Early Adolescence through Young Adulthood/Career and Technical Education

Component 1: Content Knowledge

SAMPLE ITEMS AND SCORING RUBRICS
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Overview

This document provides information about the Early Adolescence through Young Adulthood/Career and Technical Education (EAYA/Career and Technical 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/Career and Technical Education Component 1 Computer-Based Assessment

In the EAYA/Career and Technical 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/Career and Technical Education Standards Measured by Selected Response Items

The EAYA/Career and Technical Education selected response items focus on the following Standards:

<table>
<thead>
<tr>
<th>Standards Content</th>
<th>Approximate Percentage of Selected Response Item Section*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of Students and Program Design and Management (Standards I, VII)</td>
<td>28%</td>
</tr>
<tr>
<td>• Obtaining a Holistic View of Students</td>
<td></td>
</tr>
<tr>
<td>• Program Design</td>
<td></td>
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<tr>
<td>• Assessing stakeholder needs to validate programs</td>
<td></td>
</tr>
<tr>
<td>• Respond to stakeholder finding</td>
<td></td>
</tr>
<tr>
<td>• Program Management</td>
<td></td>
</tr>
<tr>
<td>• Monitor and maintain student data</td>
<td></td>
</tr>
<tr>
<td>• Inventory and maintain resources</td>
<td></td>
</tr>
<tr>
<td>Learning Environment and Instructional Practices (Standard IV)</td>
<td>42%</td>
</tr>
<tr>
<td>• Contextualizing Education within the Learning Environment</td>
<td></td>
</tr>
<tr>
<td>• Maintaining a Safe Learning Environment</td>
<td></td>
</tr>
<tr>
<td>• Utilizing Technology</td>
<td></td>
</tr>
<tr>
<td>Postsecondary Readiness (Standard VI)</td>
<td>30%</td>
</tr>
<tr>
<td>• Defining Postsecondary Opportunities</td>
<td></td>
</tr>
<tr>
<td>• Pursuing Postsecondary Opportunities</td>
<td></td>
</tr>
</tbody>
</table>

* These percentages are an approximation only.
EAYA/Career and Technical Education Constructed Response Exercises

The EAYA/Career and Technical Education constructed response exercises assess the following:

- **Exercise 1: Integration of General Education with Career and Technical Education**
  In this exercise, you will use your knowledge of general education and of career and technical education to describe and justify a contextualized learning experience that will integrate specified skills from another discipline with career and technical skills. You will be asked to reply to one prompt.

- **Exercise 2: Employability Skills**
  In this exercise, you will describe a worksite simulation activity appropriate for developing a specified employability skill and provide a rationale for why this activity would be effective. You will be asked to reply to one prompt.

- **Exercise 3: Work-based Learning**
  In this exercise, you will use your knowledge of work-based learning to describe a learning experience appropriate for middle school or high school students in your career and technical education area. You will be asked to reply to one prompt.

Each constructed response exercise will be assessed using a scoring rubric. Each EAYA/Career and Technical Education Component 1 scoring rubric is derived from the Career and Technical Education, Second Edition Standards 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/Career and Technical Education Component 1” and “Sample Constructed Response Exercises and Scoring Rubrics for EAYA/Career and Technical Education Component 1.”

Selected Response Section

This section includes the following:

- 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

Other Important Information

Refer to the National Board website for the following:

- For information about scheduling and taking your test at the assessment center, please refer to the Assessment Center Policy and Guidelines.
- For a link to an online tutorial, please refer to the Assessment Center Testing page.
- For more information about how the assessment is scored, please refer to the Scoring Guide.
Sample Selected Response Items and Answer Key for EAYA/Career and Technical 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.

- an **answer key**.

**Sample Selected Response Items**

**Standard I. Knowledge of Students**

1. A marketing teacher is planning an assignment in which students will develop three marketing strategies that have the potential to significantly improve the sales of a business. Which of the following approaches is likely to be most effective in engaging students' interest in the project?
   A. allowing students to choose their own partners to work with on the marketing assignment
   B. giving students a rubric outlining how the marketing assignment will be evaluated
   C. providing students with a set of completed sample marketing assignments from previous years' classes
   D. letting students select the business and the marketing strategies they will use in the marketing assignment
## Standard VII. Program Design and Management

2. Which of the following pieces of information does a CTE teacher need to include in a training agreement for a cooperative education program?

   - A. the results of a student's initial skills assessment and safety test
   - B. a description of the duties of all parties involved in the program
   - C. a procedure for evaluating a student's performance in the program
   - D. an outline of the specific job skills a student will develop in the program

## Standard IV. Learning Environments and Instructional Practices

3. A high school CTE teacher is interested in building students' mathematics skills during class lab experiences. When planning these types of cross-disciplinary experiences, it would be most important for the teacher to consider:

   - A. various methods for combining the mathematics skills with relevant spreadsheets technology.
   - B. assigning instructional videos for homework and practicing the mathematics skills during class time.
   - C. how best to relate the selected mathematics skills to an application in the specialty area.
   - D. collaborating with the mathematics department to develop specific procedures for completing mathematical computations.

