoted nationalism, was used as part of military training, and focused on large groups of people performing mass drills. The Swedish system emphasized exercises and body positions performed in highly precise ways, much like many aerobic and fitness classes today (see Figure 1.2). Swedish exercising concentrated on posture development rather than the stunts employed in German gymnastics. Ling invented a variety of apparatus for his system, including the stall bars and the Swedish box used for vaulting. We still use these and similar apparatus today (see Figure 1.3).

**The Gymnastics Wars**

Much as in the “reading wars” and the “math wars” of recent times, educators in the late 1800s debated whether the German or Swedish system was best. Educators sometimes called these debates the gymnastics wars or the “battle of the systems” (Freeman, 2012).

**New Goals: Teaching Games, Sports, Dance, and Recreational Activities**

In the twentieth century, educators began to promote a second set of subject matter goals for physical education—namely, that students learn games, sports, dance, and recreational activities. After World War I, the Roaring Twenties were in full swing. The United States entered a new era after the war with “unprecedented confidence,” a “quest for the ‘good life,’” and a feeling that “anything was possible” (Swanson, 1985, p. 18). John Dewey, whose work is still influential today, and other educators proposed a new view of schooling called progressive education that focused on developing the whole child. This spirit of progressive education soon captured the field of education. In 1927, Thomas Wood and Rosaline Cassidy wrote a book titled The New Physical Education, which advocated a shift from the regulated fitness regimes of German and Swedish gymnastics to teaching movement skills and physical activities, such as games, sports, and dance. It makes sense that physical educators moved away from the German and Swedish systems when addressing the general public because these systems were developed, in part, for military training. By the 1920s, World War I was over, Europe was “over there,” and people were optimistic. Educators of this era viewed fitness exercises as inadequate for a total program of physical education; instead, they...
claimed that health would be an outcome of children learning skills and activities that they could enjoy in their everyday lives (Swanson, 1985).

At the same time, educators called for the development of children's mental capabilities and moral character so they could become productive citizens of a democratic society. They believed that these goals could be met through games and sports (Freeman, 2012).

The dual goals of engaging in health-related activities and teaching games, sports, dance, and recreational activities have coexisted since the 1920s, and they continue to influence physical education today. In some years, health-related goals predominated; in other years, the teaching of sports, dance, and recreational activities assumed primary importance. Two additional events had a major influence on elementary physical education; one occurred in England and the other in the broader field of education.

**Historical Influences on Elementary Physical Education**

**The English Movement Approach**

In the late 1940s and 1950s, there was growing interest in England among physical education teachers to apply Rudolf Laban's work in modern educational dance (what we would label creative or educational dance today) to games and gymnastics (Riley, 1981). In addition, teachers found that children enjoyed exploring apparatus such as cargo nets and parallel ropes, which were originally used to train the armed forces for World War II.

During the same era, *Moving and Growing* (1952) and *Planning the Programme* (1953) were published by the Department of Education in England as replacements for the national syllabus that had been maintained since 1933. These texts promoted a curriculum and instructional model called a movement education or a movement approach, which included exploration, repetition, discovery learning, and versatility and quality in movement. The new syllabus led to changes in elementary physical education curricula and instruction across England. In the late 1950s and 1960s, adoption and development of the English movement approach by North American physical educators increased dramatically.

**ASCD Promotion of Individual Development as a Goal of Education**

In 1962, the Association for Supervision and Curriculum Development (ASCD) published a yearbook that brought individual development goals to prominence. Many physical educators embraced the goals outlined in the ASCD yearbook; as a consequence, the yearbook had a lasting impact on American elementary schools.

The major aim articulated in the yearbook was to help the child develop into a “fully functioning” person with the capabilities needed to live a “good life.” A good life, according to this source, is a life that is satisfying, meaningful, and productive. A fully functioning person has a sense of confidence, is open to new challenges, and accepts change with optimism and hope that the change will be enriching and enhancing.

