



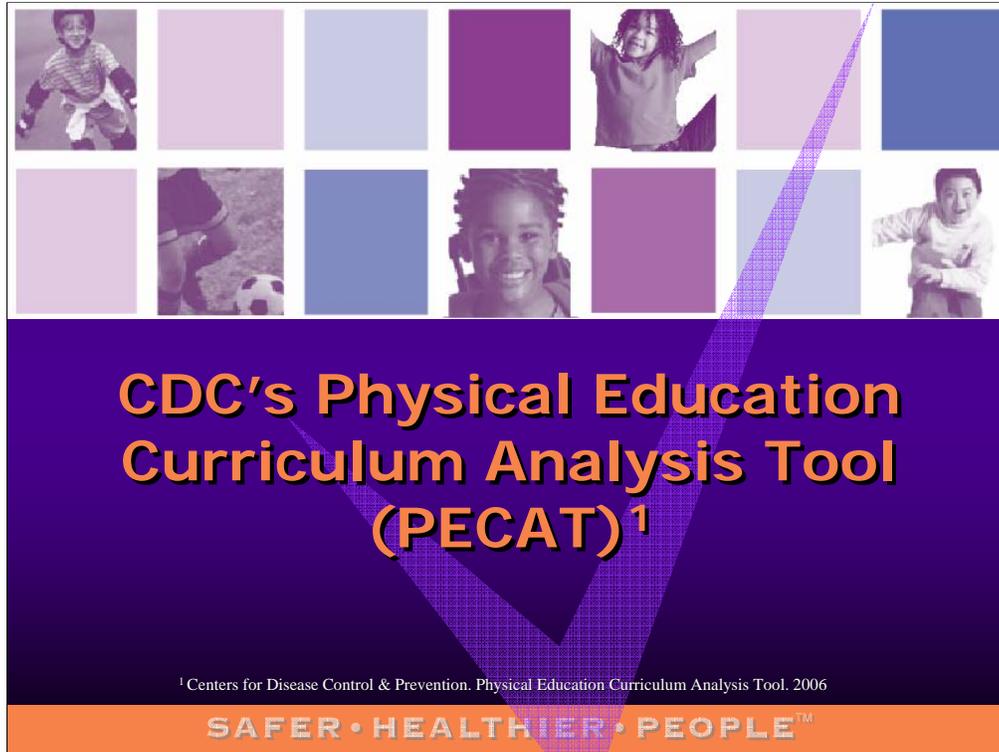
DEPARTMENT OF HEALTH AND HUMAN SERVICES  
CENTERS FOR DISEASE CONTROL AND PREVENTION



# PECAT

## Physical Education Curriculum Analysis Tool: Overview

Today I am going to introduce you to the **Physical Education Curriculum Analysis Tool – the PE – CAT**. The **PECAT** was developed by the Centers for Disease Control & Prevention’s Division of Adolescent and School Health, to help individuals and groups evaluate written physical education curriculum.



# CDC's Physical Education Curriculum Analysis Tool (PECAT)<sup>1</sup>

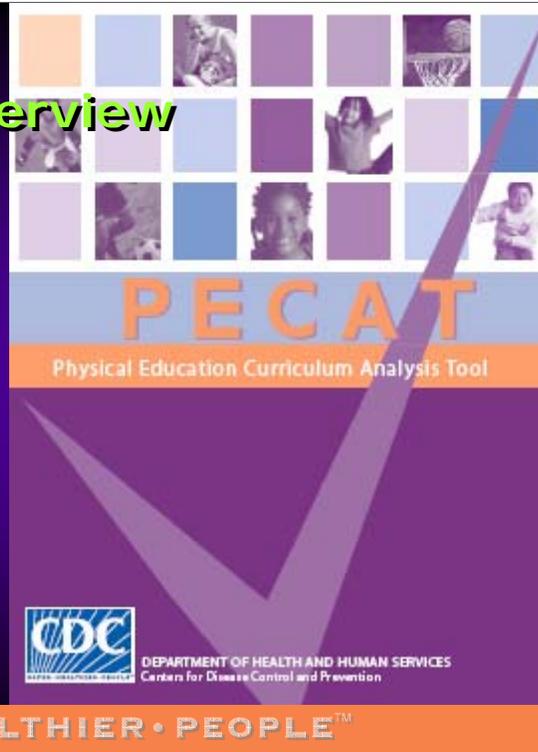
<sup>1</sup>Centers for Disease Control & Prevention. Physical Education Curriculum Analysis Tool. 2006

