



Early Adolescence through Young Adulthood

CAREER AND TECHNICAL EDUCATION

Assessment at a Glance

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*National Board Certification
Promotes Better Teaching,
Better Learning, Better Schools*

Choosing the Right Certificate

The National Board Certification® process offers experienced teachers the professional development opportunity to demonstrate their knowledge, skills, and practices against high and rigorous standards. Candidates pursue certification by completing two major assessment components: a portfolio of classroom teaching practice and an assessment of content knowledge administered at a computer-based testing center.

The Early Adolescence through Young Adulthood/Career and Technical Education certificate is appropriate for teachers who teach career and technical information subjects to students ages 11–18+ and who know industry-specific subject matter. Read this document to learn the content and pedagogical knowledge you will be required to demonstrate for this certificate area and to measure your readiness to pursue National Board Certification.

Candidates applying for certification in the Career and Technical Education certificate area must select a specialty area when applying. The following cluster descriptions may help you determine the specialty area that best fits your teaching situation:

- **Agriculture and Environmental Sciences.** Concentrations in this area include, for example, agriscience, animal science, agricultural business, environmental sciences, fisheries management, forestry, horticulture, and wildlife management.
- **Arts and Communications.** Concentrations in this area include, for example, media arts, writing and related arts (e.g., journalism, translation, advertising, and public relations), and graphic arts.
- **Business, Marketing, Information Management, and Entrepreneurship.** Concentrations in this area include, for example, accounting and finance, information systems, administrative office technology, marketing, and entrepreneurship.
- **Family and Consumer Sciences.** Concentrations in this area include, for example, nutrition and wellness, family relations and human development, child and elder care, clothing and textiles industries, hospitality industries, housing decision making, and home living and maintenance.
- **Health Services.** Concentrations in this area include, for example, nursing, psychiatry, rehabilitative therapy, hospital administration, and medical records.
- **Human Services.** Concentrations in this area include, for example, preschool or day care, law and legal studies, law enforcement, public administration, child and family services, religion, and social services.
- **Manufacturing and Engineering Technology.** Concentrations in this area include, for example, carpentry, electronics, plumbing, masonry, mechanics and repair technology, and automotive maintenance.
- **Technology Education.** Concentrations in this area include, for example, communication systems (e.g., transmitting, receiving, storing information), transportation systems (e.g., loading, moving, unloading, and storing items), manufacturing systems (e.g., locating and extracting material resources, producing industrial materials), and construction systems (e.g., preparing building sites, setting foundations, erecting structures, installing utilities).

Refer to the *Career and Technical Education Standards* for a complete description of each specialty-area practice.

Below is a set of questions to ask yourself about your teaching practice. If you answer “yes” to these questions, you are ready to apply. For eligibility requirements and application instructions, read the *Guide to National Board Certification* on the NBPTS Web site (www.nbpts.org).

If you answer “no” to one or more of these questions, you may need to discuss your teaching situation with professional colleagues, your school faculty, a National Board Certified Teacher®, your faculty support group, or a local-level administrator who is directing a National Board program.

For the portfolio, will you be able to:

- demonstrate that your teaching practice meets the Career and Technical Education Standards?
- have access to a class of at least 6 students, in which 51% of the students are ages 11–18+ during the 12 months prior to the submission of your portfolio entries?
- submit student work samples and video recordings in English and/or Spanish showing your interactions with your students?
- present evidence of how you use assessment of student work to support learning goals, to facilitate students' growth as career and technical education students, and to inform and shape your teaching practice?
- present evidence of how you engage students in active career and technical education learning as part of a demonstration lesson?
- present evidence of how you incorporate current technologies as supports for student learning?
- demonstrate how you use small-group learning experiences to foster students' teamwork skills?
- present specific examples of your ability to address fairness, equity, and access challenges?
- present evidence of how you impact student learning through your work with students' families and community and through your development as a learner and as a leader/collaborator?

For the assessment center, will you be able to demonstrate content knowledge in:

- high-level skills?
- the integration of career and technical education and academic studies?
- career exploration and career paths?
- advances in technology and techniques?
- employability skills?
- issues related to the transition from school to work?

