Know Your Neighbors! Learning and Celebrating the Human and Natural Diversity of Houston

Pilar Palacin Navarro Piney Point Elementary School

INTRODUCTION

"The whole art of teaching is only the art of awakening the natural curiosity of young minds for the purpose of satisfying it afterwards."

-- Anatole France (1844-1924, French writer)

"Is this for real, teacher?" This is one of the questions that always surprises me when teaching my third grade students about other cultures and places, or rare animals and plants. Children are very curious about the world around them. They absorb nearly everything that captivates them. They learn about the dinosaurs, the planets, the polar bear, etc. They will probably be able to give more information about the polar bear than about some of the animals they have seen in their backyard. It is also possible that they do not know about the different neighborhoods in their city. These children, however, can tell you many facts about the planets. So, is it fair to know more about a distant place than about the city the students themselves live in?

Sometimes, our curiosity about other cultures and places leads us to fantasize about far away lands with exotic cultures and places without realizing that we can learn about other people and places from both a human and a natural perspective in our own backyard right here in Houston. There are few places that offer the human diversity of Houston with its significant population of African American, Hispanic and Asian populations. Combine the area's human diversity with its natural diversity of coastline, prairies and piney forests, and the end result is that Houston becomes the ultimate classroom. Houston becomes a place where students can learn to appreciate and respect the world they live in once they are introduced to what is nearby them, something they can experience and enjoy.

My intention is to develop a curriculum unit that will arouse my students' curiosity about "their neighbors," i.e., Houston's multicultural population and its flora and fauna that enrich and shape urban life. The outcome of this unit will be students who have developed a respect and value for the earth and its inhabitants as a result of having been exposed to Houston's human and natural diversity. I would like my students to learn to enjoy the common daily things nature offers them things such us listening to the birds' songs, observing the ants working, watching a plant grow in the school garden.

My school, Piney Point Elementary, which is located in West Houston, was the place that a small community of recently freed African American slaves chose to settle during the late 1860s. The Piney Point community, so named because of the Piney Wood

forests, formed its first school in a Baptist church. This elementary school was simply a one-room building with an outside toilet and a wood stove, and it served only first-through sixth-grade African American students. In 1962, Howard Barnstone built a new school building, the current Piney Point Elementary school building. The school currently serves about 900 students. About 72 percent of the student population is Hispanic, 18 percent African American, four percent white and six percent Asian.

Student Background

Most of the elementary students who live in big cities, such as Houston, have little contact with local inhabitants and nature. Their experiences with nature, in most cases, are limited to their backyard, school playground and school field trips. Many of them are not aware of what their city can offer them concerning nature. This is due to factors such as distance, income, safety, and parents who work. Nevertheless, they are not the only ones who don't get acquainted with nature. The pace of modern life often prevents us adults from relating to nature as much as we otherwise could.

The students are also not familiar with the people around them, their historical origin and what their traditions are. All of my third graders are either first- or second-generation Hispanic immigrants. They tend to live in areas with a high Hispanic population where they have almost everything they need. Their community, which provides them with a strong sense of family and culture, may prevent them from getting the most from their surroundings. These two factors can also prevent them from expanding their knowledge about other cultures and from quickly learning the language of the country they live in.

UNIT OVERVIEW

My curriculum unit focuses on Houston's natural and multicultural diversity. This unit combines two subjects: social studies and science. Both subjects will be taught through an ESL (English as a Second Language) approach since all of my students have limited proficiency with English and are categorized as LEP (Limited English Proficiency) or ELL (English Language Learners).

Most of the activities designed in this curriculum unit are visual and are created to fulfill the special needs of bilingual students. Research shows that foreign language students learn more rapidly if they are taught visually. These activities focus on the improvement of one or several of the following skills: listening, reading, writing and speaking often taught with extensive visual aids. I intend to teach this unit during the last semester of the school year when my students have mastered, in their native language (Spanish), the objectives and skills taught in the curriculum unit and when they will be more fluent in English. Taking into account that I teach social studies and science twice a week, in 45-minutes periods, this unit should take about six weeks. The gardening activity, however, will be ongoing till the end of the school year.

All of the unit's learning activities have been developed taking into account some of the Houston Independent School District social studies and science Clear objectives as well as the TAKS (Texas Assessment of Knowledge and Skills) reading objectives for third graders.

