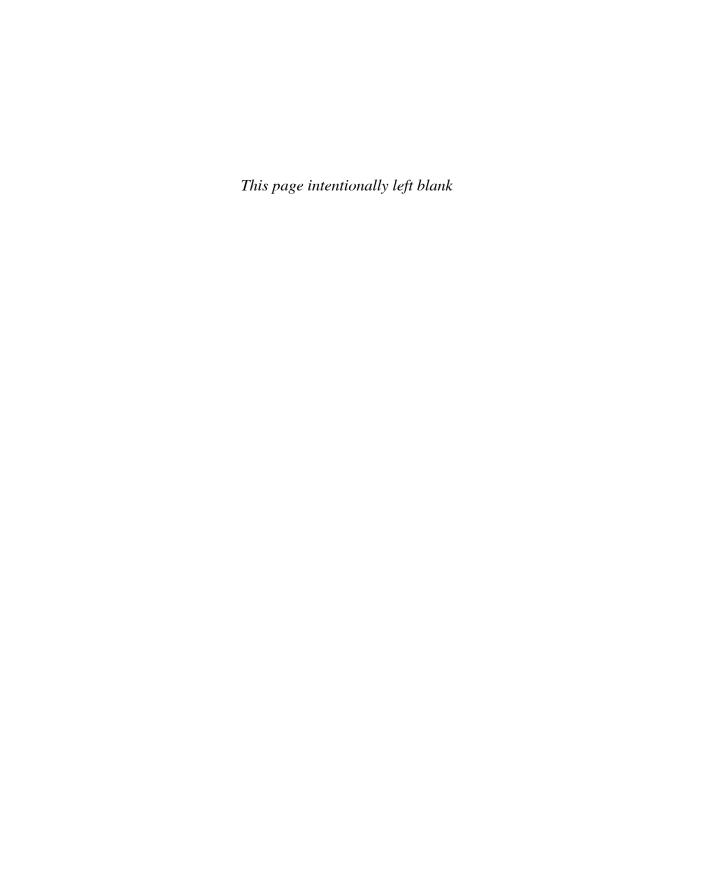


Teaching Physical Education for Learning

Judith E. Rink



Teaching Physical Education FOR LEARNING



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Judith E. Rink

University of South Carolina





TEACHING PHYSICAL EDUCATION FOR LEARNING, SEVENTH EDITION

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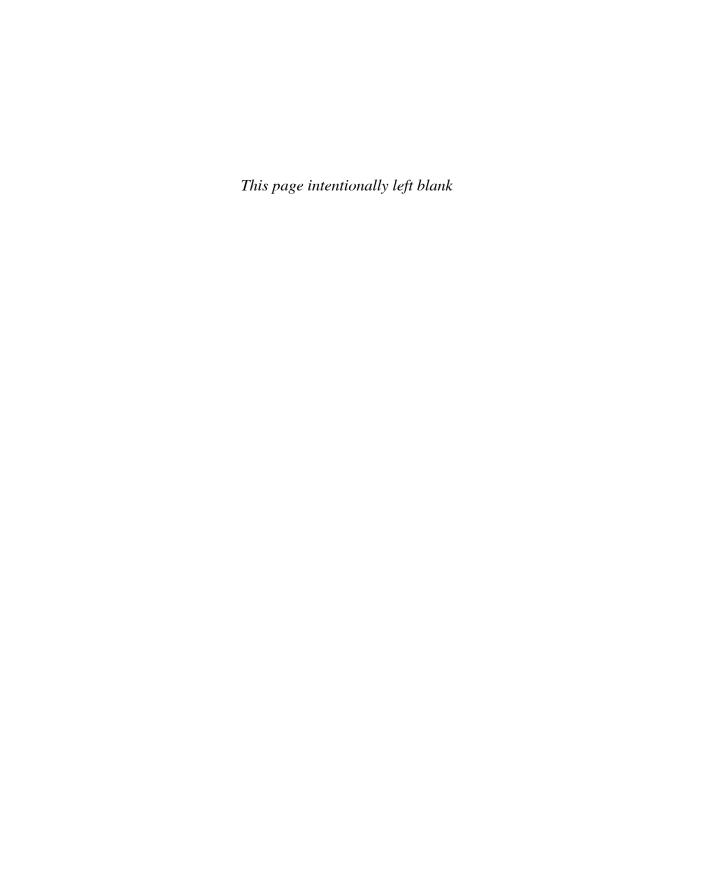
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For my mother, Eleanor