Reviewing the Standards

The requirements for National Board Certification in the field of Early Adolescence through Young Adulthood/Career and Technical Education (EAYA/CTE) are organized into the following Standards. The ordering of the Standards is designed to facilitate understanding, not to assign priorities.

Creating a Productive Learning Environment

I. Knowledge of Students

Accomplished career and technical educators are dedicated to advancing the learning and well-being of all students. They personalize their instruction and apply knowledge of human development to best understand and meet their students' needs.

II. Knowledge of Subject Matter

Accomplished career and technical educators command a core body of knowledge about the world of work in general and the skills and processes that cut across industries, industry-specific knowledge, and a base of general academic knowledge. They draw on this knowledge to establish curricular goals, design instruction, facilitate student learning, and assess student progress.

III. Learning Environment

Accomplished career and technical educators efficiently manage their classrooms and create an environment that fosters democratic values, risk taking, and a love of learning. In this environment, students develop knowledge, skills, and confidence through contextualized learning activities, independent and collaborative laboratory work, and simulated workplace experiences.

IV. Diversity

Accomplished career and technical educators create an environment where equal treatment, fairness, and respect for diversity are modeled, taught, and practiced by all. They take steps to ensure quality career and technical learning opportunities for all students.

Advancing Student Learning

V. Advancing Knowledge of Career and Technical Subject Matter

Accomplished career and technical educators foster experiential, conceptual, and performance-based student learning of career and technical subject matter and create important, engaging activities for students that draw upon an extensive repertoire of methods, strategies, and resources. Their practice is also marked by their ability to integrate career and technical and academic disciplines productively.

VI. Assessment

Accomplished career and technical educators utilize a variety of assessment methods to obtain useful information about student learning and development, to assist students in reflecting on their own progress, and to refine their teaching.

Helping Students Transition to Work and Adult Roles

VII. Workplace Readiness

Accomplished career and technical educators develop student career decision-making and employability skills by creating opportunities for students to gain understanding of workplace cultures and expectations.

VIII. Managing and Balancing Multiple Life Roles

Accomplished career and technical educators develop in students an understanding of the competing demands and responsibilities that are part of the world of work and guide students as they begin to balance those roles in their own lives.

IX. Social Development

Accomplished career and technical educators develop in students self-awareness, confidence, character, leadership, and sound personal, social, and civic values and ethics.

Improving Education through Professional Development and Outreach

X. Reflective Practice

Accomplished career and technical educators regularly analyze, evaluate, and strengthen the effectiveness and quality of their practice through lifelong learning.

XI. Collaborative Partnerships

Accomplished career and technical educators work with colleagues, the community, business and industry, and postsecondary institutions to extend and enrich the learning opportunities available to students and to ease school-to-work transitions.

XII. Contributions to the Education Profession

Accomplished career and technical educators work with colleagues and the larger educational community both to improve schools and to advance knowledge and practice in their field.

XIII. Family and Community Partnerships

Accomplished career and technical educators work with families and communities to achieve common goals for the education of all students.

Read the Standards on the NBPTS Web site to ensure that you will be able to demonstrate your accomplishments and confidently satisfy the defined expectations for National Board Certification.

Demonstrating Your Teaching Practice and Content Knowledge

This section describes the portfolio entries and assessment center exercises for the EAYA/CTE certificate area.

Portfolio Entries

You will be required to submit four portfolio entries. One entry is based on student work samples, and two entries feature video recordings of student–teacher interactions in the classroom. The fourth entry relates to your accomplishments outside of the classroom—with families, the community, or colleagues—and how they impact student learning.

Following is a description of each portfolio entry.

**Entry 1:
Assessment of
Student Learning**

In this entry, you select two assessments related to a unified area of career and technical study, drawn from different points in time, that differ from one another in structure or form, that you use in your career and technical education instruction to evaluate students' understanding. You select the responses of two students to each of these assessments, and submit a Written Commentary in which you describe, analyze, and evaluate the student work and reflect on your teaching practice.

**Entry 2:
Demonstration
Lesson**

In this entry, you submit a 20-minute video recording that depicts how you engage your students in active career and technical learning. You also show how you use explanation, demonstration, discussion, and individual/group follow-up and feedback to support students in their exploration and acquisition of a specific career and technical skill or a set of related skills. You submit a Written Commentary in which you describe, analyze, and reflect on how you use a demonstration lesson to promote student learning and inquiry.

