

# PECAT IHE Guide



## Physical Education Curriculum Analysis Tool

# A Guide for Physical Education Teacher Preparation Programs in Institutions of Higher Education

National Center for Chronic Disease Prevention and Health Promotion  
Division of Adolescent and School Health







## Physical Education Curriculum Analysis Tool

# A Guide for Physical Education Teacher Preparation Programs in Institutions of Higher Education



## Acknowledgments

This document was prepared by the Centers for Disease Control and Prevention (CDC), National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), Division of Adolescent and School Health (DASH), with conceptual, technical, and editorial assistance from others across CDC and experts in the fields of physical education, physical activity, school health education, and physical education professional teacher preparation. CDC expresses special appreciation to Dr. Susan Russell, from Columbus Technologies and Services, Inc., for her significant contribution to the development of this document.

### PECAT IHE Expert Working Group

Sandra Bargainnier, EdD, CHES  
Pennsylvania State University

Sarah Lee, PhD  
CDC, NCCDPHP, DASH

Lisa Barrios, DrPH  
CDC, NCCDPHP, DASH

Lois Mauch, MS  
Fargo Public Schools

Aaron Bieghle, PhD  
University of Kentucky

Bane McCracken, MS  
Consultant

Jill English, PhD CHES  
California State University, Fullerton

Anu Pejavara, MPH  
CDC, NCCDPHP, DASH

Marci Hertz, MS  
CDC, NCCDPHP, DASH

Sue Telljohann, HSD  
University of Toledo

Pete Hunt, MPH, MEd  
CDC, NCCDPHP, DASH

Fran Zavacky, MEd  
National Association for Sport and  
Physical Education

**Suggested citation:** Centers for Disease Control and Prevention. Physical Education Curriculum Analysis Tool: A Guide for Physical Education Teacher Preparation Programs in Institutions of Higher Education. Atlanta, GA: CDC; 2011

To obtain copies:

- Download from CDC's website: <http://www.cdc.gov/HealthyYouth>
- Request by e-mail: [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov)
- Call toll-free: 1-800-CDC-INFO or 888-232-6348

Use of trade names and commercial sources is for identification only and does not imply endorsement by the Public Health Service or the US Department of Health and Human Services.



# Table of Contents

Acknowledgments .....	iii
Introduction to the Lessons .....	1

## Lessons

<b>1. Introduction to the CDC’s Physical Education Curriculum Analysis Tool (PECAT) .....</b>	<b>7</b>
• Introduction .....	7
• Lesson Objectives.....	7
• Total Estimated Time .....	7
• Materials Needed .....	8
• Instructor Preparation .....	8
• Lesson Procedures .....	9
~ Activity 1: PECAT Vocabulary .....	9
~ Activity 2: Scavenger Hunt.....	10
~ Assessment—Exit Ticket: Introduction to the PECAT .....	10
• Preparation for Lesson 2 .....	11
• Handouts .....	
~ Activity 1: PECAT Vocabulary Cards.....	13
~ Activity 1: Physical Education Curriculum Glossary .....	23
~ Activity 2: Scavenger Hunt .....	25
~ Activity 2: Scavenger Hunt Answer Key .....	27
~ Exit Ticket: Introduction to the PECAT.....	29
• Exit Ticket: Introduction to the PECAT Answer Key and Scoring Rubric (for Instructor Use).....	30
• PowerPoint® Presentation for Lesson 1 (see Appendix A)	
<b>2. Defining a Physically Educated Person .....</b>	<b>33</b>
• Introduction .....	33
• Lesson Objectives.....	33
• Total Estimated Time .....	33
• Materials Needed .....	34
• Instructor Preparation.....	34
• Lesson Procedures .....	35
~ Activity 1: The Vision of a Physically Educated Student.....	35
~ Activity 2: Learning about the National Standards for Physical Education .....	36
› Part 1: In Your Own Words .....	36
› Part 2: Checklist.....	37



~ Assessment: Exit Ticket: Student Essay .....	38
~ Lesson Extensions .....	38
• Preparation for Lesson 3 .....	33
• Handouts	
~ Activity 2: Learning about the National Standards for Physical Education: Part 1—In Your Own Words.....	39
~ Activity 2: Learning about the National Standards for Physical Education: Part 2—Checklist.....	41
~ Activity 2: Learning about the National Standards for Physical Education: Part 2—Checklist Answer Key.....	47
• Scoring Rubric for Student Essay (for Instructor Use) .....	48
• PowerPoint® Presentation for Lesson 2 (see Appendix B)	

### **3. First Things First: Preliminary Considerations for Analyzing Physical Education**

<b>Curriculum .....</b>	<b>49</b>
• Introduction .....	49
• Lesson Objectives.....	49
• Total Estimated Time .....	49
• Materials Needed .....	50
• Instructor Preparation.....	50
• Lesson Procedures .....	51
~ Activity 1: Exploring the Preliminary Curriculum Considerations of the PECAT .....	51
~ Assessment—Exit Ticket: Preliminary Curriculum Considerations— Peer Review .....	53
• Preparation for Lesson 4 .....	53
• Handouts	
~ Elements of a Quality Physical Education Curriculum (for Instructor Use) .....	55
~ Activity 1: PECAT Preliminary Curriculum Considerations Review .....	57
• Assessment—Exit Ticket: Preliminary Curriculum Considerations— Peer Review and Scoring Rubric.....	58
• PowerPoint® Presentation for Lesson 3 (see Appendix C)	

### **4. Using the PECAT to Analyze Physical Education Curricula.....59**

• Introduction .....	59
• Lesson Objectives.....	59
• Total Estimated Time .....	59
• Materials Needed .....	60
• Instructor Preparation.....	60
• Suggestions for Use.....	60

• Lesson Procedures .....	61
~ Activity 1—Using the PECAT to Analyze Your Physical Education Curriculum: Curriculum Description and Standard 1.....	61
~ Activity 2—Using the PECAT to Analyze Your Physical Education Curriculum: Standards 2–6.....	63
~ Assessment— Exit Ticket: Using the PECAT— Individual Evaluation of Curriculum .....	63
• Preparation for Lesson 5 .....	63
• Handout—Exit Ticket: Using the PECAT— Individual Evaluation of Curriculum (Scoring Rubric and Scoring Criteria) .....	64
• PowerPoint® Presentation for Lesson 4 (see Appendix D)	
 <b>5. Using the PECAT to Improve a Physical Education Curriculum.....</b>	<b>65</b>
• Introduction .....	65
• Lesson Objectives.....	65
• Total Estimated Time .....	65
• Materials Needed .....	66
• Instructor Preparation .....	66
• Lesson Procedures .....	67
~ Activity 1: Using the PECAT: Determining Strengths, Weaknesses and Elements of a Quality Physical Education Curriculum.....	67
~ Assessments.....	68
› Small Group Oral Presentation and Written Assignment .....	68
› Exit Ticket: Small Group Oral Presentation and Written Assignment and Scoring Rubrics .....	68
› Optional Student Assessment: Individual Student Essay and Scoring Rubric (for Instructor Use) .....	69
• Handouts	
~ Activity 1: Using the PECAT: Determining Strengths, Weaknesses and Elements of a Quality Physical Education Curriculum—Group Summary Form	
› Determining Strengths and Weaknesses of a Physical Education Curriculum.....	70
› Elements of a Quality Physical Education Curriculum Checklist.....	71
› Applying the Elements of a Quality Physical Education Curriculum .....	73
~ Exit Ticket: Using the PECAT to Improve a Curriculum .....	74
• Scoring Rubric for the Optional Individual Student Essay (for Instructor Use) .....	75
• PowerPoint® Presentation for Lesson 5 (see Appendix E)	

## Appendices

- A. Lesson 1: PowerPoint® Presentation for Lesson 1—**Introduction to the CDC’s Physical Education Curriculum Analysis Tool (PECAT)**
- B. Lesson 2: PowerPoint® Presentation for Lesson 2—**Defining a Physically Educated Person**
- C. Lesson 3: PowerPoint® Presentation for Lesson 3—**First Things First: Preliminary Considerations for Analyzing Physical Education Curricula**
- D. Lesson 4: PowerPoint® Presentation for Lesson 4—**Using the PECAT to Analyze Physical Education Curricula**
- E. Lesson 5: PowerPoint® Presentation for Lesson 5—**Using the PECAT to Improve a Physical Education Curriculum**

---

Appendices available on request in CD form or for download at <http://www.cdc.gov/healthyyouth/pecat.htm>.

---

## Introduction to Lessons

### Overview

This guide is designed for use by instructors in institutions of higher education (IHE) who are responsible for physical education professional teacher preparation programs. It is designed to help students understand and use the Centers for Disease Control and Prevention's (CDC's) Physical Education Curriculum Analysis Tool (PECAT). The lessons and activities in this guide are intended to be used with upper-division undergraduate, pre-service courses that focus on physical education curricula and instruction, and in graduate-level physical education courses. The lessons and activities are designed to facilitate students' use of the PECAT in analyzing single or multiple grade-level physical education curricula.

The five lessons in this guide introduce students to the knowledge and skills needed to analyze a written physical education curriculum and strengthen their preparedness for teaching physical education in schools. Students learn that a high-quality physical education curriculum provides guidance for teaching skills, physical activity instruction and student assessment. This introduction provides instructors with a synopsis of the PECAT, the intended outcomes of the lessons, a description of the lesson format, and guidance for preparing to implement the lessons.

### About the PECAT

The PECAT is a tool for analyzing written physical education curricula to determine how closely they align with national standards for high-quality physical education. The purpose of the PECAT is to help school districts conduct a clear, complete, and consistent analysis of physical education curricula. PECAT results can help users enhance, develop, or select appropriate and effective physical education curricula for the delivery of quality physical education, which will improve the ability of schools to influence motor skills and physical activity behaviors among school-aged youth.

### Lesson Outcomes

The lessons in this guide will enable students to understand and use the PECAT in their physical education professional practice. As a result of participating in all five lessons, students will be able to do the following:

1. **Summarize the purpose, importance, function, organization, and use of the PECAT.**
2. **Determine the key sections of the PECAT needed to examine physical education curricula.**
3. **Explain how effective physical education curricula contribute to the development of a physically educated student.**
4. **Summarize the National Standards for Physical Education in relationship to the PECAT content, student assessment, and planning tools.**
5. **Explain how the National Standards for Physical Education can be used to design curricula to meet individual physical education expectations for students at each grade level.**

6. **Apply the PECAT scoring rubrics to the review of a physical education curriculum.**
7. **Complete an assessment of a physical education curriculum using the PECAT that includes a summary of the strengths and weaknesses of the curriculum and how the results of the PECAT analysis can be used to improve physical education curricula.**

## Organization of Lessons

The lesson title identifies the focus of the lesson in each of the five lessons in this guide. All lessons include the following sections:

- Lesson Introduction and Objectives: Includes a brief statement of purpose and specific student objectives for the lesson.
- Total Estimated Time: Provides a time span for each phase of the lesson activities, including introduction, PowerPoint® presentation, activities, and assessment.
- Materials Needed: Lists the materials and equipment needed to implement the lesson.
- Instructor Preparation: Includes guidance for planning and preparing to implement the lesson.
- Suggestions for Use: For some lessons, includes ideas for preparing students for the lesson activities and the format for student completion of activities (in class and outside of class).
- Lesson Procedures: Describes brief, step-by-step instructions for carrying out the lesson, including use of relevant slide presentations, implementation of activities, and estimated time needed for each step.
- Assessment: For each lesson, includes an assessment tool (Exit Ticket) to check for basic understanding and application of the concepts being taught. Students apply a range of cognitive skills, including comprehension (integrating critical elements), analysis (analyzing errors, generalizing, specifying, and clarifying), knowledge utilization (problem solving and decision making), monitoring accuracy,<sup>1</sup> and evaluating the elements of the curriculum.
- Lesson Extensions: For Lesson 2, ideas are provided for expanding student application and use of the PECAT to analyze locally developed physical education curricula and to develop written physical education curricula. At the conclusion of Lesson 5, questions relating to students' experiences with the PECAT and their future physical education careers are provided. These questions might be used for class discussion or optional student essay.

---

<sup>1</sup> Marzano RJ, Kendall JS. *The New Taxonomy of Educational Objectives* (2nd ed.). Thousand Oaks, CA: Corwin Press; 2007.

## Time

Completing the five lessons in this guide will take approximately 8–11 hours. To maximize students' understanding of the PECAT, it is recommended that all five lessons be taught in sequence. The lessons are organized sequentially so that the knowledge and skills learned in each lesson build upon those learned in the previous lessons. Lessons are designed for 3-hour class periods. However, the lessons can be tailored to fit the class time period (1-hour or 1.5-hour blocks), complement teaching style, align with course purpose and structure, and meet students' learning needs.

Instructors should consider the structure and format of Lesson 4 and the time required for students to analyze a curriculum using the PECAT materials. Depending on the number of students in a class, the number of curricula available to review, and the instructor's priority for the review, the entire lesson can be facilitated during class time, or students can be assigned to review the curricula outside of class. The maximum time of 3 hours allocated for Lesson 4 allows for completion of the curriculum analysis during class time.

## Materials and Equipment Needed

Within each lesson, a list of the materials and equipment needed to implement activities is provided, including PowerPoint® slides with notes, and activity handouts. Use the slide sets to meet specific learning needs of students or to complement the physical education course content. The following materials need to be prepared prior to implementing lessons in this guide.

- The instructor and students must have a complete, personal copy of the PECAT prior to instruction. The PECAT is available at no cost by downloading the document and related materials from the CDC Web site: [www.cdc.gov/healthyyouth/PECAT/](http://www.cdc.gov/healthyyouth/PECAT/).
- The instructor and students must have a personal copy of the National Standards for Physical Education. Copies of the *Moving into the Future: National Standards for Physical Education* (2nd ed.) by the National Association for Sport and Physical Education can be ordered online at [iweb.aahperd.org/iweb/Purchase/ProductDetail.aspx?Product code=304-10275](http://iweb.aahperd.org/iweb/Purchase/ProductDetail.aspx?Product%20code=304-10275). The National Standards for Physical Education can be viewed at [www.aahperd.org/naspe/standards/nationalStandards/PEstandards.cfm](http://www.aahperd.org/naspe/standards/nationalStandards/PEstandards.cfm).
- The instructor will need to secure a sufficient number of copies of a physical education curriculum or, at minimum, a complete curricular unit so that all students, in small groups or teams, can complete a curriculum review using the PECAT. See Lesson 3 and, in particular, the Elements of a Quality Physical Education Curricula (pgs. 55-56 of this guide) when selecting curricula for student review.