Houston's Ethnic Groups

Houston is one of America's most ethnically and culturally diverse metropolitan areas. There are about 4.7 million people residing in the eight-county metropolitan area. Its four largest ethnic populations are Anglo, Hispanic, African and Asian. As shown in the table below, according to U.S. census figures for the city of Houston, the Hispanic and Asian populations are the fastest growing groups, and are expected to grow significantly in the near future.1

Census	1980	1990	2000
Anglo	52.2%	40.6%	30.8%
African-American	27.6%	28.1%	25%
Hispanic	17.6%	27.6%	37.4%
Asian/others	2.1%	4.1%	6.8%

Between 1492 and 1965, most of the people who came to the United States came from Europe. During that period, the American nation was composed mainly of European nationals. In the last century, the population of Anglos in the Houston area has been steadily decreasing. The current population of Anglos is considerably older than those in the other communities; only 18 percent are under the age of 30. According to Klineberg's *The Houston Area Survey*, less than 50 percent of Houston's Anglos have college degrees, and there is a tendency for them to live in suburban neighborhoods.

African Americans were originally brought to the United States as slaves to serve the Europeans. According to Klineberg, "almost two-thirds (62%) of Harris County's young adults are African American or Hispanic. These are the populations that have been historically underserved by Houston's educational and social service institutions" (*The Houston Area Survey*). About 23 percent of the African American population has a college degree. During the last 20 years, there has been a new immigration stream from Africa (mainly from Nigeria). They come to Houston with high levels of education and professional skills.

Hispanics lived in the Houston region before it's founding in 1836. Currently, more than 50 percent of all Hispanics over the age of 18 are first-generation immigrants (*The Houston Area Survey*). Most Hispanic immigrants arrive to the city willing to work hard. Many, however, lack the education and economic resources to compete for well-paying jobs and end up in low-paying service-sector jobs (*The Houston Area Survey*). The

Hispanic population in Houston is quite young; 40 percent are under the age of 30. Many of these youngsters are school dropouts or have no more than a high school diploma, and only 11 percent have completed all four years of college.

Many Asians, like Hispanics, immigrated to the United States in search of economic opportunities. Some of them immigrated in search of educational opportunities and others because of war and social conflict. Many arrived with little money and few skills. And, like many immigrants lacking financial resources and work skills that could quickly translate into well paying jobs, success has come due to the traditional values of hard work, ambition and strong family values. Many of those arriving, however, are highly educated and were in professional and managerial positions in their countries of origin (*The Houston Area Survey*).

The efforts of these ethnic communities in Houston to maintain their cultures and traditions are shown in the fact that they are close communities with a strong sense of identity. It's also reflected in the many events and festivals that take place yearly to celebrate their art, culture, history and heritage. Some of these festivals are: the African American Arts Festival, the Asian American Festival, the Cinco de Mayo Celebration, the Festival Chicano, the Fiestas Patrias, the Japan Festival, the Iiri-ji (A New Yam Harvest) and the Multicultural Festival. As in many other cities, Houston has its own Chinatown located southwest of the city (Bellaire area). There are over ten shopping centers, hundreds of restaurants, banks, associations, libraries and Chinese schools. There is also a Vietnamese neighborhood near downtown with its street signs in Vietnamese. Besides, some of Houston's historic neighborhoods are ethnic. One of these is the East End, which is Hispanic with some landmarks such as the Lady of Guadalupe Church, colorful murals and the Talento Bilingue center; another is the Fifth Ward, which is African American.

On the other hand, Houston's fast growing population is having a direct impact on the city landscape. The city infrastructure is changing. The boundaries of the city outskirts are moving further and further out. What was before a swamp is now a commercial and residential area (Rice Village), what was a native piney forest is now a residential area (Piney Point Village) . . . I would like my students to understand how the area's natural landscape has diminished due to this growth and how important it is to preserve what we have.

Houston's Flora

The landscape in the Houston area is quite diverse, including wetlands, piney forest, residential areas, and developed areas such as downtown. The characteristics of its soil and its moderate climate make it suitable to grow easily wildflowers, vegetables and herbs.

Wildflowers flourish nearly everywhere in Houston, from downtown vacant lots to roadsides. Many of them are suitable for gardens and are easy to grow. Most of the wildflowers require well-drained soil and plenty of sun. The best planting time for seeds for the majority of the spring blooming wildflowers is September to December. Seeds and plants for summer and fall blooming wildflowers can be planted anytime in the spring. As these seeds need light to germinate, they are not planted any deeper than 1/16 of an inch so the seeds can capture light.

Southern Dewberry, Nasturtium and Maximiliam Sunflower are the wildflowers that I would like to grow in my school garden. Maximiliam Sunflower was named after Prince Maximiliam of Prussia who devoted part of his life to exploration and natural history. It is native to the Great Plains and can be found on exposed rocky slopes and dry prairies. It also grows in moister areas and sandy soil. Until the middle of the nineteenth century, nasturtiums were grown more for food than for ornament. Today the cheerful colors of its flowers are as welcome in salads as they are in gardens. The Southern Dewberry grows wild in sandy soils. The bark of the roots has some medicinal uses if used as infusion or decoction. It is also used as natural dye.