**Entry 3:
Fostering
Teamwork**

In this entry, you submit a 20-minute video recording depicting how you engage two groups of 3–6 students in teamwork skills that parallel the expectations and requirements of a high-performance workplace. You demonstrate the strategies that you use to plan, implement, and guide learning experiences that promote and develop student teamwork. You also submit a Written Commentary in which you describe, analyze, and reflect on how you promote and nurture workplace-related teamwork.

Entry 3 is the preselected *Take One!* portfolio entry.

**Entry 4:
Documented
Accomplishments:
Contributions to
Student Learning**

In this entry, you illustrate your partnerships with students' families and community, and your development as a learner and collaborator with other professionals by submitting descriptions and documentation of your activities and accomplishments in those areas. Your description must make the connection between each accomplishment and its impact on student learning.

Read the *Portfolio Instructions* on the NBPTS Web site to learn more about the requirements for preparing, developing, and submitting the portfolio component of your assessment.

Assessment Center Exercises

This assessment is composed of six exercises that examine content knowledge specified in the NBPTS Standards. You are given up to 30 minutes to respond to each exercise.

Following is a description of each assessment center exercise.

- | | |
|--|---|
| Exercise 1:
Integration of
Academic Studies
with Career and
Technical Education | In this exercise, you are asked to describe and justify a contextualized learning experience that will integrate specified skills from the core curriculum with career and technical skills. |
| Exercise 2:
Advances in the
Field
(Specialty-Area Specific) | In this exercise, you identify a recent advance, within a specified focus, that has had a significant impact on practice in occupations from your career and technical area. You are asked to describe the critical features of the advance and how these features have created significant impact on professional practice in the field (not on teaching), and the preparation necessary to take advantage of the advance. |
| Exercise 3:
Exploring Careers | In this exercise, you demonstrate your knowledge of developmentally appropriate career exploration methods. You are asked to describe and justify a focused career exploration activity along with evaluative techniques appropriate for middle school students. |
| Exercise 4:
High-Level Skills or
Processes
(Specialty-Area Specific) | In this exercise, you are asked to demonstrate your knowledge of high-level skills within your career and technical area. Based on a given scenario, you are asked to describe a specific high-level skill crucial for expert practice in an occupation from your career and technical area and to explain the distinctions between expert and novice displays of the skill, and to explain the relationship of the skill to important workplace factors. |
| Exercise 5:
Employability Skills | In this exercise, you demonstrate your knowledge of workplace skills and expectations, and the use of authentic work simulations to advance student understanding of these skills and expectations. Based on a given scenario, you are asked to describe and justify a work simulation that would advance student understanding of the specified skills. |
| Exercise 6:
Worksite Learning | In this exercise, you demonstrate your knowledge of age-appropriate worksite learning strategies and programs. You are asked to describe and justify the appropriateness of a specified type of worksite learning experience, including the responsibilities of the specified participants. |

Read *Assessment Center Policy and Guidelines* on the NBPTS Web site for more information about the assessment center component of the certification process. To locate an assessment center, visit the NBPTS computer-based testing Web site (www.pearsonvue.com/nbpts/).

Selected Assessment Center Exercises

The following sections contain selected exercises administered in a previous assessment cycle. These exercises present information that candidates saw on screen at the assessment center and include instructions for using the computer, stimulus materials (if applicable), and prompts requiring responses. These exercises have been included to help you become familiar with the structure of assessment center exercises and to help you understand the scoring rubrics. The exercise prompts in this section **do not** represent actual prompts candidates will see at assessment centers in the future.

Please note that assessment center 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.

Sample Exercise 1: Integration of Academic Studies with Career and Technical Education

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

🕒 Time Remaining 29:31

Introduction

In this exercise, you will use your knowledge of the core curriculum and of career and technical education to describe and justify a contextualized learning experience that will integrate specified skills from the core curriculum with career and technical skills. You will be asked to respond to two prompts.

Criteria for Scoring

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

- a thorough knowledge of the specified concepts or skills from the core curriculum;
- a thorough knowledge of career and technical education concepts and/or skills;
- an ability to appropriately and meaningfully integrate the specified concepts or skills from the core curriculum with career and technical education concepts and/or skills;
- a convincing description of a contextualized and developmentally appropriate learning experience for seventh-grade students; and
- a logical and convincing 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 core curriculum and the career and technical education concepts and/or skills.