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Today I am going to introduce you to the **Physical Education Curriculum Analysis Tool – the PE – CAT**. The **PECAT** was developed by the Centers for Disease Control & Prevention's Division of Adolescent and School Health, to help individuals and groups evaluate written physical education curriculum.

## Overview

- Introduction to the PECAT
- Rationale and development of the PECAT
- Organization and use of the PECAT



In this session, I will introduce you to the PECAT, discuss the rationale and the process of development of the PECAT, share how the PECAT is organized, and then discuss the use of the PECAT.

## Objectives of the Presentation

The participants will:

1. Identify physical education as a component of the Coordinated School Health Program
  - Define elements of a quality physical education program
  - Relate the PECAT as a key ingredient to effective physical education
2. Describe the approach and organization of the PECAT
3. Distinguish the relationship of PECAT to research and national standards for physical education
4. Discuss the next steps to use the PECAT

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By the end of the presentation, you will be able to

- (1) Identify physical education as a fundamental component of the Coordinated School Health Program,
  - define elements of a quality physical education program, and
  - relate the PECAT as a key ingredient to effective physical education;
- (2) Describe the approach and organization of the PECAT;
- (3) Distinguish the relationship of PECAT to research and national standards for physical education; and
- (4) Discuss the next steps to use the PECAT.

## Physical Education: Integral to the Coordinated School Health Program (CSHP)<sup>2</sup>



<sup>2</sup> Burgeson C, Wechsler H, Brener ND, Young JC, Spain CG. Physical education and activity: results from the School Health Policies and Programs Study 2000. *J Sch Health* 2001;71(7): 279-293.

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The effectiveness of school physical education is enhanced when it is implemented as an integral part of the **Coordinated School Health Program (CSHP)** and when physical education outcomes are reinforced by other components of a school health program. The purpose of the **CSHP** is to provide learning opportunities, experiences, services and an environment that will favorably influence those values, attitudes, practices, and cognitive capabilities, which promote individual, family, and community health.

The **CSHP** is composed of 8 interrelated components: 1) School health education, 2) School physical education, 3) School nutrition services, 4) School health services, 5) Healthy school environment, 6) School Mental Health and Social Services, 7) Health promotion for school staff, and 8) Family/community involvement. The components represent the typical activities and services provided by schools to promote the health and safety of students, their families, and school staff.

## School Health Education

- Is a planned, sequential K -12 curriculum, designed to help students develop knowledge, attitudes and skills needed to maintain and improve health, prevent disease, and avoid or modify health risk behaviors

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The following are working descriptions of the components of the Coordinated School Health Program.

**Health Education:** is a planned, sequential K -12 curriculum, designed to help students develop knowledge, attitudes and skills needed to maintain and improve health, prevent disease, and avoid or modify health risk behaviors.

## School Physical Education

- Is a planned, sequential K-12 curriculum, designed to provide students with the knowledge, attitudes, skills, behaviors, and confidence to adopt and maintain life-long physical activity



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***Physical Education:*** is a planned, sequential K-12 curriculum, designed to provide students with the knowledge, attitudes, skills, behaviors, and confidence to adopt and maintain life-long physical activity.