## Instructor Preparation

Before implementing the lessons in this guide, the instructor should become thoroughly familiar with the PECAT, each lesson in this guide, the PowerPoint® presentations, and the curriculum or curricula that students will use to complete the analyses. Instructors should also do the following:

- Consider any modifications that need to be made to lesson activities. For example, instructional class time can be reduced if some activities and assignments are completed as homework. Consider whether students will work on assignments in teams rather than individually. This might be particularly helpful if the number of curriculum copies is less than the number of students; student team members can share curricula.)
- Complete a personal analysis of the curriculum your students will be analyzing, using the PECAT. If a curriculum is locally developed, prepare a Curriculum Improvement Plan Worksheet (pg. 187 of the PECAT). Provide this completed sample for students to review when preparing their curriculum improvement plan.
- The PECAT is intended to be used by a team of individuals. To maximize the learning experiences derived from using the PECAT, consider methods and strategies that will allow students to participate in teams or small groups.
- Optional: If available, a copy of state or local standards for physical education could be obtained and used as part of the lessons. The PECAT allows for the inclusion of state or local standards in addition to National Standards for Physical Education. For example, see the Template for Additional Standards for Content Analysis for Grades K–2 on pg. 49 of the PECAT and the Template for Additional Standards for Student Assessment Analysis for Grades K–2 on pg. 63 of the PECAT.

## Student Preparation

The following steps are necessary to prepare students for learning about the PECAT prior to implementing these lessons.

- **Student academic preparation:** Although the lessons are intended for upper division undergraduate students enrolled in a professional preparation program in physical education at a college or university, these lessons can also be used in curriculum development, graduate level education, and pedagogy courses. Instructors using this guide should review it to determine the appropriateness of the lessons for their student audience(s), the prerequisite knowledge and skills those learners should possess prior to implementation of the lessons, and subsequent modifications in the lessons that might be needed prior to implementation. For example, instructors might find that select lessons are most appropriate for their undergraduate students while graduate students would have sufficient background to complete all five lessons.
- **Prerequisite skills:** Students must be familiar with lesson planning for use at the elementary, middle, or junior high school and/or high school level(s). They should be able to write objectives and goals, select appropriate teaching strategies, describe learning experiences, identify materials and equipment needed for implementing the lessons, and apply appropriate assessment of the knowledge and skills to be acquired by students in a lesson.
- **Prerequisite materials:** Each student should be provided or have acquired a copy of the National Standards for Physical Education, the Physical Education Curriculum Analysis Tool (PECAT) and a copy of the curriculum to be used for analysis.
- **Reading assignment:** Students should read the National Standards for Physical Education, and the Introduction and Instructions sections of the PECAT, and become familiar with the curriculum they will analyze.





# Lesson 1

# Introduction to CDC's *Physical Education Curriculum Analysis Tool* (PECAT)

# Introduction

In this lesson, students will be introduced to the key terminology used in the PECAT and the fundamentals of curriculum development. Students also will learn about the importance and purpose of the PECAT, the ways the PECAT can be used, and the key sections of the PECAT. In this lesson, students will view a PowerPoint® presentation and participate in two activities—a guided discussion and an assessment.

## Lesson Objectives

After completing this lesson, students will be able to do the following:

1. Identify the components of a high-quality physical education program.
2. Explain the elements of a high-quality physical education curriculum.
3. Explain the importance and purpose of the PECAT.
4. Describe a variety of ways the PECAT can be used.
5. Define terms used in curriculum development and specific to the PECAT.
6. Identify key sections of the PECAT.

**Total Estimated Time: 2 hours – 2 hours, 30 minutes**

Introduction and Overview	5 minutes
Activity 1	30 minutes
PowerPoint® Presentation	30–40 minutes
Activity 2	45–60 minutes
Assessment	10–15 minutes

---

## Materials Needed

---

- PowerPoint® Presentation for Lesson 1
- LCD projector and screen
- At least one set of the PECAT Vocabulary Cards, which include 23 terms and matching definitions (pgs. 13–21)
- One copy for each student of the following:
  - ~ *Physical Education Curriculum Glossary* handout (pgs. 23–24)
  - ~ *PECAT Scavenger Hunt* handout (pgs. 25–26)
  - ~ *Exit Ticket: Introduction to the PECAT Assessment* handout (pg. 29)
  - ~ PECAT
- One copy for instructor review of the following:
  - ~ *Physical Education Curriculum Glossary* handout (pgs. 23–24)
  - ~ *PECAT Scavenger Hunt Answer Key* (pgs. 27–28)
  - ~ *Exit Ticket: Introduction to the PECAT Assessment Answer Key and Scoring Rubric* (pgs. 30–31)
- For Lesson 2, one copy for each student of *Moving into the Future: National Standards for Physical Education* (2<sup>nd</sup> ed.) by the National Association for Sport and Physical Education, 2004.

---

## Instructor Preparation

---

1. **Review the PECAT to become familiar with the format and content. Review the following:**
  - A. Lesson 1 Procedures (pgs. 9–10 in this guide).
  - B. PowerPoint® slides, notes, and narrative for Lesson 1.
2. **Review and become familiar with all the terms and their definitions used in *Activity 1: PECAT Vocabulary*, the *Physical Education Curriculum Glossary* handout (pgs. 23–24) and the Glossary in Appendix 3 of the PECAT (pgs. 197–198).**
3. **Prepare all materials for Lesson 1, Activity 1.**
  - A. Print at least one set and cut the PECAT Vocabulary Cards (pgs. 13–21).
  - B. Copy the *Physical Education Curriculum Glossary* handout (pgs. 23–24) for each student and instructor.
4. **Prepare all materials for Lesson 1, Activity 2.**
  - A. Print one PECAT Scavenger Hunt handout for each student (pgs. 25–26).
  - B. Print the PECAT Scavenger Hunt Answer Key (pgs. 27–28) for the instructor's use.

**5. Prepare the Assessment for Lesson 1.**

- A. Print one copy of the Exit Ticket: Introduction to the PECAT handout for each student (pg. 29).
- B. Print one copy of the Exit Ticket: Introduction to the PECAT: Answer Key and Scoring Rubric (pgs. 30–31).

**6. Set up computer, LCD projector, and screen and use the Lesson 1 PowerPoint® file.**

---

**Lesson Procedures: 2 hours – 2 hours, 30 minutes**

---

**1. Introduction and Overview (5 minutes)**

Make the following introductory points:

- As an introduction to physical education curricula and curriculum analysis, you will participate in an activity that will familiarize you with key vocabulary terms we will use in this and subsequent lessons.

**2. Lesson 1, Activity 1: PECAT Vocabulary (30 minutes)**

- A. Explain the following to the students:
  1. The purpose of this activity is to learn key terms in curriculum development that are used in the *Physical Education Curriculum Analysis Tool*.
  2. Each student will have a card with either a key term or a definition.
  3. Once you have your card, roam the room and attempt to find the student with the match to your card that contains the corresponding key term or definition.
  4. When you find your match, discuss the term and definition with your partner. Then, return to your seat.
- B. Shuffle the PECAT Vocabulary Cards and distribute one card to each student.<sup>2</sup>
  1. Have the students stand up and begin the activity.
  2. Give students sufficient time to complete the activity and then have them return to their seats.
- C. Beginning with the first term (“learning experience”), ask who has the cards with this term and corresponding definition. Ask the student with the definition card to read the definition. Provide the correct definition, clarification, details, and examples as necessary.
  - Continue in this manner until all definitions for which cards were distributed have been covered. Distribute the *Physical Education Curriculum Glossary* handout to each student.

---

<sup>2</sup> Modify the number of cards used depending on the number of students in the class. Students might be given more than one card each, or some cards might be omitted from the activity.

- D. Conclude the activity by emphasizing that students should now be familiar with the important terms used in physical education and in the PECAT they will be using in these lessons.

**3. Lesson 1 Slide Presentation (30–40 min.)**

- A. Present the PowerPoint® slides for Lesson 1. Use the notes and narrative for each slide to supplement the information found on the slide.
- B. Ask students if they have any questions or comments.
- C. Conclude by engaging students in a 2–3 minute movement/stretching activity.

**4. Lesson 1, Activity 2: Scavenger Hunt (45–60 min.)**

- A. Inform students of the following:
  - 1. The purpose of this next activity is to familiarize you with the organization of the PECAT.
  - 2. You will search the PECAT looking for key sections, content, resources, and organization.
- B. Distribute a copy of the PECAT and the *Scavenger Hunt* handout to each student.
- C. Explain to the students that they need to find each item in the *Scavenger Hunt*, using the PECAT and the hints provided on the handout.
- D. Tell the students to begin.
- E. After sufficient time has elapsed, review the answers to the *Scavenger Hunt*, using the *Scavenger Hunt Answer Key* (pgs. 18–19) with the class.
- F. Ask the students if they have any questions about the organization of the PECAT or locating any of the sections.

**5. Assessment—Exit Ticket (10–15 minutes)**

- A. Distribute the *Exit Ticket: Introduction to the PECAT* handout to each student.
- B. Explain to students that they should complete their Exit Tickets individually and submit them at the end of the class session. Allow students 10–15 minutes to complete the Exit Ticket, or ask students to complete it as homework and collect it at the beginning of Lesson 2.
- C. Review the directions and scoring rubric for the Exit Ticket: Introduction to the PECAT with students (pgs. 29–32).
- D. Collect and score students' responses to the *Exit Ticket: Introduction to the PECAT* using the Answer Key and Scoring Rubric.
- E. At the beginning of Lesson 2, return the Exit Tickets (for Lesson 1) and use the Answer Key and Scoring Rubric to discuss the correct answers and determine areas that need to be reviewed.

---

## Preparation for Lesson 2

---

- Tell students that in the next session they will learn about the *National Standards for Physical Education*, expectations, and outcomes of the physically educated person.
- In preparation for Lesson 2, tell students to read the *Moving into the Future: National Standards for Physical Education (2<sup>nd</sup> ed.)* by the National Association for Sport and Physical Education for the next class session.
- If your state has developed its own physical education standards and/or physical education framework, it would be useful to obtain and review those documents prior to the next lesson.



(Cut on dotted lines)

<b>Learning experience</b>	<b>Presentation of and subsequent participation in a movement or motor concept or skill.</b>
<b>Locomotor skills</b>	<b>Basic motor skills involving a change of position of the feet and/or a change of direction of the body. Examples include walking, running, hopping, skipping, jumping, leaping, sliding, and galloping.</b>
<b>Manipulative skills</b>	<b>Basic motor skills involving handling an object. Examples include throwing, catching, kicking, trapping, and striking.</b>
<b>Curriculum alignment</b>	<b>Clear and direct relationship among standards, curricula, instructional materials, instructional methods, and assessments.</b>
<b>Moderate physical activity</b>	<b>Intensity of physical activity that corresponds to 50 to 69 percent of an individual's maximal heart rate. Examples include brisk walking and slow bike riding.</b>





(Cut on dotted lines)

<b>Fundamental movement skills</b>	<b>Locomotor, nonlocomotor, and manipulative skills are all considered fundamental, as they form the basis of numerous forms of movement and advanced skill development.</b>
<b>Motor learning</b>	<b>The study of change in a person's ability to perform a motor skill.</b>
<b>Nonlocomotor skills</b>	<b>Movement of the body performed from a relatively stable base of support. Examples include bending, stretching, twisting, turning, leaning, swaying, and swinging.</b>
<b>Performance assessment</b>	<b>Direct observation and judgment of student products or performances.</b>
<b>Performance standard</b>	<b>The expected quality of student work and specifying how good is good enough.</b>



(Cut on dotted lines)

<b>Assessment (of student learning)</b>	<b>Process of gathering evidence and documentation of a student's learning; this can be formative assessment or summative assessment.</b>
<b>Protocol</b>	<b>Step-by-step instructions and/or directions for how to administer a specific assessment of student performance.</b>
<b>Scope and sequence</b>	<b>A pre-K–12 curricular structure that outlines the breadth and depth of key learning concepts and skills across grade level(s) and the logical, developmental progression of concepts and skills to be addressed at each grade level or grade group.</b>
<b>Procedures</b>	<b>Step-by-step description of the implementation of the lesson, from the introduction to assessment.</b>
<b>Developmentally appropriate</b>	<b>Curriculum materials that are consistent with an individual's cognitive, mental, emotional, moral, and social development.</b>



(Cut on dotted lines)

<b>Standards</b>	<b>Statements that identify the essential knowledge, skills, and attitudes that should be taught and learned in school.</b>
<b>Standards-based curriculum</b>	<b>A curriculum designed to produce student understanding and work that demonstrates achievement of standards.</b>
<b>Vigorous physical activity</b>	<b>Intensity of physical activity that corresponds to approximately 70 percent or more of an individual's maximal heart rate; examples include running, aerobic dance, singles tennis, swimming laps, and competitive basketball.</b>
<b>Physical education curriculum</b>	<b>A plan for teaching physical education that includes a structured, developmentally appropriate series of learning experiences for students organized as a detailed set of directions, strategies, and assessments.</b>
<b>Objectives (precise instructional objectives)</b>	<b>Prescriptive statements of intended student outcomes that specify both the behavior to be developed and content to be learned.</b>



(Cut on dotted lines)

<b>Goals of the curriculum</b>	<b>Broad or general statements that provide instructional direction or intent. They identify the essential physical education knowledge, skills, and attitudes that are taught and learned in a curriculum.</b>
<b>Unit</b>	<b>A set of lessons based on a set of instructional objectives on a similar topic and/or skill. Units are parts of a larger course.</b>
<b>Lesson plan</b>	<b>Specific guidelines for lesson instruction, including instructional objectives, materials and resources needed, procedures or directions for implementing the lesson, background information for the teacher, time, and assessment instrument or tool.</b>
<b>Formative assessment</b>	<b>Any task used during the instructional period, course or unit of study that provides feedback to students on their learning achievements, in relation to their strengths, weaknesses, and gaps in learning. It is also used to monitor teaching effectiveness.</b>
<b>Summative assessment</b>	<b>Tasks administered at the end of an instructional period, course or unit of study that are used for grading purposes and determining student proficiency levels.</b>





# Physical Education Curriculum Glossary

**Assessment (of student learning)**

Process of gathering evidence and documentation of a student's learning; this can be formative assessment or summative assessment.

**Curriculum alignment**

Clear and direct relationship among standards, curricula, instructional materials, instructional methods, and assessments.

**Developmentally appropriate**

Curriculum materials that are consistent with an individual's cognitive, mental, emotional, moral, and social development.

**Formative assessment**

Any task used during the instructional period, course or unit of study that provides feedback to students on their learning achievements, in relation to their strengths, weaknesses, and gaps in learning. It is also used to monitor teaching effectiveness.

**Fundamental movement skills**

Locomotor, nonlocomotor, and manipulative skills are all considered fundamental, as they form the basis of numerous forms of movement and advanced skill development.