Another key aim was for children to develop autonomy and the ability to make wise decisions about what is meaningful and important to them. The yearbook also proposed that programs focus on helping children develop social responsibility, form cooperative relationships with others, and care about the well-being of people in their communities.

In the 1960s, the goals articulated in the ASCD yearbook contributed to the interest of North American physical educators in adopting the movement approach. The movement approach was based on comparable goals and introduced new teaching techniques and a new view of content that allowed teachers to design programs to meet the goals promoted in the yearbook. Teachers and university faculty brought the movement approach to North America, and its use in elementary physical education has grown ever since.

We turn now to a discussion of the goals of physical education and national standards.

### The Goals of Physical Education and the National Standards

According to the Society of Health and Physical Educators (SHAPE), the national organizational for physical education, “The goal of physical education is to develop physically literate individuals who have the knowledge, skills, and confidence to enjoy a lifetime of healthful physical activity” (SHAPE, 2014, p. 11). The term *literate* in this sense means educated, and it is currently used across many subject areas to describe their goals (e.g., to be mathematically literate). The reference to preparing students to enjoy a lifetime of healthful physical activity indicates that our goals are not simply to keep children physically active and having fun, but, more importantly, to lay an educational foundation in physical literacy that will support them throughout adulthood. It is a goal worthy of our best efforts as teachers and has broad, nationwide support.

To provide a framework to guide physical education programs, this broad goal has been broken down into the following five national standards (SHAPE, 2014, p.12):

1. **The physically literate individual demonstrates competence in a variety of motor skills and movement patterns** (see Figure 1.4).
2. **The physically literate individual applies knowledge of concepts, principles, strategies, and tactics related to movement and performance.**
3. **The physically literate individual demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness.**
4. **The physically literate individual exhibits responsible personal and social behavior that respects self and others.**
5. **The physically literate individual recognizes the value of physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.**

These national standards identify for teachers what students are expected to achieve in physical education from kindergarten through grade 12 (K–12).

As you can see, the historical motor goals for learning both physical activities and health-enhancing physical activity remain prominent today, as do broader goals for individual development, such as developing social responsibility...
National standards and outcomes represent the collective professional judgment of teachers, administrators, and researchers about what students need to learn in schools. If students meet these standards and outcomes, they are considered to be physically literate and well on their way to a lifetime of physical activity. In addition, these standards, along with curriculum guidelines and policies published by SHAPE America (e.g., *Opportunity to Learn*, NASPE, 2010; *The Essential Components of Physical Education*, SHAPE America, 2015; *Appropriate Instructional Practice Guidelines for Elementary School Physical Education*, NASPE, 2009), define elements of professional standards of practice. Professional standards of practice are used by courts in lawsuits to determine if a teacher's actions or lack of action is negligent in relation to harm or injury to a student. Although we discuss specific safety and liability issues in relevant chapters throughout the text, we introduce negligence here to help you understand the importance of adhering to the national standards and generally accepted characteristics of professional practice.

**Negligence, Liability, and the National Standards**

As undergraduates, we both memorized the definition of negligence, that is, a failure to do what a reasonably prudent person would do in the same or similar circumstances. We recommend you do the same. Following the standard of professional practice to do as a reasonably prudent person would do will decrease your chances of being held liable for a student's injury, and failing to do so will increase your chances of liability (Eickhoff-Shemek, Herbert, & Connaughton, 2009). It is critical to remember that in a negligence lawsuit, you will be judged not on what a reasonably prudent person in the general population would do, but what another, well-trained, knowledgeable, reasonably prudent physical educator would do (Eickhoff-Shemek et al., 2009; Hart & Ritson, 2002). For example, if you teach a lesson and don't follow a developmentally appropriate progression for teaching a skill based on the national standards and learning outcomes for physical education, and a student is injured and claims your instruction was inadequate to prevent injury, you could be held liable in a negligence lawsuit for failing to follow the professional standards of practice described in the National Standards for Physical Education, written by other physical education professionals and published by our professional association, SHAPE America.