## School Health Services

- Provide health screenings, ensure access and/or referral to health care services, prevent and control communicable diseases and other health problems, and provide emergency care for illness or injury

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**Health Services:** provide health screenings, ensure access and/or referral to health care services, prevent and control communicable diseases and other health problems, and provide emergency care for illness or injury.

## School Nutrition Services

- Provide students with access to a variety of nutritious meals and snacks, and accommodate the health and nutrition needs of all students that meet U.S. dietary guidelines

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***Nutrition Services:*** provide students with access to a variety of nutritious meals and snacks, and accommodate the health and nutrition needs of all students that meet U.S. dietary guidelines.

## Health Promotion for School Staff

- Programs that encourage and support school staff to improve their health status and morale, thereby developing greater personal commitment to the school's coordinated health program

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***Health Promotion for Staff:*** are programs that encourage and support school staff to improve their health status and morale, thereby developing greater personal commitment to the school's coordinated health program.

## School Mental Health and Social Services

- Are the individual and group assessments, interventions and referrals intended to improve students' mental, emotional, and social health

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***School Mental Health and Social Services:*** are the individual and group assessments, interventions and referrals intended to improve students' mental, emotional, and social health.

## Healthy School Environment

- Is the physical and aesthetic surroundings, psychosocial climate, and policies that support learning, and ensure students and staff are physically safe

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***Healthy School Environment:*** is the physical and aesthetic surroundings, psychosocial climate, and policies that support learning, and ensure students and staff are physically safe.

## Family/Community Involvement

- Is an integrated parent/guardian, community, and school approach to respond to students' health-related needs and enhance students' health and well-being. Parent involvement in health education increases both student achievement and self-esteem

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***Family/Community Involvement.*** is an integrated parent/guardian, community, and school approach to respond to students' health-related needs and enhance students' health and well-being. Parent involvement in health education increases both student achievement and self-esteem.

## Coordinated School Health Program



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*A coordinated school health program, with effective and adequate physical education, can help ensure that students are fit, healthy, and ready to learn every day.*

For a school health program to be effective, these components must work together through a coordinated approach.

A well-coordinated school health program fosters collective planning that increases the likelihood that a comprehensive range of student health needs are addressed through an extensive array of programs and services.

**The PECAT can help strengthen the quality of the physical education component and raise awareness of the important contributions of physical education to a school's coordinated school health program.**

## What is the PECAT?

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Let us begin – “What is the Physical Education Curriculum Analysis Tool (PECAT)?”

## The Purpose of the PECAT

- To help schools conduct a clear, complete, and consistent analysis of written physical education curricula

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The purpose of the PECAT is to help schools conduct a clear, complete, and consistent analysis of written physical education curricula. The results can help schools enhance existing curricula, develop their own curricula, or select a published curriculum, to be appropriate and effective for the delivery of high **quality physical education** in schools. In turn, a high quality curriculum can improve the school's ability to positively influence motor skills and physical activity behaviors among students.

## The PECAT Encompasses

- ✓ An overview of high-quality physical education
- ✓ Information about physical education curricula
- ✓ Tools to assess a curriculum, and
- ✓ Resources for developing a curriculum improvement plan

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The PECAT includes:

- An overview and definition of high-quality physical education.
- Information about what should be included in physical education curricula.
- Tools to assess a curriculum.
- Resources for developing a curriculum improvement plan.

## The PECAT

- ✓ Can be used to assess locally and commercially developed physical education curricula
- ✓ Can help schools identify strengths and weaknesses of written curriculum

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The PECAT can assist users in assessing how closely written curricula — whether locally developed by a school district, school or organization, or nationally available — is aligned with national standards for high-quality physical education programs.

And, 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.

## The PECAT

- ✓ Helps users create an improvement plan based upon the results
- ✓ Is user-friendly

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For those without a curriculum, the PECAT provides a vision of what should be included in a high-quality, written physical education curriculum.

The final product of the PECAT is the development of an improvement plan that is based on all of these assessments.