**Goals of the curriculum**

Broad or general statements that provide instructional direction or intent. They identify the essential physical education knowledge, skills, and attitudes that are taught and learned in a curriculum.

**Lesson plan**

Specific guidelines for lesson instruction, including instructional objectives, materials and resources needed, procedures or directions for implementing the lesson, background information for the teacher, time, and assessment instrument or tool.

**Learning experience**

Presentation of and subsequent participation in a movement or motor concept or skill.

**Locomotor skills**

Basic motor skills involving a change of position of the feet and/or a change of direction of the body. Examples include walking, running, hopping, skipping, jumping, leaping, sliding, and galloping.

**Manipulative skills**

Basic motor skills involving handling an object. Examples include throwing, catching, kicking, trapping, and striking.

**Moderate physical activity**

Intensity of physical activity that corresponds to 50 to 69 percent of an individual's maximal heart rate. Examples include brisk walking and slow bike riding.

**Motor learning**

The study of change in a person's ability to perform a motor skill.

### **Nonlocomotor skills**

Movement of the body performed from a relatively stable base of support. Examples include bending, stretching, twisting, turning, leaning, swaying, and swinging.

### **Objectives (precise instructional objectives)**

Prescriptive statements of intended student outcomes that specify both the behavior to be developed and content to be learned.

### **Performance assessment**

Direct observation and judgment of student products or performances.

### **Performance standard**

The expected quality of student work and specifying how good is good enough.

### **Physical education curriculum**

A plan for teaching physical education that includes a structured, developmentally appropriate series of learning experiences for students organized as a detailed set of directions, strategies, and assessments.

### **Procedures**

Step-by-step description of the implementation of the lesson, from the introduction to assessment.

### **Protocol**

Step-by-step instructions and/or directions for how to administer a specific assessment of student performance.

### **Scope and sequence:**

A pre-K–12 curricular structure that outlines the breadth and depth of key learning concepts and skills across grade level(s) and the logical, developmental progression of concepts and skills to be addressed at each grade level or grade group.

### **Standards**

Statements that identify the essential knowledge, skills, and attitudes that should be taught and learned in school.

### **Standards-based curriculum**

A curriculum designed to produce student understanding and work that demonstrates achievement of standards.

### **Summative assessment**

Tasks administered at the end of an instructional period, course or unit of study that are used for grading purposes and determining student proficiency levels.

### **Unit**

A set of lessons based on a set of instructional objectives on a similar topic and/or skill. Units are parts of a larger course.

### **Vigorous physical activity**

Intensity of physical activity that corresponds to approximately 70 percent or more of an individual's maximal heart rate; examples include running, aerobic dance, singles tennis, swimming laps, and competitive basketball.



# PECAT Scavenger Hunt



**Purpose:** To become familiar with the purpose and sections of the PECAT.

**Directions:** Using the PECAT, find each of the items listed below.

1. **The intended users of the PECAT.** *Clue: See the Introduction, pg. 1.*
  
2. **The four main areas that need to be addressed to ensure a high-quality physical education program.** *Clue: See the Introduction, pg. 4.*
  1. \_\_\_\_\_
  2. \_\_\_\_\_
  3. \_\_\_\_\_
  4. \_\_\_\_\_
  
3. **The definition of “physical education curriculum.”** *Clue: See the Introduction, pg. 5.*

While you are at page 5, find the following:

4. **One example of meaningful content that should be included in a high-quality physical education curriculum.**
  
5. **One criterion for the appropriate sequencing of learning activities in a high-quality physical education curriculum.**
  
6. **The five steps to completing the PECAT.** *Clue: See the Instructions, pgs. 7–8.*
  1. \_\_\_\_\_
  2. \_\_\_\_\_
  3. \_\_\_\_\_
  4. \_\_\_\_\_
  5. \_\_\_\_\_

7. **The four factors that should be considered before analyzing the content of physical education curricula.** *Clue: See Preliminary Curriculum Considerations, pgs. 17–31.*

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

8. **The score you would give a curriculum if it did *not* provide specific lessons on motor skills such as the distinction between hopping and skipping.**

*Clue: See Content Analysis for Grades K–2, Standard 2, pg. 39*

9. **Two things that students should be able to do by the end of grade 5.**

*Clue: See Grades 3–5, pgs. 69–71.*

1. \_\_\_\_\_
2. \_\_\_\_\_

10. **If a curriculum includes protocols for assessing students' ability to self-select appropriate physical activities they enjoy and explain their reasons for enjoyment, what number is the criterion in the Student Assessment Analysis, Standard 6, and Grades 6–8?** *Clue: See pg. 133.*

11. **The form for Grades 9–12, Content Analysis, pg. 155. For what purpose would this form be used?**

12. **The pages of the Appendices where a person could find the six *National Standards for Physical Education* and a detailed explanation of each.**

13. **Where you can go to download copies of the PECAT.** *Clue: See Introductory Letter.*



## Answer Key

### PECAT Scavenger Hunt



**Purpose:** To become familiar with the purpose and sections of the PECAT.

**Directions:** Using the PECAT, find each of the items listed below.

1. **The intended users of the PECAT.** *Clue: See the Introduction, pg. 1.*  
*Team representing district or school personnel, including physical education coordinators, curriculum specialists, physical education teachers, members of the school health council, parents, and college and university physical education faculty, among others.*
2. **The four main areas that need to be addressed to ensure a high-quality physical education program.** *Clue: See the Introduction, pg. 4.*
  1. *Curriculum*
  2. *Policies and environment*
  3. *Instruction*
  4. *Student assessment*
3. **The definition of “physical education curriculum.”** *Clue: See the Introduction, pg. 5.*
  - *A sequential system for delivering learning experiences to students.*
  - *A framework providing guidance for teaching.*
  - *Based on national standards.*
  - *Emphasizes meaningful content and appropriate sequencing of learning activities.*

While you are at page 5, find the following:

4. **One example of meaningful content that should be included in a high-quality physical education curriculum.**  
*Possible answers include the following:*
  - *Instruction in a variety of motor skills.*
  - *Fitness education that improves physical well-being.*
  - *Development of cognitive concepts related to fitness.*
  - *Opportunities to improve social skills.*
  - *Opportunities to increase the value placed on physical activity.*
5. **One criterion for the appropriate sequencing of learning activities in a high-quality physical education curriculum.**  
*Possible answers include the following:*
  - *Assessments are age- and developmentally-appropriate.*
  - *Methods of teaching ensure that basic skills lead to advanced skills.*
  - *Plans to appropriately monitor, reinforce, and plan for student learning.*

6. **The five steps to completing the PECAT.** *Clue: See the Instruction, pgs. 7–8.*
  1. *Select a coordinator, form a committee, identify roles and responsibilities.*
  2. *Review curriculum materials, the PECAT, state/local standards.*
  3. *Complete the analysis of preliminary curriculum considerations.*
  4. *Complete the analyses of content and student assessment.*
  5. *Create an improvement plan.*
7. **The four factors that should be considered before analyzing the content of physical education curricula.** *Clue: See Preliminary Curriculum Considerations, pgs. 17–31.*
  1. *Accuracy*
  2. *Acceptability*
  3. *Feasibility*
  4. *Affordability*
8. **The score you would give a curriculum if it did *not* provide specific lessons on motor skills such as the distinction between hopping and skipping.**  
*Clue: See Content Analysis for Grades K–2, Standard 2, pg. 39*  
*Zero (0).*
9. **Two things that students should be able to do by the end of grade 5.**  
*Clue: See Grades 3–5, pgs. 69–71.*  
*Any of the bulleted student expectations on those three pages.*
10. **If a curriculum includes protocols for assessing students’ ability to self-select appropriate physical activities they enjoy and explain their reasons for enjoyment, what number is the criterion in the Student Assessment Analysis, Standard 6, and Grades 6–8?** *Clue: See pg. 133.*  
*Two (2).*
11. **The form for Grades 9–12, Content Analysis, pg. 155. For what purpose would this form be used?**  
*For the team to add any additional local or state standards that should be used to analyze the physical activity curricula.*
12. **The pages of the Appendices where a person could find the six National Standards for Physical Education and a detailed explanation of each.**  
*Pages 193–195.*
13. **Where you can go to download copies of the PECAT.** *Clue: See Introductory Letter.*  
[www.cdc.gov/HealthyYouth/PECAT](http://www.cdc.gov/HealthyYouth/PECAT)



# Lesson 1



## Assessment: Introduction to the PECAT

**Directions:** Write your responses to items 1–3, using the key vocabulary terms related to physical education curricula and specific to the PECAT. Each item is worth 5 points.

1. Summarize the elements of a high-quality physical education curriculum.
2. Summarize the importance and purpose of the PECAT.
3. Explain four ways the PECAT can be used.





## Lesson 1



### Assessment: Introduction to the PECAT

#### Answer Key and Scoring Rubric

**Directions:** Write your responses to the following items, using the key vocabulary terms related to physical education curricula and specific to the PECAT.

**1. Summarize the elements of a high-quality physical education curriculum. (5 points)**

*The key elements of a high-quality PE curriculum include:*

- *An overview: A general description of the overall curriculum including the purposes and organization of the curriculum.*
- *Goals of the curriculum: Broad or general statements that provide instructional direction or intent. Goals are the overarching vision or aim toward which instruction is directed. They identify the essential physical education knowledge, skills, and attitudes that are taught and learned in a curriculum.*
- *A scope and sequence: A pre-K–12 curricular structure that outlines the breadth and depth of key learning concepts and skills across grade level(s) [scope] and the logical, developmental progression of concepts and skills to be addressed at each grade level or grade group [sequence].*
- *Unit: A set of lessons on a similar topic and/or skill; part of a larger course.*
- *Lesson plans: Specific guidelines for instruction of how to implement the lesson, including instructional objectives, materials and equipment needed, procedures or directions for implementing the lesson, background information for the teacher, time, and assessment instrument/tool.*
- *Background information: Information to help the teacher better understand the content of the lesson, including procedural knowledge of the steps to teach a skill.*
- *Assessment of student learning: The process of gathering evidence and documentation of a student's learning; how one will know if learning was achieved; this can be formative assessment or summative assessment.*

**2. Summarize the importance and purpose of the PECAT. (5 points)**

*Importance of the PECAT:*

- *Federal documents support the importance of providing high-quality, daily physical education for all students. They include the following:*
- *Surgeon General's reports:*
  - ~ *Physical Activity and Health*
  - ~ *Call to Action to Prevent and Decrease Overweight and Obesity*
  - ~ *U.S. Department of Health and Human Services and U.S. Department of Education report, Promoting Better Health for Young People Through Physical Activity and Sports*
- *The following CDC publications:*
  - ~ *School Health Guidelines to Promote Lifelong Health Eating and Physical Activity Among Youth*
  - ~ *School Health Index: A Self-Assessment and Planning Guide*

- *Although these documents describe the important characteristics of high-quality physical education, they do not provide specific direction for developing, implementing, and evaluating a high-quality physical education program.*
- *Until the PECAT was developed, physical education had no tool to assess the quality of written curricula. The PECAT meets this need.*
- *Although many documents and tools address high-quality physical education, no other tool allowed users to thoroughly analyze a written curriculum.*

**Purpose:**

- *To help schools do the following:*
  - ~ *Conduct a clear, complete, and consistent analysis of written physical education curricula.*
  - ~ *Develop a written curriculum that will ensure high-quality physical education.*
  - ~ *Ensure that the physical education curriculum addresses the National Standards for Physical Education.*
  - ~ *Assess how closely written curricula align with national standards for high-quality physical education programs.*

**3. Explain four ways that the PECAT can be used. (5 points)**

1. *The PECAT can assist users in assessing how closely written curricula—whether locally developed by a school district, school or organization, or nationally available—are aligned with National Standards for high-quality physical education programs.*
2. *The PECAT can assist users in comparing strengths and weaknesses of a locally developed curriculum or various published physical education curricula being considered for adoption.*
3. *For those without a curriculum, the PECAT provides a vision of what should be included in a high-quality, written physical education curriculum.*
4. *The final product of the PECAT is the development of an improvement plan that is based on all of these assessments.*

# Lesson 1

## Scoring Rubric

### Objective:

In an essay, describe how the PECAT can be used to analyze and design written curricula to ensure that they meet the *National Standards for Physical Education*.

1. Explain the elements of a physical education curriculum.
2. Explain the importance and purpose of the PECAT.
3. Explain a variety of ways the PECAT can be used.

Points	Criteria
5	The description clearly and completely summarizes and relates to the specified topic and includes supporting details; the response addresses 90%–100% of the specified criteria.
4	The description provides a complete response with some detail; the response addresses 80%–89% of the specified criteria.
3	The description is almost complete; the response addresses 70%–79% of the specified criteria.
2	The description is somewhat complete; the response addresses 60%–69% of the specified criteria.
1	The description is incomplete; the response addresses less than 60% of the criteria.

# Lesson 2

## Defining a Physically Educated Student

---

### Introduction

In this lesson, students will be introduced to the concept of a physically educated student. Students will become familiar with the National Standards for Physical Education and corresponding grade level expectations from the PECAT. In this lesson, students will view a PowerPoint® presentation and participate in two activities and an assessment.