Directions

You may preview all of the prompts by clicking the "Next" button. The "Previous" button will enable you to return to any of the prompts in order to compose or revise your response in the space provided.

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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. Mr. Jones has 25 students in his seventh-grade mathematics class, and you will have 45 minutes to present your lesson.

Retired Prompt 1

Describe a contextualized learning activity, appropriate for seventh-grade students, that will advance student understanding of fractions within your career and technical area. The learning activity should integrate an understanding of fractions with important career and technical concepts and/or skills. In your response, include (a) your goals for this integrated learning experience and (b) a detailed description of what the students would be doing as they learn about practical applications of fractions.*

Retired Prompt 2

Briefly, explain why this activity would be effective in advancing student understanding of both fractions and the concepts and/or skills from your career and technical area.

*For the purpose of this exercise, "contextualized" means that students' hands and minds are actively engaged in a learning activity that is relevant to them and the real world.

Sample Exercise 2: Advances in the Field

Exercise 2: Advances in the Field - Candidate Name

🕒 Time Remaining 29:31

Introduction

In this exercise, you will demonstrate your knowledge of a recent advance that has had a significant* impact on practice in occupations from your career and technical area. You will be asked to respond to two prompts.

Criteria for Scoring

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

- a thorough description of a recent advance (last 5 years) within the required area;
- a thorough explanation of how the advance has significantly impacted practice in occupations from your career and technical area (not teaching); and
- a worthwhile knowledge of the preparation necessary to take advantage of the advance.

Directions

You may preview all of the prompts by clicking the "Next" button. The "Previous" button will enable you to return to any of the prompts in order to compose or revise your response in the space provided.

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Retired Prompt 1

- a) *Name one recent advance (last 5 years) related to computer software that has had a significant impact on occupations in your career and technical area. (Not on teaching)*
- b) *Describe the critical features of this advance and explain how these features, separately or taken together, have created a significant impact on practice in your career and technical area. (Not on teaching)*

Retired Prompt 2

Briefly explain what training would be necessary for an employee to have in order to take advantage of this advance.

* For the purpose of this exercise, "significant" means that a fundamental, or frequent, or critical work process, technique, or understanding has been changed.

Understanding the National Board Scoring Process

All portfolio entries and assessment center exercises are scored by teachers practicing in the same content area as the assessment they are scoring. The National Board's carefully trained assessors use scoring rubrics to evaluate candidate responses. The rubrics clearly articulate the criteria that are to be applied in the evaluation of your responses. These criteria reflect the Standards that the entry is designed to measure.

Assessors use a four-level rubric to score each candidate's response as shown below.

Rubric Level	Score Range	Quality of Evidence
Level 4	3.75–4.25	Clear, consistent, and convincing
Level 3	2.75–3.74	Clear
Level 2	1.75–2.74	Limited
Level 1	0.75–1.74	Little or no

The Level 4 and Level 3 score ranges represent accomplished teaching practice. You do not have to receive Level 4 or Level 3 scores for every entry and exercise. A high score on one may compensate for a lower score elsewhere. Read the *Scoring Guide for Candidates* on the NBPTS Web site for your assessment.

Your Total Weighted Scaled Score

When your portfolio entries and assessment center exercises are completed and scored, your Total Weighted Scaled Score is computed. This is done by applying a set of weights to each of your entry and exercise scores.

For the EAYA/CTE certificate, these are the weights:

- 16% for each of the three classroom-based portfolio entries
- 12% for the Documented Accomplishments portfolio entry
- 6.67% for each of the six assessment center exercises

Your weighted scaled score for each entry or exercise is calculated by multiplying the raw score by the appropriate weight, shown above. Your Total Weighted Scaled Score is the sum of the weighted scaled scores for all entries and exercises plus a 12-point uniform constant. For example, if your weighted scaled score is 263, you would receive a 12-point uniform constant score, and your Total Weighted Scaled Score would be 275. This number is then compared to 275, the performance standard established by the NBPTS Board of Directors.