**In addition**, the PECAT is user-friendly.

# What is a High-Quality Physical Education Program?

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**What is a High-Quality Physical Education Program?**

## Components of a high-quality physical education program<sup>3</sup>

1. Written curriculum
2. Policies and environment
3. Instruction
4. Student assessment

<sup>3</sup> National Association for Sport and Physical Education. Moving into the future: National standards for physical education. 2nd ed. Reston, VA: National Association for Sport and Physical Education, 2004.

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### There are 4 key components of a high quality physical education program:

First is – A **written physical education curriculum**, which provides guidance for teaching skills and providing physical activity instruction. A high quality physical education curriculum should be based on the national standards found in *Moving Into the Future: National Standards for Physical Education* which describes what a physically educated student should know and be able to do. The PECAT focuses on the analysis of the written curriculum.

Second, **Policy and environmental actions** requiring:

- adequate instructional time,
- classes taught by qualified physical education specialists,
- reasonable class sizes, and
- proper equipment and facilities.

Third, **Instructional strategies** emphasizing:

- Inclusion of all students,
- opportunities to be physically active the majority of class time
- out-of-school assignments that support learning, and
- not using physical activity as punishment.

And fourth, **Regular student assessment** featuring:

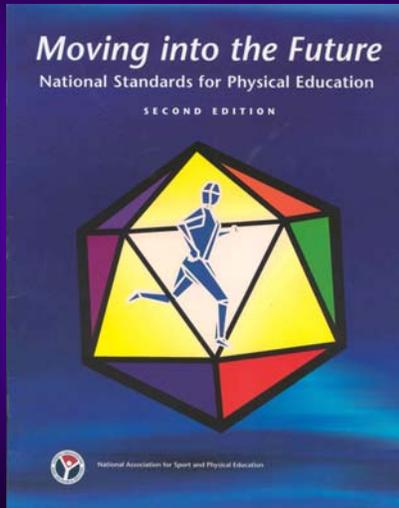
- appropriate use of physical activity and fitness assessment tools,
- ongoing opportunities for students to conduct self-assessments and practice self-monitoring of physical activity,
- communication with students and parents about assessment results, and
- clarity concerning the elements used for determining a grading or student proficiency system.

## What is the framework for the PECAT?

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What is the framework for the PECAT?

## Framework for the PECAT



- Based upon the National Standards for Physical Education
- Uses the student expectations and components of each standard

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The PECAT is based upon the National Standards for Physical Education, found in the document *Moving Into the Future: National Standards for Physical Education*. This is the 2nd edition published in 2004 by the National Association for Sport and Physical Education.

*Moving into the Future* describes what a physically educated student should know and be able to do.

It emphasizes meaningful content, which includes:

- Instruction in a variety of motor skills designed to enhance child and adolescent development.
- Fitness education and assessment that allows for students to understand and improve their physical well-being.
- Development of cognitive concepts related to motor skills and fitness.
- Opportunities to improve social and cooperative skills.
- Opportunities to increase the value placed on physical activity for health, enjoyment, self-expression, and confidence.

## Relevance and Use of National Physical Education Standards

- The National Standards are:
  - consistent,
  - widely accepted, and
  - directly related

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The National Standards for physical education are:

- Consistent with the student standards-movement that drives all subject areas.
- A widely accepted (national) guidance tool that frames physical education curriculum content at state and local levels.
- Directly related to many of the characteristics of effective curriculum.

**Who are the intended  
users of the PECAT?**

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**Who are the intended users of the PECAT?**

## The PECAT can be used by:

- State education agency staff
- Curriculum committees or physical educators at school districts, schools, or community organizations
- Other curricula developers
- Colleges and other pre-service teacher training programs

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The PECAT is designed to be used by:

- A committee at the state, regional, district, or school level.
- Such a physical education curriculum committees typically include a district curriculum director; physical education administrator; physical education teachers from elementary, middle, and high schools; members of the school health council; health education teachers; school health nurses; public health and non profit professionals; and possibly parents, students, other administrators, and college physical education faculty who are teacher educators.
- School-level physical education departments.
- Personnel at the district and state levels to analyze curricula for grades from K – 12.

