



*North East Independent School District*

*Cibolo Green Elementary*

*"Leaving Footprints on our Future"*

24315 Bulverde Green  
San Antonio, TX 78261

January 28, 2010

To Whom It May Concern:

Cibolo Green Elementary, a North East ISD school, is located at 243 15 Bulverde Green Road, in the Bulverde Village subdivision. Opening in August, 2010, it will be one of the first "green" schools in San Antonio. Our school was designed around LEED components such as energy and water conservation, utilization of recycled and nontoxic construction materials, indoor environmental quality, site sustainability, design innovation, and use of the building as an instructional tool for students and the community.

On June 23, 2010, our teachers met with Manuel Garza, a Pfluger Associates architect and LEED accredited professional who was part of our school's design team. He presented information about the components of LEED Certification, with a focus on the innovation credit 3: School as a Teaching Tool. Our teams then worked collaboratively to develop curriculum that integrated features from our building as they related to the LEED components, NEISD scope and sequence for state-required objectives/skills, and 2010 Science TEKS (Texas Essential Knowledge and Skills), our state standards. The following sustainable building and site features are incorporated into the curriculum:

- bicycle racks
- bus loop
- bus stop
- open space
- recycling bins
- recycled materials
- regional materials
- rapidly renewable materials
- certified wood
- water efficient plumbing fixtures
- water efficient process water items
- water efficient landscaping
- high-SRI roofing
- shielded exterior lighting fixtures
- MERV 13 filters
- non-smoking campus
- low-emitting materials
- occupancy sensors
- energy efficient building envelope
- stormwater management
- integrated pest management
- green cleaning
- the preferred parking spaces for low-emitting and fuel efficient vehicles
- carpool lane for low-emitting and fuel efficient vehicles
- parent drop off anti-idling program
- Energy Star equipment & appliances
- Acoustical performance

Each grade level and our enrichment team have written at least 10 hours of rich, highly interactive lessons that support the innovative credit.

Sincerely,

Ivonna Gonzales, Ed.D.  
Principal

## Kindergarten LEED Curriculum

Kindergarten at Cibolo Green Elementary will integrate Sustainability through our Science Curriculum by applying NEISD scope and sequence, 2010 Science TEKS (Texas Essential Knowledge and Skills), and satisfying LEED requirements to be certified as a green school.

Lesson Plan	Sustainable Features Incorporated
<p>Transportation (2.5 hours) – LEED SS 4, SS 10; TEKS: K.1</p> <ul style="list-style-type: none"> <li>○ SW Classify types of transportation including land, air, and water. In small groups Ss will sort pictures of transportation by land air and water. (30 min)</li> <li>○ SW will create KWL chart by activating prior knowledge of Public Transportation (outsourc public speaker) (30 min)</li> <li>○ SW discuss the importance of safe practices regarding Bike Safety (30 min)</li> <li>○ SW determine the environmental benefits of community modes of transportation through physical representation. Students will expolore public transportation options available at the school by <b>walking to the bicycle racks, bus loop and/or bus stops and learning about proper procedures for using these modes of transportation.</b> (1 hour)</li> </ul>	<ul style="list-style-type: none"> <li>● Bicycle racks</li> <li>● Bus loop</li> <li>● Bus stops</li> </ul>

## Kindergarten LEED Curriculum

Kindergarten at Cibolo Green Elementary will integrate Sustainability through our Science Curriculum by applying NEISD scope and sequence, 2010 Science TEKS (Texas Essential Knowledge and Skills), and satisfying LEED requirements to be certified as a green school.

Lesson Plan	Sustainable Features Incorporated
<p>Earth Resources / Outside Toxins (2.5 hours) LEED SS P1, SS 1, SS 6; TEKS: K.2, K.7</p> <ul style="list-style-type: none"> <li>○ SW observe and describe the physical properties of Earth’s natural resources through school wide scavenger hunt: Outdoor investigations <b>in the open space areas of the campus</b> (30 min)</li> <li>○ SW distinguish between games that are damaging and not damaging to the environment by looking for evidence of games that harmful (Project WILD pg. 432) (30 min)</li> <li>○ SW identify and discuss the sources of water, land and air Pollution to focus on how to re-use water efficiently. SW create a “Let’s Stop Pollution” poster to inform others about pollution and display around the school. (30 min)</li> <li>○ SW determine the effects of littering by identifying and evaluating ways that litter pollution can endanger the environment. Project WILD pg. 434) (30 min)</li> <li>○ SW propose ways to recycle and reuse various forms of waste. Will be introduced with smart board use and <a href="http://www.starfall.com">www.starfall.com</a>. <b>Students will create an art project by using trash and material from the school recycling bins.</b> (Trash to Treasure) (30 min)</li> </ul>	<ul style="list-style-type: none"> <li>• Open space</li> <li>• Recycling Bins</li> </ul>

## Kindergarten LEED Curriculum

Kindergarten at Cibolo Green Elementary will integrate Sustainability through our Science Curriculum by applying NEISD scope and sequence, 2010 Science TEKS (Texas Essential Knowledge and Skills), and satisfying LEED requirements to be certified as a green school.

Lesson Plan	Sustainable Features Incorporated
<p>Animals Basic Needs / Protecting Habitats (2.5 hours) – LEED SS P2, SS 5; TEKS: K.9, K.10</p> <ul style="list-style-type: none"> <li>○ <b>SW participate as “Wildlife Explorers” observing nature and looking for signs of wildlife in the open space areas of the campus.</b> SW recognize the characteristics of wildlife and provide examples. They will then record their findings in their science journal. Outdoor investigations (1 hour)</li> <li>○ SW interact with smart board using human and animal habitat website at <a href="http://www.abpischools.org.uk">www.abpischools.org.uk</a> (30 min)</li> <li>○ SW define what makes an animal an endangered species. SW participate in Oh Deer animal habitat game where they will recognize how animals depend on their habitats and how they can be affected with limited resources. (1hour)</li> </ul>	<ul style="list-style-type: none"> <li>• Open space</li> </ul>

## Kindergarten LEED Curriculum

Kindergarten at Cibolo Green Elementary will integrate Sustainability through our Science Curriculum by applying NEISD scope and sequence, 2010 Science TEKS (Texas Essential Knowledge and Skills), and satisfying LEED requirements to be certified as a green school.