To understand negligence, we direct your attention to the Safety and Liability box. In this box we explain the elements of negligence. Throughout the text, we discuss specifically what you must do to meet professional standards of practice related to the content of each chapter. For example, the following are the major topics covered by professional standards of practice:

- **Supervision**: Students in the physical education space must be supervised at all times by a qualified supervisor (i.e., a certified teacher). The younger the children, the more closely they must be supervised.
- **Instruction**: Students must receive instruction on how to perform skills and movement patterns following a developmentally appropriate progression that ensures students' safe participation. Teachers must prepare written lesson plans that include teaching of safety in relation to lesson...
content. Students must be instructed about the potential danger of various physical activities.

- **Developmental level**: Physical activities must be matched to each student’s developmental level, and students must participate with other students at comparable developmental levels in regard to safety variables. Instruction must be differentiated for students of different developmental levels, abilities, and characteristics.

- **Environment**: Teachers and administrators must maintain a physically safe environment, including facilities, grounds, apparatus, and equipment. Teachers must also ensure the class organization provides adequate space for the movements of children, balls, and equipment such as bats and racquets.

- **Emotional environment**: Teachers and administrators must maintain an emotionally safe environment, including management of bullying and harassment.

- **Training**: Administrators must provide teachers opportunities for training in current professional practice and safety procedures, such as cardiopulmonary resuscitation (CPR) and first aid.

- **Accident reports**: Administrators and teachers must maintain records of accidents and injuries.

The national standards are important for many reasons, not least of which is giving you guidance on how to maintain professional standards. These standards will serve you well in decreasing your risk of liability.

### SAFETY AND LIABILITY 1.1

**Negligence**

Negligence is the “failure to exercise reasonable care that a reasonably prudent person would have exercised in the same or similar circumstances” (Nohr, 2009, p. 17). In a lawsuit, the injured student must prove all four of the following elements of negligence.

**Duty**

Duty means there is some relationship between individuals, such as employer and employee, teacher and student, or coach and players, and that the potential for harm by an action or lack of action was foreseeable (Eickhoff-Shemek et al., 2009; Nohr, 2009). Some events and accidents are not foreseeable, such as a meteorite landing on a child. For those events that are predictable, teachers have a duty to anticipate dangers and exercise reasonable, professional care to prevent harm.

**Breach**

Breach of duty means the teacher failed to meet the standard of professional care of the child that a reasonably prudent teacher would have met in the same or a similar situation. A breach of duty can be an action or a failure to act.

**Proximate Cause**

Proximate cause means the teacher’s actions or failure to act caused the injury or harm to the child. For example, if the child asked to try a back handspring (a difficult gymnastics skill) and the teacher said yes but failed to spot the child and the child was injured, the failure to provide spotting is a proximate cause of the injury. To help you understand proximate cause, you can apply the “but for” test. But for the teacher’s negligence in not providing spotting, the child would not have been injured.

**Damage**

The final element of negligence that must be proven is that the child suffered actual damage or that an actual injury occurred. Thus, if the child tried the back handspring and fell, but was not injured, claiming he or she could have been seriously injured is not sufficient to prove negligence.

---

**The Focus on Learning in the National Standards for Physical Education**

As you reflect on the goals of physical education and the five national standards, you can see that the focus is on student learning (SHAPE, 2014). For example, developing competence in motor skills and acquiring knowledge of concepts related to movement and performance, health-related physical activity, and fitness directly focus on learning. This focus reflects physical education’s location in schools, which have a mission to educate children and young people across subject areas. Children and adults can also participate in sports, fitness, and recreational physical activities in a range of community settings. These settings sometimes provide educational lessons; however, more often the focus is on providing opportunities for recreation and participation in physical activities. To support and align with the educational mission of schools, physical education focuses on learning (Ennis, 2014). In other words, physical education is not recess or simply an opportunity to work out; physical education is an opportunity for students to learn the skills, knowledge, and dispositions that will support participation in physical activities throughout adulthood.