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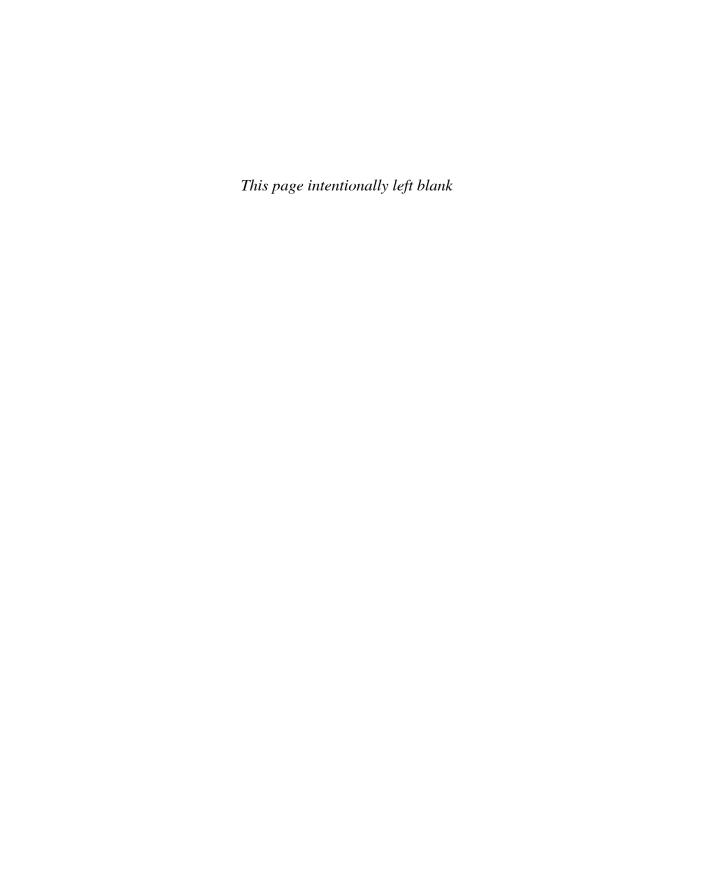
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Preface

s a result of the recent obesity crisis, physical education programs have been asked to L play a major role in increasing the level of physical activity of students and in developing skills for a lifetime of physical activity. Comprehensive School Physical Activity Programs are being implemented in many schools to respond to the daily needs of students for physical activity. Over the past years the important relationship between motor skill and lifetime physical activity has become more clear. The physical education instructional program will have to play a major role in developing the skills, attitudes, and knowledge that children will need for a lifetime of physical activity. In order to do this, teachers are going to have to have the skills to teach effectively to outcomes. Teaching is a process that is both interactive and context specific. Teachers need the technical skills of teaching, but they also need to be able to apply them situationally.

The focus of this book is on the basic skills of teaching that are appropriate to teaching all content areas. Without these skills teachers cannot be effective.

CHANGES IN THIS NEW EDITION

In this new edition the material on the professional teacher has been moved from one of the last chapters to the first chapter. A large section on the relationship between motor skills and physical activity has been added to the chapter on teaching motor skills and the games stages that were part of the context specific chapter has been moved to the content development chapter.

All chapters have been revised and updated to increase the number of examples given students and to increase the clarity of critical ideas students should take from their reading.

ORGANIZATION

The text is organized to begin with an orientation chapter that sets the stage for students beginning to see themselves as a professional and for student learning as the primary goal of the teaching process. This chapter is a key to developing student understanding of the importance of chapters to follow. It is followed by a chapter on the importance of motor skill learning to the development of a physically active lifestyle and factors that influence student learning. Although many programs have course work in motor learning and development, the essential concepts from these areas are presented with their implications for teaching.