## Standard IV. Learning Environments and Instructional Practices

4. Many CTE pathways require students to use equipment that potentially could be dangerous. Which of the following strategies is likely to be most effective in keeping students safe in these situations?

   - A. having students watch a video about how to use various pieces of equipment in a safe manner
   - B. restricting students' independent use of potentially dangerous equipment until the end of the semester
   - C. having students work in pairs or small groups when first using unfamiliar equipment
   - D. requiring students to demonstrate competence with new equipment before starting a project
Standard VI. Postsecondary Readiness

5. A cosmetology student is trying to decide whether to pursue a career in hairdressing, skin care, or nails. The student wants to make an informed decision and choose a specialty with long-term employment potential. Which of the following approaches would provide the student with the best information for making this decision?
   A. tracking the number of national job postings for each specialty on job search Web sites
   B. using the Bureau of Labor Statistics Web site to compare current employment numbers for each specialty
   C. meeting with the owner of a local hair salon to discuss his or her opinion of growing trends in the industry
   D. researching job growth projections for each specialty in the *Occupational Outlook Handbook*

Standard VI. Postsecondary Readiness

6. A student interested in pursuing a career in sports management drafts the following career plan.
   • Get a job in sports management.
   • Serve as a volunteer coach for a youth sports team.
   • Take relevant high school classes in business and physical education.
   • Research community colleges and/or four-year colleges with a sports management program.
   • Take college admissions tests.
   • Get a paid part-time job at the local community recreation center.
Which of the following changes would make the student's career plan significantly more effective?
   A. listing any required high school classes still needed for graduation
   B. identifying three individuals who would be willing to serve as a reference for employment or college admissions
   C. organizing the plan into clearly defined short-term, medium-term, and long-term goals
   D. adding one more work experience opportunity such as job-shadowing, internships, or cooperative education
**Answer Key to Sample Selected Response Items**

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Correct Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>D</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
</tr>
<tr>
<td>5</td>
<td>D</td>
</tr>
<tr>
<td>6</td>
<td>C</td>
</tr>
</tbody>
</table>
Sample Constructed Response Exercises and Scoring Rubrics for EAYA/Career and Technical 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

Standard III. Knowledge of Content

Exercise 1: Integration of General Education with Career and Technical Education - Candidate Name

Integration of General Education with Career and Technical Education

Introduction

In this exercise, you will use your knowledge of general education and of career and technical education to describe and justify a contextualized learning experience that will integrate specified skills from another discipline with career and technical skills. You will be asked to respond to one prompt.

Criteria for Scoring

To satisfy the highest level of the scoring rubric, your response must provide clear, consistent, and convincing evidence of the following:

- a thorough knowledge of the specified concepts or skills from another discipline;
- a thorough knowledge of career and technical education concepts and/or skills;
- an ability to meaningfully integrate the specified concepts or skills from the other discipline with career and technical education concepts and/or skills;
- a description of a contextualized and developmentally appropriate learning experience for middle school students;
- a detailed description of goals and student participation; and
- a logical and thorough explanation for the effectiveness of the learning experience, including a discussion of how the learning experience would advance students' understanding of the concepts or skills from the other discipline and the career and technical education concepts and/or skills.

Directions

You may view the prompt by clicking the Next button. Compose your response in the space provided.
Exercise 1: Integration of General Education with Career and Technical Education - Candidate Name

Scenario

A mathematics teacher from a neighboring middle school has invited you to present a lesson on practical applications of fractions in your career and technical area. There are 25 students in the middle school mathematics class, and you will have 45 minutes to present your lesson.

For the purpose of this exercise, “contextualized” means that students’ hands and minds are actively engaged in a learning experience that is relevant to them and the real world.

You must address each of the following in your response.

- Describe a contextualized learning experience, appropriate for middle school students, that will advance student understanding of fractions within your career and technical area. The learning experience should integrate an understanding of fractions with important career and technical concepts and/or skills. In your response, include
  - your goals for this integrated learning experience, and
  - a detailed description of what the students will be doing as they learn about practical applications of fractions.
- Briefly explain why this learning experience would be effective in advancing student understanding of both fractions and the concepts and/or skills from your career and technical area.
Scoring Rubric for Exercise 1

The **LEVEL 4** response shows *clear, consistent, and convincing* evidence that the candidate is able to demonstrate the ability to integrate career and technical skills with another discipline and justify a contextualized learning experience.

