



PECAT

Physical Education Curriculum Analysis Tool

Using the PECAT to Analyze Physical Education Curricula

Lesson 4

Lesson 4: Objectives

After completing this lesson, students will be able to:

- 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.**

* Centers for Disease Control and Prevention. *Physical Education Curriculum Analysis Tool*. Atlanta, GA: U.S. Department of Health and Human Services; 2006.

Preparation for Completing the PECAT

- **PECAT Coordinator will need to assemble:**
 - **Curriculum(a) to be reviewed.**
 - **Copies of the PECAT.**
 - **Copies of state or local PE standards.**
 - **Contact information of school or district-level physical education curriculum administrator or supervisor.**

Completing the PECAT

Physical Education Curriculum Description

Physical Education Curriculum Description

The curriculum description is used to provide an overview of the curriculum being assessed. The PECAT coordinator or the entire PECAT committee can complete the curriculum description form.

Curriculum Description Items

1. Name of Curriculum: _____

2. Year developed or published: _____ If applicable, year revised: _____

3. Publisher/Developer/Distributor Name: _____

Contact Person: _____

Address: _____

Phone: _____

4. What are the overall goals or focus of the curriculum?

5. What grade levels does the curriculum address? (check all that apply)

- Kindergarten
- Grade 1
- Grade 2
- Grade 3
- Grade 4
- Grade 5
- Grade 6
- Grade 7
- Grade 8
- Grade 9
- Grade 10
- Grade 11
- Grade 12

6. How many lessons/sessions are in the curriculum? _____

Content Analysis

- **How well does the curriculum:**
 - **Cover what students should know?**
 - **Cover what students should be able to do?**
 - **Align with the *National Standards for Physical Education*?**

Content Analysis

Content Analysis for Standard 1

Grades K-2

The content analysis for standard 1, grades K-2, is completed by placing a check in the box corresponding to "2", "1", or "0", after each question. Once this is complete, add the numbers down and then across and place in the content analysis score box for standard 1.

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

	Fully 2	Partially 1	No* 0
Does the curriculum include			
1. Specific lessons on fundamental movement skills, including locomotor (e.g., walk, skip, hop), nonlocomotor (e.g., bend, twist, rock), and manipulative (e.g., striking an object) for each skill?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Specific introductory lessons on motor skills such as rolling, transfer of body weight to one leg, or rhythmic movement?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Specific lessons on the combination of movement and motor skills, such as dribbling a ball while walking or creating movement patterns using different speeds, directions, and skills?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. At least one initial and one follow-up learning experience (e.g., introduction of basic tossing skills and then tossing the ball back and forth with partners) for each skill?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Specific instructions that clearly indicate the appropriate grade level at which each motor skill and movement pattern should be introduced and subsequently taught?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Content Analysis Score for Standard 1 (Grades K-2)

(Add the total numbers to determine the total score and place score on scorecard, page 65.)

<input type="checkbox"/>	+	<input type="checkbox"/>	+	<input type="checkbox"/>	=	<input type="checkbox"/>
						SCORE

*** Key for Scoring**

2 = Fully: The curriculum sufficiently addresses each and every element of the question; **1 = Partially:** The curriculum partially addresses the question; **0 = No:** The curriculum does not address the question.

Scoring Criteria for Content Analysis

2 = Fully addresses each element of the question

1 = Partially addresses the question

0 = Does not address the question

Calculating the Scores

1. Add all of the “2s” together. <<
2. Add all of the “1s” together. <<
3. Add two sums together.
4. Place total number in the large box.

Physical Education Curriculum Analysis Tool (PECAT)

Example of a Completed Scoring Sheet

Content Analysis for Standard 1 Grades K-2

The content analysis for standard 1, grades K-2, is completed by placing a check mark in either the box for “2”, “1”, or “0” after each question. Once this is complete, add the numbers down and then across and place in the content analysis total score box.

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

	Fully 2	Partially 1	No 0
Does the curriculum include			
1. Specific lessons on fundamental movement skills, including locomotor (e.g., walk, skip, hop), nonlocomotor (e.g., bend, twist, rock), and manipulative (e.g., striking an object)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Specific introductory lessons on motor skills such as rolling, transfer of body weight to one leg, or rhythmic movement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Specific lessons about the combination of movement and motor skills, such as dribbling a ball while walking or creating movement patterns using different speeds, directions, and skills?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. At least one initiated and one follow-up learning experience (e.g., introduction of basic tossing skills and then tossing a ball to a moving partner)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Does the curriculum clearly indicate the grade level at which each motor and movement skill should be introduced and subsequently taught?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Content Analysis Score for Standard 1 (Grades K-2) ④ + ② + ① = 6

Appendix 1: Example of Completed Scoring Sheet – Page 191

Student Assessment Analysis

- **How well does the curriculum:**
 - **Integrate standards-based assessment protocols?**
 - **Provide age-appropriate student assessment protocols for each standard?**

Student Assessment Analysis

Student Assessment Analysis for Standard 1

Grades K-2

The student assessment analysis for standard 1, grades K-2, is completed by placing a check in the box corresponding to "2", "1", or "0" after each question. Once this is complete, add the numbers down and then across and place in the student assessment analysis score box for standard 1.

