

Early Adolescence through Young Adulthood/Physical Education

Component 1: Content Knowledge

SAMPLE ITEMS AND SCORING RUBRICS

NATIONAL BOARD
for Professional Teaching Standards[®]

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Overview

This document provides information about the Early Adolescence through Young Adulthood/Physical Education (EAYA/Physical Education) Component 1 computer-based assessment. It includes sample assessment center selected response items and answer key, constructed response exercises, and the scoring rubric used to assess each constructed response exercise.

Component 1: Content Knowledge

Component 1: Content Knowledge is a computer-based assessment requiring candidates to demonstrate knowledge of and pedagogical practices for their teaching content area. Candidates must demonstrate knowledge of developmentally appropriate content, which is necessary for teaching across the full age range and ability level of the chosen certificate area.

EAYA/Physical Education Component 1 Computer-Based Assessment

In the EAYA/Physical Education Component 1 computer-based assessment, content knowledge is assessed through the completion of approximately 45 selected response items and three constructed response exercises.

EAYA/Physical Education Standards Measured by Selected Response Items

The EAYA/Physical Education selected response items focus on the following Standards:

Standards Content	Approximate Percentage of Selected Response Item Section*
<p>Exercise Science (Standard II)</p> <ul style="list-style-type: none"> • Major muscle groups and functions • Biomechanical principles • Effects of physical activity on the human body, and exercise heart rate and recovery heart rate 	35%
<p>Motor Development, Motor Learning, and Movement Forms in Context (Standard II)</p> <ul style="list-style-type: none"> • Progression from beginning to mature motor patterns, including fine and gross motor skills • Developmentally appropriate movements and progressions • Critical elements that promote skill acquisition • Developmentally appropriate scope and sequence of movement forms 	35%

Physical Activity and Wellness; Legal and Safety Issues (Standards II, IV) <ul style="list-style-type: none">• Health- and skill-related components of physical activity• FITT Principle guidelines and principles of exercise• Basic nutrition principles and guidelines• Comprehensive fitness, including hypokinetic conditions and the effect of behavioral choices on personal well-being• Legal and safety issues, including applicable laws and initiatives related to the successful participation of all students, including students with exceptionalities	30%
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* These percentages are an approximation only. Following field testing and review of data, the final assessment will be created. The final assessment content may vary from these estimates.

For the complete EAYA/Physical Education Standards, refer to www.boardcertifiedteachers.org.

EAYA/Physical Education Constructed Response Exercises

The EAYA/Physical Education constructed response exercises assess the following:

- **Exercise 1: Exercise Science**
In this exercise, you will use your knowledge of health-related fitness components and principles of exercise science to plan a developmentally appropriate physical education activity. You will be asked to respond to one prompt.
- **Exercise 2: Motor Learning and Movement Forms**
In this exercise, you will apply your knowledge of motor skills and movement concepts to teaching movement patterns associated with a physical activity. You will be asked to respond to one prompt.
- **Exercise 3: Physical Activity and Wellness**
In this exercise, you will analyze a scenario that describes a student's current physical activity levels or daily activities, and make recommendations for a wellness program that is appropriate for the student according to his or her needs, current situation, and age. You will be asked to respond to one prompt.

Each constructed response exercise will be assessed using a scoring rubric. Each EAYA/Physical Education Component 1 scoring rubric is derived from the Physical Education Standards Second Edition For Teachers of Students 3–18+ and defines the levels of accomplished teaching that you must demonstrate.

You should read the rubric while preparing to take Component 1 to understand how the rubric guides assessors in evaluating your responses to the constructed response exercises.

Inside This Document

This document includes the following two sections: "Sample Selected Response Items and Answer Key for EAYA/Physical Education Component 1" and "Sample Constructed Response Exercises and Scoring Rubrics for EAYA/Physical Education Component 1."

Selected Response Section

This section includes the following:

- five sample selected response items
- answer key

Constructed Response Section

This section includes the following:

- three sample constructed response exercises
- associated scoring rubric for each exercise

For information about scheduling and taking your test at the assessment center, please refer to the *Assessment Center Policy and Guidelines*. For more information about how the assessment is scored, please refer to the *Scoring Guide*.

