

Texas Educator Certification Examination Program

Field 370: Pedagogy and Professional Responsibilities for Trade and Industrial Education 6–12

Examination Framework

January 2020

| Domain | Range of Competencies |
|---|------------------------------|
| I. Instructional Planning, Delivery, and Assessment | 001–003 |
| II. Knowledge of Students and Student Learning | 004–005 |
| III. The Learning Environment | 006–007 |
| IV. Professional Practices and Responsibilities | 008–009 |
| V. Constructed Response | 010 |

**370: PEDAGOGY AND PROFESSIONAL RESPONSIBILITIES
FOR TRADE AND INDUSTRIAL EDUCATION 6–12
EXAMINATION FRAMEWORK**

DOMAIN I—INSTRUCTIONAL PLANNING, DELIVERY, AND ASSESSMENT

Competency 001 (Instruction): *Apply knowledge of instructional development that builds coherently toward objectives based on state standards, course content, and expected student outcomes.*

For example:

- A. Demonstrate knowledge of pedagogical practices and contextual factors, such as industry environments, standards, and practices, that affect student learning.
- B. Apply knowledge of how to develop instructional goals and objectives that are clear, relevant, and aligned with industry and state standards.
- C. Recognize ways to develop and organize the curriculum to facilitate student understanding of key content knowledge and skills of the discipline.
- D. Apply knowledge of instructional planning that is developmentally appropriate, that is standards driven, and that will motivate students to learn.
- E. Apply strategies for encouraging student engagement through direct instruction, facilitated discussion, and student-centered activities.
- F. Demonstrate knowledge of how to use communication techniques to provide ongoing, appropriate, and constructive feedback to students to reinforce learning and promote understanding of key concepts.
- G. Apply knowledge of methods for communicating goals, objectives, and learning expectations to support all students in reaching high levels of achievement.
- H. Apply knowledge of instructional strategies for designing lessons, including differentiated instruction, to meet the needs of diverse learners (e.g., acceleration, remediation, implementation of Individualized Education Programs [IEPs]).

Competency 002 (Resources, Technologies, and Materials): *Understand how to select, adapt, and incorporate resources, technologies, and standards-aligned instructional materials to promote student success in meeting learning goals.*

For example:

- A. Apply strategies for identifying, developing, and using resources and materials to prepare and present developmentally appropriate instruction that is responsive to the needs of all students.
- B. Apply strategies for selecting and using resources, technologies, and instructional materials that reflect educational goals and actively engage all students.
- C. Recognize variations in students' ability to access and use technology resources, and adapt instruction to facilitate all students' use of appropriate resources to enhance learning.
- D. Apply knowledge of digital citizenship, including technology-related laws, issues, and ethics (e.g., copyrights, Internet safety, plagiarism, computer-use guidelines).
- E. Apply knowledge of ways to integrate the use of oral, written, graphic, kinesthetic, and/or tactile resources and materials to teach key concepts.

**370: PEDAGOGY AND PROFESSIONAL RESPONSIBILITIES
FOR TRADE AND INDUSTRIAL EDUCATION 6–12
EXAMINATION FRAMEWORK**

Competency 003 (Data-Driven Practices and Student Assessments): *Understand how to collect, analyze, evaluate, and communicate data and how to design and implement appropriate and effective student assessments.*

For example:

- A. Demonstrate knowledge of strategies for collecting, analyzing, and evaluating data in a timely, thorough, accurate, and appropriate manner to monitor student learning.
- B. Apply strategies for collecting, analyzing, and evaluating multiple sources of data, including student assessments, to develop a coherent evaluation of the trade and industrial workforce training program's strengths and weaknesses, instructional strategies, and content delivery.
- C. Demonstrate knowledge of the characteristics and uses of formal and informal assessments, including cognitive and performance-based assessments, to analyze students' strengths and needs, measure and evaluate student progress, and adjust instructional strategies and content delivery.
- D. Apply strategies for providing students with timely, constructive feedback; cooperating effectively with teachers, other professionals, and parents/guardians to collect and interpret data; and communicating the purposes, methods, findings, and implications of students' assessment results.
- E. Apply principles and standards for developing individualized training plans for student work-based learning experiences, and apply methods for evaluating student performance and the value of particular experiences to student learning.

DOMAIN II—KNOWLEDGE OF STUDENTS AND STUDENT LEARNING

Competency 004 (Learning Processes): *Understand how learning occurs and how learners develop, construct meaning, and acquire knowledge and skills.*

For example:

- A. Demonstrate knowledge of theories of how learning occurs and processes by which learners acquire knowledge and skills (e.g., constructivism, behaviorism, hierarchy of needs, social learning).
- B. Demonstrate knowledge of physical, cognitive, social, and emotional factors of human development and their significance for teaching and learning.
- C. Recognize the wide range of individual development and the implications of developmental variation for instructional planning.
- D. Recognize challenges for adolescents, both in and out of school, and effective resources to help students address challenges.
- E. Apply strategies for communicating effectively with students to enhance their self-esteem and achieve personal goals.