A candidate whose Total Weighted Scaled Score is 275 or greater is recognized as an accomplished teacher and is awarded National Board Certification. A candidate whose Total Weighted Scaled Score does not meet 275 is not yet certified and for the following two years has the opportunity to retake certain portfolio entries or assessment center exercises in order to meet the performance standard of 275.

Things to Keep in Mind

The National Board Standards for the EAYA/CTE certificate area are addressed within the portfolio and assessment center process. Therefore, you should keep the following in mind:

- Although the portfolio entries address many of the Standards, they may not address all of them. Standards the portfolio does not address may be included in the assessment center portion of the certification process.
- Each entry is scored independently of the others. When an entry asks for background or contextual information, be complete, since an assessor for one entry will not see your other entries.
- At each of the four levels of the scoring rubric, the same Standards-related criteria are applied. However, each level of the scoring rubric represents a difference in the quality of evidence demonstrated by the entry or exercise. For example, if “Knowledge of Students” is a Standard measured by an entry, the Level 4 rubric will refer to “clear, consistent, and convincing” evidence of that Standard while the Level 2 rubric will refer to “limited” evidence of the same Standard.
- One of the fundamental principles underlying the evaluation is that responses are scored only on what candidates are specifically asked to do. For example, if the directions specifically ask you to demonstrate how to use assessment in the featured instructional sequence, evidence supporting your use of assessment will be evaluated based on the scoring rubric. Conversely, if an entry does not require you to demonstrate how to use assessment, it will not be evaluated.

Beginning Your Journey toward National Board Certification

The first step on this journey is to make a commitment, but what does this commitment involve? First-time candidates apply and complete their assessments in an initial candidacy period as shown in the timeline below. For candidates who are not successful in their first try, there is a 24-month window, following the receipt of scores, in which to retake assessments and/or resubmit portfolio entries in order to achieve certification.

You may wish to start with the *Take One!* program that requires submission of a single portfolio entry for scoring. The preselected portfolio entry required for *Take One!* is identified as part of the portfolio entry descriptions on page 5. You can choose to transfer your *Take One!* score to National Board Certification within three years of completing the *Take One!* process. Read *Becoming a Take One! Participant* on the NBPTS Web site to learn more about the requirements.

If you choose to pursue National Board Certification, there is also a financial commitment for which support is available. Visit the NBPTS Web site to learn about federal, state, and/or local funds available to support National Board Certification and *Take One!* fees. Be sure to check with your local, district, or state educational officials for incentives (such as salary increases and bonuses) that may be offered for achieving National Board Certification.

The following timeline provides a snapshot of your schedule of commitments. Read the *Guide to National Board Certification* on the NBPTS Web site for complete information.

Certification Planner

Step	To Do	Year 1	Year 2	Year 3	Year 4
1	Send forms and fees to NBPTS:				
	<ul style="list-style-type: none"> application nonrefundable initial fee (\$500) all eligibility forms balance of full fee (totaling \$2,500) 	Jan. 1 — Dec. 31			
2	Develop portfolio entries and submit them to NBPTS:				
	<ul style="list-style-type: none"> Receive portfolio box after submitting initial fees. Submit all four portfolio entries at once after submitting all fees and eligibility forms. 	Jan. 1 — Mar. 31			
3	Schedule your assessment center exercises:				
	<ul style="list-style-type: none"> after submitting all fees and eligibility forms at least 30 days before the test date 		Jan. 1 — Jun. 15		
4	Obtain your scores online:				
	<ul style="list-style-type: none"> Access <i>My Profile</i> to learn about your scores and certification status. 		Dec. 31	Dec. 31	Dec. 31
5	Continue the journey:				
	<ul style="list-style-type: none"> If you did not achieve certification, decide whether to retake assessment center exercises and/or portfolio entries. Submit retake application and fees. 			Jan. 31	Jan. 31
	<ul style="list-style-type: none"> Retake selected assessment center exercises. 			Jan. 1 — Jun. 15	Jan. 1 — Jun. 15
	<ul style="list-style-type: none"> Submit selected portfolio entries. 			Jan. 1 — Apr. 15	Jan. 1 — Apr. 15

Having made the commitment, many teachers who pursue National Board Certification become role models and leaders in their schools and districts, earning a greater voice in what happens and having a very positive effect on their students' experiences. On your journey, you will benefit directly from your candidacy, taking part in what many have described as the best professional development experience of their lives.

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