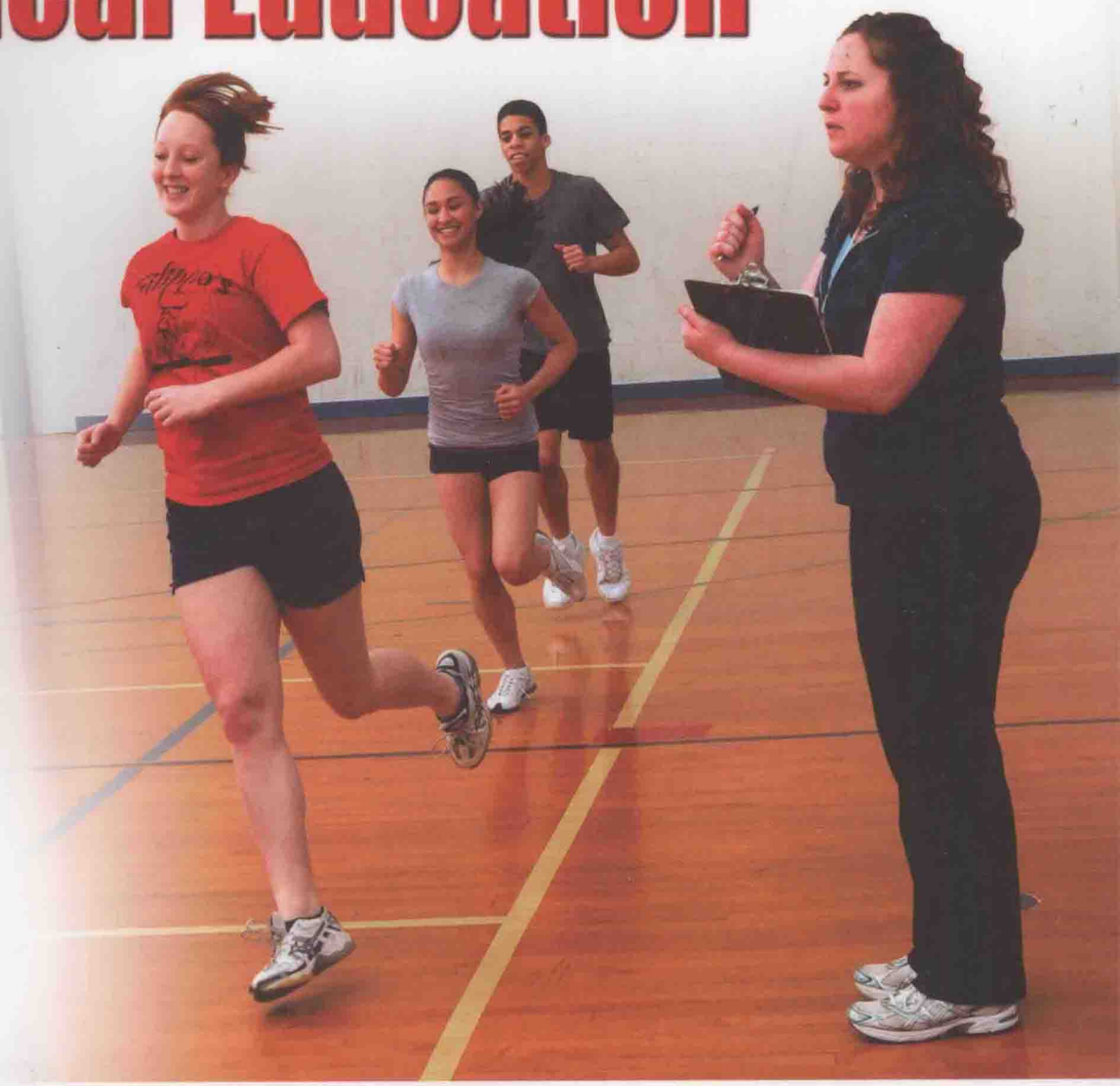
# Performance-Based Assessment for Middle and High School Physical Education

SECOND EDITION



Includes CD-ROM with authentic assessments and forms

Jacalyn Lea Lund • Mary Fortman Kirk

# Performance-Based Assessment for Middle and High School Physical Education

## Second Edition

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To Mom—you are missed!