**National Standards and the Physical, Cognitive, Social, and Affective Domains**

At first glance, it may appear that the five national standards are separate and address four different domains: physical (Standard 1), cognitive (Standards 2 and 3), social (Standard 4), and
affective (Standard 5). The physical domain refers to movement and motor skills; the cognitive domain reflects knowledge and thinking skills; the social domain focuses on social interactions; and the affective domain focuses on emotional feelings. Many physical educators define the affective domain as including both social interactions and emotional feelings, and others use the terms affective and social interchangeably. For clarity, in this text, we maintain a distinction between social and affective aspects.

Although we may discuss these four domains separately, in fact, these domains are fully integrated within physical activities. All physical activities have physical, cognitive, social, and affective aspects. For example, a class of third-graders given the task of dribbling a soccer ball (all at the same time), each traveling on different pathways (straight, curved, and zig zag) about the gymnasium, is practicing a motor skill, acquiring cognitive knowledge about different pathways and using thinking skills to decide when to change pathways to avoid bumping into a classmate, learning why changing pathways is important for working safely in a social environment, and feeling the excitement of dribbling successfully through a crowd. All four domains are part of the task.

The fact that all movement tasks you assign children include aspects of all four domains is critical because it allows you to focus on one (or more) of the national standards while also having students work on the primary aim to become competent in skills supporting a lifetime of physical activity. For example, in the soccer dribbling task, you might focus on improving the children's performance techniques (Standard 1). Or, you might instead focus on helping the children apply their knowledge of straight, curved, and zigzag pathways to avoid classmates or as a tactic to avoid defenders in game-like situations (Standard 2). You might also use the task to teach the children about the cardiorespiratory endurance needed in game-like situations (Standard 3), or you could emphasize the importance of exhibiting personal and social responsibility by not bumping into classmates (Standard 4). Finally, you might focus on helping the children recognize how the task is valuable because it is enjoyable and challenging (Standard 5). You can't focus on all five national standards at the same time, but movement tasks allow you to focus on whichever standard is most relevant at a given time and place.

The Common Core and Other State Standards

In addition to the national and state physical education standards, most states have also adopted a set of standards for literacy that apply to all subject areas. Many states use what are called the Common Core State Standards (Common Core State Standards Initiative, 2010), whereas other states have modified and adapted the Common Core to better meet specific needs. In this text, we call these standards the Common Core and other State Standards and use the label CCSS to identify these standards and note when they are included in the physical education lessons. We use the language of the Common Core because these standards are currently the most widely adopted.

The CCSS were developed by the states due to widespread concern about the English language literacy skills of American students and widespread agreement that teachers in all subject areas must contribute to students' abilities to read, write, speak, listen, and use higher-order thinking skills, as well as to collaborate with partners and small groups in discussions, projects, and problem-solving tasks. Although our goal and primary responsibility in physical education is to develop physically literate individuals, we can address CCSS without compromising our primary focus. We will show you how to do so throughout this text.

Teachers' Values and Goals

With all of the national and state standards that exist, you might be wondering if there is any room for teachers' personal values and goals. In fact, there is. In a large number of studies, Dr. Catherine Ennis found that teachers have both motor goals and broader goals for children's development. However, the extent to which they value and emphasize different goals varies. Ennis studied five value orientations that physical education teachers hold: disciplinary mastery, self-actualization, learning process, social responsibility, and ecological integration (Ennis, 1992; Ennis & Chen, 1993; Jewett, Bain, & Ennis, 1995). We summarize these orientations in the remainder of this section.

On the website, you will find a Value Orientation Inventory that you can take to see which orientations you currently value most and least. Recognizing your own value orientations can stimulate you to think about goals you might not have considered in the past. As you read the description of each orientation, think about the extent to which you want your physical education program to reflect the goals described. You might want to rank the five orientations and compare your ranking to your scores on the Value Orientation Inventory.