Part II of the text presents chapters on the critical teaching skills for teaching physical education. These have not changed a great deal over the years. Although there is a rationale for the order in which they are presented, it is expected that instructors use order flexibly according to the specific needs of a program. Part III of the text presents a chapter on content-specific pedagogy. This chapter is not intended to be inclusive of what a teacher needs to know to teach fitness, games/sports, or movement concepts, but rather begins to identify pedagogical issues specific to a content area. Chapters on the teacher as the continuous learner and observational techniques and tools are included in Part III of the text as well. The

chapter on observation is designed as a reference tool for systematic observation of teaching to facilitate instructor feedback on the teaching skills described in the text.

SUCCESSFUL FEATURES AND SUPPLEMENTS

Each chapter begins with an overview that sets the stage for the importance of the chapter. Chapters conclude with a summary of key ideas of the chapter and, questions designed to check student understanding of the materials, and references. The website that accompanies *Teaching Physical Education for Learning* includes an instructor's manual that provides some suggestions for using the chapter and describes student learning experiences that can be used to make sure that students can use the material in the chapter. It also includes a test bank of short-answer questions for the instructor, as well as PowerPoint presentations for each of the chapters.

The latest edition of *Moving into the Future:* National Content Standards for Physical Education can be packaged with Teaching Physical Education for Learning at the instructor's request. This resource is an ideal accompaniment for the text, as the standards define learning outcomes for effective teaching.

ACADEMIC REVIEWERS

I am indebted to the many friends, colleagues, and students with whom I have worked over the years. They are a continuous source of support and challenge for me and have played a major role in the development and growth of this text over the years. I am grateful to the reviewers who have challenged me to continue to make this text a better source for new generations of teachers.

Reviewers for this edition include:

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Teaching Physical Education: An Orientation



OVERVIEW

Teaching can be viewed from many perspectives. The perspective teachers take when they look at the teaching-learning process determines what they will look at in that process and how they will look at it. Perspectives are important because they cause the teacher to see things in certain ways. This chapter establishes a perspective for this text. It is an overview on instruction from which other chapters in the text are developed.

■ TEACHING AS A PROFESSION

When you made the decision to go into teaching, you made the decision to join a profession. Professions in a society are awarded special status with accompanying privileges and responsibilities. Not all occupations are considered professions. Professions are usually characterized by the following:

The occupation requires extensive preparation and expertise.

Professionals in a field have a shared language not common to the general public.

The occupation provides an essential service.

Members share a strong service motivation; they are dedicated and committed to the service they provide.

The occupation is characterized by a high level of public trust.

There are agreed-upon technical and ethical standards that monitor entrance into the profession.

Members are socialized into and share a perspective on what constitutes "best practice," normally defined by professional organizations and a historical set of ethics and values. Accountability for performance comes from within the profession.

Occupational practice is rooted in a discipline.

Practice of the occupation is free from direct onthe-job supervision of individual performance.

If you think about some of the ideas expressed in the preceding list, you will begin to realize that the world of work is different for professionals and non-professionals. Not only do professionals perform an essential service that not just anybody can do, but also there is an assumption by the public that individuals who practice the profession will act professionally. The public trust accorded to a profession might be considered directly proportional to the number of individuals within the profession who do act professionally.

■ WHAT DOES IT MEAN TO ACT PROFESSIONALLY?

To act professionally is to provide "state-of-the-art" service and to maintain your commitment to doing this throughout your career. Professionals in a field who do not act professionally and do not provide their

clients with best practice reduce the trust the public confers on the profession. Each member of the profession has an obligation to preserve and develop public trust by doing a good job. There are many ways teachers can ensure that they will contribute to the profession and do a good job of teaching.

Professional Teachers Acquire the Skills for Best Practice

Professionals should be prepared at the start of their careers to provide best practice. Table 1.1 lists the beginning teaching standards developed by the National Association for Sport and Physical Education (2008). These are expectations that the profession has for the beginning teacher. Each chapter in this text addresses one or more of these standards. Be aware of

the expectations for best practice for this stage of your career. These standards are used to assess teacher preparation programs in physical education. A good teacher preparation program should give you the opportunity to develop these abilities and technically should not let you graduate unless you have acquired the expected skills, knowledge, and dispositions. It is up to you to take advantage of the opportunities provided to you. For many college students this requires a change in perspective from an other-directedness to a self-directedness. You will mature as a professional as you begin to want to learn as much as you can as a preservice teacher and do the best job that you can because of your commitment to providing students with the best possible experience; not because someone else is requiring you to do something.