Jackie

In memory of my Aunt Edna Epstein, for always making me feel so special! In memory of my parents, Joseph and Lois Fortman, who were always my greatest fans and supporters.

Mary

# Preface

After years of teaching others how to assess, we have concluded that learning how to assess is not so much a discrete experience with distinct starting and finishing points; it is, rather, a journey. In fact, the more we learn about assessment, the more complex we recognize it to be. We published our first book on performance-based assessment 8 years ago. Since that time, we have continued on our personal assessment journeys and we wish to share some of our insights with you in this second edition of the book. We know that learning how to assess is not an easy journey. However, we feel that this book will provide you with guidelines for developing assessments that are practical and useful to those of you who are teaching the next generation how to be physically active.

This book is governed by the following beliefs:

- The primary purpose of assessment should be to enhance student learning. Assessments provide feedback to students, letting them know what they have accomplished and where they still have work to do. Assessments that enhance student learning are not punitive but positive; teachers and students should use them as they work together toward a goal of competence.
- Assessment should not be considered a separate entity but rather it is a part of instruction, woven into the instructional process. The best instruction includes assessments that help document student learning and let teachers know their next steps for teaching. Assessments that are not a part of instruction do not support the belief expressed in the previous item—that the primary purpose of assessment is to enhance student learning.
- Teachers must use a variety of assessment tools in order to accurately measure student learning. Learning is different for each activity. One assessment instrument cannot or should not be used exclusively. Assessments used for a dance unit, for example, are different from those used in a soccer unit. Teachers need to look at movement in different ways depending on the content being taught. Teacher educators must prepare their students to use appropriate assessments for various types of learning.
- Learning should be assessed in a variety of ways to develop a complete picture of student achievement. One-shot testing can give a distorted picture of students' abilities. Students should have as many opportunities as possible to demonstrate what they know and can do. It is only when teachers look at student achievement from a variety of perspectives and through several different lenses that they grasp a full understanding of what their students have learned.
- Doing good assessment requires a lot of hard work. Assessments must be planned prior to the start of instruction and implemented at several intervals during a unit. Each assessment should be examined and the information gained from the assessment used to help increase student learning. Preparing good assessments takes a lot of time and energy.
- Doing assessment well is worth the effort! Nothing is more satisfying than observing the change in a youngster or young adult who enters a class unable to perform a certain skill or activity but experiences success at the completion of the unit. Assessments administered during instruction keep both the teacher and the student focused on the ultimate goal of competence and are worth every single minute spent doing them.

Our combined 26 years of experience in public schools taught us about the problems that physical educators face while working in the trenches. We try addressing these problems as we discuss various assessment formats in this book. Obstacles such as large class size, poorly skilled students, and time shortages can make it difficult to do assessments—but not impossible. The examples offered in this book are meant to be modified for your own situation. Assessing students must be a highly contextualized endeavor. Our descriptions of how to do assessments will help you make the necessary changes to implement the assessment in your gymnasium, with your students. We present our ideas as a starting point and challenge you to take the plunge into assessment-based teaching. To help get you started, we provide models

of continuous performance-based assessment in chapters 7, 8, 9, and 10.

You will also find additional forms and charts to use with performance-based assessments on the enclosed CD-ROM. The CD-ROM also includes all of the material marked with a CD-ROM icon in the book. To see the complete contents for the CD-ROM, view the start page on the CD-ROM.

Grant Wiggins offers the following advice: "Nothing worth understanding is mastered the first time, the first year, or the first course of study" (Wiggins 1998a, 15). We encourage you to use this philosophy as you begin changing your assessment practices. Change takes time, good change takes even longer. You will no doubt at times experience frustration when things do not work as they should. However, if you keep working at the process that we present in this book, you will begin to experience satisfaction as you see how assessment can enhance instruction. We encourage you to begin your journey to change your assessment practices with small steps. Thinking big but starting small makes the task both worthwhile and possible. Remember that improvement entails change and if you want to be a better teacher, changing assessment practices is one way to accomplish your goal. It won't be easy, but you can do it.