Lesson Plan	Sustainable Features Incorporated
<p>Matter and Energy / Minimizing Heat Island Effect (2.5 hours)                      – LEED SS 7, SS 8; TEKS: K.2, K.5, K.6, K.8</p> <ul style="list-style-type: none"> <li>○ SW describe and compare the difference in temperatures of various surfaces affected by the sun during outdoor investigations. They will then record their findings in their science journal. (1 hour)</li> <li>○ SW recognize and generalize that wildlife exists in many colors by creating colorful representations of wild animals. (Project WILD pg.2) Hot/Cold Sorts using AIMS curriculum (30 min)</li> <li>○ SW be guided through the scientific process in which they will recognize the difference in temperatures based on heat absorption and light reflected materials.  <u>Lesson will include a discussion of the high SRI roofing material used at the school and how it keeps the building cool.</u> (30 min)</li> </ul> <p>SW compare the differences between a city sky and a country sky at night and the effects of Light Pollution. <u>Lesson will include a discussion on how light pollution is minimized at the school (i.e. exterior lamps are shielded or point downward instead up pointing up towards the sky).</u> (30 min)</p>	<ul style="list-style-type: none"> <li>• High SRI roofing</li> <li>• Shielded exterior lighting fixtures</li> </ul>

## First Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b><u>Materials and Resources 1.1C (1 hour)</u></b>  <b><u>The students will go on a discovery walk around campus searching for items that have been taken from the earth and are used in the school. Students will learn about the recycled materials, regional materials, rapidly renewable materials and FSC certified wood materials that were used in the construction of the school.</u></b> This lesson will promote the reduction of waste as well as encourage reusing and recycling materials.</p> <ul style="list-style-type: none"> <li>Identify and learn how to use natural resources and materials including conservation and reuse or recycling of paper, plastic and metals</li> </ul>	<ul style="list-style-type: none"> <li>Recycled content materials</li> <li>Regional materials</li> <li>Rapidly renewable materials</li> <li>FSC certified wood materials</li> </ul>
<p><b><u>Water Efficiency 1.7B (2 hours)</u></b>            Teachers will invite a representative from the San Antonio Water System (SAWS) to discuss kid-friendly ways to be water efficient. <b><u>The representative will also discuss ways our school is built to be water efficient: low-flow plumbing fixtures, reduced water use in process water items, and water efficient landscaping.</u></b>            The students will discuss differences between being water efficient and not. Students will be expected to take photos showing water conservation and wasting water. The pictures will be used to make a presentation that incorporates technology.</p> <ul style="list-style-type: none"> <li>Identify and describe a variety of natural sources of water, including streams, lakes and oceans</li> </ul>	<ul style="list-style-type: none"> <li>Low-flow plumbing fixtures</li> <li>Reduced water consumption process water items</li> <li>Water efficient landscaping</li> </ul>

## First Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b><u>Sustainable Sites 1.9C (4 hours)</u></b>            The students will take a field trip to the Botanical Gardens to discuss plants that are native to Texas and how they affect the ecosystem.  <b>Upon return, students will apply information to the water efficient landscaping on our campus.</b></p> <ul style="list-style-type: none"> <li>Gather evidence of interdependence among living organisms</li> </ul>	<ul style="list-style-type: none"> <li>Water efficient landscaping</li> </ul>
<p><b><u>Indoor Environmental Quality 1.1B (2 hours)</u></b>            The teacher will discuss with students the harmful particles in the air and water and how it affects our health. The teacher will bring in various filters to demonstrate how it acts as a barrier to stop those harmful particles from entering our indoor environment and our bodies.  <b>The teacher will discuss with the students how the MERV 13 filters used in our school are designed to block even more harmful particles from entering our school, and will learn about proper filter maintenance.</b>            The teacher will discuss the harmful effects of smoking and how it affects our health. <b>The teacher will discuss how our school is a no-smoking environment and how there are places in our community that do not allow smoking. The teacher will discuss how our school used/uses low-emitting paint, glue and cleaning supplies in order to improve the quality of our school's indoor air.</b>            Students will kinesthetically demonstrate how a filter works and will be able to make connections of how indoor air quality affects all of us.</p> <ul style="list-style-type: none"> <li>Recognize the importance of safe practices to keep self and others safe and healthy</li> </ul>	<ul style="list-style-type: none"> <li>MERV 13 filters</li> <li>Non-smoking campus</li> <li>Low-emitting materials</li> <li>Green cleaning program</li> </ul>

## First Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b><u>Energy and Atmosphere 1.6A (2 hours)</u></b>            Teachers will invite a representative from City Public Service (CPS) to discuss kid-friendly ways to be energy efficient. <b>The representative will also discuss ways our school is built to be energy efficient: occupancy sensors, daylighting, energy efficient envelope.</b>            The teacher will discuss the lighting in our classroom and how it is energy efficient. The teacher will discuss with students the importance of shutting off lights in order to conserve energy</p> <ul style="list-style-type: none"> <li>Identify and discuss how different forms of energy such as: light, heat and sound are important to everyday life</li> </ul>	<ul style="list-style-type: none"> <li>Occupancy sensors</li> <li>Daylighting</li> <li>Energy efficient building envelope</li> </ul>
<p><b><u>Materials and Resources 1.1C (3 hours)</u></b>            The teacher will discuss how long it takes various materials to decompose. <b>The students will use materials from the recycling bins in the school in order to create artwork that will be displayed in the school.</b></p> <ul style="list-style-type: none"> <li>Identify and learn how to use natural resources and materials including conservation and reuse or recycling of paper, plastic and metals</li> </ul>	<ul style="list-style-type: none"> <li>Recycling bins</li> </ul>

