**TEXAS CTE LESSON PLAN**

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| **Lesson Identification and TEKS Addressed** | |
| **Cluster** | Human Services |
| **Course** | Dollars and Sense |
| **Lesson/Unit Title** | My World, My Future |
| **TEKS Student Expectations** | **130.273. (c) Knowledge and Skills**  (5) The student analyzes the relationship of the environment to family and consumer resources.  (A) The student is expected to analyze individual and family responsibilities in relation to environmental trends and issues  (B) The student is expected to summarize environmental trends and issues affecting families and future generations  (C) The student is expected to demonstrate behaviors that conserve, reuse, and recycle resources to maintain the environment  (D) The student is expected to explain government regulations for conserving natural resources |
| **Basic Direct Teach Lesson** | |
| **Instructional Objectives** | **Students will:**   * Research environmental trends and issues that may affect their future * Evaluate environmental trends and issues and how they are affecting families now and how they will affect future generations * Conserve, reuse/repurpose and recycle resources found in their environment * Identify government regulations for conserving natural resources |
| **Rationale** | Think about all the things you throw away every day; paper, plastic bottles, food, or clothes. Where do they go? What happens to them? How will it affect future generations? Could you have recycled some of those items? Why is it important to recycle and not be wasteful? How many of you/your families already practice or promote recycling? Why would an individual NOT practice recycling?  In this lesson, we are going to learn about environmental issues currently affecting our families and our future. You will also have opportunities to practice the skills you learn. |
| **Duration of Lesson** | Three 45-minute class periods |
| **Word Wall** | **Climate change**: Change in long-term weather patterns over time (including precipitation, temperature, and wind)  **Conservation**: Protection of valued resources the preservation, management, and care of natural and cultural resources  **Ecology**: The study of relationships among organisms with each other and with their environments  **Environment**: The complex of physical, chemical, and biotic factors (as climate, soil, and living things) that act upon an organism or an ecological community and ultimately determine its form and survival  **Living**: Has life  **Natural resources**: Things found in nature that are useful to humans, such as trees, and fish  **Non-living**: Without life  **Population**: The total number of people living in a country, city, or other defined area  **Resource consumption**: The process of using natural resources, materials, or finished products to satisfy human wants or needs |
| **Materials/**  **Specialized Equipment Needed** | **Equipment:**   * Computer with projector for PowerPoint presentation * Computers with Internet access (be sure to follow district guidelines for Internet access) * Presenter remote   **Materials:**   * Magazines * Markers * Music * Note cards * Poster board * Copies of handouts   **PowerPoint:**   * My World, My Future   **Technology:**   * Free iPad App:   + iRecycle<https://itunes.apple.com/us/app/irecycle/id312708176?mt=8> * Infographic:   + How Does Recycling Work? Green T&T, which can give you lots of information about how you can recycle, who collects, who operates bins, and a wealth of other tips about greening your lifestyle and beginning your own recycling program at your home and/or office.<http://www.meppublishers.com/content/index.php/mep-partners-with-piranha-for-full-scale-recycling-programme/#axzz3X1KYvFnd> * TED Talk:   + Leyla Acaroglu: Paper beats plastic? How to rethink environmental folklore Most of us want to do the right thing when it comes to the environment. But things aren’t as simple as opting for the paper bag, says sustainability strategist Leyla Acaroglu. A bold call for us to let go of tightly-held green myths and think bigger in order to create systems and products that ease strain on the planet.<http://www.ted.com/talks/leyla_acaroglu_paper_beats_plastic_how_to_rethink_environmental_folklore>   **YouTube**®**:**   * Granger upgrades curbside recycling program Uploaded by CedraMayfield on Jan 11, 2010 Granger Waste Management launches new curbside recycling program that includes boxboard and cardboard.<http://youtu.be/ju-E36kmpDI>   **Graphic Organizer:**   * Note Taking Wheel   **Handouts:**   * Plan for Conserving Energy at Home * Rubric |
| **Anticipatory Set** | **Prior to class:**  Display as many of the lesson-related materials as you have available on a table in front of the room.  Become familiar with PowerPoint, handouts, and activities.  **Before class begins:**  Have a video or song related to the topic playing while students are entering the classroom. You may also consider locating the lyrics to the song and providing them to the students.  Examples:   * Mercy, Mercy Me (The Ecology Song) by Marvin Gaye  Only use Marvin Gaye’s version, other versions may be inappropriate for classroom use. * Earth Song by Michael Jackson * Wind on the Water by Crosby Stills and Nash * The Lion Sleeps tonight by The Tokens * We are the World by Michael Jackson   Inform students of the lesson topic “Conservation: My World, My Future”. Ask for feedback on the title.  Discussion questions:   * What does the term “My World” mean to you? * How far does your world extend? * Do things that happen far away from you affect what you consider to be your world? * What does conservation mean? * How does conservation relate to your world? * Who is Al Gore? What has he done to promote environmental awareness?   Allow for questions and discussion. |