We hope that you enjoy this book and that it encourages you to expand your assessment horizons. The power of assessment came alive for one of us during a field experience involving a preservice elementary classroom teacher. After teaching a series of lessons, the prospective teacher arranged assessments to show students how much they had progressed. At the conclusion of her lesson, she spoke of her success and finished by stating: "I never realized how motivational assessment could be." Her high rate of time on task and the excitement generated when students could see evidence of their progress was a huge *aha!* moment for her. We encourage you to make a similar discovery and become just as excited about the instructional potential that effective assessment holds. We wish you good luck on your new assessment adventure!

# Acknowledgments

Many thanks to our friends, colleagues, and families who have supported us throughout this project. Bill, thanks for all the love and support you have provided during my latest assessment adventure. Jan Montague, thanks for your encouragement, patience, and understanding, and for taking on my share of the "household chores."

Additionally, we'd like to recognize many individuals for the following contributions:

Our colleagues, who inspire and challenge us

Margaret Pentecost and Darren Clay, who contributed assessment examples

Tara Scanlan and her students, who created the brochure for chapter 2

Our students and student teachers, who have taught us much about assessment and who continue to challenge and inspire us

Our cooperating teachers, who have shared information about the assessment process

# Contents


# Introduction to Performance-Based Assessment

This section gives an overview of performance-based assessment and introduces some of the terminology used throughout the book. Performance-based assessments can enhance student learning when teachers systematically measure student ability to apply the skills, knowledge, and dispositions that they are taught in class. This type of assessment can be used as both formative and summative assessments, allowing teachers to focus on student learning in new and exciting ways.

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# The Need for Change

*It is not our classroom assessments that draw all of the news coverage and editorial comment. All the visibility and political power honors go to our large-scale standardized tests. Nevertheless, anyone who has taught knows that it is classroom assessments—not standardized tests—that provide the energy that fuels the teaching and learning engine. For this reason, our classroom assessments absolutely must be of high quality (Stiggins 1997, vi).*

One of the purposes of education is to prepare students to be successful as adults. A school's curriculum and its system for delivering instruction must be attuned to the society for which its students are being prepared so that they develop the skills and knowledge needed to negotiate the pathways and pitfalls that they will encounter as adults. If there is one word to describe today's world, that word is probably *change*.

The changing world has dictated that schools must do things differently to prepare students for a globalized economy. It is no longer possible for a student to memorize all the facts needed for success as an adult. Students need skills that allow them to access information and apply it in their own situations. The Internet has led to the creation of a huge network of information that allows users to research everything from academic topics to installing a floor for a do-it-yourself remodeling project. Physical education teachers can access many Web sites that show lesson plans and assessments for teaching almost any sport or activity, and students can see videos of professional athletes performing a wide variety of sport skills and providing instruction on the finer points of performance. The available information is almost limitless; the problem becomes one of deciding whether a given piece of information is accurate or misleading.

Collaboration (typically called teamwork in physical education and sport) is also a valued skill. Many of the projects that adults undertake are too complex to be completed by a single individual. Although the ability to support and work with others is invaluable, the extensive use of computers in schools often discourages the development of this skill.

## THE CALL FOR CHANGE IN PHYSICAL EDUCATION

The global economy has led to academic comparisons between the achievement levels of students from various countries. Comparing the performance of children from the United States with those of children in other countries has been a primary factor fueling the educational reform efforts in the United States. Although many factors have contributed to calls for change in education, some seem more significant than others. In the early 1980s, a report titled *A Nation at Risk* was issued that stated that the country's educational system was in serious decline (National Commission on Excellence in Education 1983). Some students were unable to perform basic functions that were assumed to be standard for capable high school graduates, such as the ability to read, write, and solve math problems. A high school diploma, in some cases, merely represented "seat time"—that is, students had attended school for enough days to satisfy attendance requirements while acquiring rather minimal knowledge and skills. For some students, a diploma simply meant that the student had attended school for 12 years.

Those in power began calling for the establishment of standards in many subject areas after reports critical of education were issued. "The major reason that national and state leaders have coalesced around the need for defining content and student performance standards is that the quality of American education must be improved, and the current system of relying on local decision-making power over curriculum is failing to bring about that improvement" (Jennings 1995, 768). Surprisingly, the call for reform did not originate with educational leaders. Rather, people from the world of business noted a lack of skills and called for the establishment of accountability to increase the quality of education; thus, they were calling for a business model to govern educational policy. In response to these criticisms, national content organizations put together teams to write standards in subject areas such as math, social studies, science, and language arts. In 1995, standards for physical education were released in a National Association for Sport and Physical Education (NASPE) publication titled *Moving Into the Future: National Standards for Physical Education: A Guide to Content and Assessment*. These physical education standards were accepted by many states while others used them as the basis for state physical education standards. The standards were revised in 2004 (see figure 1.1).