## Second Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p>“Landform Unit” 1 Hour dedicated to forests.            Students will identify landforms including forests. <b>Students will learn about the Forest Stewardship Council, and will identify FSC certified wood materials throughout the campus.</b></p>	<ul style="list-style-type: none"> <li>• FSC certified wood</li> </ul>
<p>“Forest for the Trees” 1 Hour            Students will role-play managing a Tree Farm to understand the economic factors that influence decisions made for private forest lands. <b>Students will learn about the Forest Stewardship Council, and will identify FSC certified wood materials throughout the campus.</b></p>	<ul style="list-style-type: none"> <li>• FSC certified wood</li> </ul>
<p>“Plant a Tree” 1 Hour            Students will trace a paper product from its natural resource, then plant a tree. <b>Students will observe environmentally preferable paper products throughout the school, recycled content janitorial supplies, recycled content and FSC certified paper products.</b></p>	<ul style="list-style-type: none"> <li>• Green cleaning program</li> <li>• Recycled content materials</li> <li>• FSC certified paper products</li> </ul>
<p>“Three Cheers for Trees” 1 Hour            Students will describe the social, environmental, and economic benefits of trees in their community. They will visualize how their community would be different without trees and think about how much trees add to people’s lives. <b>Students will learn about the Forest Stewardship Council, and will identify FSC certified wood materials throughout the campus.</b></p>	<ul style="list-style-type: none"> <li>• FSC certified wood</li> </ul>

## Second Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><u>“Litter We Know”</u> 2 Hours</p> <p>Students will:</p> <ol style="list-style-type: none"> <li>1. Identify and evaluate ways that litter pollution can endanger wildlife, and</li> <li>2. Propose ways to help eliminate these dangers to humans and wildlife</li> <li><b>3. Students will collect and evaluate litter by making collages from materials found in the school recycling bins.</b></li> </ol>	<ul style="list-style-type: none"> <li>• Recycling bins</li> </ul>
<p><u>“Campus Recycling Program”</u> Ongoing</p> <p><b>Students will implement an ongoing campus-wide recycling incentive program utilizing our “Green Star” recycling bins. The bins will be located on each floor, paper being separate from everything else.</b></p>	<ul style="list-style-type: none"> <li>• Recycling bins</li> </ul>
<p><u>“Greenstar Recycling Plant Presentations”</u> 2 on-site presentations 1 hour each.</p> <p>1228 Cornerway Blvd near Loop 410 and I-10</p> <p>Students will observe / identify environmentally sustainable behaviors.</p> <p><b>Students observe how their local community and school district recycles aluminum, steel, plastic, glass, cardboard and paper.</b></p> <p>Presenters will visit campus beginning of year to teach their “fun facts” about recycling. Later in the year a presentation topic will be centered around their “fun in a load truck”.</p>	<ul style="list-style-type: none"> <li>• Recycling bins</li> </ul>

## Second Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><u>KLRN video: 1 hour</u> Students will watch a video from KLRN about rocks and minerals to see how these resources are used on a daily basis. <b>Students will apply what they learn by making observations of rocks and minerals located throughout the school building and in the open space areas of the school.</b></p>	<ul style="list-style-type: none"><li>• Open space</li></ul>
<p><u>Vulcan Field Trip: 3 hours</u> Students will take a tour to Vulcan Quarry to study local materials and their various uses. <b>Students will learn how and why local material were included in the construction of the school.</b></p>	<ul style="list-style-type: none"><li>• Regional materials</li></ul>
<p><u>KWL Chart: 1 hour</u> Teacher will make a KWL chart to discuss what information students <u>know</u> and what they <u>want</u> to know about recycled materials. <b>Once the scavenger hunt is complete the teacher will call upon students to share what they learned about recycled materials.</b></p>	<ul style="list-style-type: none"><li>• Recycled materials</li></ul>

## Second Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p>Scavenger Hunt: 2 hours</p> <p><b>Teacher takes the students on a scavenger hunt to explore the different areas of the school and which materials used were made from recycled, rapidly renewable, regional, and FSC certified wood materials.</b> Each class will explore a different section of the school. Students will independently record their observations in their science journals. Once the hunt is complete teachers will reconvene with teams and discuss their observations of the different explored areas of the school. <b>Teachers and students will also discuss the recycled rapidly renewable, regional, and FSC certified wood materials were used in the building of the school and what happened to extra materials that were not needed.</b> When a list of all observations is developed, it will be displayed for everyone to see.</p>	<ul style="list-style-type: none"><li>• Recycled content materials</li><li>• Rapidly renewable materials</li><li>• Regional materials</li><li>• FSC certified wood materials</li></ul>

## Third Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>SAWS H<sub>2</sub>O UNIVERSITY PHILOSOPHY OF LEARNING (1 hour)</b></p> <p>The core of this lesson is to enhance the students' awareness and knowledge of water in our society. Students will become more sensitive to economic, social, political and ecological interdependence in urban and rural areas. They will develop their ability to perceive and discriminate among stimuli, and to process, refine, and extend these perceptions. This educational journey will help students to acquire a basic understanding of how the environment functions, how people interact with the environment, and how issues and problems dealing with the environment arise and how they can be resolved. Learning guides will begin class discussion to explore students' prior knowledge of the water cycle and identify misconceptions using the following questions:</p> <ul style="list-style-type: none"><li>• Does the earth have more or less water now than 1,000 years ago? Explain.</li><li>• From where does water this is on the ground come? <b>Students will learn about the water efficient landscaping features of the school.</b></li><li>• How does water get into the oceans?</li><li>• What are clouds? What are clouds made of? How does rain form?</li><li>• <b>How does water come out of the faucet? Students will learn about the water efficient plumbing fixtures located throughout the school.</b></li></ul>	<ul style="list-style-type: none"><li>• Water efficient landscaping</li><li>• Water efficient plumbing fixtures</li></ul>

## Third Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>H<sub>2</sub>O Heroes Presentation (1 hour)</b> Have you ever wondered what lies under the streets in a city? We will join the H<sub>2</sub>O Heroes as they take you students under highways and city streets, under tall buildings and homes to show you the watery world that lies beneath our feet. <b>Students will learn about the water efficient plumbing fixtures located throughout the school. Students will learn about the water efficient landscaping features of the school. Students will learn how stormwater runoff from the school is managed.</b></p>	<ul style="list-style-type: none"><li>• Water efficient plumbing fixtures</li><li>• Water efficient landscaping fixtures</li><li>• Stormwater management system</li></ul>