**Characteristics:**

- Knowledge of the specified concepts or skills from another discipline is thorough.
- Knowledge of career and technical education concepts and/or skills is thorough.
- Integration of the specified concepts or skills from the other discipline with career and technical education concepts and/or skills is meaningful.
- Learning experience is developmentally appropriate and engaging.
- Description of goals and student participation is detailed.
- Explanation for the effectiveness of the learning experience, including a discussion of how the learning experience would advance students’ understanding of the concepts or skills from the other discipline and the career and technical education concepts and/or skills, is logical and thorough.

The **LEVEL 3** response shows *clear* evidence that the candidate is able to demonstrate the ability to integrate career and technical skills with another discipline and justify a contextualized learning experience.

**Characteristics:**

- Knowledge of the specified concepts or skills from another discipline is appropriate.
- Knowledge of career and technical education concepts and/or skills is adequate.
- Integration of the specified concepts or skills from the other discipline with career and technical education concepts and/or skills is complete.
- Learning experience is developmentally appropriate.
- Description of goals and student participation is complete.
- Explanation for the effectiveness of the learning experience, including a discussion of how the learning experience would advance students’ understanding of the concepts or skills from the other discipline and the career and technical education concepts and/or skills, is logical.
The **LEVEL 2** response shows *limited* evidence that the candidate is able to demonstrate the ability to integrate career and technical skills with another discipline and justify a contextualized learning experience.

**Characteristics:**
- Knowledge of the specified concepts or skills from another discipline is weak.
- Knowledge of career and technical education concepts and/or skills is weak.
- Integration of the specified concepts or skills from the other discipline with career and technical education concepts and/or skills is simplistic or confusing.
- Learning experience is developmentally inappropriate or weak.
- Description of goals and student participation is incomplete or vague.
- Explanation for the effectiveness of the learning experience, including a discussion of how the learning experience would advance students’ understanding of the concepts or skills from the other discipline and the career and technical education concepts and/or skills, is unfounded or vague.

The **LEVEL 1** response shows *little or no* evidence that the candidate is able to demonstrate the ability to integrate career and technical skills with another discipline and justify a contextualized learning experience.

**Characteristics:**
- Knowledge of the specified concepts or skills from another discipline is unclear or missing.
- Knowledge of career and technical education concepts and/or skills is unclear or missing.
- Integration of the specified concepts or skills from the other discipline with career and technical education concepts and/or skills is minimal or missing.
- Learning experience is developmentally inappropriate or missing.
- Description of goals and student participation is minimal or missing.
- Explanation for the effectiveness of the learning experience, including a discussion of how the learning experience would advance students’ understanding of the concepts or skills from the other discipline and the career and technical education concepts and/or skills, is unfounded or missing.
Sample Exercise 2 and Scoring Rubric

Sample Exercise 2

Standard III. Knowledge of Content

**Employability Skills**

**Introduction**

In this exercise, you will describe a worksite simulation activity appropriate for developing a specified employability skill and provide a rationale for why this activity would be effective. You will be asked to respond to one prompt.

**Criteria for Scoring**

To satisfy the highest level of the scoring rubric, your response must provide clear, consistent, and convincing evidence of the following:

- a thorough description of the specified employability skill;
- an accurate and thorough description of an appropriate worksite simulation activity that would advance student understanding of the specific skill;
- a detailed description of goals for the worksite simulation activity, what students will be doing during the activity, and monitoring of the activity; and
- a thoughtful and detailed rationale for the effectiveness of the worksite simulation activity.

**Directions**

You may view the prompt by clicking the Next button. Compose your response in the space provided.
You are an **eleventh-grade** instructor at the local high school. This semester your class is focused on employability skills, and you are preparing your students for their first jobs. You use authentic worksite simulations to help your students learn about workplace expectations and practices.

You must address each of the following in your response.

- Describe an authentic worksite simulation for advancing the requisite organizational skills that students would need in entry-level positions. In your response, include
  - the specific goals of the worksite simulation,
  - a brief explanation of what the students will be doing, and
  - what you will do to monitor the effectiveness of the activity.
- Explain why this worksite simulation would be effective for advancing students' understanding of organizational skills used on the job.
Scoring Rubric for Exercise 2

The **LEVEL 4** response shows *clear, consistent, and convincing* evidence that the candidate is able to describe a worksite simulation activity appropriate for developing a specified employability skill and to provide a rationale for why this activity would be effective.

**Characteristics:**
- Description of the specified employability skill is thorough.
- Description of an appropriate worksite simulation activity that would advance student understanding of a specific skill is accurate and thorough.
- Description of goals, what students are doing, and monitoring is detailed.
- Rationale for the effectiveness of the worksite simulation activity is thoughtful and detailed.