So what are standards in relation to education? The term *standards* generally represents the minimal amount of information that all students should know and be able to do in relation to a given subject. When people use the term standards they are typically talking about either content standards or performance standards. **Content standards** specify what students should know and be able to do (National Association for Sport and Physical Education 2004). They "establish what should be learned in various subjects . . . [and] emphasis is apt to be on learning content more through critical thinking and problem solving strategies than through rote learning of discrete facts" (Lewis 1995, 746). Content standards incorporate the most important and enduring ideas that represent the knowledge and skills necessary to the specified discipline. The NASPE physical education standards are content standards, as are most state standards.

A physically educated person:

1. Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities.
2. Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities.
3. Participates regularly in physical activity.
4. Achieves and maintains a health-enhancing level of physical fitness.
5. Exhibits responsible personal and social behavior that respects self and others in physical activity settings.
6. Values physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.

**Figure 1.1** Content standards in physical education.

Based on NASPE, 2004, *Moving into the future: National standards for physical education,* 2nd ed. (Reston, VA: National Association for Sport and Physical Education).

**Performance standards**, on the other hand, seek to answer the question "How good is good enough?" They define a satisfactory *level* of learning (Lewis 1995). A performance standard indicates both the nature of the evidence that is acceptable for documenting student achievement and the quality of student performance that is necessary to satisfy the performance standard. Grant Wiggins (1998a) uses the high jump to illustrate the difference between content and performance standards (see figure 1.2). If one thinks of the high jump as the content standard, then the performance standard is where the teacher places the bar. Jumping a bar placed at 3 feet is much less demanding than jumping one placed at 6 feet. Performance standards for physical education have not yet been written at the national level, but NASPE is developing assessments for each of its six national standards under a program called PE Metrics. The elementary assessments for standard 1 were released in 2008, and the assessments for the other standards and grade levels will follow.

The establishment of standards has given schools a way of comparing students' performance with a standard for learning rather than with the work of other students. In **standards-based instructional formats**, students are required to demonstrate competence in a variety of subject areas. With standards-based education it doesn't matter how well students perform in comparison each other because standards are criterion-referenced (based on a set standard) rather than **norm-referenced** (see figure 1.3). Many national achievement tests are norm-referenced. In physical education, FitnessGram is a criterion-referenced test while The President's Challenge is an example of a norm-referenced fitness test. Many of the standardized physical education skill tests from the 1960s and 1970s were norm-referenced. Norm-referenced tests tell teachers and administrators how the performances of students in a given school compare with those of others taking the same test.

Another form of norm-referenced testing is grading on a curve, wherein a student's performance is compared with the performances of other students. Since the standard set by the curve depends on performance, it can change what the teacher expects students to know. The use of a curve makes the goal for learning a moving target because the performances