Sample Selected Response Items and Answer Key for EAYA/Physical Education Component 1

This section includes

- **sample selected response items** to help you become familiar with the content and format of the items on an actual computer-based assessment.

Although this section illustrates some of the types of items that appear on the assessment, note that these sample items do not necessarily define the content or difficulty of an entire actual assessment.

Please note that the selected response items cover the *entire* age range of the certificate. Be aware that you are expected to demonstrate knowledge of developmentally appropriate content across the full range of your certificate.

- **reference material**, as appropriate, provided as part of the assessment, such as formula and constants pages and the periodic table.
- an **answer key**.

Sample Selected Response Items

1. The movement pattern for the tennis serve is most similar to the one used for which other sport skill?
 - A. overhand serve in volleyball
 - B. forehand stroke in badminton
 - C. volleyball dig
 - D. badminton serve

2. Which of the following statements accurately explains why using a combination of aerobics and strength training is generally more effective in improving body composition than using either aerobics or strength training alone?
- A. The combination of aerobics and strength training uses both stored carbohydrates and fats as a source of energy.
 - B. The combination of aerobics and strength training engages more muscles in movement than either form of exercise does alone.
 - C. The combination of aerobics and strength training decreases fat mass while increasing lean muscle mass.
 - D. The combination of aerobics and strength training burns more calories in the same amount of time than either form of exercise does alone.

3. During a track and field unit, a physical education teacher introduces students to hurdling. Which activity would be most important to engage students in before allowing them to practice hurdling over padded or foam hurdles on the track?
- A. practicing the run-up and stride pattern with low stable barriers such as jump ropes placed on the ground
 - B. learning a mnemonic to say aloud when taking one stride over the first hurdle and three strides between subsequent hurdles
 - C. practicing running over hoops or poles placed on the ground before practicing other hurdling skills
 - D. learning to use proper lead leg and trail leg actions in jumping over single low hurdles before adding arm actions

4. During a lacrosse lesson, students are learning how to pick up stationary balls. Which technique is a key element of stationary ball pickups?
- A. holding the stick in front of the body and pushing through the ball with the top hand
 - B. placing the foot opposite the top hand on the stick alongside the ball
 - C. bending at the waist and knees to get low to the ground and running through the ball
 - D. holding the stick at a 45-degree angle with the stick head just above the ground

5. A high school student participates in the fitness regimen described in the table below.

Activity	Duration/Number	Frequency (days per week)
jogging	45 minutes	5
modified push-ups	1 set of 8 to 12	3
abdominal crunches	2 sets of 12	3
leg lifts	2 sets of 12	3

Which type of activity would be most important to add to this regimen to help the student maintain comprehensive fitness?

- A. weight lifting
- B. static stretching
- C. swimming laps
- D. cycling

Answer Key to Sample Selected Response Items

Item Number	Correct Response
1	A
2	C
3	A
4	C
5	B

Sample Constructed Response Exercises and Scoring Rubrics for EAYA/Physical Education Component 1

This section includes

- **sample constructed response exercises** to help you become familiar with the content and format of the exercises on an actual computer-based assessment. These exercises include instructions for using the computer, stimulus materials (if applicable), and prompts requiring responses.

Although this section illustrates some of the types of exercises that appear on the assessment, note that these sample exercises do not necessarily define the content or difficulty of the exercises on an actual assessment.

Please note these constructed response exercises cover the **entire** age range of the certificate. Be aware that you are expected to demonstrate knowledge of developmentally appropriate content across the full range of your certificate.

- **scoring rubrics** that are used by assessors in evaluating your responses to help you understand how your responses are assessed.