Herbs have played an important part in man's life for countless years. Early settlers brought herbs to America for use as remedies for illnesses, seasoning, and storing with linens or burning for their fragrances. As the population of the new country grew, people from many countries brought herbs with them. Many herbs familiar to the settlers were native to North America. Today, herbs are still used for their food seasoning, their scents and medicinal purposes. Some of these fragrant plants are easily grown in a garden. Most herbs simply need to be planted in areas where there is well-drained soil and plenty of natural light. Fresh leaves may be picked as soon as the plant has enough foliage to maintain growth.

The herbs that I'm planning to grow in the school garden are anise, oregano and basil. Anise is native to the eastern Mediterranean region. In Roman times anise was used for culinary and digestive purposes. Nowadays, anise is used to flavor some medicines and as an ingredient in dog food. It is claimed that anise can ward off the Evil Eye or keep away nightmares if placed under one's pillow. Basil is most likely native to India. It was used to embalm ancient Egyptian mummies and it was a symbol of mourning in ancient Greece. Today, it is used as a food flavoring, in perfumery and in herbal holistic remedies. Children are very familiar with oregano as it is the spice that gives pizza its characteristic flavor. Mexican oregano is a bit stronger that Mediterranean Oregano and is used in chili powder.

From the first days of settlement, almost every family had a vegetable garden for personal use. Vegetables are one of the most rewarding plants to grow in a garden because one gets to enjoy the pleasure of eating the results of his/her hard work. Being city dwellers, it is possible that children have never seen vegetables except in stores and on the table, and they have a curiosity to see how they grow. Vegetables need sun, at

least six to eight hours of daily sunlight. They should be planted at a proper depth and watered regularly. They demand plenty of water to develop proper size and flavor.

Carrot, radish and spinach are the vegetables that I intend to plant in our school garden. When carrots were first cultivated in central Asia, they appeared in a variety of hues but never orange. They were grown as a medicine. Today carrots come in all shapes and sizes. They are much appreciated because they are nutrient dense. China is believed to be the country of origin of the radish. Radish is a root vegetable with many uses worldwide. They have long been ascribed healing qualities. It is said they were fed to workers who built the pyramids. The cartoon character "Popeye" popularized spinach. This green leafy vegetable high in vitamins and minerals came originally from Iran. Nowadays, this crop is becoming more popular as evidenced by increases in consumption of both the fresh and processed varieties.

Cultivating a garden is relaxing; it helps us to ease the distress of our daily life. When working in a garden, we develop a relationship with the earth and sensitivity to the environment. Through gardening, children can learn many things. Gardens can teach children the abilities to observe and be patient. They also help them to become responsible and develop the capability of enjoying the natural world. Moreover, every plant has a story to tell – it has a place of origin and a past. Plants play an important part in the history and folklore of every culture. Working together in a project such as planting a garden with plants used by different cultures gives the opportunity to share plant histories. Bringing plants mentioned in children's literature into the classroom could bring these stories/histories to life.

Houston's Fauna

Animals of many kinds are important parts of a city's environment. They inhabit our trees, lawns and gardens and they fly through our polluted skies. Many animals have adapted to a city landscape maintaining a wildlife status. While it is difficult for children to go into the woods to study wildlife, the city itself can be an excellent classroom for observing and studying wildlife. Animals such as squirrels, house sparrows, American crows, Monarch butterflies and house sparrows have become a common sight for Houston's city dwellers. These city "inhabitants" can be a useful resource for learning about wildlife.

My school, Piney Point Elementary, has a nature center that includes a pond and a butterfly garden. When we go to the playground, my students often ask for permission to go to the pond and come back with the "report" of their observations, talking with excitement about what they have seen. My students sometimes show me where a bird has built its nest. The birds most commonly seen in my school area are house sparrows, pigeons, grackles and killdeers. The Houston area has a wide variety of bird species ranging from well-known birds such as the mockingbird or cardinal to more exotic ones such as the yellow-crowned night heron. The ones I believe my students will be more

curious to learn about are the house sparrow because it is easily seen, the blue jay due to its physical characteristics and the screech owl because of its behavior.