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

	Fully 2	Partially 1	No* 0
Does the curriculum include			
1. Protocols for assessing fundamental movement skills, including locomotor (e.g., walk, skip, hop), nonlocomotor (e.g., bend, twist, rock), and manipulative (e.g., striking an object) skills?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Protocols for assessing specialized movement skills such as rolling, transfer of body weight to one leg, or rhythmic movement?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Protocols for assessing the combination of movement and motor skills such as dribbling a ball while walking or creating movement patterns using different speeds, directions, and skills?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Protocols for assessing the application of a variety of locomotor, nonlocomotor, manipulative, combination, and specialized skills, such as having a student demonstrate how to adapt movement skills to changing conditions (e.g., rolling a ball to a moving partner or moving to music)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Specific instructions that clearly indicate the appropriate grade level at which each protocol for student assessment should be conducted for the above components?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Student Assessment Score for Standard 1 (Grades K-2) + + = **SCORE**
(Add the numbers across for the total score and place score on scorecard, page 65.)

*** Key for Scoring.**

2 = Fully: Includes 1 or more specific protocols for assessment and multiple levels of competency; **1 = Partially:** Does include 1 or more protocols but not multiple levels of competency; **0 = Not:** Does not include any protocol for assessing student performance.

Scoring for Student Assessment Analysis

2 = Fully: one or more specific protocols + multiple levels of student competency

1 = Partially: one or more protocols but not multiple levels of student competency

0 = No: does not include any protocol

Calculating the Scores

1. Add all of the “2s” together. <<
2. Add all of the “1s” together. <<
3. Add two sums together.
4. Place total number in the large box.

Student Assessment Analysis for Standard 1

Grades K-2

The student assessment analysis for standard 1, grades K-2, is completed by placing a check in the box corresponding to “2”, “1”, or “0” after each question. Once this is complete, add the numbers down and then across and place in the student assessment analysis score box for standard 1.

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

	Fully 2	Partially 1	No* 0
Does the curriculum include			
1. Protocols for assessing fundamental movement skills, including locomotor (e.g., walk, skip, hop), nonlocomotor (e.g., bend, twist, rock), and manipulative (e.g., striking an object) skills?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Protocols for assessing specialized movement skills such as rolling, transfer of body weight to one leg, or rhythmic movement?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Protocols for assessing the coordination of movement and motor skills such as dribbling a ball while walking, creating movement patterns using different speeds, directions, and skills?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Protocols for assessing the application of a variety of locomotor, nonlocomotor, manipulative, combination, and specialized skills, such as having a student demonstrate how to adapt movement skills to changing conditions (e.g., rolling a ball to a moving partner or moving to music)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Specific instructions that clearly indicate the appropriate grade level at which each protocol for student assessment should be conducted for the above components?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Student Assessment Score for Standard 1 (Grades K-2)

(Add the numbers across for the total score and place score on scorecard, page 65.)

$$\textcircled{8} + \textcircled{2} + \textcircled{0} = \mathbf{10}$$

* Key for Scoring

2 = Fully: Includes 1 or more specific protocols for assessment and multiple levels of competency; 1 = Partially: Does include 1 or more protocols but not multiple levels of competency; 0 = No: Does not include any protocol for assessing student performance.

Importance of Sequence in Written Curriculum

- **The sequence of a written curriculum is important:**
 - It identifies the content, skills, and activities that should be covered yearly, and throughout K–12.
 - Students need to be taught increasingly advanced skills and concepts.
- **Assessment of Sequence**
 - Content Analysis examines sequence from one grade level to the next.
 - Student Assessment Analysis determines if age-appropriate assessment protocols exist across the grade levels.

Additional State or Local Standards

- For state or local standard that differ from the *National Standards for Physical Education*:
 - Use templates for Content Analysis and Student Assessment Analysis.
 - Write out standard.
 - Identify four essential components.
 - Enter score.

Templates for Additional Standards for Content Analysis and Student Assessment Analysis

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Template for Additional Standards for Content Analysis, Grades K-2

Standard: Write out the additional physical education standard below.

To complete the following section, identify the four main components that are essential for students to know or be able to do to achieve the standard. Proceed to determine how well the written curriculum addresses each with the same scoring system used throughout the PECAT (i.e., fully, partially, or not at all). Question 5 for each additional standard will remain the same. Photocopy this page for any additional standards.

<i>Does the curriculum include</i>	Fully 2	Partially 1	No* 0
1. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Specific instructions that clearly indicate the appropriate grade level at which each protocol for student assessment should be conducted for the above components?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Content Analysis Score

(Add the total numbers for the total score and place score on scorecard, page 65.)

$$\square + \square + \square = \square$$

SCORE

* Key for Scoring

2 = Fully: The curriculum sufficiently addresses each and every element of the question; 1 = Partially: The curriculum partially addresses the question; 0 = No: The curriculum does not address the question.