Disciplinary Mastery

Teachers with a disciplinary mastery value orientation focus on subject-matter mastery as the primary goal of instruction. Thus, the first priority for these teachers is that children develop skillful movement in games, dance, and gymnastics; acquire knowledge of health-related physical activities; and learn about the disciplinary concepts of biomechanics, exercise physiology, the sociology and psychology of physical activity, and the history of sports and fitness.

Self-Actualization

Teachers who value self-actualization as their primary orientation focus on individual development and help children develop autonomy, self-confidence, self-management skills, self-understanding, and the ability to identify and work toward their own goals. Teachers select physical activities that children find meaningful and relevant and aim to develop children's individual capabilities.

Learning Process

Teachers with a learning process orientation help children learn how to learn. They not only teach physical activities, but also teach the process of learning these activities, such as how to improve performance, how to make decisions, and how to solve problems. They want children to be lifelong participants in
physical activities and consequently focus on helping children learn how to engage in physical activities throughout their lives.

**Social Responsibility**

Teachers who prioritize social responsibility goals focus on developing responsible citizenship. This perspective includes teaching children how to cooperate and work responsibly and positively with others, why respecting the rights of others is important, and how to exert positive leadership, avoid conflict, and negotiate conflict resolutions (Ennis, 1994; Ennis & Chen, 1995).

**Ecological Integration**

Ecological integration emphasizes the integration of the individual within the total physical, social, and cultural environment. The teacher’s primary objective is to prepare children for living in a global, interdependent society in which neither individual nor social needs predominate. Ecological integration has a future orientation, and teachers balance subject matter with individual and societal goals.

**Research on Teachers’ Value Orientations**

Ennis and her colleagues have studied the value orientations of physical education teachers in elementary, middle, and high school settings. According to these researchers, most teachers have a disciplinary mastery orientation. Nevertheless, only 7.6% of the teachers in urban schools in their study reported valuing disciplinary mastery (Ennis, Chen, & Ross, 1992); instead, these urban teachers tended to emphasize social responsibility (Ennis, 1994).

Ennis and her colleagues also found that teachers have different value profiles. A profile indicates the extent to which you believe in each of the five value orientations. For example, some teachers believe strongly in one or two orientations and are only minimally concerned about the others. Other teachers will be concerned equally with most value orientations. Still other teachers will score high on one orientation, low on another, and be neutral on the other three.

You can discover your own profile by completing the Value Orientation Inventory on the text website and then scoring your answers using the scoring method provided. Keep in mind that your profile is not set in stone. Research shows that undergraduates’ orientations change as they progress through teacher education (Solmon & Ashy, 1995).

What is critical is for you to reflect on your values and implement a program that reflects what you believe. The National Standards for Physical Education include goals that reflect different orientations. In this text, we present curriculum and instructional practices that you can use to implement a program in keeping with any of the five value orientations. We hope to challenge you to become the kind of teacher you want to be.

---

**The Significance of Physical Education**

The significance of physical education relates directly to its goals. We begin by considering the significance of health-related physical activity (HRPA).

**The Significance of Health-Related Physical Activity**

There is considerable support for the importance of HRPA and the role of physical education in its promotion from government agencies, such as the Centers for Disease Control and Prevention (CDC), the Surgeon General of the United States, the American Heart Association (AHA), and SHAPE, as well as researchers and physical education teachers. Specifically, a substantial body of research shows that HRPA produces the following benefits:

- Lower risk of early death
- Lower risk of coronary heart disease
- Lower risk of stroke
- Lower risk of high blood pressure
- Lower risk of adverse blood lipid profile
- Lower risk of type 2 diabetes
- Lower risk of metabolic syndrome
- Lower risk of colon cancer
- Lower risk of breast cancer
- Prevention of weight gain
- Weight loss, particularly when combined with reduced calorie intake
- Improved cardiorespiratory and muscular fitness
- Prevention of falls
- Reduced depression
- Better cognitive function (for older adults) (U.S. Department of Health and Human Services [USDHHS], 2008, p. 9)

In addition, the CDC (2010) has confirmed a link between physical activity and academic achievement:

- There is substantial evidence that physical activity can help improve academic achievement, including grades and standardized test scores.
- The articles in this review suggest that physical activity can have an impact on cognitive skills and attitudes and academic behavior, all of which are important components of improved academic performance. These include enhanced concentration and attention, as well as improved classroom behavior.
- Increasing or maintaining time dedicated to physical education may help, and does not appear to adversely impact, academic performance (p. 6).