The house sparrow was introduced to North America from Europe between the 1850 and 1870 to control the insect populations. Since then, it has spread across the country, displacing several native birds. These birds are year-round residents and can be found in suburban and urban areas. They inhabit cities and depend largely on human activities for food and shelter. They forage on the ground, eating a variety of seeds, and they also eat insects, spiders and fruits in the summer. House sparrows are monogamous. The male selects the nest site and both male and female work to build it. They use grass, feathers, clothes and other debris to build their nests, usually in buildings, cavities or trees. They are hole-nesters. They aggressively defend a nest site. They sometimes appropriate the nests of other species, destroying their eggs and even killing the incubating female. For this reason they are believed to be a factor in the decline of some native bird species. The female incubates four to six eggs during 10 to 13 days. The young fledge after 14 to 17 days. House sparrows can have up to four broods per breeding season reusing the same nest.

Screech owls are one of the smaller owls within the family of typical owls with ear tufts, well-developed facial discs and yellow eyes. Their vocalizations consist of a series of short whistles that increase in tempo near the end. In both the wild and captivity they can live to about 13 years. They are highly nocturnal, and therefore are rarely seen hunting and feeding. Their diet consists of small mammals, insects, snakes, lizards, frogs and small birds. In summer these birds can be seen hunting insects and moths around street lamps. They swoop down from their perch to capture their prey. Before the breeding season, males defend an area containing several cavities, spending each night in a different cavity. Once breeding begins, males concentrate more on courting females than on territorial defense. It is believed that male and female screech owls mate for life. The breeding season is short, usually from March to May, and they only raise one brood per season. Their favorite nest sites are natural tree hollows and cavities excavated by woodpeckers. Females select a nest site from the cavities on the male territory to lay two to five eggs that are incubated for 30 days. The young cannot fly when they leave the nest, but instead hop and climb from tree to tree. After seven to nine weeks out of the nest, they can fly as well as their parents.

Blue jays are quite distinctive because of their blue coloration and crests. They are capable of making a wide variety of screaming sounds. They come from the crow family and are intelligent and adaptable. They are mainly vegetarian (eating seeds, acorns and beechnuts) but they also eat grasshoppers, beetles, caterpillars and small vertebrates. Their nests are situated in trees; they fearlessly defend their territory, sometimes appropriating the nests of other birds. They often nest in settled areas, close to buildings. The female incubates most of the three to six eggs during 16 to 18 days and is fed by the male. The blue jay practices courtship feeding, beginning prior to nest building and continuing through incubation. By 21 days of age, the young are on the wing, and they

continue to follow their parents for one or two months. In late summer and fall, blue jays migrate south by day in small flocks. They tend to fly quietly and high during migration. This bird plays a role in keeping bird population and some insect pests under control.

TEACHING STRATEGIES

This unit combines two different subjects. In social studies, students will learn about Houston's landscape and its population; meanwhile, in science they will learn about the city's flora and fauna. Some of the activities, like the introductory one, which follows, will be common to both subjects.

Introductory Activity

The first activity that I will assign my students is to take pictures using a disposable camera. The students will take pictures of their family, friends and/or neighbors from different ethnic groups and of their plants and animals at their backyard/home (no pets). Each student will only be able to take three pictures: one of a person, one of an animal and one of a plant. They will have to write in their writing journals about the difficulties they encountered when taking the pictures and about why they chose to take those shots. Afterwards, we will organize the pictures, classifying them in three groups: people, plants and animals.

Social Studies

As an introductory activity, I will show my students pictures of our schoolteachers from different ethnic groups and races. We will classify them by ethnicities. The students will have to guess the country each teacher comes from. I'll give them a list of countries, and they will have to match the country with the teacher. To these pictures, we will add the ones of the students' neighbors or relatives. This will lead to a discussion about their neighborhood and its inhabitants. As a class project, my students will have to interview people from different ethnicities (relatives, neighbors and teachers) about their traditions, reasons for coming to Houston and the place they live.

Some of the questions they will have to ask will be the following:

- 1) Where does your family come from originally?
- 2) How long have you been living in this country?
- 3) Why did you/your family come to Houston?
- 4) Why did you choose to live in this neighborhood?
- 5) Do you celebrate any of your country's traditions?
- 6) What can you find in Houston from your country?

Then, we will make a chart to compare and contrast the results. This is intended to stimulate discussion about ethnic groups in Houston along with those ethnic groups' culture and traditions. Afterwards, I will focus on Houston's festivals. I will bring to the classroom some brochures and information about these festivals, and students will have

to arrange them chronologically and give some facts about them. Then, by groups, they will choose one of the festivals and draw a poster announcing it.