TABLE 1.1

National Standards for Beginning Teachers

Standard 1: Scientific and Theoretical Knowledge

Physical education teacher candidates know and apply discipline-specific scientific and theoretical concepts critical to the development of physically educated individuals.

Outcomes—Teacher candidates will:

- 1.1 Describe and apply physiological and biomechanical concepts related to skillful movement, physical activity, and fitness.
- 1.2 Describe and apply motor learning, psychological, and behavioral theory related to skillful movement, physical activity, and fitness.
- 1.3 Describe and apply motor development theory and principles related to skillful movement, physical activity, and fitness.
- 1.4 Identify historical, philosophical, and social perspectives of physical education issues and legislation.
- 1.5 Analyze and correct critical elements of motor skills and performance concepts.

Standard 2: Skill and Fitness Based Competence*

Physical education teacher candidates are physically educated individuals with the knowledge and skills necessary to demonstrate competent movement performance and health-enhancing fitness as delineated in the NASPE K-12 Standards.

Outcomes—Teacher candidates will:

- 2.1 Demonstrate personal competence in motor skill performance for a variety of physical activities and movement patterns.
- 2.2 Achieve and maintain a health-enhancing level of fitness.
- 2.3 Demonstrate performance concepts related to skillful movement in a variety of physical activities.

Standard 3: Planning and Implementation

Physical education teacher candidates plan and implement a variety of developmentally appropriate learning experiences and content aligned with local, state, and national standards to develop physically educated individuals.

^{*} Physical education teacher candidates with special needs are allowed and encouraged to utilize a variety of accommodations and/or modifications to demonstrate competency and performance concepts (modified/adapted equipment, augmentative communication devices, multimedia devices, etc.) and fitness (weight programs, exercise logs, etc.).

TABLE 1.1

National Standards for Beginning Teachers—con't

Outcomes—Teacher candidates will:

- 3.1 Design and implement short- and long-term plans that are linked to program and instructional goals as well as a variety of student needs.
- 3.2 Develop appropriate (e.g., measurable, developmentally appropriate, performance-based) goals and objectives aligned with local, state, and/or national standards that lead to student learning.
- 3.3 Design and implement content that is aligned with lesson objectives.
- 3.4 Plan and implement effective demonstrations, explanations, instructional cues, and prompts to link physical activity concepts to appropriate learning experiences.
- 3.5 Plan for the management of resources to provide active, fair, and equitable learning experiences.
- 3.6 Adapt instruction to diverse student needs, adding specific accommodations and/or modifications for student exceptionalities.
- 3.7 Plan and implement progressive and sequential instruction that addresses the diverse needs of all students.
- 3.8 Design and implement student learning experiences that integrate technology.

Standard 4: Instructional Delivery and Management

Physical education teacher candidates use effective communication and pedagogical skills and strategies to enhance student engagement and learning.

Outcomes—Teacher candidates will:

- 4.1 Demonstrate effective verbal and nonverbal communication skills across a variety of instructional formats.
- 4.2 Provide instructional feedback that results in skill acquisition, student learning, and motivation.

- 4.3 Recognize the changing dynamics of the environment and adjust instructional tasks based on student responses.
- 4.4 Utilize managerial rules, routines, and transitions to create and maintain an effective learning environment.
- 4.5 Implement strategies to help students demonstrate responsible personal and social behaviors in a productive learning environment.

Standard 5: Impact on Student Learning

Physical education teacher candidates utilize assessments and reflection to foster student learning and inform instructional decisions.

Outcomes—Teacher candidates will:

- 5.1 Select or create appropriate assessments that will measure student achievement of goals and objectives.
- 5.2 Use a variety of appropriate assessments to evaluate student learning before, during, and after instruction.
- 5.3 Utilize the reflective cycle to implement change in teacher performance, student learning, and instructional goals and decisions.

Standard 6: Professionalism

Physical education teacher candidates demonstrate dispositions essential to becoming effective professionals.