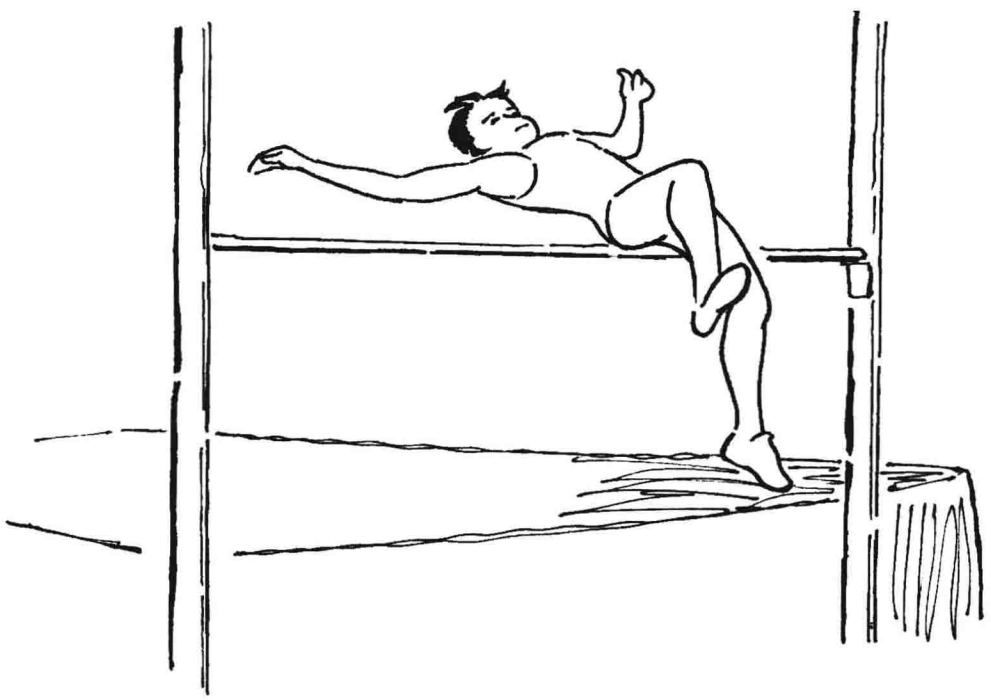

**Figure 1.2** If one thinks of the high jump as the content standard, then the performance standard is where the teacher places the bar.

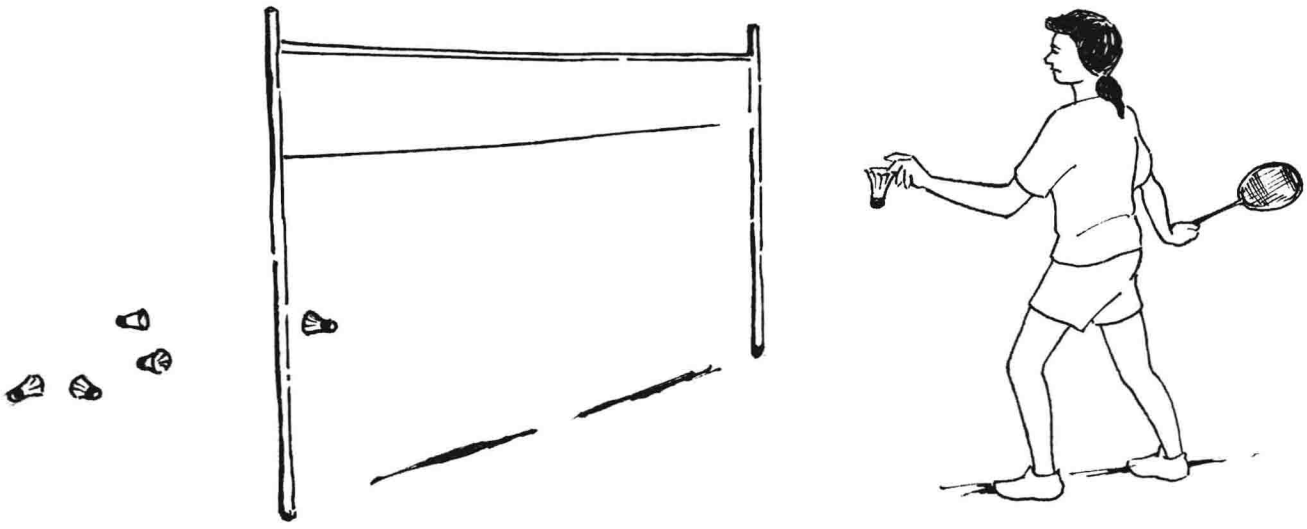

**Figure 1.3** In standards-based education, it doesn't matter how well students perform in comparison with others because standards are criterion-referenced (based on a set standard) rather than norm-referenced (based on comparison of one's performance with those of a certain population).

of other students determine the standard for a given student's learning. The best students get the best grades (e.g., top 5 percent) and the poorest students get the lowest grades (e.g., lowest 5 percent), but no one is really sure how much students learn. Comparing students with one another isn't always bad, especially when top student performances are of high quality. However, when student performance is not generally of a high caliber, comparing mediocre students with one another doesn't provide much information about their level of achievement.