## Third Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>Water Concentration (1 hour)</b></p> <p>Through the familiar game of Concentration, the students make connections between modern and past water use practices and discuss how attitudes toward water change as water use practices evolved. Our objectives will be for the students to analyze why water use practices have evolved over time. The students will also compare efficiency of past and present water use and practices. Some questions will include:</p> <ul style="list-style-type: none"><li>• What water use practice is represented?</li><li>• Which method involved the most time?</li><li>• What supplied the energy for each method?</li><li>• What spurred the need or desire for new technologies to be developed?</li><li>• What resources were used to construct tools or appliances?</li><li>• What waste materials were generated from each method?</li><li>• <b><u>Students will learn about the water efficient landscaping features of the school.</u></b></li><li>• <b><u>Students will learn about the water efficient plumbing fixtures located throughout the school.</u></b></li></ul>	<ul style="list-style-type: none"><li>• Water efficient landscaping</li><li>• Water efficient plumbing fixtures</li></ul>

## Third Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>Every Drop Counts (1 hour)</b></p> <p>Students identify and implement water conservation habits to learn how this essential resource can be shared with other water users of today and tomorrow. Students will determine how water conservation practices save water, identify water conservation habits they can change or adopt, and recognize that water conservation is important. Students will be asked to keep track of the water they use over a one week period by keeping journals or using water meters. Students will discuss reasons why water should not be wasted and future water availability. Students will research water conservation strategies and develop a set of activities they can use to conserve water at school and at home.</p> <p><b><u>Students will learn about the water efficient plumbing fixtures located throughout the school. Students will learn about the water efficient process water items located throughout the school.</u></b></p>	<ul style="list-style-type: none"><li>• Water efficient plumbing fixtures</li><li>• Water efficient process water items</li></ul>

## Third Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>Water Messages in Stone (1 hour)</b>            Students replicate rock paintings and carvings to learn about ancient cultures' relation to water and to create their own water related expressions. The students will demonstrate how ancient cultures drew messages to express their relation to water, discern characteristics of pictographs and petroglyphs. Students will create their own water conservation posters listing their ideas for water conservation that they can hang around the campus to educate all students at all grade levels.  <b>Students will learn about the water efficient plumbing fixtures located throughout the school. Students will learn about the water efficient process water items located throughout the school.</b></p>	<ul style="list-style-type: none"> <li>• Water efficient plumbing fixtures</li> <li>• Water efficient process water items</li> </ul>
<p><b>Amazing Water (1 hour)</b>            Students guide a drop of water through a maze of “draining pipes” that they create to learn how action in the home and yard affect water quality. <b>Because the pipe system in our green school uses special materials and is visible throughout the campus, students have an opportunity to have a real live visual model.</b> Students will describe urban forms of pollution, provide reasons why people should monitor what they put on their lawns or in streets, and identify ways to treat urban runoff. Students will discuss how water is used to clean things such as surface of a table after a spill. They will relate that to how rainwater washes the outdoors.</p>	<ul style="list-style-type: none"> <li>• “Truth” window – shows pipe system</li> </ul>

## Third Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>Branching Out (2 hour)</b></p> <p>This two-day project will begin with the construction of a model landscape to investigate how water flows through and connects watersheds. Students will predict where water will flow in watersheds and describe drainage patterns in watersheds in order to create a satisfactory design. <b>Students will learn how stormwater runoff is managed at the school.</b> The second day the students will test the water flow on their model and observe the way the water disperses. They will then create an aerial model of the watershed dispersal among high and low points. Students will make connections with their water flow and systems in the human nervous system, water shed drainage patterns, road systems and tree root systems</p>	<ul style="list-style-type: none"> <li>• Stormwater management system</li> </ul>
<p><b>H<sub>2</sub>Olympics (1 hour)</b></p> <p>Students will compete in an indoor Water Olympics to investigate two properties of water, adhesion and cohesion. Students will demonstrate adhesive and cohesive properties of water and relate adhesion and cohesion to daily activities. Observations discussed will include the way water beads on the surface of a glass, which is adhesion. They will also learn how water molecules are attracted to one another which results in plants being able to get water and is called cohesion. <b>Students will learn about the water efficient landscaping at the school.</b> Students will create a graph comparing the results of the different events and explaining the role of cohesion and adhesion in each activity.</p>	<ul style="list-style-type: none"> <li>• Water efficient landscaping</li> </ul>

## Third Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>Rainsticks (3 hour)</b>  <u>Students will build a rainstick out of materials from the school recycling bins, like people of ancient cultures, imitate the sound of rain.</u> Students will relate the sound produced by an instrument to the type and quantity of materials used in its construction, recognize how other cultures create rainsticks from materials found within their own environments, and imitate the sound of rain with various materials.</p> <ul style="list-style-type: none"> <li>• Day 1 – Teacher will read the fable “The Rainstick” and discuss the construction of a rainstick.</li> <li>• Day 2 – Students will construct their own rainstick, discuss how people have used rainsticks in the past and begin writing stories or poems about rain.</li> <li>• Day 3 – Students will continue to work on their stories or poems. A math connection will also be made in discussion.</li> </ul>	<ul style="list-style-type: none"> <li>• Recycling bins</li> </ul>
<p><b>Choices and Preferences, Water Index (1 hour)</b>            Students rank and compare different uses of water. <u>Students will learn about the water efficient plumbing fixtures, water efficient process water items, and water efficient landscaping located throughout the campus.</u> The class develops a <i>water index</i>, an indication of the group’s feelings and values about water and its uses. Students will analyze how people perceive the value of various water uses differently. Involving students in learning how their peers rank water resource uses will help them appreciate how differing opinions influence water resource management strategies. The students will rank and graph major water uses.</p>	<ul style="list-style-type: none"> <li>• Water efficient plumbing fixtures</li> <li>• Water efficient process water items</li> <li>• Water efficient landscaping</li> </ul>

## Third Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>Thirstin' Builds an Aquifer (1 hour)</b></p> <p>Students will be able to illustrate how water is stored in an aquifer, how groundwater can become contaminated, and how this contamination ends up in a drinking water source. <u>Students will learn how stormwater runoff is managed at the school, and will learn how integrated pest management helps reduce pollution.</u> Ultimately, students should get a clear understanding of how careless use and disposal of harmful contaminants above the ground can potentially end up in the drinking water below the ground. This particular experiment can be done by each student at their work station.</p>	<ul style="list-style-type: none"><li>• Stormwater management system</li><li>• Integrated pest management</li></ul>

## Fourth Grade LEED Curriculum

We have created two weeks of lesson plans for our GREEN ENERGY UNIT. These lesson plans will show Ss the importance of alternative fuels alternative energy sources