Outcomes—Teacher candidates will:

- 6.1 Demonstrate behaviors that are consistent with the belief that all students can become physically educated individuals
- 6.2 Participate in activities that enhance collaboration and lead to professional growth and development.
- 6.3 Demonstrate behaviors that are consistent with the professional ethics of highly qualified teachers.
- 6.4 Communicate in ways that convey respect and sensitivity.

Source: National Association for Sport and Physical Education (2008).

Although it is reasonable for beginning teachers to learn a lot during their first few years from experience, it is not reasonable to expect that you will acquire these skills independently by practice alone. The college and university setting has the resources to help you acquire these skills, and during

your initial preparation to be a teacher is the time that you should be working hard to develop these skills.

Most people who decide to teach physical education do so because they are good at it, have enjoyed their past experiences with sport and physical education, and like to work with people. These are good reasons to choose a profession. Because engaging in sport and physical activity is fun for most people, a misconception often exists that teaching physical education is easy, or at least easier than teaching any other content. Teaching physical education can be exciting, rewarding, and fun, but to do it effectively is not easy.

Teaching is a complex activity. Its goal is student learning. The teacher has primary responsibility for directing the teaching-learning process. This is why teaching can become difficult. If a student is not learning, the teacher must find an effective way to reach this student. There are many types of students and many types of skills, knowledges, and values that teachers will want to teach. Finding ways to reach objectives for learning with all students is a real challenge. Teaching is not an exact science. Teachers need to design and redesign experiences for their students based on their pedagogic goals and their knowledge of the learner, the lesson content, and the teaching-learning process.

Although teachers in schools play many roles other than instructing in a physical education class, Teaching Physical Education for Learning is primarily a text on instructional processes and the teaching skills required to execute those processes effectively; that is, what teachers can do to help students learn what teachers want them to learn. Several key ideas will be reinforced throughout this text. The first is that instruction is a goal-oriented activity. This means that the process is meaningless unless it is designed with a clear goal regarding what the student will learn. You will be asked to articulate what you want learners to learn as a result of what you do as a teacher. The second key idea is that instructional processes are specific to an intent. This means that you select an instructional process to best accomplish a specific purpose.

For instance, a teacher may decide to lead students through a problem-solving experience while teaching balance to help them understand principles related to base of support. The teacher selects *problem solving* as the instructional process rather than *telling* because the teacher's intent is not only that students know the information but that they are able to use this

information in their balance activities. If you want students to lead a physically active lifestyle outside of your class and as adults, you will teach differently than if you want them only to know that physical activity is good for them.

It is important for teachers to choose instructional processes appropriate to their goals. To do this, teachers must have a clear idea of what they want students to be able to do, and they must be able to implement instructional processes effectively for a given activity and group of students. This chapter explains the basic framework of the instructional process in physical education and identifies the skills needed to operate successfully within this framework.

■ TEACHING AS A GOAL-ORIENTED ACTIVITY

Instruction is guided by a long-term plan for student outcomes called the curriculum. When curricular decisions are not made or used to guide instruction, the instructional process is like a moving car without a driver. For this reason curriculum and instruction are integrally related. Teaching as a goal-oriented activity begins at the curricular level. Many curricular decisions in today's educational climate are being determined by content standards at the national, state, and local level that clearly prescribe what students should know and be able to do in physical education. The consensus in the field is that the purpose of physical education is the development of a physically active lifestyle. The national standards for physical education were developed and published by the National Association for Sport and Physical Education in 1995, revised in 2004, and have been used extensively by states and local districts to articulate program goals related to this purpose. The six standards describe the skills, abilities, and dispositions students will need to lead a physically active lifestyle. These standards are listed in box 1.1. In the publication Moving into the Future: National Standards for Physical Education (NASPE, 2004), each of the standards is broken down by grade level so teachers can identify what students at each age should know and be able to do.

B O X 1.1

National Content Standards for Physical Education Programs

Standard 1: Demonstrates competency in motor skills and movement patterns to perform a variety of physical activities.

Standard 2: Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities.

Standard 3: Participates regularly in physical activity. Standard 4: Achieves and maintains a health-enhancing level of physical fitness.

Standard 5: Exhibits responsible personal and social behavior that respects self and others in physical activity settings.

Standard 6: Values physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.