Physical Education Curriculum Analysis Tool (PECAT)

Template for Additional Standards for Student Assessment Analysis, Grades K-2

Standard: Write out the additional physical education standard below.

To complete the following section, identify the four types of protocols that are essential for assessing student knowledge and skills. Proceed to determine the extent to which the written curriculum includes these protocols with the same scoring system used throughout the PECAT (i.e., fully, partially, or not at all). Question 5 for each additional standard will remain the same. Photocopy this page for any additional standards.

<i>Does the curriculum include</i>	Fully 2	Partially 1	No* 0
1. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Specific instructions that clearly indicate the appropriate grade level at which each protocol for student assessment should be conducted for the above components?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Student Assessment Analysis Score

(Add the total numbers across for the total score and place score on scorecard, page 65.)

$$\square + \square + \square = \square$$

SCORE

* Key for Scoring

2 = Fully: Includes 1 or more specific protocols for assessment and multiple levels of competency; 1 = Partially: Does include 1 or more protocols but not multiple levels of competency; 0 = No: Does not include any protocol for assessing student performance.

Content and Student Assessment Analyses— What's Next?

- Transfer score for each standard to the corresponding grade-level scorecards.

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SCORECARD FOR CONTENT AND STUDENT ASSESSMENT ANALYSES

Grades K-2

To complete the scorecard for content and student assessment analyses (grades K-2), transfer the individual scores for each standard from the preceding pages.

NATIONAL STANDARD	CONTENT ANALYSIS SCORE	STUDENT ASSESSMENT ANALYSIS SCORE
1	10	10
2	8	8
3	5	0
4	7	7
5	6	5
6	2	0
ADDITIONAL STANDARDS		

Note: Add each of these scores to the overall PECAT scorecard on page 173.

OVERALL PECAT SCORECARD

To complete the overall PECAT scorecard and examine strengths and weaknesses of a single curriculum, transfer each of the individual scores from the completed content and student assessment analyses scorecards to the corresponding location below.

STANDARD	Content Analysis Score for Each Grade Level				STANDARD	Student Assessment Analysis Score for Each Grade Level			
	K-2	3-5	6-8	9-12		K-2	3-5	6-8	9-12
Standard #1	9	6	9	10	Standard #1	6	5	9	5
Standard #2	8	7	7	9	Standard #2	7	8	9	9
Standard #3	6	5	5	6	Standard #3	10	7	5	6
Standard #4	7	7	6	7	Standard #4	8	5	5	5
Standard #5	5	5	5	5	Standard #5	0	2	1	0
Standard #6	6	5	6	6	Standard #6	0	2	2	2
<i>Additional Standards:</i>					<i>Additional Standards:</i>				
#1					#1				
#2					#2				
#3					#3				
#4					#4				

For Analyses of Multiple Curricula

- **Transfer all scores to PECAT Multiple Curricula Comparison Scorecard.**
- **Identify the strengths and weaknesses of each curriculum.**
- **Select the strongest curriculum that meets local needs.**

PECAT MULTIPLE CURRICULA COMPARISON SCORECARD GRADES K-2

	CONTENT ANALYSIS SCORES FOR GRADES K-2					STUDENT ASSESSMENT ANALYSIS SCORES FOR GRADES K-2			
	<i>Curricula being analyzed</i>					<i>Curricula being analyzed</i>			
	Name:	Name:	Name:	Name:		Name:	Name:	Name:	Name:
Standard #1					Standard #1				
Standard #2					Standard #2				
Standard #3					Standard #3				
Standard #4					Standard #4				
Standard #5					Standard #5				
Standard #6					Standard #6				
<i>Additional Standards:</i>					<i>Additional Standards:</i>				
#1					#1				
#2					#2				
#3					#3				
#4					#4				

Next Steps

- **For each standard:**
 - **Review scores on scorecards per grade level analyzed.**
 - **Highlight discrepancies existing across two areas analyzed.**
 - **Determine where improvement is needed most.**

Locally Developed Curriculum



Curriculum Improvement Plan

Curriculum Improvement Plan

- **The Curriculum Improvement Plan guides users through a process of:**
 - 1. Interpreting scores.**
 - 2. Completing worksheet.**
 - 3. Implementing the plan.**
 - 4. Reassessing for improvement.**

Curriculum Improvement Plan Worksheet

Identified weaknesses within PECAT results	PECAT Committee recommendations	Necessary actions	Persons responsible and completion dates

Curriculum Improvement Plan

- **Follow through on the Curriculum Improvement Plan:**
 - Organize quarterly meetings.
 - Discuss progress.
 - Share progress with school officials.

Conclusions

- **Use of the PECAT can provide valuable insight as to how complete a curriculum on the basis of its alignment with national and/or state physical education standards.**
- **The Curriculum Improvement Plan should be used to guide the PECAT Committee through planning for revisions and enhancement of a locally developed curriculum.**
- **Use resources in the PECAT to assist with implementing the Curriculum Improvement Plan.**

Any questions?

For more information please contact Centers for Disease Control and Prevention

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

National Center for Chronic Disease Prevention and Health Promotion

Division of Adolescent and School Health