---

### Lesson Objectives

After completing this lesson, students will be able to do the following:

1. **Describe a physically educated student.**
2. **Explain how effective physical education curricula contribute to the development of a physically educated student.**
3. **Describe the relationship of the PECAT to the *National Standards for Physical Education* and related expectations.**
4. **Apply the *National Standards for Physical Education* and specific grade group expectations to student outcomes.**

---

### Total Estimated Time: 1 hour, 40 minutes – 2 hours

Introduction and Overview	5 minutes
Activity 1	45 minutes
Activity 2	25–35 minutes
Part 1	15–20 minutes
Part 2	10–15 minutes
PowerPoint® Presentation	15–20 minutes
Assessment	10–15 minutes

---

## Materials Needed

---

- Four different colored markers for each group of 3–5 students
- One large (approx. 5 feet) sheet of white poster paper for each group of 3–5 students
- Several rolls of non-stick painter's or masking tape
- One copy for each student of the following handouts:
  - ~ *National Standards for Physical Education: Part 1—In Your Own Words* (pgs. 39–40)
  - ~ *National Standards for Physical Education: Part 2—Checklist* (pgs. 41–46)
- One copy for instructor review of the following handouts:
  - ~ *National Standards for Physical Education: Part 1—In Your Own Words* (pgs. 39–40)
  - ~ *National Standards for Physical Education: Part 2—Checklist* (pgs. 41–46)
  - ~ *National Standards for Physical Education: Part 2—Checklist Answer Key* (pg. 47)
  - ~ *Exit Ticket Lesson 2 (Assessment—Scoring Rubric for Essay)* (pg. 48)
- PowerPoint® Presentation for Lesson 2
- LCD projector and screen

---

## Instructor Preparation

---

1. **Prior to Lesson 2, assess student responses to the Lesson 1 *Exit Ticket: Introduction to the PECAT*, using the scoring rubric. Determine areas that need to be reviewed.**
2. **Review the following:**
  - A. PECAT chapters and content that will be introduced in this lesson (specifically pgs. 35–61 and 69–83).
  - B. Lesson 2 Procedures (pgs. 35–38 in this guide).
  - C. Review PowerPoint® slides, notes, and narrative for Lesson 2.
3. **Set up computer, LCD projector, and screen, and use the Lesson 2 PowerPoint® file.**
4. **Prepare all materials for the Lesson 2 activities.**

---

**Lesson Procedures: 1 hour, 40 minutes – 2 hours**

---

1. **Return the scored Exit Tickets (for Lesson 1, Introduction to the PECAT), discuss the correct answers, and discuss areas identified as needing to be reviewed.**
2. **Introduction and Overview (5 minutes)**
  - A. Make the following introductory points:
    - Explain that this lesson will examine the nature of a physically educated student and explore the knowledge and skills that need to be covered in a physical education curriculum to develop that student.
    - The relationship between the National Standards for Physical Education and student expectations will be discussed.
3. **Lesson 2, Activity 1: The Vision of a Physically Educated Student (45 minutes)**
  - A. Arrange the class into six groups of 3–5 students each.
  - B. Distribute the following to each group:
    1. Four different colored marker pens
    2. One large sheet of paper
  - C. Explain the following to the students:
    1. You are going to draw and label a picture of a physically educated student.
    2. Place the sheet of paper flat on the floor.
    3. Have one person in the group lie down, face-up, on the paper.
    4. Have one person in the group take a marker and draw an outline of the student on the paper. (Alternately, if students are uncomfortable doing this, they can simply draw an outline of a person on the paper.)
    5. In one corner of the poster, you should create an answer key by creating and labeling four 5 -inch circles, using a different color markers for each of the following areas:
      - ~ Skills (example: blue)
      - ~ Knowledge (example: orange)
      - ~ Attitudes/Values (example: red)
      - ~ Health (example: purple)
    6. Then, you are to draw and label at least three examples for each of these four attributes (i.e., skills, knowledge, attitudes/values, and health) that a physically educated student should have, using the color of marker that corresponds to the answer key. (**Note:** At this point, display or draw a sample for students to see.) For example, you might use the purple marker to draw a heart on the person, and label it “cardiorespiratory endurance.” You might draw a smile on the person with the red marker and label it “enjoys physical activity.” Encourage students to be creative.
    7. Tell students they will have approximately 20 minutes to complete their work.
    8. Circulate through the groups to ensure that they are on task and answer any questions they might have. Once the posters are complete, ask each group to tape their poster on a wall in the classroom.

9. Ask each group to identify one person who will serve as their reporter. The reporters should remain standing by their group's poster while the remainder of the class returns to their seats.
  10. Ask the reporters, one at a time, to describe the poster prepared by their group, using three examples from each of the four categories. Encourage the reporters to cite examples that have not already been given by previous groups.
- D. Summarize by emphasizing the following:
- When developing, reviewing or selecting physical education curricula, it is important to keep in mind the vision of a physically educated student who will have the knowledge, skills, and confidence to enjoy a lifetime of healthful physical activity. The *National Standards for Physical Education* and the related grade-level expectations of what a physically educated student will be able to know and do should serve as the basis for a high-quality, effective physical education curriculum.
    - ~ The PECAT can provide guidance for what needs to be included in an effective physical education curriculum.
    - ~ In the next activity, you will learn more about the *National Standards for Physical Education*.

**4. Lesson 2, Activity 2: Learning about the *National Standards for Physical Education*: Part 1—In Your Own Words (15–20 minutes)**

- A. Explain to the students that in this activity they will become more familiar with the *National Standards for Physical Education*<sup>3</sup>.
- B. Ask the class to form groups of six students, and then number off 1 through 6 within each group. **Note:** There might be one group with fewer than six students.
- C. Distribute the *National Standards for Physical Education: In Your Own Words, Part 1* handout (pgs. 39–40) to each student. Assign each student the standard that corresponds to his or her number (e.g., Student 1 is assigned Standard 1; Student 2 is assigned Standard 2; etc.).
- D. Explain the following to the students:
  1. Each of you will read (silently) the standard assigned to you and its corresponding description.
  2. After reading the standard and description, write a paraphrased description of your standard in the column “In Your Own Words.”
  3. Then, taking turns within your group, read the paraphrased description to the other group members.
  4. After each standard and description has been read, members of the group can comment on the paraphrased description of the standard.
  5. You have approximately 15 minutes to complete this part of the activity.
- E. Circulate through the groups to ensure that they are on task, answering any questions they might have. At 15–20 minutes, ask students for questions or comments on finalizing this group task.

**5. Lesson 2 Slide Presentation (15–20 minutes)**

- A. Present the PowerPoint® slides for Lesson 2. Use the notes and narrative for each slide to supplement the information found on the slide.
- B. Ask students if they have any questions or comments.

**6. Lesson 2, Activity 2: Learning about the *National Standards for Physical Education: Part 2—Checklist* (10–15 minutes)**

---

**Note:** Have students return to the same small groups they were in for Activity 2, Part 1.

---

- A. Distribute the *National Standards for Physical Education: Checklist* (Activity 2, Part 2) handout (pgs. 41–46) to each student in each group.
- B. Explain the following to the students:
  - 1. You should complete the checklist individually and then discuss your answers with your group.
  - 2. You will use what you learned about each standard during the Part 1, In Your Own Words activity and from the PowerPoint® presentation. In Part 2, Checklist, you will apply the standard and corresponding expectations to determine the matching example outcomes (objectives) for teaching cycling to middle school (8th grade) students.
  - 3. For each standard (pgs. 41–46) and related expectations, you will check only the outcomes that best match the expectations for that standard. You may select more than one objective or outcome for each standard.
  - 4. You will have approximately 10 minutes to complete the *Checklist*.
- C. After 10 minutes, ask the small groups to share and discuss their answers to each of the standards.
  - 1. They should start with Standard 1 and identify the outcomes *they* selected or matched. If students have different answers, they should justify the fit between the standards, expectations, and outcomes. Remind students that these are only sample objectives/outcomes, intended to elicit their application and analysis skills.
  - 2. Once all students with Standard 1 have given their answers, go on to Standard 2, continuing through Standard 6.
- D. Review the correct answers using the *National Standards for Physical Education: Part 2—Checklist Answer Key* (pg. 47). Answer or clarify any questions students might have.



**7. Assessment—Exit Ticket: Student Essay (10–15 minutes)**

- A. Ask students to take out a piece of paper or use a personal computer to write individual responses to the following:
  - “Describe how the PECAT can be used to analyze and design written curricula to ensure that they meet the *National Standards for Physical Education*.”
- B. Review the *Exit Ticket: Scoring Rubric for the Student Essay* (pg. 48) with students.
- C. The student essay should be completed individually and submitted at the end of the class session; allow students 10–15 minutes to complete their response. Alternately, ask students to write the essay as homework and collect it at the beginning of Lesson 3.
- D. Collect students’ responses to the *Exit Ticket: Student Essay*.

**8. Lesson Extensions**

- *Using a locally-developed physical education curriculum.* You might want students to locate a locally-developed written physical education curriculum and use it to identify other developmentally appropriate examples of outcomes and objectives that are aligned with their state and/or local standard and expectations. Students might find curricula and standards on a school district (local education agency) or state education agency Web site. Have students share those examples at the next class session.
- *Using the PECAT to develop a written curriculum.* Although not a purpose of these 5 lessons, the instructor might want to consider developing another lesson and set of slides that guide students through the use of the PECAT to create standards-based curricula. Using the expectations provided for each standard in the PECAT, students could create a developmentally appropriate physical education curriculum that includes accurate and up-to-date content, skills, and student assessment, with intended student outcomes that are standards-based.

---

**Preparation for Lesson 3**

---

- Score students’ responses to the *Exit Ticket* for Lesson 2 using the scoring rubric (pg. 48). Determine the areas that need to be reviewed during the next class.
- At the beginning of Lesson 3, return the scored *Exit Tickets*.

Name \_\_\_\_\_

Standard # \_\_\_\_\_

### ***National Standards for Physical Education\**—In Your Own Words**

**Directions:** Read the standard assigned to you and the corresponding description. Rewrite the description, paraphrasing it in your own words. Then read the standard and your description to the group.

Standard	Description	In Your Own Words
<b>1. Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities.</b>	The intent of this standard is development of the movement and physical skills needed to enjoy participation in physical activities. Mastering movement fundamentals establishes a foundation to facilitate continued motor-skill acquisition and gives students the capacity for successful and advanced levels of performance to further the likelihood of participation on a daily basis.	
<b>2. The learner demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities.</b>	The intent of this standard is to facilitate the ability of the learner to use cognitive information to understand and enhance motor-skill acquisition and performance. It enhances the ability to use the mind to control or direct one's performance. This includes the application of concepts from disciplines such as motor learning and development, sport psychology and sociology, and biomechanics and exercise physiology.	
<b>3. Participates regularly in physical activity.</b>	The intent of this standard is for students to establish patterns of regular participation in meaningful physical activity. The standard connects what is done in the physical education class with the lives of students outside of the classroom.	

\* National Association for Sport and Physical Education (NASPE). *Moving Into the Future: National Standards for Physical Education* (2<sup>nd</sup> ed.). Reston, VA. 2004.

Name \_\_\_\_\_

Standard # \_\_\_\_\_

### ***National Standards for Physical Education\**—In Your Own Words**

**Directions:** Read the standard assigned to you and the corresponding description. Rewrite the description, paraphrasing it in your own words. Then read the standard and your description to the group.

Standard	Description	In Your Own Words
<b>4. Achieves and maintains a health-enhancing level of physical fitness.</b>	The intent of this standard is for students to have both the ability and the willingness to accept responsibility for personal fitness leading to an active, healthy lifestyle. Students develop higher levels of basic fitness and physical competence as needed for many work situations and active leisure participation.	
<b>5. Exhibits responsible personal and social behavior that respects self and others in physical activity settings.</b>	The intent of this standard is achievement of self-initiated behaviors that promote personal and group success in activity settings. These include safe practices, adherence to rules and procedures, etiquette, cooperation and teamwork, ethical behavior in sport, and positive social interaction. Key to this standard is developing respect for individual similarities and differences through positive interaction among participants in physical activity.	
<b>6. Values physical activity for health, enjoyment, challenge, self-expression, and/or social interaction</b>	The intent of this standard is to develop an awareness of the intrinsic values and benefits of participation in physical activity that provides personal meaning. Physical activity provides opportunities for self-expression and social interaction and can be enjoyable, challenging, and fun.	

\* National Association for Sport and Physical Education (NASPE). *Moving Into the Future: National Standards for Physical Education* (2<sup>nd</sup> ed.). Reston, VA. 2004.

# National Standards for Physical Education: Checklist

**Directions:** Using each of the Standards and descriptions (from Activity 2, Part 1) and the Expectations listed in the first column below, identify one or more **Cycling Outcomes** that match or correspond to the Standard on this page. Check **ONLY** those outcomes that are aligned with the corresponding Standard on each page. Follow the same directions for Standards 1–6.

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

<i><b>Expectations</b></i>	<i><b>8<sup>th</sup> Grade Cycling Outcomes</b></i>
<i><b>By the end of grade 8, students should:</b></i>	<i><b>By the end of grade 8, students should:</b></i>
<ul style="list-style-type: none"> <li>• Participate with skill in a variety of modified sport, dance, gymnastics, and outdoor activities.</li> <li>• Perform the basic skills of the more specialized sports, dance, and gymnastics activities with mature form.</li> <li>• Use skills successfully in modified games or activities of increasing complexity and in combination with other basic skills.</li> <li>• Demonstrate use of tactics within sport activities.</li> </ul>	<p><b>For Example Only</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Use advanced form when starting, stopping, mounting, dismounting, breaking, shifting gears, pedaling, turning on a variety of surfaces, ascending, descending, during track stands and wheel hops, and riding over obstacles.</li> <li><input type="checkbox"/> Perform basic bicycle maintenance and repairs.</li> <li><input type="checkbox"/> Analyze cycling skills, develop and participate in activities to improve skills, and experience increased enjoyment by applying cycling skill.</li> <li><input type="checkbox"/> Research and compare cycling equipment availability and costs.</li> <li><input type="checkbox"/> Always wear a bicycle helmet.</li> <li><input type="checkbox"/> Locate on a map local, regional, and national cycling opportunities.</li> <li><input type="checkbox"/> Identify and describe local, regional, and national cycling resources, such as bike shops, clubs, American Cycling Federation, League of American Wheelman, etc.</li> <li><input type="checkbox"/> Maintain a physical activity log that documents participation in cycling activities outside of physical education classes.</li> <li><input type="checkbox"/> Use cycling to increase physical activity opportunities and developing a health-enhancing level of physical activity.</li> <li><input type="checkbox"/> Assess personal fitness; analyze fitness benefits and requirements of cycling; and identify, document, and analyze participation in activities to improve fitness and cycling performance.</li> <li><input type="checkbox"/> Understand and follow rules of the road as applied to cycling: stop at all marked intersections; ride on the right; ride single file; signal intent; and identify oncoming and following traffic, obstacles, and hazards for other cyclists.</li> <li><input type="checkbox"/> Understand and follow rules of the trail: stay on the trail, leave no trace, obey regulations, share the trail with others (including animals), know your equipment, and know your ability.</li> <li><input type="checkbox"/> Use cycling to create opportunities for social interaction and personal enjoyment.</li> </ul>

## National Standards for Physical Education: Checklist

**Directions:** Using each of the Standards and descriptions (from Activity 2, Part 1) and the Expectations listed in the first column below, identify one or more **Cycling Outcomes** that match or correspond to the Standard on this page. Check **ONLY** those outcomes that are aligned with the corresponding Standard on each page. Follow the same directions for Standards 1–6.