Reprinted from Moving into the Future: National Standards for Physical Education (2nd ed., 2004).

Physical educators must explain and defend their role and program in the schools. Physical education programs are expensive in the facilities, equipment, and personnel they require. Growing opportunities for students to participate in sport activities outside the schools have caused educators, administrators, and taxpayers to view with uncertainty the contributions of physical education programs to the overall educational picture. Research done by physical educators on the attitudes of secondary students toward physical education (and the products and processes of physical education programs) largely confirms the discrepancy between what physical educators promise and what they produce. Many physical education programs are not defensible. Lack of accountability for program goals in the schools has resulted in many poor programs of physical education: those without identifiable or defensible goals and programs that bear no relation to their stated goals. If physical education is to attain credibility as a truly educational program, the relationship between curriculum and instruction must be clearly defined and programs must be oriented toward clearly stated goals. The contrast between two elementary and secondary programs is made clear in box 1.2 (see p. 6), which describes two different programs, one defensible and one not defensible. Read the example and see if you can identify what it is that makes a program defensible.

Types of Goals

Educational program outcomes are commonly called goals when they refer to broad outcomes and **objectives** when they refer to more specific outcomes. Whereas curriculum objectives and, more recently, student performance standards usually define what the student should achieve as result of an entire program, instructional objectives usually describe what the student should achieve as a result of a single lesson or unit of instruction. Educational goals and objectives are used for both curriculum and instruction. They are usually classified under one of three interrelated categories according to the domain of learning that characterizes that particular goal or objective: psychomotor, cognitive, or affective. As you review the national standards, you should be able to identify which of the standards address which domain (figure 1.1).

Psychomotor Domain

Motor Skills
Fitness Outcomes

Affective Domain

Feelings Values Social Behavior Attitudes

Cognitive Domain

Knowledge Strategies Tactics Cognitive Abilities

FIGURE 1.1

Physical education has responsibility for all domains of learning.

B O X 1.2

Defensible and Not Defensible Programs

Elementary—Defensible

The teacher has planned the day's lesson with psychomotor, cognitive, and affective objectives from a written plan that describes what the learning objectives for the day will be and how the lesson will proceed. The second-grade class will be working on combining locomotor patterns. Opportunities to practice the skills separately and then combine them are provided. The teacher also has planned to have each student develop a personal routine that will be shared with a partner and assessed using peer review.

Elementary—Not defensible

The teacher decides on the way to work: the secondgrade class really likes to play with the parachute, so that is what the class will do today. The teacher thinks of all the fun things that the students like to do with parachutes and writes them down when he/she gets to work.

Secondary—Defensible

The teacher is teaching a unit on volleyball. The teacher has carefully planned the unit so that each day students work on some aspect of their skill development that they have decided, with the teacher, is a weakness. Each part of every day is also devoted to some gamelike or game play. At the end of each class the teacher and the students assess their play and skill and make a decision about what needs the most attention. The teacher plans the next lesson to work on those aspects of play that need attention.

Secondary—Not defensible

The teacher has been working on a unit in volleyball. The first day of the unit the teacher presented all of the skills of volleyball and is running a tournament for the rest of the unit. Some students are better than others, but the students really don't like to practice the skills. The teacher has decided that his/her role is primarily to keep the peace during play and to help the students deal with conflict that emerges on an individual basis.

Goals and objectives that deal with motor and physical abilities are termed psychomotor objectives. Standards 1 and 4 (box 1.1) are directly related to the psychomotor content of physical education. Psychomotor outcomes are the unique contribution of physical education to the education of the students. No other educational program emphasizes psychomotor objectives the way physical education does. Psychomotor objectives include motor skill objectives such as teaching fundamental skills (e.g., skipping, throwing, or rolling) or the complex skills required for sports (e.g., the basketball layup or back handspring). Psychomotor objectives also include fitness outcomes (e.g., arm strength, cardiorespiratory endurance, and flexibility). A psychomotor goal might be to play basketball at an intermediate level of ability or to reach a particular level of ability on a fitness test.

