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| **TEXAS CTE LESSON PLAN**  [www.txcte.org](http://www.txcte.org) | |
| **Lesson Identification and TEKS Addressed** | |
| **Career Cluster** | Transportation, Distribution & Logistics |
| **Course Name** | Principles of Distribution and Logistics |
| **Lesson/Unit Title** | Personal & Occupational Safety |
| **TEKS Student Expectations** | **130.443. (c) Knowledge and Skills**  (9) The student applies problem-solving, mathematical, and organizational skills to maintain financial and logistical records. The student is expected to:  (A) discuss safe work practices and emergency procedures  (B) identify rules and laws designed to promote safety and health in the distribution and logistics environments |
| **Basic Direct Teach Lesson**  (Includes Special Education Modifications/Accommodations and  one English Language Proficiency Standards (ELPS) Strategy) | |
| **Instructional Objectives** | **Students will…**   * Identify ways young workers get injured on the job. * Explain what a young worker should do if they see something at work that could harm them or make them sick. * Identify legal rights that all workers have to ensure a safe working environment. * Identify Child Labor Laws. * Identify different types of job hazards. * Identify three main ways to reduce or eliminate hazards at work. * Identify governmental agencies that enforce labor a job safety laws. |
| **Rationale** | In this lesson, students will learn and then demonstrate their knowledge of personal and occupational health and safety. |
| **Duration of Lesson** | 2 45-minute class periods |
| **Word Wall/Key Vocabulary**  *(ELPS c1a, c, f; c2b; c3a, b, d; c4c; c5b) PDAS II (5)* | * Safety hazards: can cause immediate accidents and injuries. (Examples: knives, hot grease, etc.) * Chemical hazards: are gases, vapors, liquids, or dusts that can harm your body. (Examples: cleaning products or pesticides.) * Biological hazards: are living things that can cause sickness or disease. (Examples: bacteria, viruses, or insects.) * Other health hazards: are harmful things, not in other categories, that can injure you or make you sick. They are sometimes less obvious because they may not cause health problems right away. (Examples: noise, radiation, repetitive movements, heat, cold) * “Pressure Cooker or Unspoken” hazards: May include unsafe equipment or procedures, emergency situations: fires, explosions, severe injury, violence, stressful conditions, inadequate training, inadequate supervision, deadlines, production requirements, etc. |
| **Materials/Specialized Equipment Needed** | * Dry-erase board or flip chart & markers. * Power Point slides – laptop and LCD projector (this is a large PPT – instructors may want to reduce the number of slides). * Computer with internet access, if available. * Handouts (if necessary – 65 pages) |
| **Anticipatory Set**  (May include pre-assessment for prior knowledge) | Explain the risk factors associated with young workers:   * Hazards on the job * Inexperienced * Developmental factors * Working in violation of child labor laws * Lack of training and supervision   Discuss the statistics associated with young workers in the workplace.  Engage the students in a warm-up discussion related to their own personal work-related experiences.  Ask the students:  • Have you ever been hurt at work, or do you know someone who was?  • Have you ever been uncomfortable with a task you’ve been asked to do at work?  Provide time for the class to discuss their answers. |
| **Direct Instruction \*** | Discuss with the students the basic definition of a job hazard. Explain the wide range of possible job hazards. Tell the students that hazards can be divided into four categories:   * **Safety hazards** can cause immediate accidents and injuries. (Examples: knives, hot grease, etc.) * **Chemical hazards** are gases, vapors, liquids, or dusts that can harm your body. (Examples: cleaning products or pesticides.) * **Biological hazards** are living things that can cause sickness or disease. (Examples: bacteria, viruses, or insects.) * **Other health hazards** are harmful things, not in other categories, that can injure you or make you sick. They are sometimes less obvious because they may not cause health problems right away. (Examples: noise, radiation, repetitive movements, heat, cold, stress.) * “**Pressure Cooker or Unspoken**” hazards (unsafe equipment or procedures; emergency situations: fires, explosions, severe injury, violence; stressful conditions; inadequate training; inadequate supervision; deadlines, production requirements, etc.)   On the flipchart, draw three columns: hazard, effect, and possible solutions. Using the list created during task 2 of Section C, list the job hazards in the first column. Ask the class what the effect would be for each of these hazards. After discussing the effects for a couple of minutes, discuss with the class the possible solutions for removing the hazard.  Explain to the class that there are often several ways to control a hazard, but that some methods are better than others. Go over with the class the three main control methods:   * remove the hazards * improve work policies and procedures * use protective clothing and equipment   Explain to the class how removing the hazard prevents all the responsibility for safety from falling on an individual worker. Then discuss how in the absence of the ability to remove the hazard, workplace policies and procedures can help to reduce employee exposure to hazards. Finally, personal protective equipment is the least effective way to control hazards.  *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **Guided Practice \*** | **Students will…**   * Work together with a partner, team, or small group to review and discuss provided resource links as shown on slide 14.   *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **Independent Practice/Laboratory Experience/Differentiated Activities \*** | **Students will…**   * Categorize each of the solutions with: 1- removing the hazard 2- a workplace policy or procedure 3- personal protective equipment. If time does not permit to classify all the solutions, just select a couple to highlight/discuss.   *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **Lesson Closure** | **Students will…**   * Discuss and review the objectives of this lesson, as outlined in the beginning of this lesson plan.   *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **Summative/End of Lesson Assessment \*** | **Students will…**   * Complete a post-lesson questionnaire.   *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **References/Resources/**  **Teacher Preparation** | * Complete lessons, including Spanish, available at: <https://www.osha.gov/dte/grant_materials/fy10/sh-20848-10.html> * Occupational Safety and Health Administration (OSHA) [www.osha.gov](http://www.osha.gov) and <http://www.youth2work.gov/> * National Institute of Occupational Safety and Health (NIOSH) <http://www.cdc.gov/niosh/topics/youth/> * Gulf Coast Safety Institute [www.com.edu/gcsi](http://www.com.edu/gcsi) |
| **Additional Required Components** | |
| **English Language Proficiency Standards (ELPS) Strategies** |  |
| **College and Career Readiness Connection[[1]](#footnote-1)** |  |
| **Recommended Strategies** | |
| **Reading Strategies** |  |
| **Quotes** |  |
| **Multimedia/Visual Strategy**  **Presentation Slides + One Additional Technology Connection** |  |
| **Graphic Organizers/Handout** |  |
| **Writing Strategies**  **Journal Entries + 1 Additional Writing Strategy** |  |
| **Communication**  **90 Second Speech Topics** |  |
| **Other Essential Lesson Components** | |
| **Enrichment Activity**  (e.g., homework assignment) |  |
| **Family/Community Connection** |  |
| **CTSO connection(s)** | DECA, SkillsUSATexas |
| **Service Learning Projects** |  |
| **Lesson Notes** |  |

1. Visit the Texas College and Career Readiness Standards at <http://www.thecb.state.tx.us/collegereadiness/CRS.pdf>, Texas Higher Education Coordinating Board (THECB), 2009. [↑](#footnote-ref-1)