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

<b>Expectations</b>	<b>8<sup>th</sup> Grade Cycling Outcomes</b>
<b>By the end of grade 8, students should:</b>	<b>For Example Only</b> <b>By the end of grade 8, students should:</b>
<ul style="list-style-type: none"> <li>Exhibit an increasingly complex discipline-specific knowledge.</li> <li>Identify principles of practice and conditioning that enhance movement performance.</li> <li>Have higher levels of understanding and application of movement concepts/ principles and game strategies, critical elements of activity-specific movement skills, and characteristics representing highly skilled performance.</li> <li>Know when, why, and how to use strategies and tactics within game play.</li> <li>Use information from a variety of sources, both internal and external, to guide and improve performance.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Use advanced form when starting, stopping, mounting, dismounting, breaking, shifting gears, pedaling, turning on a variety of surfaces, ascending, descending, during track stands and wheel hops, and riding over obstacles.</li> <li><input type="checkbox"/> Perform basic bicycle maintenance and repairs.</li> <li><input type="checkbox"/> Analyze cycling skills, develop and participate in activities to improve skills, and experience increased enjoyment by applying cycling skill.</li> <li><input type="checkbox"/> Research and compare cycling equipment availability and costs.</li> <li><input type="checkbox"/> Always wear a bicycle helmet.</li> <li><input type="checkbox"/> Locate on a map local, regional, and national cycling opportunities.</li> <li><input type="checkbox"/> Identify and describe local, regional, and national cycling resources, such as bike shops, clubs, American Cycling Federation, League of American Wheelman, etc.</li> <li><input type="checkbox"/> Maintain a physical activity log that documents participation in cycling activities outside of physical education classes.</li> <li><input type="checkbox"/> Use cycling to increase physical activity opportunities and developing a health-enhancing level of physical activity.</li> <li><input type="checkbox"/> Assess personal fitness; analyze fitness benefits and requirements of cycling; and identify, document, and analyze participation in activities to improve fitness and cycling performance.</li> <li><input type="checkbox"/> Understand and follow rules of the road as applied to cycling: stop at all marked intersections; ride on the right; ride single file; signal intent; and identify oncoming and following traffic, obstacles, and hazards for other cyclists.</li> <li><input type="checkbox"/> Understand and follow rules of the trail: stay on the trail, leave no trace, obey regulations, share the trail with others (including animals), know your equipment, and know your ability.</li> <li><input type="checkbox"/> Use cycling to create opportunities for social interaction and personal enjoyment.</li> </ul>

## National Standards for Physical Education: Checklist

**Directions:** Using each of the Standards and descriptions (from Activity 2, Part 1) and the Expectations listed in the first column below, identify one or more **Cycling Outcomes** that match or correspond to the Standard on this page. Check **ONLY** those outcomes that are aligned with the corresponding Standard on each page. Follow the same directions for Standards 1–6.

### Standard 3. Participates regularly in physical activity.

<b>Expectations</b>	<b>8<sup>th</sup> Grade Cycling Outcomes</b>
<b>By the end of grade 8, students should:</b>	<b>For Example Only</b> <b>By the end of grade 8, students should:</b>
<ul style="list-style-type: none"> <li>• Be able to set physical activity goals independently and participate in individualized programs based on personal goals and interests, as well as the results of fitness assessments.</li> <li>• Select and utilize physical activities that are appropriate for the activity goals they set.</li> <li>• Have an increasing awareness of the opportunities for participation in a broad range of physical activities and interests.</li> <li>• Participate regularly in moderate-to-vigorous physical activities in both school and non-school settings.</li> <li>• Have a level of knowledge and understanding of physical movement principles and tactics that allows them to apply these concepts to their participation in more situations.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Use advanced form when starting, stopping, mounting, dismounting, breaking, shifting gears, pedaling, turning on a variety of surfaces, ascending, descending, during track stands and wheel hops, and riding over obstacles.</li> <li><input type="checkbox"/> Perform basic bicycle maintenance and repairs.</li> <li><input type="checkbox"/> Analyze cycling skills, develop and participate in activities to improve skills, and experience increased enjoyment by applying cycling skill.</li> <li><input type="checkbox"/> Research and compare cycling equipment availability and costs.</li> <li><input type="checkbox"/> Always wear a bicycle helmet.</li> <li><input type="checkbox"/> Locate on a map local, regional, and national cycling opportunities.</li> <li><input type="checkbox"/> Identify and describe local, regional, and national cycling resources, such as bike shops, clubs, American Cycling Federation, League of American Wheelman, etc.</li> <li><input type="checkbox"/> Maintain a physical activity log that documents participation in cycling activities outside of physical education classes.</li> <li><input type="checkbox"/> Use cycling to increase physical activity opportunities and developing a health-enhancing level of physical activity.</li> <li><input type="checkbox"/> Assess personal fitness; analyze fitness benefits and requirements of cycling; and identify, document, and analyze participation in activities to improve fitness and cycling performance.</li> <li><input type="checkbox"/> Understand and follow rules of the road as applied to cycling: stop at all marked intersections; ride on the right; ride single file; signal intent; and identify oncoming and following traffic, obstacles, and hazards for other cyclists.</li> <li><input type="checkbox"/> Understand and follow rules of the trail: stay on the trail, leave no trace, obey regulations, share the trail with others (including animals), know your equipment, and know your ability.</li> <li><input type="checkbox"/> Use cycling to create opportunities for social interaction and personal enjoyment.</li> </ul>

## National Standards for Physical Education: Checklist

**Directions:** Using each of the Standards and descriptions (from Activity 2, Part 1) and the Expectations listed in the first column below, identify one or more **Cycling Outcomes** that match or correspond to the Standard on this page. Check **ONLY** those outcomes that are aligned with the corresponding Standard on each page. Follow the same directions for Standards 1–6.

### Standard 4. Achieves and maintains a health-enhancing level of physical fitness.

<p><b>Expectations</b></p> <p><b>By the end of grade 8, students should:</b></p>	<p><b>8<sup>th</sup> Grade Cycling Outcomes</b></p> <p><b>For Example Only</b></p> <p><b>By the end of grade 8, students should:</b></p>
<ul style="list-style-type: none"> <li>• Participate in moderate-to-vigorous physical activities on a regular basis without undue fatigue.</li> <li>• Know the components of health-related fitness and how these relate to their overall fitness status.</li> <li>• Participate in moderate-to-vigorous activities that address each component of health-related fitness, including cardiorespiratory endurance, muscular strength and endurance, flexibility, and body composition.</li> <li>• Monitor their own heart rate, breathing, and recovery rate during and after strenuous physical activity</li> <li>• Assess their personal fitness status for each component and use the development of individualized physical fitness goals with little help from the teacher.</li> <li>• Show progress towards knowing the components and theories of physical fitness (e.g., threshold, overload, specificity) and how these principles can be used to improve their level of physical fitness.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Use advanced form when starting, stopping, mounting, dismounting, breaking, shifting gears, pedaling, turning on a variety of surfaces, ascending, descending, during track stands and wheel hops, and riding over obstacles.</li> <li><input type="checkbox"/> Perform basic bicycle maintenance and repairs.</li> <li><input type="checkbox"/> Analyze cycling skills, develop and participate in activities to improve skills, and experience increased enjoyment by applying cycling skill.</li> <li><input type="checkbox"/> Research and compare cycling equipment availability and costs.</li> <li><input type="checkbox"/> Always wear a bicycle helmet.</li> <li><input type="checkbox"/> Locate on a map local, regional, and national cycling opportunities.</li> <li><input type="checkbox"/> Identify and describe local, regional, and national cycling resources, such as bike shops, clubs, American Cycling Federation, League of American Wheelman, etc.</li> <li><input type="checkbox"/> Maintain a physical activity log that documents participation in cycling activities outside of physical education classes.</li> <li><input type="checkbox"/> Use cycling to increase physical activity opportunities and developing a health-enhancing level of physical activity.</li> <li><input type="checkbox"/> Assess personal fitness; analyze fitness benefits and requirements of cycling; and identify, document, and analyze participation in activities to improve fitness and cycling performance.</li> <li><input type="checkbox"/> Understand and follow rules of the road as applied to cycling: stop at all marked intersections; ride on the right; ride single file; signal intent; and identify oncoming and following traffic, obstacles, and hazards for other cyclists.</li> <li><input type="checkbox"/> Understand and follow rules of the trail: stay on the trail, leave no trace, obey regulations, share the trail with others (including animals), know your equipment, and know your ability.</li> <li><input type="checkbox"/> Use cycling to create opportunities for social interaction and personal enjoyment.</li> </ul>



## National Standards for Physical Education: Checklist

**Directions:** Using each of the Standards and descriptions (from Activity 2, Part 1) and the Expectations listed in the first column below, identify one or more **Cycling Outcomes** that match or correspond to the Standard on this page. Check **ONLY** those outcomes that are aligned with the corresponding Standard on each page. Follow the same directions for Standards 1–6.

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

<b>Expectations</b>	<b>8<sup>th</sup> Grade Cycling Outcomes</b>
<b>By the end of grade 8, students should:</b>	<b>For Example Only</b> <b>By the end of grade 8, students should:</b>
<ul style="list-style-type: none"> <li>Understand the concept of physical activity as a component of modern culture and social life.</li> <li>Understand the role of diversity in physical activity and continue to include and support each other, respecting limitations and strengths of group members.</li> <li>Move from merely identifying and following rules, procedures, safe practices, ethical behavior, and positive forms of social interaction to reflecting on their role in physical activity settings.</li> <li>Have well-developed cooperation skills and accomplish group/team goals in both cooperative and competitive situations.</li> <li>Seek greater independence from adults and effectively work independently and in groups to complete assigned tasks.</li> <li>Make appropriate decisions to resolve conflicts arising from the influence of peers and practice appropriate problem-solving techniques to resolve conflicts when necessary in competitive activities.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Use advanced form when starting, stopping, mounting, dismounting, breaking, shifting gears, pedaling, turning on a variety of surfaces, ascending, descending, during track stands and wheel hops, and riding over obstacles.</li> <li><input type="checkbox"/> Perform basic bicycle maintenance and repairs.</li> <li><input type="checkbox"/> Analyze cycling skills, develop and participate in activities to improve skills, and experience increased enjoyment by applying cycling skill.</li> <li><input type="checkbox"/> Research and compare cycling equipment availability and costs.</li> <li><input type="checkbox"/> Always wear a bicycle helmet.</li> <li><input type="checkbox"/> Locate on a map local, regional, and national cycling opportunities.</li> <li><input type="checkbox"/> Identify and describe local, regional, and national cycling resources, such as bike shops, clubs, American Cycling Federation, League of American Wheelman, etc.</li> <li><input type="checkbox"/> Maintain a physical activity log that documents participation in cycling activities outside of physical education classes.</li> <li><input type="checkbox"/> Use cycling to increase physical activity opportunities and developing a health-enhancing level of physical activity.</li> <li><input type="checkbox"/> Assess personal fitness; analyze fitness benefits and requirements of cycling; and identify, document, and analyze participation in activities to improve fitness and cycling performance.</li> <li><input type="checkbox"/> Understand and follow rules of the road as applied to cycling: stop at all marked intersections; ride on the right; ride single file; signal intent; and identify oncoming and following traffic, obstacles, and hazards for other cyclists.</li> <li><input type="checkbox"/> Understand and follow rules of the trail: stay on the trail, leave no trace, obey regulations, share the trail with others (including animals), know your equipment, and know your ability.</li> <li><input type="checkbox"/> Use cycling to create opportunities for social interaction and personal enjoyment.</li> </ul>



## National Standards for Physical Education: Checklist

**Directions:** Using each of the Standards and descriptions (from Activity 2, Part 1) and the Expectations listed in the first column below, identify one or more **Cycling Outcomes** that match or correspond to the Standard on this page. Check **ONLY** those outcomes that are aligned with the corresponding Standard on each page. Follow the same directions for Standards 1–6.

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

<i>Expectations</i>	<i>8<sup>th</sup> Grade Cycling Outcomes</i>
<i>By the end of grade 8, students should:</i>	<p style="text-align: center;"><b>For Example Only</b></p> <i>By the end of grade 8, students should:</i>
<ul style="list-style-type: none"> <li>• Seek physical activity experiences for group membership and positive social interaction.</li> <li>• Participate in physical activities that provide a positive outlet for competition with peers and a means of gaining respect and recognition so that they can increase self-confidence and self-esteem.</li> <li>• Understand that physical activities can help them take steps toward independence.</li> <li>• Recognize that challenge is found both in high levels of competition and in learning new and/or different activities.</li> <li>• Experience a greater awareness of feelings toward the avenues of self-expression provided through dance, gymnastics, and other artistic sports.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Use advanced form when starting, stopping, mounting, dismounting, breaking, shifting gears, pedaling, turning on a variety of surfaces, ascending, descending, during track stands and wheel hops, and riding over obstacles.</li> <li><input type="checkbox"/> Perform basic bicycle maintenance and repairs.</li> <li><input type="checkbox"/> Analyze cycling skills, develop and participate in activities to improve skills, and experience increased enjoyment by applying cycling skill.</li> <li><input type="checkbox"/> Research and compare cycling equipment availability and costs.</li> <li><input type="checkbox"/> Always wear a bicycle helmet.</li> <li><input type="checkbox"/> Locate on a map local, regional, and national cycling opportunities.</li> <li><input type="checkbox"/> Identify and describe local, regional, and national cycling resources, such as bike shops, clubs, American Cycling Federation, League of American Wheelman, etc.</li> <li><input type="checkbox"/> Maintain a physical activity log that documents participation in cycling activities outside of physical education classes.</li> <li><input type="checkbox"/> Use cycling to increase physical activity opportunities and developing a health-enhancing level of physical activity.</li> <li><input type="checkbox"/> Assess personal fitness; analyze fitness benefits and requirements of cycling; and identify, document, and analyze participation in activities to improve fitness and cycling performance.</li> <li><input type="checkbox"/> Understand and follow rules of the road as applied to cycling: stop at all marked intersections; ride on the right; ride single file; signal intent; and identify oncoming and following traffic, obstacles, and hazards for other cyclists.</li> <li><input type="checkbox"/> Understand and follow rules of the trail: stay on the trail, leave no trace, obey regulations, share the trail with others (including animals), know your equipment, and know your ability.</li> <li><input type="checkbox"/> Use cycling to create opportunities for social interaction and personal enjoyment.</li> </ul>

# National Standards for Physical Education: Checklist

## ANSWER KEY

**Directions:** Using each of the Standards and descriptions (from Activity 2, Part 1) and the Expectations listed in the first column below, identify one or more **Cycling Outcomes** that match or correspond to the Standard on this page. Check **ONLY** those outcomes that are aligned with the corresponding Standard on each page. Follow the same directions for Standards 1–6.