Cognitive objectives describe knowledge or ability levels in processing information. The national standard that is related to this outcome is primarily "standard 2:" Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities. Many aspects of performance in the psychomotor and affective domains (discussed next) are related to cognitive abilities that must be developed as well. In other words, you have to know how to achieve fitness in order to design a program to achieve and maintain a fitness level. Cognitive goals and objectives are intellectual and thinking related. They include outcomes related to knowledge students should have (e.g., how to develop joint flexibility) and outcomes related to problem solving and creativity or the transfer of knowledge from one situation to another (e.g., how to apply zone defense to a six-onsix soccer game).

Affective objectives describe student feelings, attitudes, values, and social behaviors. The national standards directly related to affective outcomes are 5 and 6. Standard 5 deals with personal and social behavior, standard 6 with values related to the benefits of participation in physical activity. The desire to have students value fitness and engage in activity on a regular basis (standard 3) is mostly an affective goal that needs skill and knowledge. Objectives teachers



Physical education should prepare students for a life of physical activity.

have related to student feelings, attitudes, values, and social behaviors are affective objectives. A major goal of physical education is to prepare students for a lifetime of physical activity. Unless teachers address affective goals in their programs, students may be skilled and may even be knowledgeable but may choose not to participate.

Unlike sport programs outside the school, physical education also shares many cognitive and affective goals with all educational programs within a school. The teacher in physical education often has psychomotor, cognitive, and affective objectives in one lesson. Physical educators should help students to be thinking, caring, and sharing individuals. Lessons that in part teach working productively with a partner, fair play, independent learning skills, and positive self-regard have objectives classified as affective. Chapter 9 in this text addresses these issues.

Chapter 10, "Planning," describes in detail how teachers can write goals and objectives for different purposes when planning both curriculum and instruction. At this point it is important to recognize that educational goals are concerned with each dimension of human development.

Establishing Realistic Goals

If the relationship between curriculum and instruction is to be maintained, the curriculum goals and objectives established must be appropriate to the instructional situation. Instructional programs cannot be conducted in a manner consistent with established goals if the goals set are hopelessly unattainable. Selecting realistic goals for a program is difficult in physical education. The field has the potential to contribute in many ways to educational goals and objectives. Physical educators can use active learning and physical activity to make major contributions to all domains of learning, and that makes it difficult to define our responsibility. Designating realistic goals has been a major problem for many programs. Physical educators for the most part have tried to be all things to all people. As a result, they have tended to accomplish little. For example, a representative high school curriculum guide for the ninth grade might list the following goals:

- Develop and maintain fitness.
- Develop skills for participation in six team sports, four individual sports, gymnastics, and dance.
- Teach students how to value themselves and interact with others in positive ways.
- Teach students how to be independent learners and problem solvers.
- Develop skills, attitudes, and knowledge related to participation in physical activity that will transfer to new skills and encourage lifetime participation.

If students in this ninth grade have physical education class two times a week, it should be apparent that even the first goal of fitness is not attainable within the confines of the assigned class time. If the sport, gymnastics, and dance objectives are divided by the time normally available in a school year, the extent of the problem becomes apparent. Each sport would have less than two weeks of program time. Enough time is not available to successfully complete even the simplest of the stated goals. The goals listed in this curriculum are worthwhile. Teachers should be setting their goals high. However, had the designers of this curriculum considered the instructional process needed to reach their goals, they would have realized that the goals stated were not attainable in the time allotted.

To attempt to meet all of these goals in one program can result only in accomplishing none of them,

because the students need adequate time to experience any degree of success. The goals established for any program must be realistic to their setting, which often means that the teacher must choose between many worthwhile goals.

More realistic skill and fitness goals for this ninthgrade setting might have included the following:

- Students should be able to design personal goals for fitness with the help of the instructor and meet those goals by the end of the school year through a personal fitness program.
- Students should be able to attain a participant level of competency in one team sport and one individual sport of their choice.
- Students should be able to design and safely conduct a personal weight-training program.
- Students should participate on a regular basis in an activity of their choice outside of the physical education class for at least six weeks.

Choosing Instructional Processes to Meet Goals

Once the teacher has chosen goals and has translated those goals into objectives for instruction, the teacher must choose instructional processes that can reach a specific objective. What should be clear from the ninth grade goals above is that the teacher will need to plan learning experiences that prepare the student to participate both in developing fitness and participating in activity outside of the physical education class. Instructional experiences and processes are chosen intentionally to reach specific goals. Although more occurs in classes than is intended, teaching processes are designed to be specific to their desired learning outcomes. It is impossible to discuss what to do or what is good instruction without discussing what the teacher hopes to accomplish.