Sample Exercise 1 and Scoring Rubric

Sample Exercise 1

Exercise 1: Exercise Science - Candidate Name		⌚ Time Remaining 29:31
Exercise Science <u>Introduction</u>		
In this exercise, you will use your knowledge of health-related fitness components and principles of exercise science to plan a developmentally appropriate physical education activity. You will be asked to respond to one prompt.		
<u>Criteria for Scoring</u>		
To satisfy the highest level of the scoring rubric, your response must provide clear, consistent, and convincing evidence of the following:		
<ul style="list-style-type: none">• a thorough and complete description of a learning experience that effectively integrates a specified fitness component and principle and would significantly promote student fitness;• an appropriate identification and description of student self-monitoring strategies and an insightful rationale for teaching them to students; and• an explanation that demonstrates deep understanding of developmentally appropriate physical education activities.		
<u>Directions</u>		
You may view the prompt by clicking the Next button. Compose your response in the space provided.		
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Exercise 1: Exercise Science - Candidate Name		⌚ Time Remaining 29:31
A physical education teacher has a ninth-grade class of heterogeneously grouped students. One of the teacher's primary goals is to incorporate health-related fitness components and principles of fitness into instruction. You must address each of the following in your response:		
<ul style="list-style-type: none">• Thoroughly describe a developmentally appropriate learning experience for ninth graders that effectively integrates the health-related fitness component of cardiovascular endurance and the fitness principle of duration.• Describe strategies that students can use to help monitor themselves during the activity and to monitor their progress over time with respect to cardiovascular endurance. Explain the rationale for teaching students to use these strategies.• Explain why this learning experience is developmentally appropriate for ninth graders.		
? Help	⌚ Navigator	Next →

Scoring Rubric for Exercise 1

The **LEVEL 4** response shows *clear, consistent, and convincing* evidence that the candidate demonstrates thorough and complete knowledge of health-related fitness components and principles of exercise science, and an ability to plan developmentally appropriate physical education activities.

Characteristics:

- Description of a learning experience that effectively integrates a specified fitness component and principle and would significantly promote student fitness is detailed, appropriate, and thorough.
- Identified student self-monitoring strategies are complete and appropriate and rationale for teaching them to students is strong.
- Explanation demonstrates thorough and complete understanding of developmentally appropriate physical education activities.

The **LEVEL 3** response shows *clear* evidence that the candidate demonstrates thorough and complete knowledge of health-related fitness components and principles of exercise science, and an ability to plan developmentally appropriate physical education activities.

Characteristics:

- Description of a learning experience that effectively integrates a specified fitness component and principle and would significantly promote student fitness is appropriate.
- Identified student self-monitoring strategies are appropriate and rationale for teaching them to students is adequate.
- Explanation demonstrates sufficient understanding of developmentally appropriate physical education activities.

The **LEVEL 2** response shows *limited* evidence that the candidate demonstrates thorough and complete knowledge of health-related fitness components and principles of exercise science, and an ability to plan developmentally appropriate physical education activities.

Characteristics:

- Description of a learning experience that effectively integrates a specified fitness component and principle and would significantly promote student fitness is weak or inappropriate.
- Identified student self-monitoring strategies are incomplete or inappropriate and rationale for teaching them to students is weak.
- Explanation demonstrates limited understanding of developmentally appropriate physical education activities.

The **LEVEL 1** response shows *little or no* evidence that the candidate demonstrates thorough and complete knowledge of health-related fitness components and principles of exercise science, and an ability to plan developmentally appropriate physical education activities.

Characteristics:

- Description of a learning experience that effectively integrates a specified fitness component and principle and would significantly promote student fitness is inappropriate or missing.
- Identified student self-monitoring strategies are inappropriate or missing and rationale for teaching them to students is weak or missing.
- Explanation demonstrates minimal understanding of developmentally appropriate physical education activities or is missing.