The **LEVEL 3** response shows *clear* evidence that the candidate is able to describe a worksite simulation activity appropriate for developing a specified employability skill and provides a rationale for why this activity would be effective.

**Characteristics:**
- Description of the specified employability skill is adequate.
- Description of an appropriate worksite simulation activity that would advance student understanding of a specific skill is accurate.
- Description of goals, what students are doing, and monitoring is complete.
- Rationale for the effectiveness of the worksite simulation activity is complete.
The LEVEL 2 response shows limited evidence that the candidate is able to describe a worksite simulation activity appropriate for developing a specified employability skill and provides limited rationale for why this activity would be effective.

Characteristics:

- Description of the specified employability skill is weak or vague.
- Description of an appropriate worksite simulation activity that would advance student understanding of a specific skill is weak or inappropriate.
- Description of goals, what students are doing, and monitoring is weak or vague.
- Rationale for the effectiveness of the worksite simulation activity is incomplete or vague.

The LEVEL 1 response shows little or no evidence that the candidate is able to describe a worksite simulation activity appropriate for developing a specified employability skill and provides little or no rationale for why this activity would be effective.

Characteristics:

- Description of the specified employability skill is incomplete or missing.
- Description of an appropriate worksite simulation activity that would advance student understanding of a specific skill is vague or missing.
- Description of goals, what students are doing, and monitoring is trivial or missing.
- Rationale for the effectiveness of the worksite simulation activity is missing.
Sample Exercise 3 and Scoring Rubric

Sample Exercise 3

Standard IV. Learning Environments and Instructional Practices

Exercise 3: Work-based Learning - Candidate Name

Work-based Learning

Introduction

In this exercise, you will use your knowledge of work-based learning to describe a learning experience appropriate for middle school or high school students in your career and technical education area. You will be asked to respond to one prompt.

Criteria for Scoring

To satisfy the highest level of the scoring rubric, your response must provide clear, consistent, and convincing evidence of the following:

- a thorough description of a specific age-appropriate work-based learning experience;
- a detailed description of the work-based learning goals/objectives;
- a thorough description of specific activities for student participation; and
- a thorough explanation of the responsibilities of the specified participant(s) with connections to advancing student knowledge of the worksite.

Directions

You may view the prompt by clicking the Next button. Compose your response in the space provided.

You must address each of the following in your response.

- Describe the defining features of one specific service learning experience that is appropriate for middle school career and technical education students that would advance their knowledge of the worksite. In your response, include detailed descriptions of the following:
  - the goals/objectives of the service learning experience; and
  - the specific activities in which the students would participate.
- Describe the responsibilities of the advising teacher. Explain how these responsibilities are directly related to advancing students' knowledge of the worksite.
Scoring Rubric for Exercise 3

The **LEVEL 4** response shows *clear, consistent, and convincing* evidence that the candidate is able to describe a work-based learning experience appropriate for middle school or high school students in his/her career and technical education area.

**Characteristics:**
- Description of a specific age-appropriate work-based learning experience is thorough.
- Description of goals/objectives with connections to work-based learning is detailed.
- Description of the specific activities for student participation is thorough.
- Explanation of the responsibilities of the specified participant(s) with connections to the advancement of students’ knowledge of the worksite is thorough.

The **LEVEL 3** response shows *clear* evidence that the candidate is able to describe a work-based learning experience appropriate for middle school or high school students in his/her career and technical education area.

**Characteristics:**
- Description of a specific age-appropriate work-based learning experience is complete.
- Description of goals/objectives with connections to work-based learning is appropriate.
- Description of the specific activities for student participation is complete.
- Explanation of the responsibilities of the specified participant(s) with connections to the advancement of students’ knowledge of the worksite is complete.
The **LEVEL 2** response shows *limited* evidence that the candidate is able to describe a work-based learning experience appropriate for middle school or high school students in his/her career and technical education area.

**Characteristics:**
- Description of a specific age-appropriate work-based learning experience is incomplete or vague.
- Description of goals/objectives with connections to work-based learning is trivial or missing.
- Description of the specific activities for student participation is unclear or weak.
- Explanation of the responsibilities of the specified participant(s) with connections to the advancement of students’ knowledge of the worksite is incomplete or weak.

The **LEVEL 1** response shows *little or no* evidence that the candidate is able to describe a work-based learning experience appropriate for middle school or high school students in his/her career and technical education area.

**Characteristics:**
- Description of a specific age-appropriate work-based learning experience is incomplete or missing.
- Description of goals/objectives with connections to work-based learning is trivial or missing.
- Description of the specific activities for student participation is unclear or missing.
- Explanation of the responsibilities of the specified participant(s) with connections to the advancement of students’ knowledge of the worksite is incomplete or missing.