### Lesson Plan

### Sustainable Features Incorporated

#### **Clean Green Power (Lesson 1 -Time frame: 4hrs)**

The objective is to create awareness for our Ss with the alternate forms of energy such as wind energy, hydro energy, solar energy, and bio-fuels energy. These days, the use of gasoline and diesel fuel for engines, and the use of coal and natural gas in furnaces has created more comfort and convenience than humans have ever experienced. But there's a consequence for burning all that fuel. The exhaust gasses contain carbon, which gets trapped in the atmosphere. As more and more carbon gets trapped, the temperature of the Earth's surface heats up as well. Because the world's population continues to grow, it is important that we develop alternative fuels that do not create carbon gas. It's also important that we reduce the amount of fossil fuels used in everyday life. **Students will learn about the preferred parking spaces and carpool lane for low-emitting and fuel efficient vehicles, bike racks, bus loop, anti-idling program and nearby bus stops located at the school and how these strategies help mitigate the impacts of carbon gas.**

We will put the students into small groups. Give each group a puzzle bag. It is the missing puzzle piece activity made from posters for wind energy, solar energy, bio-fuel energy, and hydro energy. Whichever bag the group puts together will determine their focus.

- Preferred parking spaces for low-emitting and fuel efficient vehicles
- Carpool drop-off lane for low-emitting and fuel efficient vehicles
- Bike racks
- Bus loop
- Bus stops
- Anti-idling program

## Fourth Grade LEED Curriculum

We have created two weeks of lesson plans for our GREEN ENERGY UNIT. These lesson plans will show Ss the importance of alternative fuels alternative energy sources

Lesson Plan	Sustainable Features Incorporated
<p><b>Energy Sleuths (Lesson 2- Time frame: 2hr)</b>            Using what has been learned about alternative energy sources, TSW create a super hero character that is based on one energy source. The student will illustrate their character and then write a personal narrative from the viewpoint of the super hero. <b>Students will learn about the energy efficient features of the building: occupancy sensors, daylighting sensors, energy efficient envelope.</b></p>	<ul style="list-style-type: none"> <li>• Occupancy sensors</li> <li>• Daylighting sensors</li> <li>• Energy efficient building envelope</li> </ul>
<p><b>Litter We Know (Lesson 3 – Time Frame: 2 hours)</b>            Students will identify and evaluate ways that litter pollution can endanger wildlife, and propose ways to help eliminate these dangers to humans and wildlife. Discuss the impact of litter on the environment. Do a walk around the school and collect garbage, teacher can also bring garbage to use. <b>Students will sort trash and recyclable materials.</b> Students plot garbage a litter continuum and make predictions about how long different pieces of trash take to break down. (Use pull tabs on Smart Board created lesson)</p>	<ul style="list-style-type: none"> <li>• Recycling bins</li> </ul>

## Fourth Grade LEED Curriculum

We have created two weeks of lesson plans for our GREEN ENERGY UNIT. These lesson plans will show Ss the importance of alternative fuels alternative energy sources

Lesson Plan	Sustainable Features Incorporated
<p><b>SAM's Club Field Trip (Lesson 4- Time Frame: 4hrs)</b>            Students observe and participate in stations pertaining to conservation of resources and the disposal or recycling of materials. <b>Station 1:</b> Energy Efficiency- looks at energy efficiency with water and electricity; students predict usage of energy and relate it to how much can be saved. <b>Station 2:</b> Recycling- focus on materials that we throw away such as cardboard, medical bottles, and show them the proper ways to dispose or recycle different items; students also get to see how that looks in an employee lounge (real life connection) <b>Station 3:</b> Green Products- focus on what they sell to use in homes to lessen the environmental impact. <b>Station 4:</b> Planting- each student plants a succulent bulb, discuss replanting, native plants, low water needs. <b>Station 5:</b> Snack- discuss local produce to lesson carbon footprint, what do we do with our trash? <b>Upon return, students will have a recap discussion of what they have learned and will apply this information in a lesson about the sustainable features of the school. Energy Efficiency: occupancy sensors, daylighting sensors, energy efficient building envelope. Recycling: campus-wide recycling program, and recycled materials used in the construction of the school. Green products: environmentally preferable green cleaning products. Planting: water efficient native landscaping.</b></p>	<ul style="list-style-type: none"> <li>• Occupancy sensors</li> <li>• Daylighting sensors</li> <li>• Energy efficient building envelope</li> <li>• Recycling bins</li> <li>• Recycled content materials</li> <li>• Green cleaning</li> <li>• Water efficient landscaping</li> </ul>

## Fifth Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>LEED Measures:</b> Sustainable Sites</p> <p>TEKS 5.7B – Earth and Space. The student knows Earth’s Surface is constantly changing and consists of useful resources. The student is expected to recognize how landforms such as deltas, canyons, and sand dunes are the result of changes to Earth’s surface by wind, water &amp; ice.</p> <p><b>Lesson:</b> Stream Table Lab (FOSS Lesson)/Pesticide Reduction</p> <p>Students will learn that green sites are built in a way to reduce erosion, control storm water run-off and minimize the site impact on waterways. <b>Students will learn how stormwater runoff is managed at the school, and will learn how integrated pest management reduces pollution.</b></p> <p>Students will observe and measure the effects of flowing water in the stream table. Students compare the features created in the stream tables and communicate the investigation results. Relate the process in the stream table to the processes of erosion and deposition.</p> <p>Students set up stream tables with earth materials and run water through the system. They observe the process of erosion and deposition and become familiar with the landforms created.</p> <p>Science content water is an important agent in shaping landforms, the wearing away of the earth is erosion and settling of eroded material is deposition.</p> <p>Landforms that result from running include canyons, deltas and alluvial fans.</p>	<ul style="list-style-type: none"><li>• Stormwater management system</li><li>• Integrated pest management</li></ul>

## Fifth Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>LEED Measures:</b> Sustainable Sites</p> <p>TEKS 5.9AC Science concepts. The student knows that adaptations may increase the survival of members of a species. The student is expected to compare the adaptive characteristics of species that improve their ability to survive and reproduce in an ecosystem and analyze and describe adaptive characteristics that result in an organism's unique niche in an ecosystem; and(C) predict some adaptive characteristics required for survival and reproduction by an organism in an ecosystem.</p> <p><b>Students will learn how the open space areas of the school help to promote biodiversity in the ecosystem.</b></p> <p><b>Lesson:</b> Oh Deer! (Project WILD)</p> <p>Students will learn that sustainable site minimize a buildings impact on ecosystems and water waste. <b>Students will observe wildlife in the open space areas of the campus.</b></p> <p>Students will portray deer and habitat components in a physical activity. Student will learn about limiting factors of a population.</p>	<ul style="list-style-type: none"><li>• Open space</li></ul>