<b>Expectations</b>	<b>8<sup>th</sup> Grade Cycling Outcomes</b>
<b>By the end of grade 8, students should:</b>	<b>For Example Only</b> <b>By the end of grade 8, students should:</b>
1. Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities.	<input type="checkbox"/> Use advanced form when starting, stopping, mounting, dismounting, breaking, shifting gears, pedaling, turning on a variety of surfaces, ascending, descending, during track stands and wheel hops, and riding over obstacles.
2. Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities.	<input type="checkbox"/> Perform basic bicycle maintenance and repairs. <input type="checkbox"/> Analyze cycling skills, develop, and participate in activities to improve skills, and experience increased enjoyment by applying cycling skills. <input type="checkbox"/> Research and compare cycling equipment availability and costs. <input type="checkbox"/> Locate on a map local, regional, and national cycling opportunities: trails, designated areas, Rails-to-Trails, American Discovery Trail. <input type="checkbox"/> Identify and describe local, regional, and national cycling resources: bike shops, clubs, American Cycling Federation, League of American Wheelman, etc.
3. Participates regularly in physical activity.	<input type="checkbox"/> Maintain a physical activity log that documents participation in cycling activities in addition to physical education classes.
4. Achieves and maintains a health-enhancing level of physical fitness.	<input type="checkbox"/> Use cycling to increase physical activity opportunities and developing a health enhancing level of physical activity.
5. Exhibits responsible personal and social behavior that respects self and others in physical activity settings.	<input type="checkbox"/> Always wear a bicycle helmet. <input type="checkbox"/> Understand and follow rules of the road as applied to cycling: stop at all marked intersections, ride on the right, ride single file, signal intent, identify for other cyclists, oncoming and following traffic, obstacles, and hazards. <input type="checkbox"/> Understand and follow rules of the trail: stay on the trail, leave no trace, obey regulations, share the trail with others (including animals), know your equipment, and your ability.
6. Values physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.	<input type="checkbox"/> Use cycling to create opportunities for social interaction and personal enjoyment. <input type="checkbox"/> Assess personal fitness, analyze fitness benefits and requirements of cycling, identify, document, and analyze participation in activities to improve fitness and cycling performance.



## Lesson 2



### Scoring Rubric for Student Essay

#### Objective:

In an essay, describe how the PECAT can be used to analyze and design written curricula to ensure that they meet the *National Standards for Physical Education*.

Points	Scoring Rubric
5	The description is accurate, clear, through, and provides sufficient detail; the essay is well organized.
4	The description is accurate, provides some detail, is incomplete and is well organized.
3	The description is somewhat accurate, provides little detail, is incomplete and is somewhat organized.
2	The description is somewhat clear and correct, but provides little to no detail. The essay is not well organized.
1	The description is weak, unclear, incorrect and incomplete. The essay is not well organized.

# Lesson 3

## First Things First: Preliminary Considerations for Analyzing Physical Education Curricula

---

### Introduction

---

This lesson is designed to familiarize students with sections and forms found in the PECAT *Preliminary Curriculum Analyses*. They will participate in a hands-on, interactive activity using the following preliminary analyses forms: Accuracy Analysis, Acceptability Analysis, Feasibility Analysis, and Affordability Analysis. They will explain the forms to their peers by identifying their purpose and use.

---

### Lesson Objectives

---

After completing this lesson, students will be able to:

1. **Summarize the following sections and forms in the PECAT:**
  - A. Physical Education Curriculum Description
  - B. Accuracy Analysis
  - C. Acceptability Analysis
  - D. Feasibility Analysis
  - E. Affordability Analysis

---

### Total Estimated Time: 1 hour, 5 minutes – 1 hour, 20 minutes

---

Introduction and Overview	5 minutes
PowerPoint® Presentation	15 minutes
Activity	40–50 minutes
Assessment	5–10 minutes

---

## Materials Needed

---

- One copy for each student of the following:
  - ~ *PECAT Preliminary Curriculum Considerations Review* handout (pg. 57)
  - ~ PECAT
- Four copies for each student (in each small group of five students) of the *Exit Ticket: Preliminary Curriculum Considerations—Peer Review* handout (pg. 58)
- One copy for instructor review of the following:
  - ~ *Elements of a Quality Physical Education Curriculum* (for instructor use only, pgs. 55–56)
  - ~ *PECAT Preliminary Curriculum Considerations Review* handout (pg. 57)
  - ~ *Exit Ticket: Preliminary Curriculum Considerations—Peer Review* handout (58)
  - ~ PECAT
- LCD projector and screen
- PowerPoint® Presentation for Lesson 3

---

## Instructor Preparation

---

2. Review and become familiar with all analyses in the section of the PECAT manual entitled *Preliminary Curriculum Considerations* (pgs. 13–31).
3. Review Lesson 3 Procedures (pgs. 51–53 in this guide).
4. Review the PowerPoint® slides, notes, and narrative for Lesson 3.
5. Set up computer, LCD projector, and screen; use the Lesson 3 PowerPoint® file.
6. Prepare all materials for the Lesson 3 activities and assessment.

---

## Lesson Procedures: (1 hour, 5 minutes– 1 hour, 20 minutes)

---

### 1. Introduction and Overview (5 minutes)

A. Make the following introductory points:

- This lesson will help you summarize the content and purpose of the section of the PECAT entitled *Preliminary Curriculum Considerations*.
- Preliminary curriculum considerations include issues related to accuracy of information and teaching methodologies, acceptability (compatibility of the curriculum to the physical education needs of students, school norms, district and state policies, and physical education instructional frameworks), and feasibility of implementing the curriculum.
- This section is used to analyze existing written curricula. If a curriculum PECAT team or committee ultimately decides not to use the written curriculum being reviewed, the results might be considered when developing a new curriculum (e.g., cost of the curriculum and materials, teacher qualifications, accuracy and acceptability of a curriculum).

### 2. Lesson 3 Slide Presentation (15 minutes)

A. Present the PowerPoint® slides for Lesson 3. Use the notes and narrative for each slide to assist you in your presentation.

### 3. Lesson 3, Activity 1: Exploring the Preliminary Curriculum Considerations of the PECAT (40–50 minutes)

A. Explain the following to the students:

1. You will be learning about the Preliminary Curriculum Analysis of the PECAT by actually going through the forms and explaining the purpose and use of the section to your peers.

B. Divide students into groups of five. Within each group, ask students to number off, 1 through 5.

---

**Note:** If there are too many students to form groups of only five, disperse the remaining students to other groups, instructing them to number off as “1a, 2a, 3a, 4a, 5a.”

---

C. Assign each student to a section of the PECAT corresponding to his or her number, as follows:

#1: Physical Education Curriculum Description (pgs. 13–15 of the PECAT)

#2: Accuracy Analysis (pgs. 17–19 of the PECAT)

#3: Acceptability Analysis (pgs. 21–24 of the PECAT)

#4: Feasibility Analysis (pgs. 25–26 of the PECAT))

#5: Affordability Analysis (pgs. 27–31 of the PECAT)

- D. To each student, distribute one *PECAT Preliminary Curriculum Considerations Review* handout (pg. 57).
- E. Tell students they will have approximately 10 minutes to review their *Preliminary Curriculum Considerations* section and complete the corresponding row of the handout, and then they will have 3–5 minutes to report their findings to the rest of the members of their group.
- F. Explain that at the conclusion of the reports, students will evaluate each other on their presentation, using the following criteria:
  1. All required information was presented.
  2. Information provided sufficient breadth and depth to fully understand the section being discussed.
  3. Presentation was within allocated time limit of 3–5 minutes.
- G. Allow approximately 10 minutes for students to review their section and answer the questions on their PECAT Preliminary Curriculum Considerations Review handout. Stop work after sufficient time has been allocated to this part of the activity.
- H. Summarize by asking groups to provide examples of issues or concerns that need to be addressed (Guiding Question 2 in the *Preliminary Curriculum Considerations Review* handout, pg. 57). Below are prompt questions and potential answers.
  1. *Physical Education Curriculum Description:*
    - Where could you locate information about a school district’s curriculum requirements?
    - Why would a curriculum review conducted and completed by another committee be important for your PECAT team’s review?
    - Why is it important to notify parents and families about the curriculum or the content of instruction?
  2. *Accuracy:*
    - What are some concepts, beliefs, or ideas about physical activity that might be antiquated? (For example, the amount of daily physical activity recommended for youth.)
    - What exercise techniques might have changed that are not reflected in curricula? (For example, sit-ups; exercise safety; protective clothing or gear.)
  3. *Acceptability:*
    - What might be in a curriculum that might make it unacceptable for a given population? (For example, promotion of stereotypes; violation of state mandates or district policies; does not provide support for diverse learners or accommodate for students’ disabilities; religious or cultural beliefs, including recommendations of appropriate apparel for certain activities; marketing messages embedded in the curriculum.)

4. *Feasibility:*

- What are factors that might make it difficult for a school district to use a given curriculum? (For example, lack of space; lack of teachers trained in physical education; time allocated for instruction; availability of facilities; abilities of students.)

5. *Affordability:*

- What about a curriculum might make it too costly for a district or school to implement? (For example, physical education teacher training on the curriculum; equipment needs; technology or audio-visual needs.)

4. **Assessment—Exit Ticket (5–10 minutes)**

- Distribute the *Exit Ticket: Preliminary Curriculum Considerations—Peer Review and Scoring Rubric* handout (pg. 58). Students will evaluate peers in their groups. For each group of five students, distribute to each student four copies of the handout.
- Explain to students that they will use the handout to evaluate each other's review and presentation.
- Review the instructions, criteria, and rubric on the *Exit Ticket: Preliminary Curriculum Considerations—Peer Review and Scoring Rubric* handout (pg. 58).
- Tell the students to begin their presentations. Circulate around the room to ensure that students are on task and to answer any questions.
- Collect all evaluation forms.

---

**Note:** In Lesson 4, each student will use the PECAT to analyze a physical education curriculum. The instructions for preparing the materials are provided below. Each student will need a copy of a curriculum to review. Depending on what curricula are available and on the size of the class there are several ways to organize this activity. See item 5.B below for suggestions. Review and consider the *Elements of a Quality Physical Education Curricula* (pgs. 55–56, in this guide) when selecting a curriculum for student review.

---



---

## Preparation for Lesson 4

---

- Collate the PECAT analysis forms for your students.
  - Select forms that coincide with the grade or grade-level group addressed by the curriculum.
    - ~ Include the *Student Expectations, Content Analysis, Student Assessment Analysis* forms. For example, for grades 9–12, include *Student Expectations at the End of Grade 12, Content Analysis for Standards 1–6, Grades 9–12, and Student Assessment Analysis for Standards 1 – 6, Grades 9–12), and Scorecard for Content and Student Assessment Analyses*.
    - ~ Prepare one set of forms for each student.



- B. Make available a sample physical education curriculum or, at a minimum, one sample physical education unit, for at least one grade level or grade-level group for each student in the class. Each curriculum should have the *Elements of a Quality Physical Education Curriculum* for use with PECAT (see pgs. 55–56).
- C. Become familiar with each curriculum being used, and complete a PECAT Curriculum Analysis for each curriculum to be analyzed.
- D. Organize students into PECAT teams of 3–4 students each. Select one of the following three options for the analysis.
  - 1. All PECAT teams analyze the **same curriculum, but each student in the group analyzes a different grade(s) or grade-level group(s)**. This allows for a discussion about the possible variations in scores across different grades of the same curriculum.
  - 2. All PECAT teams analyze the **same curriculum, and each student analyzes the same grade(s) or grade-level group(s)**. This allows for a discussion about the possible variations in scoring among reviewers of the same curriculum.
  - 3. Each PECAT team analyzes a **different curriculum, but with the same grade(s) or grade-level group(s)**. This allows for a discussion about the possible variations in scoring among team members about the curriculum, and for discussion across teams about different curriculum of the same grade(s) or grade-level group(s).

## Elements of a Quality Physical Education Curriculum

Each curriculum *must* have at least the elements that are asterisked (\*).

- **Overview:** A brief description of the curriculum. It might include the breadth and depth of the content and skills found in the curriculum, as well as the purpose(s) of the curriculum.
- **Goal(s):** General statement of what students should know or do following participation in the learning experiences found in the curriculum.
- **Scope and sequence:** A K–12 curricular framework that outlines the breadth and arrangement of key physical education learning concepts across grade level(s) [scope] and the logical progression of essential physical education knowledge and skills to be addressed at each grade level or grade group [sequence].
- **\*Unit(s):** Units provide an overview and at least one unit objective that encompass at least two or more lessons and related instructional objectives. The unit has lessons organized by a common topic, and sequentially related content, concepts and skills. The unit might also include a unit assessment, covering all lesson objectives addressed in that unit.
- **\*Lesson plans:** Lesson plans should specify the following:
  - ~ **\*Targeted grade level**
  - ~ **\*PE standards and expectations:** The PE standards and expectations that are addressed in the lesson; they are congruent with the instructional objectives.
  - ~ **\*Instructional objectives:** Measurable instructional objectives that clearly specify what the student show know and do following completion of the lesson.
  - ~ **\*Procedures:** Step-by-step methods for implementing the lesson to attain the instructional objectives.
  - ~ **\*Learning experiences (learning activities or opportunities):** Activities implemented by the teacher to allow the student to develop the knowledge and skills and practice the skills specified in the objectives. For each objective, there should be a learning activity that allows students to learn the content and skills and to practice the skills. Note that one activity might encompass more than one objective.
  - ~ **\*Materials and equipment:** Resources and supplies the teacher will need to implement the learning activities and the materials that students will need to acquire the knowledge and skills specified in the objectives for each lesson. This also includes fully developed templates and/or worksheets for use by the student. Note: if “correct” responses are required, a key is provided.
- **\*Background information:** Content/information that the teacher will need to teach the lesson.

- **\*Assessment of student learning:** The assessment should be separate from the learning activity and provide feedback to the teacher and student about the progress they have made to achieve the stated objective(s). The assessment should (1) be matched to the content and behavior specified in each instructional objective, and (2) have a protocol with step-by-step instructions and/or directions for how to administer a specific assessment of student performance.
- **Other elements:** In addition, the curriculum should provide the information needed to respond to questions about the accuracy of the information found in the curriculum (for knowledge and skills), the affordability of the curriculum (including the cost of teacher training and materials), the acceptability of the curriculum (the compatibility of the curriculum to the physical education needs of students, school norms, district and state policies, and physical education instructional frameworks), and the feasibility (can the curriculum reasonably be implemented by teachers) of implementing the curriculum in the school/district.

## PECAT Preliminary Curriculum Considerations Review

**Directions:** Fill in your response to each of the guiding questions for the PECAT Preliminary Curriculum Consideration analysis assigned to you. When all members of your group have completed their sections, report your answers to the group.

Guiding Questions	Analyses				
	Curriculum Description (pgs. 13–15 of the PECAT)	Accuracy Analysis (pgs. 17–19 of the PECAT)	Acceptability Analysis (pgs. 21–24 of the PECAT)	Feasibility Analysis (pgs. 25–26 of the PECAT)	Affordability Analysis (pgs. 27–31 of the PECAT)
1. What is the purpose of this section?					
2. What examples of issues or concerns need to be considered?					
3. What forms are included in this section?					
4. Who should be involved in this analysis area?					
5. How might this section be helpful to you in understanding and reviewing curricula?					