| **Direct Instruction with Special Education Modifications/**  **Accommodations** | Prior to slide presentation, provide student with instructions and Note Taking Circle to be used for new terms and definitions. Begin slide presentation, My World, My Future.  As terms and definitions are discussed, allow for questions and check for understanding. Teacher notes Extended Script and Questions for Slide Presentation are provided.  What are the government regulations for conserving natural resources?  What are five ways people can promote a healthful environment? View <http://definitions.uslegal.com/c/conservation-of-resources/> to identify government regulations. Discuss the importance of government regulations to conservation of natural resources.  Allow time for questions and discussion.  *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*   * providing a copy of the completed note taking handout to assist students in filling out their blank copy * providing partially completed slide presentation notes with some blanks |
| **Guided Practice with Special Education Modifications/Accommodations** | Students will create a plan to conserve energy at home. Distribute handout, Plan to Conserve Energy at Home. Allow students to brainstorm ways to recycle, reuse/repurpose and conserve energy in their homes.  Examples: grocery shopping bags reused as trashcan liners, plastic bottles can be placed in recycle bin, turn jeans into shorts by cutting off the jean legs and hemming and so forth.  Students will write all ideas on their paper. Students will then circle all the ways they are going to recycle, reuse/repurpose and conserve energy at home.  Student will share this assignment with their family and encourage family members to assist with this effort. Students will receive extra credit weekly for keeping a log of their plan for the remainder of the school year.  *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*   * providing frequent teacher/student contact to help students remain on task * offering encouragement and praise |
| **Independent Practice/Laboratory Experience with Special Education Modifications/**  **Accommodations** | **Scenario:** You have been hired by the United States government to research an environmental trend or issues that may affect our future. Provide students with instructions for a conservation research project which will consist of a visual and oral presentation. Allow students time to brainstorm project ideas. Ideas may include topics such as global warming, water conservation, endangered species. Issues may be local, national, or worldwide.  Review the components of the Rubric so that the students will know what is expected.  Students may work collaboratively in teams of two or independently.  Computer lab will be utilized for Internet research. Students may use online databases such as World Book Online, Encyclopedia Britannica and so forth. These databases will introduce students to information from reliable sources. See your librarian for additional resources and references.  Visual and oral presentations will be made during lesson closure and assessed by previously discussed rubric.  *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*   * providing project topic * providing extra time for completion |
| **Lesson Closure** | Review terms, definitions, and lesson objectives.  Each student will take a turn telling the class one thing they will personally do differently to protect “their world, their future” based on the knowledge they learned from this lesson. |
| **Summative/End of Lesson Assessment with Special Education Modifications/**  **Accommodations** | Students will present their oral and visual projects to the class. Presentations/projects will be assessed with previously provided rubric.  *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*   * providing immediate feedback * continuously check for understanding * shortening the length or format of written assignment * encouraging participation * extending “wait time” for oral response |
| **References/**  **Resources** | **Images:**   * Microsoft Clip Art: Used with permission from Microsoft®.   **Websites:**   * Energy Teachers The network for educators interested in energy resources and uses.<http://energyteachers.org/projects.php> * Glogster – Poster Yourself A Glog is a unique creation made up of text, images, music, and video. <http://www.glogster.com/> * State Energy Conservation Office (SECO) SECO partners with Texas consumers, businesses, educators, and local governments to reduce energy costs and maximize efficiency.<http://www.seco.cpa.state.tx.us/> * State of Texas Alliance for Recycling Recycling information, news, and events.<http://recyclingstar.org/> * Tools for Zero Waste Schools Waste Reduction for K – 12 Provides students, teachers, school administrators, local recycling coordinators and community activists with the tools that have been developed by their peers to achieve zero waste in their K-12 school systems.<http://www.kidsrecycle.org/overview.php> |
| **Additional Required Components** | |
| **English Language Proficiency Standards (ELPS) Strategies** | * Word Wall * Sentence starters to reinforce concepts * Visual representations of terms and definitions |
| **College and Career Readiness Connection[[1]](#footnote-1)** |  |
| **Recommended Strategies** | |
| **Reading Strategies** | Current Events: Assign students to read about conservation. Information can be found in newspaper articles, magazines, journals, and online print.  Suggestions:   * What Can I Recycle?<http://www.wm.com/thinkgreen/what-can-i-recycle.jsp>   Partner Reading Strategy – This strategy involves two students reading together to process the information in the article. Each can alternate a paragraph while the other one summaries OR one can read and the other student summarizes the article and asks questions. |
| **Quotes** | Thank God men cannot fly, and lay waste the sky as well as the earth. **-Henry David Thoreau**  In America, today you can murder land for private profit. You can leave the corpse for all to see, and nobody calls the cops. **-Paul Brooks, The Pursuit of Wilderness, 1971**  We do not inherit the earth from our ancestors; we borrow it from our children. **-Native American Proverb**  Because we don’t think about future generations, they will never forget us. **-Henrik Tikkanen**  The activist is not the man who says the river is dirty. The activist is the man who cleans up the river. **-Ross Perot** |