Thus, physical activity is not only beneficial to health, but increasing time in physical education does not correspond to decreased test scores, even if less time is spent in subjects such as reading and mathematics.

In response to this research, the Surgeon General (USDHHS, 2010) made the following recommendations.

To promote physical activity, school systems should:

- Require daily physical education for students in pre-kindergarten through grade 12, allowing 150 minutes per week for elementary schools and 225 minutes per week for secondary schools.
- Require and implement a planned and sequential physical education curriculum for pre-kindergarten through grade 12 that is based on national standards.
- Require at least 20 minutes of daily recess for all students in elementary schools.
This perception changed with the landmark report in 1996 from the Surgeon General (CDC, 1996). Based on research findings, the report recommended that adults engage in moderate physical activity for approximately 30 minutes most days of the week and included a broad range of physical activities considered effective in enhancing health. The current guidelines for children call for 60 minutes or more of moderate to vigorous physical activity every day, including activities such as skateboarding, hiking, games involving running, walking to school, bike riding, and jumping rope (USDHHS, 2008).

Therefore, the emphasis in physical education today is on a variety of enjoyable health-related physical activities that can lead to lifelong participation.

### The Significance of Learning Sports, Dance, Outdoor Activities, and Physically Active Play

The many forms of physical activity are significant parts of human life. Physical education is the only subject area in school devoted to teaching children the skills they need for meaningful participation. Siedentop (2002) argues, “The cultures of physically active play [are] fundamentally important to collective social life, and that bringing children and youth into contact with those cultures through educationally sound practices [is] sufficient to justify physical education as a school subject” (p. 411).

Physically active play—including sports, dance, outdoor activities, children’s games, and recreational sports—is undeniably an important activity in society today. One of the key roles of schools is to educate students about ideas and events and to prepare students to participate in activities that are important.

### What the Research Says

**Support for the Significance of Physical Education’s Contribution to Children’s Education**

Learning movement skills is both an outcome in itself, as well as a means for physical education to contribute to the general goal of education to develop the whole child in all domains: physical, cognitive, social, and emotional. Educational researchers support the importance of physical education’s contribution to the whole child.

**Howard Gardner’s Research**

There is no doubt that one goal of education is to develop children’s intelligence. But what is intelligence? Does it consist of a score on an I.Q. test? Howard Gardner, a Harvard University psychologist, says no. In his influential books, *Frames of Mind: The Theory of Multiple Intelligences* (1983) and *Intelligence Reframed: Multiple Intelligences for the 21st Century* (2000), Gardner argues that the old view of intelligence based on verbal and mathematical abilities is far too narrow to define intelligence.

In his research, Gardner has identified eight different intelligences: linguistic, logical-mathematical, spatial, musical, bodily-kinesthetic, interpersonal, intrapersonal, and naturalist. Individuals have different strengths among these eight intelligences, but all of these capabilities are important, valuable intelligences that help humans to function in society.

One implication of Gardner’s work is that schools should develop all of the intelligences that will help students function well and contribute to their communities. We live and work in a complex world where we rarely acquire and use isolated pieces of information. Instead, the challenges we face, the problems we must solve, daily living, and work tasks require us to use multiple intelligences.

A second implication of Gardner’s work is that children acquire knowledge and skills using multiple intelligences. Some children will learn more easily through one mode of learning; others will benefit from another approach. Relying on only one mode of learning does a disservice to children who might better understand a given topic if the teacher used multiple sources and modes of learning. Providing more than one source of information and multiple modes of learning can help all children develop a deeper understanding of subject matter.