Standards provide teachers with measuring sticks that they can use to assess students' learning more accurately and determine the additional work that students must do to reach the specified level of achievement. Standards make learning expectations clear to both students and teachers. When students are judged via a criterion-referenced score or standard, there is no limit to the number of students who can reach the goal. If the teacher sets a criterion score or standard for the badminton serve, all students who reach that standard have achieved the desired goal or developed the desired competence. It doesn't matter how they place in a rank ordering of the class because they are competing to meet a criterion-referenced score instead of against one another.

This paradigm represents a philosophical shift in the way many teachers plan and conduct classes because with a standards-based approach teachers select activities or sports so that students can meet the standards. The standards do not specify which sports or activities must be taught. Instead, they identify meaningful concepts that are important for being a physically educated individual.

## STANDARDS-BASED INSTRUCTION

This book focuses on improving students' learning and achievement in physical education through the use of **standards-based instruction** and performance-based assessments for students. In standards-based instruction, the teacher identifies unit goals based on state or national standards and uses these goals to set expectations for student learning. Assessments are developed based on these expectations prior to the start of instruction. Formative assessments are given regularly so that the teacher can determine students' progress toward final goals. When students are unable to reach the expectations for learning, teachers modify instruction to support student learning. The goal at the completion of the unit is that every child will meet the criteria

for performance set prior to the beginning of the unit. Planning assessments before implementing the unit helps ensure that assessment is systematic and thorough. If teachers don't plan assessments ahead of time, they may end up doing it in a piecemeal manner or not at all. Chapters 7, 8, 9, and 10 provide examples of developing standards-based units of instruction and assessments that support student learning.

## TYPES OF ASSESSMENT IN STANDARDS-BASED INSTRUCTION

The standards movement has brought with it new ways to document student learning. For many years, schools were dominated by a behavioral approach, wherein a learning unit was divided into a series of tasks and learning was sequenced according to an accepted teaching progression. This approach to teaching is analogous to the assembly-line method of producing cars. The process begins with a frame, followed by the motor, then a body is added, the exterior shell, and so on. Assessment in this behavioral approach was focused on achievement of discrete skills and learning of factual knowledge (Lambert 2007). Many of the valid and reliable skill tests that exist for sport skills were developed between 1950 and 1970 (Strand and Wilson 1993). They focus on the evaluation of skills associated with a variety of sports and activities. The cognitive assessments associated with this model were typically selected-response questions (e.g., true-false, matching, multiple-choice) that measured students' recall of information rather than requiring them to think critically. The emphasis was on the parts of the game—not the whole.

Some educational researchers found this approach lacking and began experimenting with a different methodology. In the early 1990s a constructivist approach to learning began to be widely accepted. With the constructivist approach a student's individuality is recognized as well as a need for the student to make sense of information and link it to prior learning. Facts memorized for a test will quickly be forgotten if they are not applied and reinforced. These tests typically measure knowledge and comprehension, which are lower levels of learning. Educators who take a constructivist approach value higher-level thinking in students. The need to document this different type of learning (i.e., application rather than recall of information) led educators to develop new, alternative forms of assessment. Grant Wiggins (1989b) called for the use of authentic tests that approximate tasks done by people in the real world. Performance-based assessment is closely associated with both the standards movement and the need for students to measure application of knowledge while demonstrating mastery of content material. Because much of physical education is already based on observable performance or behavior, physical educators have been very comfortable with using these new forms of assessment.

Two instructional models are quite compatible with the constructivist philosophy of education. The first, Teaching Games for Understanding (TGfU), emphasizes game play and game-play strategies over skill development. Games are classified into four types: invasion games, net or wall games, target games, or field games. In this instructional model students are engaged in a game from one of the four categories to learn strategies that are important to success in that game category. When a new skill is needed with which to work on a more complex strategy, the skill is introduced within the context of the game. Thus students are able to see how the skill is used during the game and construct their knowledge of the skill in an applied setting. The second model, Sport Education, also emphasizes achievement in an applied setting. Students are divided into teams at the beginning of the unit and then learn various roles considered essential to playing the game. Team roles can include coach, fitness trainer, equipment manager, statistician, and publicist. When engaged in a tournament, students who are not playing in the game are assigned to duty-team roles such as referee, line official, scorekeeper, and timer. Both the TGfU and Sport Education models emphasize the application of skill in an authentic setting instead of only skill development as measured by a skill test.

Performance-based assessments are compatible with either of these two instructional models as well as other instructional models common to physical education because they