| **Writing Strategies** | **Journal Entries:**   * It is important to save and conserve energy because……. * I can help conserve energy by………. * Businesses can do their part of conserving energy by………   **Writing Strategy:**   * RAFT strategy: students place themselves in the role of the writer.   + Role: Student   + Audience: Their parents   + Format: Letter   + Topic: We need to conserve energy at home by……. * Students will each write a one-page personal reflection on what they learned from this lesson and how they plan to use the information now and in the future. Students will proofread and edit each other’s work prior to submitting for assessment.   **Writing Prompt:**   * Imagine that you have a summer job with someone who is wasteful, write an essay persuading them to understand the importance of saving and conserving energy. |
| **Communication 90 Second Speech Topics** | * If I could make the world a cleaner place I would… * My community helps keep the city clean by…. |
| **Other Essential Lesson Components** | |
| **Enrichment activity** | * TED Talk: TEDx is a program of local, self-organized events that bring people together to share a TED-like experience. At a TEDx event, TEDTalks videos and live speakers combine to spark deep discussion and connection in a small group. These local, self-organized events are branded TEDx, where x = independently organized TED event. The video below is related to this lesson. Allow students to view the video and lead a discussion concerning the TED Talk.   + Leyla Acaroglu: Paper beats plastic? How to rethink environmental folklore Most of us want to do the right thing when it comes to the environment. But things aren’t as simple as opting for the paper bag, says sustainability strategist Leyla Acaroglu. A bold call for us to let go of tightly-held green myths and think bigger in order to create systems and products that ease strain on the planet.<http://www.ted.com/talks/leyla_acaroglu_paper_beats_plastic_how_to_rethink_environmental_folklore> * America Recycles Day is November 15. Students can organize a Recycle Awareness Drive.  State of Texas Alliance for Recycling<http://recyclingstar.org/> Recycling information, news, and events. * Earth Day is April 22. Students can research and develop a conservation community event. * Students will research and create a graph depicting use of natural resources by future populations.   Dollars and Sense – Writing Prompts  The student analyzes the relationship of the environment to family and consumer resources. The student is expected to:   * Analyze individual and family responsibilities in relation to environmental trends and issues * Explain government regulations for conserving natural resources   Think about individual and family responsibilities in relation to environmental trends and issues. Write an essay in which you state your position on individual and family responsibilities in relation to environmental trends and issues. (10th and 11th grade persuasive writing)  Think about government regulations for conserving natural resources. Write an essay explain government regulations for conserving natural resources. (9th and 10th grade expository writing) |
| **Family/Community Connection** | Students can create interview questions to ask parents, grandparents, or other adults regarding how the environment has changed over the course of their lives.  Students can research the changes that have taken place in their neighborhoods. |
| **CTSO connection** | Family, Career, and Community Leaders of America (FCCLA)<http://texasfccla.org>  **FCCLA—Community Service Project** Students will work with their community to provide information and training for recycling plastic, paper, and glass.  The FCCLA Community Service program guides students to develop, plan, carry out, and evaluate projects that improve the quality of life in their communities. Community Service helps young people build skills for family, career, and community roles; provides youth-centered learning experiences related to Family and Consumer Sciences education; and encourages young people to develop the positive character traits of trustworthiness, respect, responsibility, fairness, caring, and citizenship |
| **Service Learning Projects** | Successful service learning project ideas originate from student concerns and needs. Allow students to brainstorm about service projects pertaining to lesson. For additional information on service learning see<http://www.ysa.org/>  Students can conduct a project through Keep America Beautiful; Litter prevention, waste reduction and recycling or just through beautification actions in the neighborhood.  Keep America Beautiful<http://www.kab.org/site/PageServer?pagename=index>  Example of Project -Saving Our World Students will practice their conservation skills by conducting a project through Keep America Beautiful.   * Brainstorm needs of the community * Conduct research of the community/neighborhood which they are going to beautify. Where is it, the distance from the school, how will they get there (transportation needs) costs, method of beautifying the neighborhood and timeline for the project. They will identify a community venue with a need then provide the support. * The students will contact the neighborhood association at the community venue to discuss the service learning project. * They will list the materials, costs, and resources for the project. Students will determine roles and responsibilities of the project. * Students will schedule the trip and make the necessary arrangements at school. * Beautify the neighborhood. * Volunteer their time and energy to the community venue. * As a reflection, the students will evaluate how their conservation skills aided them in assisting and serving at community project. Do they feel they had a positive impact at the community venue and school? Compare and contrast the positive impact the project had on class members before they started the project and after the project was completed. Did the project achieve its purpose? What might you do differently next time?   Allow students to debrief and discuss what they gained from this experience.  Students will write a personal reflection on what they learned from the experience and how this knowledge will help them in the future. |

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)