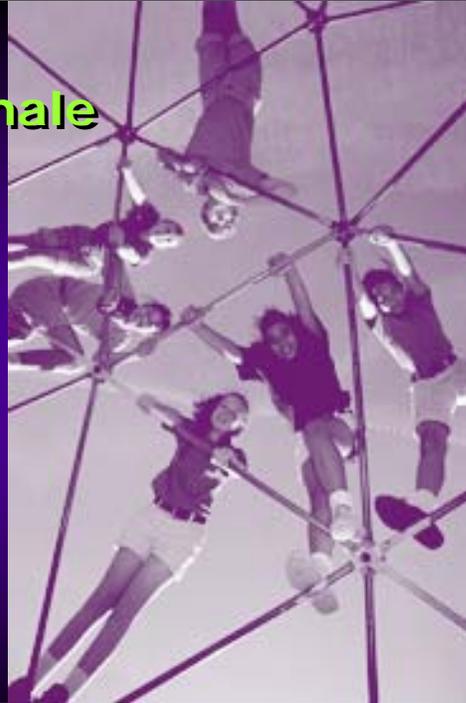
**What is the rationale to  
support the PECAT?**

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**What is the rationale to support the PECAT?**

## Rationale

1. Students need to be more physically active



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There are at least five fundamental reasons (or rationale) to support the use of the PECAT:

- (1) Students need to be more physically active through physical education in schools. Schools can Increase physical activity through physical education instruction; however, participation in daily physical education has declined from 1991 to 2003.

## Rationale

2. Schools must play a role in improving physical activity habits and health of students
3. The physical education curriculum is the primary means by which schools deliver physical education



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- (2) Schools can help improve the physical activity habits and health of young people by providing quality instruction, programs, and services that promote enjoyable, lifelong physical activity.
- (3) A high-quality physical education program is the cornerstone of a school's physical activity programming, and a well-written physical education curriculum is the foundation of a physical education program

## Rationale

4. Federal documents support the importance of providing high quality, daily physical education for all students
5. No tool was available to analyze written physical education curricula

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(4) Federal documents support the importance of providing high-quality, daily physical education for all students.

They include the Surgeon General's reports:

- *Physical Activity and Health*,
- *Call to Action to Prevent and Decrease Overweight and Obesity*;

The CDC publications:

- *Guidelines for School and Community Programs to Promote Lifelong Physical Activity Among Young People*, and the
- *School Health Index*; and the HHS/ED report *Promoting Better Health for Young People Through Physical Activity and Sports*.

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 had no tool to assess the quality of written curricula. The PECAT meets this need.

(5) Although many documents and tools address high-quality physical education, no existing tool allowed users to thoroughly analyze a written curriculum.

# How was the PECAT developed?

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How was the PECAT developed?

## PECAT Development

- National Standards framework
- Drafts based on research and other guidance

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The process began with the National Standards for Physical Education as the framework.

Several drafts were developed based on research literature and internal and external guidance.

## How is the PECAT organized?

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How is the PECAT organized?

## PECAT Organization

- Front Material: Introduction and Instructions
- Part One: Curriculum Description and Preliminary Curriculum Considerations
  - Accuracy Analysis
  - Acceptability Analysis
  - Feasibility Analysis, and
  - Affordability Analysis
- Part Two: Content and Student Assessment Analyses
- Part Three: Curriculum Improvement Plan
- Appendices

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### The PECAT is organized by the following sections:

- The **Front Material** includes an Introduction and Instructions for use of the PECAT.
- **Part One** includes the **Curriculum Description**, which requests basic information about the curriculum;
  - **Preliminary Curriculum Analyses (Accuracy, Acceptability, Feasibility, and Affordability Analyses)**, feature questions to consider about the curriculum before analyzing content and student assessment components.
- **Part two** includes the **Content and Student Assessment Analyses**, which feature scoring systems for rating the curriculum on how well it addresses each of the six national standards for physical education.
- **Part Three**, includes the **Curriculum Improvement Plan**.
- The **Appendices** include an example of a completed Scoring Card, the National Standards, Glossary, and Resources.