## Fifth Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>LEED Measures:</b> Sustainable Sites</p> <p>Science TEKS 5.4B Investigations are used to learn about the natural world. Students should understand that certain types of questions can be answered by investigations and those methods, models, and conclusions built from these investigations change as new observations are made. Models of objects and events are tools for understanding the natural world and can show how systems work. They have limitations and based on new discoveries are constantly being modified to more closely reflect the natural world. Students learn how changes occur on Earth's surface and that predictable patterns occur in the sky. Students learn that the natural world consists of resources, including nonrenewable, renewable, and alternative energy sources.</p> <p><b>Lesson:</b> Stone Oak Park SAWS Field Trip- Ground Water Sleuthing</p> <p>Students will investigate how ground water is formed and the importance of this underground water source to our local water drinking system. Students will have the opportunity to see an actual Edwards Aquifer feature. <b><u>Students will learn how stormwater runoff is managed at the school and how integrated pest management reduces stormwater pollution.</u></b></p>	<ul style="list-style-type: none"><li>• Stormwater management system</li><li>• Integrated pest management</li></ul>

## Fifth Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>LEED Measures:</b> Water Efficiency</p> <p>Science TEKS 5.4B Investigations are used to learn about the natural world. Students should understand that certain types of questions can be answered by investigations and that methods, models, and conclusions built from these investigations change as new observations are made. Models of objects and events are tools for understanding the natural world and can show how systems work. They have limitations and based on new discoveries are constantly being modified to more closely reflect the natural world. Students learn how changes occur on Earth's surface and that predictable patterns occur in the sky. Students learn that the natural world consists of resources, including nonrenewable, renewable, and alternative energy sources.</p> <p><b>Lesson:</b> EPA Water Sense Kids Website (<a href="http://www.epa.gov/owm/water-efficiency/">www.epa.gov/owm/water-efficiency/</a>) Using Water Wisely Lesson #3 (Texas Water Development Board)</p> <p>Students will learn about water being a renewable resource and managing it carefully and conserve so there is enough for the future.</p> <p>Students will calculate how much water they use when they brush their teeth. Then students will apply that to calculate water use in other areas of the home, and school. <b>Students will learn about the water efficient plumbing fixtures of the school.</b> Students will create a graph/chart to record data and discussion additional ways to save water around the house. Students will then further their learning using the EPA Water Sense Kids Website to view water conservation tips and play a culminating questions and game.</p>	<ul style="list-style-type: none"><li>• Water efficient plumbing fixtures</li></ul>

## Fifth Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>LEED Measures:</b> Energy &amp; Atmosphere</p> <p>TEKS 5.7C- Earth &amp; Space. The student knows earth surface is consistently changing and consists of useful resources. The student is expected to identify alternative energy resources such as wind, solar, hydroelectric, geothermal and biofuels.</p> <p><b>Lesson:</b> Energy Vampire</p> <p>Students will identify “energy vampires” - electronics and appliances in their homes and classrooms that suck energy out of the grid when they are not being used.</p> <p>Students will be exposed to devices that waste energy, hurt the environment and not cost effective devices. <b>Students will research the Energy Star website in order to explore energy-efficient products that are recommended as resources that will lower our carbon footprint, and will learn to identify Energy Star rated equipment and appliances located throughout the school.</b></p>	<ul style="list-style-type: none"><li>• Energy Star equipment and appliances</li></ul>

## Fifth Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>LEED Measures:</b> Energy &amp; Atmosphere</p> <p>TEKS 5.7C- Earth &amp; Space. The student knows earth surface is consistently changing and consists of useful resources. The student is expected to identify alternative energy resources such as wind, solar, hydroelectric, geothermal and biofuels.</p> <p><b>Lesson:</b> Exploring Solar Collection/Solar Cooker <a href="http://www.eia.doe.gov/kids/onlineresources.html">www.eia.doe.gov/kids/onlineresources.html</a></p> <p>Students will learn that green sites are built with an efficient design and construction using renewable and clean sources of energy. <b>Students will learn about the urban heat island effect, and will learn how our building is designed with a high SRI roof to reflect light and save energy.</b></p> <p>Students will create two solar collectors consisting of black and white bottoms. Students will test water temperature in the two collectors to determine which color absorbs or reflects light.</p>	<ul style="list-style-type: none"><li>• High SRI roof</li></ul>

## Fifth Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>LEED Measures:</b> Materials &amp; Resources</p> <p>Science TEKS 5.5A Matter and energy. The student knows that matter has measurable physical properties and those properties determine how matter is classified, changed, and used. The student is expected to classify matter based on physical properties, including mass, magnetism, physical state (solid, liquid, and gas), relative density (sinking and floating), solubility in water, and the ability to conduct or insulate thermal energy or electric energy.</p> <p>Math TEKS 5.13B Probability and statistics. The student solves problems by collecting, organizing, displaying, and interpreting sets of data. The student is expected to describe characteristics of data presented in tables and graphs including median, mode, and range; and</p> <p><b>Lesson:</b> Recycling Round Up (Green Education Foundation)</p> <p><b><u>Students will learn that our school is constructed with the use of recycled, regional, and FSC certified materials.</u></b></p> <p><b><u>Students will also discover examples of these types of materials used amongst the campus.</u></b></p> <p><b><u>Students will learn about items that can be recycled by going on a scavenger hunt amongst the campus. Each class will track their recycling efforts for one week creating a graph of the number of materials their class recycled.</u></b></p> <p>Students will recycle at home for one week creating a graph of the number of materials their family recycled. Students will also create reflection about the data of their graph. Students will bring in the graphs to share and discuss as a class, determining mode, median, and range from the data.</p>	<ul style="list-style-type: none"> <li>• Recycled content materials</li> <li>• Regional materials</li> <li>• FSC Certified wood</li> <li>• Recycling bins</li> </ul>