One of the best examples of the specificity of teaching processes to desired outcomes occurs in the area of fitness. Fitness is developed only when certain criteria for workload, duration of activity, and intensity are met. The type of exercise is specific to the type of fitness desired (e.g., strength, muscular endurance, flexibility, or cardiorespiratory endurance). Most activities that develop strength do not also develop

flexibility. The type of fitness is specific not only to the type of exercise but also to a muscle group.

Criteria for teaching processes involved in learning motor skills objectives are not as neatly defined as those for fitness, but they are beginning to emerge in the literature. Open motor skills (those that take place in changing environments, such as the basketball layup shot) require different processes from closed skills (those that take place in more stable environments, such as archery). Teaching for transfer of learning from one skill to another requires a different process from teaching that does not intend transfer. All motor skill learning involves processes that require consideration of certain prerequisites for learning, such as the amount and type of information students need, practice, and feedback that learners at different levels of development need.

Processes and criteria for meeting affective and cognitive objectives in physical education are not neatly packaged but are as specific as those for other areas. Physical educators have traditionally assumed that if learners are engaged in creative experiences, creative learning is occurring. They have assumed that learners engaged in social interaction with others are developing positive social interaction skills and that learners engaged in team sports will develop sportsmanship and self-discipline. Teachers have come to realize that merely engaging in an experience that has the potential to make a positive contribution to affective or cognitive goals does not ensure that these goals are met. Learning experiences must be designed and developed for specific outcomes: What is not taught often is not learned. Fair play, independent learning skills, problem solving, positive social interaction, and the development of positive selfconcepts require specific conditions and processes. These goals should be designated, planned for, taught, and assessed, as with other kinds of content goals.

Achieving Goals Through Processes

Teachers can achieve psychomotor goals and objectives directly by teaching movement content. Physical educators can teach basketball, jumping, dance, or swimming by providing carefully planned and conducted experiences in basketball, jumping,



Instilling a love of activity in students is a primary objective of the physical education program.

dance, or swimming. A more difficult question concerns how the educator teaches creativity, positive self-concept, positive social interaction skills, love of activity, or fair play.

Sometimes a teacher might put the primary emphasis of a lesson on developing student cooperative behavior or creativity through physical activity. A teacher might also plan an entire lesson using physical education content to teach a moral value or to positively contribute to the self-concept of students. Most often these affective concerns are taught in conjunction with psychomotor or fitness skill development. The teacher chooses a way to develop the lesson with students so that more than a psychomotor

emphasis becomes the focus of the lesson. This means that although the primary content might be the basketball layup shot (and we design experiences to best teach the basketball layup shot), how the teacher goes about teaching this skill contributes a great deal to affective and cognitive goals. How students feel about basketball, themselves, and others; their knowledge of basketball; and their abilities to work independently, think creatively, and problem solve are all affected by the process the teacher chooses to teach the layup shot. If teaching the basketball layup were the only objective, teaching would be easy, or at least easier.

A teacher's goals must be more inclusive. Although no teacher would intentionally teach for negative affect in class, in many classes affective goals and cognitive goals related to learning activity are ignored. Teacher decision making in the instructional process is affected by the complex interrelationship between what to teach (content) and how to teach it (process). The two are not easily separated. The teaching process a teacher uses results in products many times not intended. Effective teachers choose processes because they are aware of the potential contributions of those processes to their comprehensive goals.

Little research has been done that links different pedagogic processes to specific affective and cognitive outcomes because of the difficulty of measuring such elusive and long-term products of instruction. Teachers, however, should be objective in assessing all the outcomes of their teaching. This necessarily includes affective and cognitive goals. Until teachers have a better understanding of the contribution of different instructional processes to these important outcomes, they must make informed decisions regarding teaching and carefully observe the products of these processes.

■ UNDERSTANDING THE INSTRUCTIONAL PROCESS

It is helpful in designing and implementing successful instructional programs to understand instruction as a process that involves both teacher and students in