Teachers and schools across North America have embraced Gardner’s work because it has given them a broader, more comprehensive framework for understanding intelligence. Schools applying such a framework have succeeded in improving student achievement (Campbell & Campbell, 1999).
in their society. Literature, poetry, biology, earth science, geography, art, music, and history are all justified as subject areas, in part because they include ideas, events, and activities that were significant throughout history and remain important to today’s society.

From the sports pages of most every newspaper to the Friday night lights of high school football, sports are part of the fabric of our communities. Across the country, parks and recreation departments provide swimming pools; access to lakes for fishing; trails for hiking, biking, and walking; tennis courts; golf courses; recreation centers offering a variety of leisure activity classes; and playgrounds for children. Sport agencies offer youth programs in soccer, basketball, softball, baseball, swimming, volleyball, cheerleading, gymnastics, dance, ice hockey, and other sports and activities. Television offers sports and sport-related shows 24 hours a day.

Clearly, learning sports, dance, and other physical activities is a critical part of children’s education, enabling them to know about and participate in culturally significant activities. These activities contribute to the quality of their lives and support a lifetime of participation in health-enhancing, recreational physical activity in their communities (see Figure 1.5).

**Summary**

Until the twentieth century, many physical educators were physicians whose primary aim was to improve the health of their “patients.” In the nineteenth century, German and Swedish systems of exercise predominated, and traces of these systems persist within modern-day approaches to physical education. In the twentieth century, educators promoted the goals of having
students learn games, sports, dance, and outdoor recreational activities. In the 1960s, emphasis was placed on motor, cognitive, social, and emotional goals to help children develop into fully functioning people. All of these goals were valued today and are evident in the National Standards for Physical Education. There is wide consensus that the “goal of physical education is to develop physically literate individuals who have the knowledge, skills, and confidence to enjoy a lifetime of healthful physical activity” (SHAPE, 2014, p. 11). To provide a framework to guide physical education programs, this goal has been broken down into five national standards. Teachers plan their curriculum and lessons in order to ensure their students meet the National Standards for Physical Education and their state’s standards for physical education. In addition, education in all subject areas is expected to contribute to students’ meeting the Common Core or other State Standards for English language literacy.

Teachers differ in the extent to which they value different goals. Researchers have identified five value orientations: disciplinary mastery, self-actualization, learning process, social responsibility, and ecological integration.

The significance of physical education relates directly to its goals. A substantial body of research shows that HRPA leads to health benefits. In addition, physical activity and academic achievement are linked. Increasing time for physical education does not detract from academic performance. Sports, dance, outdoor activities, children’s games, and recreational sports are undeniably significant cultural activities. Physical education is the only subject area in school devoted to teaching children the skills they need for meaningful participation.

### Review Questions

1. Describe the goal of physical education prior to the 1900s. What were the gymnastics wars?
2. In the early 1900s, what became the second subject-matter goal of physical education, and why did teachers shift to this goal?
3. In your own words, describe the goal of physical education as defined by SHAPE (2014).
4. Link the four domains discussed in this chapter to the five National Standards for Physical Education.
5. Describe a task to practice a motor skill in an elementary school grade and identify the physical, cognitive, social, and emotional aspects of that task.
6. Pretend you are back in elementary school physical education. Rank the five value orientations that you would want your teacher to emphasize. Now assume that you are a parent, and rank the five value orientations that you would want your child’s physical education teacher to emphasize. Discuss the reasoning underlying your rankings.
7. Reflect on the following situation. You are a high school physical education teacher in a rural community, and a senior girl who often confides in you asks your opinion about what she should do. All her life, she has wanted to be a fashion designer; now, because of her talent, she has the opportunity to attend a famous fashion institute in New York. Her family runs the only grocery store in their small town. Her parents are getting old and rely on her to run the store. If she leaves for New York, the store will likely have to close, which will affect both her family and the community. What do you say to her? What do you think she should do? Identify which value orientations reflect what you think she should do.
8. Pretend you are meeting with a principal. Explain the significance of physical education as a school subject.