## Fifth Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>LEED Measures:</b> Materials &amp; Resources</p> <p>TEKS: Science TEKS 5.4B Investigations are used to learn about the natural world. Students should understand that certain types of questions can be answered by investigations and that methods, models, and conclusions built from these investigations change as new observations are made. Models of objects and events are tools for understanding the natural world and can show how systems work. They have limitations and based on new discoveries are constantly being modified to more closely reflect the natural world. Students learn how changes occur on Earth's surface and that predictable patterns occur in the sky. Students learn that the natural world consists of resources, including nonrenewable, renewable, and alternative energy sources.</p> <p><b>Lesson:</b> The Many Uses of Trees/Forest Products</p> <p>Students will determine that trees, a renewable resource, provide food, clothing, shelter, shade, energy, medicine, paper products and much more. <b>Students will learn about the native trees located throughout the campus.</b></p> <p>Students will be asked to list different uses of trees, and how trees can be harvested in a sustainable manner. Student will watch “A First Look at Trees” on United Streaming Video and discuss the impact trees have on our lives. <b>Students will look around their school list all the things made out of trees, for example FSC certified woodwork, recycled fiber custodial paper products, and recycled copy paper.</b> As a class, we will share data.</p>	<ul style="list-style-type: none"> <li>• Open space (tree preservation)</li> <li>• Native landscaping</li> <li>• FSC certified wood</li> <li>• Recycled janitorial paper products</li> <li>• Recycled copy paper</li> </ul>

## Fifth Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>LEED Measures:</b> Indoor Environmental Quality</p> <p>TEKS: 5.9CD Organisms and environments. The student knows that there are relationships, systems, and cycles within environments. The student is expected to predict the effects of changes in ecosystems caused by living organisms, including humans, such as the overpopulation of grazers or the building of highways; and identify the significance of the carbon dioxide-oxygen cycle to the survival of plants and animals.</p> <p><b>Lesson:</b> Kids for Clean Air (American Lung Association)</p> <p>Students will understand that breathing dirty air is unhealthful to the lungs and body.</p> <p>Students will learn the causes of air pollution as well as short/long term health effects. <b><u>Students will learn about the low-emitting materials, green cleaning policy, integrated pest management policy, MERV 13 air filters, and the anti-idling program at the school and will learn how these contribute to improved health and indoor air quality.</u></b></p> <p>Students will use websites to research/design a poster showing what they can do to help make the air cleaner to breath.</p>	<ul style="list-style-type: none"> <li>• Low-emitting materials</li> <li>• Green cleaning policy</li> <li>• Integrated pest management</li> <li>• MERV 13 filters</li> <li>• Anti-idling program</li> </ul>

## Fifth Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>LEED Measures:</b> Indoor Environmental Quality</p> <p>TEKS: 5.9CD Organisms and environments. The student knows that there are relationships, systems, and cycles within environments. The student is expected to predict the effects of changes in ecosystems caused by living organisms, including humans, such as the overpopulation of grazers or the building of highways; and identify the significance of the carbon dioxide-oxygen cycle to the survival of plants and animals.</p> <p><b>Lesson:</b> Guest Speaker – Energy Manager</p> <p><b><u>Students will study the trees and native vegetation in the open spaces of the site and will learn how the preservation of open spaces promotes biodiversity. Students will learn about the “green school” and how the HVAC in the facility keeps the indoor air quality at a healthy level.</u></b></p>	<ul style="list-style-type: none"><li>• Open space</li><li>• Native vegetation (water efficient landscaping)</li><li>• Indoor Air Quality</li></ul>

## Fifth Grade LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>LEED Measures:</b> Innovation in Design</p> <p>TEKS 5.3A- Scientific investigations and reasoning. Student use critical thinking and scientific problem solving to make informed decisions. The student is expected to in all fields of science, analyze, evaluate, and critic scientific explanations by using empirical evidence logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student.</p> <p><b>Lesson:</b> Innovation Celebration</p> <p><b><u>Students will learn about the innovative strategies pursued in the LEED certification process: Green Cleaning, Integrated Pest Management, Exemplary Performance for Low-Emitting Furniture and Furnishings, Exemplary Performance for Open Space, and ID Credit 3, The School as a Teaching Tool.</u></b> Students will research and create an innovative design of their choice.</p> <p>Students will include: a model, technology use, a visual display and written explanation of their design/invention.</p> <p>Students will present/teach at the “Innovation Celebration” presented in the grade level campus houses. The architect, Manuel Garza, will attend and have a question/answer session and/or tour of the campus.</p>	<ul style="list-style-type: none"> <li>• Green cleaning</li> <li>• Integrated pest management</li> <li>• Low-emitting furniture and furnishings</li> <li>• Open space</li> <li>• The School as a Teaching Tool</li> </ul>

## Enrichment & Extension activities to Support LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>Library Resources:</b></p> <p>Students will learn more about the school’s design features by utilizing the following resources:</p> <ol style="list-style-type: none"> <li>1. <b>Word Book Online: Living Green Digital Library</b> (Tools for various <i>Green</i> resources) <ul style="list-style-type: none"> <li>• Accessed through Cibolo Green Library Electronic Resources Page (which can also be accessed at home from campus web page and Parent Portal).</li> <li>• <b>Contains the following resources:</b> <ul style="list-style-type: none"> <li>-<i>Section Pages</i> provide a <b>list of Texas Curriculum standards (TEKS)</b></li> <li>-Kid friendly encyclopedia articles on the various topics</li> <li>-engage students and test their comprehension of the content. Interactive features include Multiple Choice Quizzes, Drag and Drop games, Crossword Puzzles, Get the Big Picture, and Choices and Consequences.</li> <li>-<b>Links to articles</b> in World Book Student (if included in your subscription) will take you to related articles on the section topic.</li> <li>-videos and animations, activities, lesson plans, and Web sites, are listed at the end of the article's Table of Contents.</li> <li><b>*Interactive activities can be used on SMART boards, iPads, etc.....</b></li> </ul> </li> </ul> </li> </ol>	<ul style="list-style-type: none"> <li>• Any/all of the aforementioned sustainable features of the building and site can be further researched by the students with the aid of these library resources.</li> </ul>