Sample Exercise 2 and Scoring Rubric

Sample Exercise 2

Exercise 2: Motor Learning and Movement Forms - Candidate Name		⌚ Time Remaining 29:31
Motor Learning and Movement Forms		
<u>Introduction</u>		
In this exercise, you will apply your knowledge of motor skills and movement concepts to teaching movement patterns associated with a physical activity. You will be asked to respond to one prompt.		
<u>Criteria for Scoring</u>		
To satisfy the highest level of the scoring rubric, your response must provide clear, consistent, and convincing evidence of the following:		
<ul style="list-style-type: none">• an accurate explanation of how two particular skills apply to a given physical activity;• a thorough description of a learning experience that facilitates students' application of the skills and movement concepts to the activity and that demonstrates deep understanding of developmentally appropriate physical education; and• a description of appropriate adaptations to the instruction that would allow a given student to participate successfully in the activity.		
<u>Directions</u>		
You may view the prompt by clicking the Next button. Compose your response in the space provided.		
? Help	⦿ Navigator	Next →

Exercise 2: Motor Learning and Movement Forms - Candidate Name		⌚ Time Remaining 29:31
Students in an eighth-grade class have been practicing running and catching skills. You must address each of the following in your response.		
<ul style="list-style-type: none">• Explain how each of these skills is applicable to lacrosse.• Thoroughly describe a developmentally appropriate learning experience for facilitating students' application of the skills and identified movement concepts to lacrosse. Explain why this approach is developmentally appropriate for eighth graders.• Describe how you would adapt the skill instruction for a student with autism spectrum disorder so that he or she can participate successfully in the activity.		
? Help	⦿ Navigator	Next →

Scoring Rubric for Exercise 2

The **LEVEL 4** response shows *clear, consistent, and convincing* evidence that the candidate demonstrates a thorough knowledge of motor skills and movement concepts, an ability to apply this knowledge to the teaching of movement patterns associated with a physical activity, and an understanding of how physical activities can be adapted to meet the needs of all students.

Characteristics:

- Explanation of how two particular skills apply to a given physical activity is thorough and accurate.
- Description of a learning experience that facilitates students' application of the skills and movement concepts to the activity and that demonstrates deep understanding of developmentally appropriate physical education is appropriate and detailed.
- Description of adaptations to the instructions that would allow a given student to participate successfully in the activity is appropriate and thorough.

The **LEVEL 3** response shows *clear* evidence that the candidate demonstrates a thorough knowledge of motor skills and movement concepts, an ability to apply this knowledge to the teaching of movement patterns associated with a physical activity, and an understanding of how physical activities can be adapted to meet the needs of all students.

Characteristics:

- Explanation of how two particular skills apply to a given physical activity is accurate.
- Description of a learning experience that facilitates students' application of the skills and movement concepts to the activity and that demonstrates deep understanding of developmentally appropriate physical education is appropriate.
- Description of adaptations to the instructions that would allow a given student to participate successfully in the activity is appropriate.

The **LEVEL 2** response shows *limited* evidence that the candidate demonstrates a thorough knowledge of motor skills and movement concepts, an ability to apply this knowledge to the teaching of movement patterns associated with a physical activity, and an understanding of how physical activities can be adapted to meet the needs of all students.

Characteristics:

- Explanation of how two particular skills apply to a given physical activity is somewhat inaccurate.
- Description of a learning experience that facilitates students' application of the skills and movement concepts to the activity and that demonstrates deep understanding of developmentally appropriate physical education is not completely appropriate.
- Description of adaptations to the instructions that would allow a given student to participate successfully in the activity is not completely appropriate.

The **LEVEL 1** response shows *little or no* evidence that the candidate demonstrates a thorough knowledge of motor skills and movement concepts, an ability to apply this knowledge to the teaching of movement patterns associated with a physical activity, and an understanding of how physical activities can be adapted to meet the needs of all students.

Characteristics:

- Explanation of how two particular skills apply to a given physical activity is inaccurate or missing.
- Description of a learning experience that facilitates students' application of the skills and movement concepts to the activity and that demonstrates deep understanding of developmentally appropriate physical education is inappropriate or missing.
- Description of adaptations to the instructions that would allow a given student to participate successfully in the activity is inappropriate or missing.