**370: PEDAGOGY AND PROFESSIONAL RESPONSIBILITIES
FOR TRADE AND INDUSTRIAL EDUCATION 6–12
EXAMINATION FRAMEWORK**

Competency 005 (Student Learning): *Apply principles for connecting learning, content, and expectations to students' prior knowledge, real-world experiences, and interests in meaningful contexts.*

For example:

- A. Demonstrate knowledge of the ethnic, cultural, linguistic, gender, gender identity, and socioeconomic diversity of students and the effects of this diversity on student learning.
- B. Apply strategies for developing and adapting lesson plans and instruction that are responsive to students' diverse backgrounds and particular needs, including the needs of English learners.
- C. Recognize the importance of modeling acceptance of and respect for all students.
- D. Apply strategies for developing lesson plans and instruction that meaningfully relate to students' prior knowledge, life experiences, and interests.
- E. Apply strategies for ensuring equitable access to educational opportunities and experiences for all students, including students with disabilities.
- F. Demonstrate knowledge of different types of work-based learning experiences (e.g., mentorships, job shadowing, internships, apprenticeships, practicum) and the characteristics, advantages, and disadvantages of each.

DOMAIN III—THE LEARNING ENVIRONMENT

Competency 006 (Organized, Productive Learning Environment): *Understand the development and implementation of strategies for creating a well-organized and productive learning environment.*

For example:

- A. Demonstrate understanding of ways to implement efficient and effective routines and procedures that promote students' learning and achievement.
- B. Apply knowledge of strategies to organize classroom and laboratory activities and schedules to enhance the efficiency of teaching and learning.
- C. Apply knowledge of strategies for maintaining a learning environment that is based on high expectations for student performance and empowers students to take responsibility for their own learning.
- D. Apply strategies for maximizing time spent on instruction (e.g., managing time, facilitating transitions).
- E. Apply principles for planning, managing, and facilitating classroom and laboratory organization in order to maximize students' collaboration, participation, and achievement.

**370: PEDAGOGY AND PROFESSIONAL RESPONSIBILITIES
FOR TRADE AND INDUSTRIAL EDUCATION 6–12
EXAMINATION FRAMEWORK**

Competency 007 (Safe, Supportive Learning Environment): *Understand principles and strategies for maintaining a physically and emotionally safe, supportive learning environment that maximizes student learning.*

For example:

- A. Apply knowledge of strategies for creating an inclusive learning environment in which diversity and individual differences are respected and classroom interactions are positive and respectful.
- B. Demonstrate knowledge of how to facilitate positive and productive interactions with and among students in small or large groups.
- C. Apply strategies for arranging and organizing the physical environment to maximize student learning and to ensure that all students have access to resources.
- D. Apply knowledge of relevant local, state, and federal safety regulations and current practices and procedures for ensuring the safety of students in the classroom, laboratory, field, and workplace settings.
- E. Demonstrate knowledge of principles and characteristics of effective behavior management systems and strategies for maintaining an environment where all students can learn.
- F. Recognize potential hazards, threats, and vulnerabilities (e.g., mechanical, chemical, human, natural) and ways to prevent or mitigate them.

DOMAIN IV—PROFESSIONAL PRACTICES AND RESPONSIBILITIES

Competency 008 (Ethics and Integrity): *Understand the importance of maintaining the highest standards of ethics and integrity in personal and professional behavior.*

For example:

- A. Apply self-assessment procedures to identify strengths and areas for growth in order to maintain high standards in quality of instruction, interactions with students and others, and personal development.
- B. Demonstrate understanding of ethical guidelines, policies, and procedures for educators in Texas as outlined in the Code of Ethics and Standard Practices for Texas Educators.
- C. Demonstrate knowledge of ways to apply campus and school district policies and procedures.
- D. Identify and apply legal requirements for educators (e.g., related to students' and families' rights, student discipline, record keeping, equity, OSHA regulations).
- E. Apply strategies for serving as an advocate for students and modeling ethical behavior for students, families, colleagues, and others.

**370: PEDAGOGY AND PROFESSIONAL RESPONSIBILITIES
FOR TRADE AND INDUSTRIAL EDUCATION 6–12
EXAMINATION FRAMEWORK**

Competency 009 (Professional Practice): *Apply strategies for collaborating with other professionals, maintaining professional relationships, and fulfilling professional duties.*

For example:

- A. Demonstrate understanding of the importance of participating in program, school, and community activities and performing professional responsibilities and duties outside the classroom setting.
- B. Demonstrate knowledge of the importance of identifying opportunities for and participating in relevant professional development activities and lifelong learning to enhance technical knowledge and pedagogical skills.
- C. Recognize the benefits of maintaining membership and participating in professional organizations (e.g., networking, access to resources, contributing to the profession, obtaining current technical and pedagogical information).
- D. Recognize the importance of establishing partnerships, maintaining relationships, and working effectively with internal and external partners.
- E. Apply knowledge of skills and procedures for organizing and working with advisory committees.
- F. Demonstrate understanding of the purpose and benefits of student organizations and the roles of advisors to such organizations.

DOMAIN V—CONSTRUCTED RESPONSE

Competency 010 (Constructed Response): *Apply appropriate pedagogical principles and knowledge of instructional methods to describe components of a lesson designed to achieve a specific learning objective.*

Note: Examinees' written responses will be scored only on pedagogical content knowledge. Written responses may be presented in any format that clearly communicates pedagogical content knowledge (e.g., essay, bullet points, outline).

For example:

- A. Identify one learning objective related to a field within trade and industrial workforce training, including a logical rationale for selecting the particular learning objective.
- B. Use appropriate pedagogical principles and effective instructional methods to describe an approach for promoting students' achievement of the learning objective.
- C. Describe instructional strategies for connecting students' prior knowledge, life experiences, and interests to the learning objective.
- D. Identify potential safety issues and discuss methods for securing student safety during instruction.
- E. Describe how instruction will be accessible to all students, including those with special needs.
- F. Describe appropriate assessment methods for evaluating student performance and achievement of the learning objective.