## Enrichment & Extension activities to Support LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>Library Resources (cont'd):</b></p> <p>2. <b>KLRN Streaming Videos</b> -Many videos on <i>Green</i> topics</p> <p>3. <b>Cibolo Green Library Electronic Resources Page</b></p> <ul style="list-style-type: none"><li>• School and home access to:<ul style="list-style-type: none"><li>-Online Encyclopedias (Britannica and World Book)</li><li>-iBistro (online library catalog)</li><li>-Ebsco online newspaper and magazine databases</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Any/all of the aforementioned sustainable features of the building and site can be further researched by the students with the aid of these library resources.</li></ul>

## Enrichment & Extension activities to Support LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>Physical Education:</b></p> <ol style="list-style-type: none"> <li><b>1. Green Activities and Games</b> <ul style="list-style-type: none"> <li>• Toxic River Clean-up</li> <li>• Clean Up Our Community</li> <li>• <b>Recycle Can Ball – use and explain Recycling Cans</b></li> <li>• Picture Our World – <b>Basic orienteering using pictures of LEED Measures inside and outside</b></li> </ul> </li> <li><b>2. Green/LEED Curriculum</b> <ul style="list-style-type: none"> <li>• Go, Slow, and Whoa Foods – Recycling the containers of various foods and what will and will not compost</li> <li>• <b>Review and Teach Bicycle Safety to promote more bike riders</b></li> <li>• Promote Walking to School and Wellness through the Physical Education Curriculum and Running Club</li> <li>• Green Friendly Activities during School’s Annual Fun Field Day</li> </ul> </li> <li><b>3. Environmentally Friendly Physical Education Equipment</b> <ul style="list-style-type: none"> <li>• Order and Continue to Seek Out Environmentally Friendly Physical Education Equipment</li> <li>• i.e.: mats from recycled materials, solar powered stopwatches etc.</li> </ul> </li> </ol>	<ul style="list-style-type: none"> <li>• Recycle bins</li> <li>• Interior and exterior LEED Measures (sustainable features include open space, bike racks, bus loop, preferred parking and carpool drop-off lane for low-emitting and fuel efficient vehicles, water efficient landscaping, water efficient plumbing fixtures, recycled content, regional material, FSC certified wood, etc.)</li> <li>• Bicycle racks, bike lanes</li> </ul>

## Enrichment & Extension activities to Support LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>Music:</b></p> <p>1. Design a lesson based on how different objects have different timbres or sounds. Have students experiment with creating sounds on various objects. <b>The next lesson, students will use items from the class recycling bin and will create musical instruments.</b> They will then break into groups and design a musical composition using their new instruments and perform them for the class. (Materials and Resources) (TEKS included: Perception, Creative Performance and Expression, and Response/Evaluation strands)</p> <p>2. Teach students the science of acoustics. Ask them what affects sound. How do sound waves travel? Are they different through water as opposed to air? Design various experiments for students to actually “hear” (or even see) the sound waves. <b>Lesson will include a discussion of the acoustical materials in the school (i.e. Tectum panels, acoustical ceiling tile, etc.) and how these affect sound.</b> (Indoor Environmental Quality) (TEKS included: Performance and Response/Evaluation strands)</p> <p>3. <b>Make a rain stick out of recycled materials from materials found in the school recycling bins.</b> Lead students in a discussion about how water is used in our everyday lives. Can we cut back on water? Use the rain stick as a representation of water in a performance. (Water Efficiency) (TEKS included: Perception, Creative Performance/Expression, Historical/Cultural, and Response/Evaluation strands)</p> <p>4. Have students do a composition unit. Discuss how design affects a composition and compare how the design has helped our school. (Innovation in Design) (TEKS included: Perception and Creative Performance/Expression strands)</p> <p>5. For young students, when teaching louder/softer and faster/slower, relate back to smart transportation choices. <b>How do</b></p>	<ul style="list-style-type: none"> <li>• Recycling bin</li> <li>• Acoustic performance</li> </ul>

## Enrichment & Extension activities to Support LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>Gifted &amp; Talented/ Enrichment Activities:</b></p> <p><b>Students will investigate all the aspects of being a green school, compare and contrast green schools across the nation and world, and share their findings through multimedia presentations. (Innovation in Design)</b></p> <p>1. Assist students in the creation of an educational video/ podcast about our green school. This project would be completed in a series of sessions that guide students in:</p> <ul style="list-style-type: none"> <li>• investigating and discovering the various features that contribute to a green school</li> <li>• reviewing what aspects of our building helped us achieve certification by LEED.</li> <li>• touring the building and writing scripts designed to explain in kid-friendly language the “green” features.</li> <li>• writing, editing, and revising the scripts</li> <li>• rehearsing, recording and editing the performance of a school tour</li> <li>• sharing the video via podcast with our school community and others</li> <li>• schools that would have difference resources and cultures than the San Antonio area and interview via webcam and online sessions.</li> <li>• write about what was learned and create a multimedia presentation to share with others.</li> </ul>	<ul style="list-style-type: none"> <li>• Any/All of the sustainable features of the building and site can be incorporated into the student’s multimedia presentations.</li> <li>• Students will be utilizing energy star equipment and appliances in their multimedia presentations.</li> <li>• Innovation in Design, The School as a Teaching Tool – not only will students <i>learn</i> about the sustainable features of the school, they will use this knowledge to <i>teach</i> others.</li> </ul>

## Enrichment & Extension activities to Support LEED Curriculum

Lesson Plan	Sustainable Features Incorporated
<p><b>Gifted &amp; Talented/ Enrichment Activities (cont'd):</b></p> <p>2. Locate green schools in other parts of the country and world and initiate correspondence that would lead to a greater depth of understanding about green schools.</p> <ul style="list-style-type: none"> <li>• use IPADs to research locations of other green schools in the United States and the world.</li> <li>• brainstorm questions as a class that would allow comparisons to our own school</li> <li>• initiate correspondence with at least two other schools that would have different resources and cultures than the San Antonio area and interview via webcam and online sessions.</li> <li>• write about what was learned and create a multimedia presentation to share with others.</li> </ul>	<ul style="list-style-type: none"> <li>• Any/All of the sustainable features of the building and site can be incorporated into the student's multimedia presentations.</li> <li>• Students will be utilizing energy star equipment and appliances in their multimedia presentations.</li> </ul> <p>Innovation in Design, The School as a Teaching Tool – not only will students <i>learn</i> about the sustainable features of the school, they will use this knowledge to <i>teach</i> others.</p>