## Lesson 3



### Preliminary Curriculum Considerations: Peer Review and Scoring Rubric

Points possible: 11

Name: \_\_\_\_\_

Points assigned: \_\_\_\_\_

Date: \_\_\_\_\_

#### Objective:

In a 3–5 minute oral presentation to peers in their small group, students will respond to guiding questions to describe one of the preliminary curriculum considerations used in the PECAT (Physical Education Curriculum Description, Accuracy Analysis, Acceptability Analysis, Feasibility Analysis, or Affordability Analysis).

**Directions:** Fill in the name of the presenter and the section and form to be presented, and then use the criteria and scoring rubric to evaluate your peer's presentation. Enter points for each criterion and write comments below.

Presenter name: \_\_\_\_\_

Section and form summarized: (check one)

- ☐ Physical Education Curriculum Description
 ☐ Accuracy Analysis
 ☐ Feasibility Analysis  
☐ Acceptability Analysis
 ☐ Affordability Analysis

Points	Scoring Rubric
4	The response for all of the questions is detailed, complete, accurate, and comprehensive.
3	The response for all of the questions is generally complete, accurate, and comprehensive. There might be some confusion among group members about the content and purpose.
2	The response for all of the questions is somewhat complete; it provides minimal breadth and depth of information, and there is confusion among group members about the content and purpose.
1	The response for one or more of the elements is incomplete; there is little-to-no breadth and depth of information, and there is much confusion among group members about the content and purpose.

Scoring Criteria	Points			
	4	3	2	1
1. A brief summary of the purpose and the form.				
2. Answers to the Guiding Questions that provided depth of understanding.				
3. Observed the 3–5 minute time limit (1 = yes; 0 = no).				
4. Overall perception of presentation (2 = excellent/good; 1 = fair/adequate; 0 = inadequate).				
<b>Total score</b>	<b>/11</b>			

Comments: \_\_\_\_\_

# Lesson 4

## Using the PECAT to Analyze Physical Education Curricula

---

### Introduction

This lesson is designed to help students become familiar with how to use the PECAT to analyze a physical education curriculum.

---

### Lesson Objectives

After completing this lesson, students will be able to do the following:

1. **Apply the PECAT scoring rubrics to the review of a physical education curriculum.**
2. **Complete an analysis of a physical education curriculum using the PECAT.**

---

### Total Estimated Time: 2 hours, 15 minutes – 2 hours, 55 minutes

Introduction and Overview	5 minutes
PowerPoint® Presentation	25–35 minutes
Activity 1	30–60 minutes
Activity 2	70 minutes
Assessment	5 minutes

---

**Note:** The minimum time assumes that students will complete the curriculum analysis outside of class time; the maximum time assumes that students will complete the curriculum analysis during class time.

---

---

## Materials Needed

---

- One copy for each student of the following:
  - ~ *PECAT Curriculum Analysis* forms in the PECAT.

---

**Note:** The selection of forms used will be dependent on the grade level of the curricula available for your students to review and how you organize the activity. For example, if each student is reviewing a third grade curriculum, only pgs. 69–97 of the PECAT would be used.

---

- ~ A sample physical education curriculum for at least one grade level or grade-level group (e.g., K–2, 3–5). (For specific options and requirements, see Lesson 3, Preparation for Lesson 4, pgs. 53–54.)
- Copy for the instructor’s use and one for each student of the *Exit Ticket: Using the PECAT—Individual Evaluation of Curriculum* handout (pg. 64).
- PowerPoint® Presentation for Lesson 4.
- LCD projector and screen.

---

## Instructor Preparation

---

1. Review and become familiar with all sections of the PECAT.
2. Review Lesson 4 Procedures (pgs. 61–63 in this guide).
3. Review the PowerPoint® slides, notes, and narrative for Lesson 4.
4. Set up computer, LCD projector, and screen, and use the Lesson 4 PowerPoint® file.
5. Prepare all materials for the Lesson 4 activities and assessment.
6. Complete the *PECAT Curriculum Analysis* for each curriculum being made available to students.

---

## Suggestions for Use

---

- Prior to implementation, determine the amount of class time that can be dedicated to completing the PECAT analysis.
- Consider assigning a PECAT team role to each student within each small group. Refer to “Intended Users of the PECAT” in the Introduction to the PECAT (pgs. 1–2 of the PECAT ).
- If time permits, have the student groups complete the *Preliminary Curriculum Considerations* analyses for their physical education curriculum prior to Lesson 4, Activity 1.

- Activity 1 should be completed in class: however, if enough time is not available in class session(s) to complete it, students can be assigned to complete the activity outside of class.
- Activity 2 should be completed outside of class.

---

## **Lesson Procedures: 2 hours, 15 minutes – 2 hours, 55 minutes**

---

### **1. Introduction and Overview (5 minutes)**

- A. Explain to students that during this lesson they will become familiar with how to use the PECAT to analyze a physical education curriculum.
- B. Explain that this lesson will help them to:
  - Apply the PECAT scoring rubrics to the review of a physical education curriculum.
  - Complete an analysis of a physical education curriculum using the PECAT.

### **2. Lesson 4 Slide Presentation (25–35 minutes)**

- A. Present the PowerPoint® slides for Lesson 4. Use the notes and narrative for each slide to supplement the information found on the slide.

### **3. Lesson 4, Activity 1: Using the PECAT to Analyze Your Physical Education Curriculum: Curriculum Description and Standard 1 (30–60 minutes)**

- A. Ensure that each student or each group has the requisite physical education curriculum.
- B. Instruct each student to scan the curriculum title and/or introduction to determine what grade (e.g., grade 3) or grade-level group (e.g., grade K–3) is the focus of their curriculum.
  - Tell those students with a curriculum that is designed for multiple grades or grade-level groups that they need to decide which grade or grade-level group they want to use to analyze the curriculum.
- C. Direct students to the *Physical Education Curriculum Description* form on pgs. 13–15 of the PECAT, and ask them to complete this form using the information provided in their curriculum.
  - Tell students that all of the information needed to complete the description form might not be found in the curriculum. Ask students for ideas as to where that information could be located. For example,
    - ~ If a previous review of the curriculum was conducted, it might be public record and available on a school district Web site. Or if the curriculum was reviewed by a state education agency (SEA) or regional education agency for a curriculum adoption process, that review might be available on the SEA Web site or the regional curriculum review center Web site.
  - If teaching aides, such as posters and student worksheets, do not accompany a published curriculum (e.g., they are only available in an ancillary package that is not included with the given written curriculum), students might not have all information needed to answer questions 9 and 10 (pgs. 14–15 of the PECAT).



- D. Tell students to turn to the pages of the PECAT that correspond to the grade or grade-level group that they will be using to evaluate their curriculum.
- E. Tell students to familiarize themselves with the *National Standards for Physical Education* and the related *Student Expectations* that are on the first two to three pages of each grade-level group in the PECAT. For example, the *Standards* and related *Student Expectations* can be found on the following pages in the PECAT: grades K–2, pg. 35; grades 3–5, pgs. 69–71; grades 6–8, pgs. 105–107; and grades 9–12, pgs. 141–142.
- F. Tell students to turn to the specified page for *Content Analysis for Standard 1* for their grade-level group (in the PECAT).
  - K–2: pg. 37
  - 3–5: pg. 73
  - 6–8: pg. 109
  - 9–12: pg. 143
  - Tell students to use this form with the scoring rubric to analyze the *content* of their curriculum as it relates to Standard 1, making sure to total the score at the bottom of the page.
  - Allow time for students to complete the *Content Analysis for Standard 1*.
- G. Tell students to turn to the page *Student Assessment Analysis for Standard 1* for their grade-level group (in the PECAT).
  - K–2: pg. 51
  - 3–5: pg. 87
  - 6–8: pg. 123
  - 9–12: pg. 157
  - Tell students to use this form with the scoring rubric to analyze the *Student Assessment* of their curriculum as it relates to Standard 1, making sure to total the score at the bottom of the page.
  - Allow time for students to complete the *Student Assessment Analysis for Standard 1*.
- H. Direct students to transfer their Standard 1 score to the *Scorecard for Content and Student Assessment Analysis* form which they can find of the last page of their grade-level group (in the PECAT).
  - K–2: pg. 65
  - 3–5: pg. 101
  - 6–8: pg. 137
  - 9–12: pg. 171
- I. Review the process with the students, answering any questions they might have.

**4. Lesson 4, Activity 2: Using the PECAT to Analyze Your Physical Education Curriculum: Standards 2–6 (1 hour, 10 minutes)**

- A. Tell students to turn to the page *Content Analysis for Standard 2* for their grade-level group (in the PECAT).
- B. Explain the following to students:
  1. They are to work on their own to analyze the remainder of their curriculum using the scoring rubric forms for *Content Analysis* for Standard 2 and continuing through Standard 6 (in the PECAT).
  2. Once they have completed the *Content Analysis*, they should continue the analysis by using the forms *Student Assessment Analysis* for Standards 2 through 6, transferring their scores to the *Scorecard for Content and Student Assessment Analysis* form (on the last page of their grade-level group of the PECAT).
  3. For those students analyzing a different grade-level grouping of the same curriculum, they will need to work in a group and transfer their scores from the *Scorecard for Content and Student Assessment Analysis* to the *Overall PECAT Scorecard* on pg. 173 of the PECAT.
- C. Ask students if they have any questions about the assignment.
- D. Review the scoring criteria and rubric for the assignment with students, using the *Exit Ticket: Using the PECAT—Individual Evaluation of Curriculum* form (pg. 64).
- E. Tell students when they need to have the activity completed.

---

**Note:** This activity occurs after students have completed the entire curriculum analysis. If students complete the curriculum analysis in class, this activity can be done at that time. If students complete the curriculum analysis on their own time, this activity would need to be done during the follow-up class session.

---

**5. Assessment—Exit Ticket (5 minutes)**

- A. Ask students to submit their *Scorecard for Content and Student Assessment Analyses* form, six *Content Analysis* forms, one for each Standard 1–6, and six *Student Assessment Analysis* forms, one for each Standard 1–6.
- B. Use the *Exit Ticket: Using the PECAT—Individual Evaluation of Curriculum* form (pg. 64) to review and score students' work on this task.

---

**Preparation for Lesson 5**

---

- Prepare to return the scored *Exit Ticket: Using the PECAT—Individual Evaluation of Curriculum* forms, and their completed PECAT analysis forms (*Scorecard for Content and Student Assessment Analyses*, *Content Analysis*, and *Student Assessment Analysis*), during the next class period.



## Lesson 4:



### Using the PECAT— Individual Evaluation of Curriculum

Points Possible: 16

Points Assigned: \_\_\_\_

Name: \_\_\_\_\_

Curriculum Name: \_\_\_\_\_

Grade level/group: \_\_\_\_\_ Date: \_\_\_\_\_

#### Objective:

After completing this lesson, students will be able to:

1. Apply the PECAT scoring rubrics to the review of a physical education curriculum, and
2. Complete an analysis of a curriculum using the PECAT.

**Directions:** Following the completion of their analyses of a single grade/grade-level group of one physical education curriculum using the PECAT, students will submit in writing their completed *Content Analysis* forms for Standards 1–6, *Student Assessment Analysis* forms for Standards 1–6, and their *Scorecard for Content and Student Assessment Analysis*. The scoring rubric and criteria below will be used to analyze the written assignment.

Points	Scoring Rubric
4	The responses for all of the sections are complete, accurate, and comprehensive.
3	The responses for all of the sections are adequate. The responses are generally complete, accurate, and comprehensive. There might be few minor inaccuracies.
2	The responses for all of the elements are somewhat complete; they provide minimal breadth and depth of information, and there are several inaccuracies.
1	The response for one or more of the elements is incomplete and/or inadequate. There is little to no breadth or depth of information, and there are several inaccuracies.

Scoring Criteria	Points			
	4	3	2	1
1. Based on analysis of the curriculum using the PECAT, submitted a complete <i>Scorecard for Content and Student Assessment Analysis</i> .				
2. Based on analysis of the curriculum using the PECAT, submitted complete scoring sheets for <i>Content Analysis</i> for Standards 1–6.				
3. Based on analysis of the curriculum using the PECAT, submitted complete scoring sheets for <i>Student Assessment Analysis</i> for Standards 1–6.				
4. Overall perception of written assignment.				
<b>Total score</b>	<b>/16</b>			

Comments: \_\_\_\_\_

# Lesson 5

## Using the PECAT to Improve a Physical Education Curriculum

---

### Introduction

---

This lesson is designed to familiarize students with how to apply the analysis of a physical education curriculum to a plan to improve the curriculum. The students will summarize and synthesize the results of their PECAT analysis, creating a curriculum improvement plan. Highlights of their plans will be presented in an oral presentation to the class.

---

### Lesson Objectives

---

After completing this lesson, students will be able to do the following:

1. **Summarize the results of their PECAT analysis.**
2. **Describe the strengths and weaknesses of the physical education curriculum.**
3. **Identify the Elements of a Quality Physical Education Curriculum applied in a physical education curriculum.**
4. **Describe how to apply the results of a PECAT analysis to improve physical education curricula.**

---

### Total Estimated Time: 1 hour, 45 minutes – 2 hours, 5 minutes

---

Introduction and Overview 5 minutes

PowerPoint® Presentation 10–15 minutes

Activity 1 90–105 minutes

Assessment\* 20 minutes per small group

\*included in Activity 1

---

**Note:** This lesson may be completed over two class periods (one session for small group work, the other session for small group presentations).

---

---

## Materials Needed

---

- For each student, the instructor-scored *Exit Ticket: Using the PECAT—Individual Evaluation of Curriculum* form (pg. 64) along with the PECAT scoring forms used in Lesson 4.
- One copy for each group of 3–4 students:
  - ~ *Using the PECAT: Determining Strengths, Weaknesses, and Elements of a Quality Physical Education Curriculum—Group Summary Forms* (handouts, pgs. 70–73)
    1. *Determining Strengths and Weaknesses of a Physical Education Curriculum* (pg. 70)
    2. *Elements of a Quality Physical Education Curriculum Checklist* (pgs. 71–72)
    3. *Applying the Elements of a Quality Physical Education Curriculum* (pg. 73)
  - ~ *Curriculum Improvement Plan Worksheet* handout (pg. 187 of the PECAT).
- For the instructor’s use, one copy of the following for each group of 3–4 students:
  - ~ *Exit Ticket: Using the PECAT to Improve a Curriculum—Group Oral Presentation and Written Assignment Evaluation* (pgs. 74–75).
- PowerPoint® Presentation for Lesson 5
- LCD projector and screen

---

## Instructor Preparation

---

1. Review and become familiar with pg. 187 of the PECAT.
2. Review Lesson 5 Procedures (pgs. 67–69 in this guide).
3. Review the PowerPoint® slides, notes, and narrative for Lesson 5.
4. Set up computer, LCD projector, and screen, and use the Lesson 5 PowerPoint® file.
5. Prepare all materials for the Lesson 5 activities and assessment.
6. Complete the *Using the PECAT: Determining Strengths, Weaknesses, and Elements of a Quality Physical Education Curriculum—Group Summary Forms* (pgs. 70–73) for each of the assigned curricula.
7. If you reviewed a locally developed curriculum, make available a copy of the sample *Curriculum Improvement Plan Worksheet* that you completed for student review.