Sample Exercise 3 and Scoring Rubric

Sample Exercise 3

Exercise 3: Physical Activity and Wellness - Candidate Name		⌚ Time Remaining 29:31
Physical Activity and Wellness		
<u>Introduction</u>		
In this exercise, you will analyze a scenario that describes a student's current physical activity levels or daily activities, and make recommendations for a wellness program that is appropriate for the student according to his or her needs, current situation, and age. You will be asked to respond to one prompt.		
<u>Criteria for Scoring</u>		
To satisfy the highest level of the scoring rubric, your response must provide clear, consistent, and convincing evidence of the following:		
<ul style="list-style-type: none">• a detailed explanation of how fitness and nutrition affect students in their daily lives and long-term well-being;• a comprehensive understanding of age-appropriate wellness programs; and• a thorough knowledge of critical elements of student fitness and wellness, including health- and skill-related fitness components.		
<u>Directions</u>		
You may view the prompt by clicking the Next button. Compose your response in the space provided.		
? Help	⦿ Navigator	Next →

Exercise 3: Physical Activity and Wellness - Candidate Name		⌚ Time Remaining 29:31
Stimulus		
The following describes a tenth-grade student at your school.		
Max has never participated in a regular fitness program and does not participate in any structured physical activity outside physical education class. His daily physical activity consists of school activities and doing light household work (e.g., taking out the garbage, unloading the dishwasher). Max's body fat percentage is greater than 25%, and he has a desire to become more physically fit. He is able to perform 2 right-angle push-ups and 10 elbow-to-knee sit-ups before failure. He is unable to jog or run for more than 2 minutes before needing to walk.		
<ul style="list-style-type: none">• Evaluate the student's habits and their likely short- and long-term effects on wellness. Identify two areas in which change is needed.• Prescribe a wellness program that best meets the needs of the student. Explain how the program applies the FITT Principle.• Describe how to facilitate this student's personalized evaluation and how the student can monitor his progress.		
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Scoring Rubric for Exercise 3

The **LEVEL 4** response shows *clear, consistent, and convincing* evidence that the candidate demonstrates an ability to analyze a scenario that describes a student's current physical activity levels or daily activities, and make recommendations for a wellness program that is appropriate for the student according to his or her needs, current situation, and age.

Characteristics:

- Explanation of how fitness and nutrition affect students in their daily lives and long-term well-being is thorough and accurate.
- Understanding of age-appropriate wellness programs is comprehensive and detailed.
- Knowledge of critical elements of student fitness and wellness, including health and skill related fitness, is comprehensive and accurate.

The **LEVEL 3** response shows *clear* evidence that the candidate demonstrates an ability to analyze a scenario that describes a student's current physical activity levels or daily activities, and make recommendations for a wellness program that is appropriate for the student according to his or her needs, current situation, and age.

Characteristics:

- Explanation of how fitness and nutrition affect students in their daily lives and long-term well-being is accurate and somewhat detailed.
- Understanding of age-appropriate wellness programs is fairly comprehensive.
- Knowledge of critical elements of student fitness and wellness, including health and skill related fitness, is fairly comprehensive and mostly accurate.

The **LEVEL 2** response shows *limited* evidence that the candidate demonstrates an ability to analyze a scenario that describes a student’s current physical activity levels or daily activities, and make recommendations for a wellness program that is appropriate for the student according to his or her needs, current situation, and age.

Characteristics:

- Explanation of how fitness and nutrition affect students in their daily lives and long-term well-being is limited and somewhat inaccurate.
- Understanding of age-appropriate wellness programs is weak.
- Knowledge of critical elements of student fitness and wellness, including health and skill related fitness, is minimal.

The **LEVEL 1** response shows *little or no* evidence that the candidate demonstrates an ability to analyze a scenario that describes a student’s current physical activity levels or daily activities, and make recommendations for a wellness program that is appropriate for the student according to his or her needs, current situation, and age.

Characteristics:

- Explanation of how fitness and nutrition affect students in their daily lives and long-term well-being is inaccurate or missing.
- Understanding of age-appropriate wellness programs is misinformed or missing.
- Knowledge of critical elements of student fitness and wellness, including health and skill related fitness, is inaccurate or missing.

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The National Board for Professional Teaching Standards, Inc. has been funded in part with grants from the U.S. Department of Education and the National Science Foundation. The contents of this publication do not necessarily represent the policy of the U.S. Department of Education or the National Science Foundation, and you should not assume endorsement by the Federal Government. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the sponsors.

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