## The PECAT

- Helps users analyze written physical education curriculum
  - Content and Student Assessment
  - Accuracy
  - Acceptability
  - Affordability
  - Feasibility

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The PECAT helps users analyze written physical education curriculum, based upon:

- **Content and Student Assessment.**
- **Accuracy.**
- **Acceptability.**
- **Affordability.**
- **Feasibility.**

## Content and Student Assessment

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**Content and Student Assessment** — To determine whether the content described in the curriculum matches the national PE standards **AND** whether there are protocols matched with each national PE standard to guide the assessment of student skills and abilities.

## Accuracy



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**Accuracy** — to assess the accuracy of the health, medical, and scientific information in the written physical education curriculum.

## Acceptability



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Acceptability—to analyze how well the curriculum aligns with social norms among students, families, community member; and, to analyze if cultural and other aspects of the school and community are acceptable.

## Affordability



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**Affordability** — to assess how affordable the curriculum appears to be, for example, to determine the costs of sustaining curricular materials annually, what funds are available for curriculum purchase and implementation, or needed changes in staffing, facilities, or schedule so that lessons in the curriculum can be implemented as written.

## Feasibility



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**Feasibility** — to determine if the physical education curriculum content, materials, and instructional strategies can be successfully implemented and used by physical education teachers within the available instructional time and with the existing physical education facilities and equipment.

## Next Steps



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**Now, what are the next steps in completing the PECAT?**

## Next Steps

**Step 1.** Select a PECAT coordinator, then

- a. form a PECAT committee
- b. identify roles of each member

**Step 2.** Review materials, the PECAT, and any additional state or local standards

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**Step 1: Select a PECAT coordinator, form a PECAT committee, and then identify the roles and responsibilities of each member.**

- The PECAT coordinator will lead the PECAT committee through the curriculum analysis.
- You may want to use any existing review committees and determine if a school health council (SHC) exists at either the district or school level. SHC members are ideal partners for curriculum review. Consider whether one or two members from the SHC should serve on the committee or how the committee will work with the entire SHC.

**Step 2. Review curriculum materials, the PECAT, and any additional state or local standards.**

- Once a coordinator and committee are selected, each member will receive a copy of the curriculum being reviewed as well as a copy of the PECAT.
- This allows members to understand the framework of the curriculum as well as its contents.

## Next Steps

**Step 3:** Complete the Accuracy, Acceptability, Feasibility, and Affordability Analyses

**Step 4:** Score the Content and Student Assessment Analyses of *PECAT*

**Step 5:** Create a plan for improvement

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**Step 3: Complete the Accuracy, Acceptability, Feasibility, and Affordability Analyses.**

**Step 4: Score the Content and Student Assessment Analyses**

**Step 5: Create a plan for improvement.**

The curriculum improvement plan guides users through a process of:

- 1) Interpreting and evaluating PECAT scores.
- 2) Completing the improvement plan worksheet (highlight areas that are most feasible to improve).
- 3) Implementing the improvement plan (identify recommendations, actions, people responsible, and realistic timeline).
- 4) Reassessing and striving for continuous improvement.

**What are YOUR  
next steps?**



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What are YOUR next steps?

## Questions and Answers

- Website address:  
[www.cdc.gov/healthyyouth/PECAT](http://www.cdc.gov/healthyyouth/PECAT)

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Distribute and use the PECAT FAQ (frequently asked questions) handout to respond to questions. Thank audience for attending presentation, provide your contact information.