---

## Lesson Procedures: 1 hour, 45 minutes – 2 hours, 5 minutes

---

### 1. Introduction and Overview (5 minutes)

- A. Return to students the instructor-scored *Using the Physical Education Curriculum Analysis Tool—Individual Evaluation of Curriculum* form along with the PECAT scoring rubrics they used in Lesson 4.
- B. Explain that this lesson will help them to:
  - Apply the results of the PECAT scoring rubrics to determining the quality of a physical education curriculum.
  - Complete the three forms, *Using the PECAT: Determining Strengths, Weaknesses, and Elements of a Quality Physical Education Curriculum—Group Summary Forms* (pgs. 70–73) based on their analyses.
  - Present their findings to the class.

### 2. Lesson 5 Slide Presentation (10–15 minutes)

- A. Present the PowerPoint® slides for Lesson 5. Use the notes and narrative for each slide to supplement the information found on the slide.

### 3. Lesson 5, Activity 1: Using the PECAT: Determining Strengths, Weaknesses and Elements of a Quality Physical Education Curriculum (1 hour, 15 minutes – 1 hour, 30 minutes)

- A. Tell students to have available their PECAT scoring rubrics that were just returned to them (e.g., *Content Analysis and Student Assessment Analysis for Standards 1–6*, and *Scorecard*).
- B. Students should return to the PECAT teams to which they may have been assigned in Lesson 4 (see Preparation for Lesson 5 on pgs. 63).
- C. Distribute to each group the three pages of handouts, *Using the PECAT: Determining Strengths, Weaknesses, and Elements of a Quality Physical Education Curriculum—Group Summary Forms* (pgs. 70–73).
- D. Instruct each group to identify a recorder.
- E. Explain that each group will use the results of their individual PECAT scoring rubrics to create a group summary of the strengths and weaknesses (including omissions) found in the curriculum. They are to discuss their individual results with other group members, compiling their results on the *Using the PECAT: Determining Strengths and Weaknesses of a Quality Physical Education Curriculum—Group Summary Form* (pg. 70).

---

**Note:** Students might want to focus on the score they marked for content and student assessment on their *Scorecard for Content and Student Assessment Analysis* (pg. 137 of the PECAT); instead, they need to focus on discussing the specific strengths and weaknesses, including omissions, instead of the actual score for each standard.

---

- F. Tell the groups that while they are reviewing the strengths and weaknesses of their curriculum they are to also consider and check off the *Elements of Quality Physical Education Curriculum Checklist—Group Summary Form* (pgs. 71–72) that were consistently and inconsistently included in the curriculum they analyzed.
- G. Tell the groups, that when they have completed the *Using the PECAT: Determining Strengths and Weaknesses, and Elements of a Quality Physical Education Curriculum — Group Summary Forms* (pgs. 70–72) they are to summarize, with examples of each, at least two of the important Elements of a Quality Physical Education Curriculum that were consistently applied and two important elements that were inconsistently applied in the curriculum they reviewed, using the *Applying the Elements of a Quality Physical Education Curriculum—Group Summary Form* (pg. 73).
- H. Tell the groups they will have 60 minutes to complete the group summary forms.
- I. Once 60 minutes have elapsed, ask groups to stop work on the forms.
- J. Have each group decide which two items in each strengths and weaknesses column they found to be particularly important, and have the recorder place a checkmark next to those items.
- K. Ask each group to identify a reporter who will report to the class the two items identified in each of the strengths and weaknesses (including omissions) columns and the two examples each of *Elements of a Quality Physical Education Curriculum* they found to be consistently and inconsistently applied in their curriculum.
  - Each group will have a maximum of 20 minutes to present their results.
  - Review the oral presentation and written assignment scoring rubrics and criteria with students using the *Exit Ticket: Using the PECAT to Improve a Curriculum—Group Oral Presentation and Written Assignment Evaluation* section of form (pgs. 74–75).

#### 4. Assessment: Exit Ticket—Small Group Oral Presentation and Written Assignment (20 minutes per group)

---

**Note:** The instructor for each small group will need one *Exit Ticket: Using the PECAT to Improve a Curriculum—Oral Presentation and Written Assignment Evaluation* (pgs. 74–75).

---

- A. Small Group Oral Presentation
  1. Ask group reporters to share their identified items with the entire class.
  2. Note commonalities and differences among the groups.
  3. Evaluate each group's presentation using the *Exit Ticket: Using the PECAT to Improve a Curriculum Oral Presentation* section of the form.
- B. Small Group Written Assignment
  1. Collect from each group their group summary forms.
  2. Evaluate each group's written work, using the scoring rubric and criteria found in the Group Written Assignment section of the *Exit Ticket*. Return the scored work and the instructor-completed *Exit Ticket: Using the PECAT to Improve a Curriculum—Oral Presentation Evaluation and Written Assignment Evaluation* to student groups during another class session.



**5. Optional Student Assessment: Individual Student Essay**

- A. Have each student, using individual results on the *Overall PECAT Scorecard* (pg. 173 in the PECAT) and a copy of the completed group summary forms, write an essay that describes how they would apply the results of their PECAT analysis to improve the physical education curriculum. Tell students to provide examples for the improvements they offer. Review the *Scoring Rubric for the Optional Individual Student Essay* (pg. 76) with students and use it to evaluate student essays.

**6. Summarize the previous activities, using the following key points as a guide:**

- A. The PECAT is a useful tool to help physical education teachers, physical education coordinators/directors, curriculum coordinators, and others plan for quality physical education by revising existing curricula or creating new curricula.
- B. The PECAT is most effective when used by a team of people who can bring different perspectives, experiences, and expertise to the process.
- C. The PECAT is flexible in that it allows for the inclusion of state and local standards that might not be fully articulated in the *National Standards for Physical Education*.
- D. The use of the PECAT will help ensure that high-quality physical education is being delivered to students.

**7. Lesson Extension: Once students have completed these activities, the following questions might be considered for class discussion or a student essay:**

- A. How can your experiences with the PECAT (the content of the PECAT and your use of the PECAT) be used in your future career as physical education specialists and physical education teachers?
- B. What are the complexities and challenges involved in developing a high-quality physical education curriculum?



## Using the PECAT:

### Determining Strengths, Weaknesses, and Elements of a Quality Physical Education Curriculum—Group Summary Forms

#### Determining Strengths and Weaknesses of a Physical Education Curriculum

Group members: \_\_\_\_\_

**Directions:** Review the results from your individual PECAT scoring rubrics. Discuss the identified strengths and weaknesses (including omissions) within the PECAT results with other members of your group. Compile your group's results and comments in the sections below. Complete the *Elements of a Quality Physical Education Curriculum Checklist* (pg. 2a and 2b of 3).

Strengths	Weaknesses

## Using the PECAT:

### Determining Strengths, Weaknesses, and Elements of a Quality Physical Education Curriculum— Group Summary Form

#### Elements of a Quality Physical Education Curriculum Checklist\*

Each curriculum *must* have at least the elements that are asterisked (\*).

---

**Directions:** Review the physical education curriculum and place a check next to only the elements that are included or applied consistently throughout the curriculum.

---

- ☐ **Overview:** A brief description of the curriculum. It might include the breadth and depth of the content and skills found in the curriculum, as well as the purpose(s) of the curriculum.
- ☐ **Goal(s):** General statement of what students should know or do following participation in the learning experiences found in the curriculum.
- ☐ **Scope and sequence:** A K–12 curricular framework that outlines the breadth and arrangement of key physical education learning concepts across grade level(s) [scope] and the logical progression of essential physical education knowledge and skills to be addressed at each grade level or grade group [sequence].
- ☐ **\*Unit(s):** Units provide an overview and at least one unit objective that encompass at least two or more lessons and related instructional objectives. The unit has lessons organized by a common topic, and sequentially related content, concepts and skills. The unit might also include a unit assessment, covering all lesson objectives addressed in that unit.
- ☐ **\*Lesson plans:** Lesson plans should specify the following:
  - ☐ **\*Targeted grade level**
  - ☐ **\*PE standards and expectations:** The PE standards and expectations that are addressed in the lesson; they are congruent with the instructional objectives.
  - ☐ **\*Instructional objectives:** Measurable instructional objectives that clearly specify what the student show know and do following completion of the lesson.
  - ☐ **\*Procedures:** Step-by-step methods for implementing the lesson to attain the instructional objectives.

- ☐ **\*Learning experiences (learning activities or opportunities):** Activities implemented by the teacher to allow the student to develop the knowledge and skills and practice the skills specified in the objectives. For each objective, there should be a learning activity that allows students to learn the content and skills, and practice the skills. Note that one activity might encompass more than one objective.
- ☐ **\*Materials and equipment:** Resources and supplies the teacher will need to implement the learning activities; and the materials that students will need to acquire the knowledge and skills specified in the objectives, for each lesson. This also includes fully developed templates and/or worksheets for use by the student. Note: if “correct” responses are required, a key is provided.
- ☐ **\*Background information:** Content/information that the teacher will need to teach the lesson.
- ☐ **\*Assessment of student learning:** The assessment should be separate from the learning activity, and provide feedback to the teacher and student about the progress they have made to achieve the stated objective(s). The assessment should (1) be matched to the content and behavior specified in each instructional objective, and (2) have a protocol with step-by-step instructions and/or directions for how to administer a specific assessment of student performance.
- ☐ **Other elements:** In addition, the curriculum should provide the information needed to respond to questions about the accuracy of the information found in the curriculum (for knowledge and skills), the affordability of the curriculum (including the cost of teacher training and materials), the acceptability of the curriculum (the compatibility of the curriculum to the physical education needs of students, school norms, district and state policies, and physical education instructional frameworks), and the feasibility (can the curriculum reasonably be implemented by teachers) of implementing the curriculum in the school/district.

## Using the PECAT:

### Determining Strengths, Weaknesses, and Elements of a Quality Physical Education Curriculum—Group Summary Form

#### Applying the Elements of a Quality Physical Education Curriculum

**Directions:** Using the results of your completed checklist of the *Elements of a Quality Physical Education Curriculum* form (page 2a and 2b of 3):

1. Select two key elements that were consistently applied throughout the curriculum, and describe and provide examples of each, and
2. Select two key elements that were missing or were inconsistently applied throughout the curriculum, and describe and provide examples of each.

Elements <i>consistently</i> applied	Elements <i>inconsistently</i> applied



## Lesson 5:



### Using the PECAT to Improve a Curriculum —Group Oral Presentation and Written Assignment Evaluation

Group members: \_\_\_\_\_

Curriculum topic: \_\_\_\_\_

Grade level/group: \_\_\_\_\_ Date: \_\_\_\_\_

#### Objectives:

1. Summarize the strengths and weaknesses, including omissions, of a written physical education curriculum based on the completion of a PECAT analysis.
2. Describe the findings from the checklist, *Elements of a Quality Physical Education Curriculum*.
3. Describe the *Elements of a Quality Physical Education Curriculum* that were applied consistently and inconsistently, with examples of each.

**Directions:** Each small group of students will submit in writing the completed *Using the PECAT: Determining Strengths and Weaknesses of the Physical Education Curriculum Group Summary* forms and the *Elements of a Quality Physical Education Curriculum Checklist*. Each group will present an oral summary of their review, including the strengths and weaknesses (including omissions) of a physical education curriculum, and the consistency or inconsistency with which the curriculum addressed the elements of a quality physical education curriculum. The scoring rubric and criteria will be used to evaluate the written summary and oral presentation.

Points	Scoring Rubric
4	The responses for all of the sections are complete, accurate, and comprehensive.
3	The responses for all of the sections are adequate. The responses are generally complete, accurate, and comprehensive. There might be few minor inaccuracies.
2	The responses for all of the elements are somewhat complete; they provide minimal breadth and depth of information, and there are several inaccuracies.
1	The responses for one or more of the elements are incomplete and/or inadequate. There is little to no breadth or depth of information, and there are several inaccuracies.

Scoring Criteria for Oral Presentation				Points			
				4	3	2	1
1.	Presented an accurate description of the curriculum's specific strengths and weaknesses, including omissions found in the curriculum.						
2.	Presented an accurate description of the <i>Elements of a Quality Physical Education Curriculum</i> that was applied consistently and inconsistently in the curriculum.						
3.	Observed the 20-minute time limit. (yes = 1; no = 0)						
4.	Overall perception of oral presentation.						
Subtotal				/13			

Comments: \_\_\_\_\_

Points	Scoring Rubric
4	The responses for all of the sections are complete, accurate, and comprehensive.
3	The responses for all of the sections are adequate. The responses are generally complete, accurate, and comprehensive. There might be few minor inaccuracies.
2	The responses for all of the elements are somewhat complete; they provide minimal breadth and depth of information, and there are several inaccuracies.
1	The responses for one or more of the elements are incomplete and/or inadequate. There is little to no breadth or depth of information, and there are several inaccuracies.

Scoring Criteria for Written Assignment	Points			
	4	3	2	1
1. Submitted a complete <i>Using the PECAT: Determining Strengths and Weaknesses of the Physical Education Curriculum—Group Summary Form</i> (page 1 of 3).				
2. Clearly and accurately described the specific strengths and weaknesses, including omissions in the curriculum (page 1 of 3).				
3. Submitted a complete <i>Elements of a Quality Physical Education Curriculum—Group Summary Form</i> (page 2a and 2b of 3).				
4. Clearly and accurately described/summarized the <i>Elements of a Quality Physical Education Curriculum</i> applied consistently and inconsistently in the curriculum on the <i>Applying the Elements of a Quality Physical Education Curriculum—Group Summary Form</i> (page 3 of 3).				
5. Overall perception of written assignment.				
<b>Subtotal</b>	<b>/20</b>			

**Comments:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Oral presentation:** \_\_\_\_\_

**Written presentation:** \_\_\_\_\_

**Total score:** \_\_\_\_/33

## Lesson 5

### Scoring Rubric for the Optional Individual Student Essay

**Objective:** In an essay, using results and examples from the *Overall PECAT Scorecard* and group summary forms, describe how he or she would apply the results of the PECAT analysis to improve the physical education curriculum.

Points	Scoring Rubric
5	The description is accurate, clear, thorough, and provides sufficient detail; the essay is well organized.
4	The description is accurate, provides some detail, is incomplete and is well organized.
3	The description is somewhat accurate, provides little detail, is incomplete and is somewhat organized.
2	The description is somewhat clear and correct, but provides little to no detail. The essay is not well organized.
1	The description is weak, unclear, incorrect and incomplete. The essay is not well organized.