



Principles of Transportation Systems (Proc 17)

PRE-TEST/POST-TEST TEKS BLUEPRINT

Pre-Test/Post-Test Development Overview

TEKS Addressed Selection Process

The Texas Essential Knowledge & Skills (TEKS) included in the course pre-test and post-test were selected for their direct relevance to the course content. This selection process was guided by the goal of assessing learners' understanding of specific topics and skills that are integral to the course. As a result, TEKS related to general employability skills or broader topics were often excluded. This focus ensures that the assessments accurately measure students' mastery of the subject matter, allowing educators to gain a clear insight into areas where students excel or may need additional support. By concentrating on content-specific TEKS, the tests provide a more precise evaluation of the students' knowledge and understanding of the core material.

Test Question Development Process

The questions created for the pre-test and post-test were designed using psychometric principles to ensure they are of high quality and fairness. This approach helps to accurately assess student understanding. These principles guide the development of questions to be reliable, valid, and free from bias, ensuring that they effectively measure the knowledge and skills the students are expected to acquire in the course.

Principles of Transportation Systems (Proc 17) TEKS Pre-Test/Post-Test Blueprint

Knowledge & Skills Statement	Student Expectation	iCEV Lesson Title
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) demonstrate knowledge of personal and occupational health and safety	Workplace Issues
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(G) identify employers' expectations, appropriate work habits, ethical conduct, legal responsibilities, and good citizenship skills	Workplace Issues
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(H) explore career goals, objectives, and strategies as part of a plan for future career opportunities	Formulas for Career Success: Career Testing & Investigation
(2) The student develops leadership experience as it relates to transportation systems. The student is expected to:	(A) plan, propose, conduct, and evaluate industry-based occupational experiences	Formulas for Career Success: Career Testing & Investigation
(2) The student develops leadership experience as it relates to transportation systems. The student is expected to:	(B) apply proper record-keeping skills as they relate to industry-based occupational experiences	Records & Filing
(2) The student develops leadership experience as it relates to transportation systems. The student is expected to:	(C) use a customized record-keeping system for the individual industry-based occupational experiences	Records & Filing
(2) The student develops leadership experience as it relates to transportation systems. The student is expected to:	(D) discuss youth leadership opportunities to create a well-rounded industry-based occupational experience	Citizenship Basics
(2) The student develops leadership experience as it relates to transportation systems. The student is expected to:	(E) develop a work plan and budget	Business Workflow Business & Management Concepts
(3) The student explores concepts related to cultural diversity. The student is expected to:	(A) identify significant similarities and differences in international culture	The Cultures in International Business
(3) The student explores concepts related to cultural diversity. The student is expected to:	(B) explain the variety of world markets	Global Industry
(3) The student explores concepts related to cultural diversity. The student is expected to:	(C) describe marketing factors and practices that impact other cultures	Global Marketing
(4) The student understands the historical, current, and future significance of the transportation industries. The student is expected to:	(A) define terms associated with the transportation industries	Exploring Careers: Transportation, Distribution & Logistics
(5) The student analyzes the structure of transportation organizations. The student is expected to:	(A) describe common business management principles	Business & Management Concepts
(5) The student analyzes the structure of transportation organizations. The student is expected to:	(B) identify opportunities for leadership development and personal growth	Citizenship Basics
(5) The student analyzes the structure of transportation organizations. The student is expected to:	(C) demonstrate democratic principles in conducting effective meetings	Parliamentary Procedure Guidelines
(5) The student analyzes the structure of transportation organizations. The student is expected to:	(D) describe team dynamics	Teamwork & Collaboration
(5) The student analyzes the structure of transportation organizations. The student is expected to:	(E) describe the development of organizational vision, mission, and goals through the strategic planning process	Aspects of a Business Plan
(6) The student explains the transportation industries at the local, state, national, and international levels. The student is expected to:	(A) identify reasons for world trade and globalization	U.S. & International Trade
(7) The student demonstrates appropriate interpersonal and communication skills. The student is expected to:	(A) examine workplace ethical and legal responsibilities	Ethics in Business
(7) The student demonstrates appropriate interpersonal and communication skills. The student is expected to:	(B) define the uses of proper etiquette	Emily Post, Who?
(7) The student demonstrates appropriate interpersonal and communication skills. The student is expected to:	(C) identify appropriate personal appearance and health habits	Dressing, Emily Post Style
(7) The student demonstrates appropriate interpersonal and communication skills. The student is expected to:	(D) practice written and oral communication skills in formal and informal situations	Written Communication Practices
(7) The student demonstrates appropriate interpersonal and communication skills. The student is expected to:	(E) practice effective listening skills in formal and informal situations	Listening 101
(7) The student demonstrates appropriate interpersonal and communication skills. The student is expected to:	(G) employ writing and preparation skills using technical information	Written Communication Practices

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Knowledge & Skills Statement	Student Expectation	iCEV Lesson Title
(8) The student applies appropriate research methods for transportation systems. The student is expected to:	(B) identify and apply scientific methods of research in transportation industries	Scientific Procedures & Safety
(8) The student applies appropriate research methods for transportation systems. The student is expected to:	(C) use a variety of resources for research and development	Scientific Procedures & Safety
(8) The student applies appropriate research methods for transportation systems. The student is expected to:	(D) describe the scientific methods of research	Scientific Procedures & Safety
(9) The student applies problem-solving, mathematical, and organizational skills in order to maintain financial and logistical records related to transportation. The student is expected to:	(C) collect and organize data in graphs, tables, charts, and plots	Mathematics in the Workplace
(9) The student applies problem-solving, mathematical, and organizational skills in order to maintain financial and logistical records related to transportation. The student is expected to:	(D) analyze and interpret data from graphs, tables, charts, and plots	Mathematics in the Workplace
(10) The student uses information technology tools specific to transportation industries to access, manage, integrate, and create information. The student is expected to:	(A) use management software, email applications, and Internet applications	Microsoft® Outlook 2019 Basics - Unit 1 (Welcome to Microsoft® Outlook®)
(10) The student uses information technology tools specific to transportation industries to access, manage, integrate, and create information. The student is expected to:	(B) use word-processing, database, spreadsheet, and presentation software	Introduction to Microsoft® Office 2019 - Unit 3 (Excel) Introduction to Microsoft® Office 2019 - Unit 2 (PowerPoint)
(10) The student uses information technology tools specific to transportation industries to access, manage, integrate, and create information. The student is expected to:	(C) examine collaborative, groupware, and virtual meeting software	Skills for Real World Survival
(11) The student discusses methods to reduce workplace hazards in order to promote a safe working environment. The student is expected to:	(A) discuss safe work practices and emergency procedures	Workplace Issues
(11) The student discusses methods to reduce workplace hazards in order to promote a safe working environment. The student is expected to:	(C) demonstrate first aid and cardiopulmonary resuscitation procedures	First Aid Basics
(12) The student examines Texas Department of Public Safety regulations as related to the transportation industry. The student is expected to:	(F) identify types of transportation that supply warehouses and distribution centers	Distribution