The school neighborhood, Piney Point Village, will serve as a starting point for the students to learn about some neighborhoods in Houston. They will learn about the school area, its beginnings and how it developed throughout time. After that, students will locate their homes and places they haunt using an area map. They will locate the stores or businesses they know of that people of other ethnicities run. The purpose of this activity is to familiarize students with the area they live in and make them realize Houston's diversity. We will also analyze the potential improvements of this particular area (more parks, restaurants, less traffic, etc). As a hands-on project, my students will have to either draw a plan or make a model of the area they live in the way they would like it to be. Then, we will move on to other neighborhoods, locating them on a city map and learning a few facts about them. Some of these neighborhoods will be the ones with a high density of immigrant population such as the East End, the Vietnamese district, Fifth Ward and Chinatown. Others will be the ones that have endured dramatic landscape changes due to the demographic increase, e.g. Rice Village, the Woodlands and River Oaks. We will read tables and charts about Houston's population growth. By comparing and contrasting old and new pictures of Houston, students will realize the way the city's natural landscape has diminished. By groups and using a city map, they will have to reach a consensus about which part of Houston is the best to live in, taking into account location and natural areas.

Finally, reading Denise Fleming's *Once There Was a Wood* aloud will bring valuable discussion about the modern development of natural areas. This book conveys the negative side of development and provides suggestions for welcoming wildlife into housing developments.

Science

As an introduction or warm-up activity, I will use pictures of plants from the students' homes and some pictures of the school's plants to familiarize my students with the plants that surround them. We will classify them into wildflowers, vegetables and herbs. Then, we will do a playground observation. I will give my students a map of the school playground, and they will have to locate several of the plants. They will either draw them or write their names.

We will investigate which plants and vegetables grow naturally in Houston by cultivating a school garden. I'm planning to start the garden from seeds. We will use pots to grow the seeds, and once they are grown we will transplant them into the school soil. Each student will "adopt" a plant and take care of it. They will work in pairs using the scientific method to record information about their plants in their journals. The plants that I intend to grow in the school garden are either native or are easy to grow. This is a tentative list of the garden plants:

WildflowersHerbsVegetablesSouthern DewberrybasilcarrotMaximilian SunfloweraniseradishNasturtiumoreganospinach

We will do some writing activities related to the plants such as naming each plant, describing it and writing a diary with additional observations. Some of these observations will be focused on the animals that "visit" or live nearby the plants. The objective of this is to connect this science section with the one on fauna.

Many of my students are used to taking certain herbs when they are sick. I believe they will identify themselves with the main character of the story *My Nana's Remedies* by Roni Capin Rivera. This story is about how a grandmother prepares a variety of traditional remedies for her granddaughter. She uses herbs to treat everything from an upset stomach to being frightened at night. I'll read aloud this Hispanic story, and we will discuss the importance of plants and the role of "curandera" in their culture.

While the gardening activity is going on, I will start teaching the students about Houston's fauna. The first activity that I will do is to show my students pictures of Houston's urban animals so that they can eventually identify them. I will show them pictures taken from magazines and from the Internet. Afterwards, we will classify them by groups (mammals, insects, birds, amphibians and reptiles). To these we will add the ones they took from their backyard/home with the disposable camera, making a poster to be displayed in the classroom. We will talk about these animals and discuss which ones are most likely to be found in the school playground. Then, we will go on a fieldtrip to the playground. Each student will have to pick a spot, sit there in silence and observe for awhile. They will have to record some information about their observations by answering the following questions:

- 1) What animal sounds do you listen to?
- 2) What do they sound like?
- 3) What animals can you see?
- 4) What are they doing?
- 5) Why did you pick up this spot?
- 6) Describe the place and how you feel.

Back in the classroom we will list the animals they have seen and heard.

While reading aloud the book *Did You Ever Wonder about Things You Find in Your Backyard?* by Vera Vullo Capogna, the students will learn some facts about the animals they have observed in the playground. This book is a great introduction to city wildlife because it covers many animals and is very visual. It explains mainly about insects (spiders, ladybugs, grasshopper, bees, butterflies, moths and fireflies), worms (earthworms, centipedes, earwigs and slugs) and birds (blue jays, cardinals, chickadees,

hummingbirds, robin and orioles). I will do many vocabulary and comprehension activities related to the book, both at an oral and written level, so that students will be able to identify the animals by name.

Once we have read the book, students, in groups of three or four, will have to choose one animal either from those discussed in *Did You Ever Wonder about Things You Find in Your Backyard?* or from those they saw in the playground or in the city. They will have to do some research about one of these animals both on the Internet and in books. This activity will take place in the school library, as there are several computers available for students to research. About half of each group will be checking library books while the other students do research using the Internet. They will have to look for specific information about each animal (habitat, diet, behavior, physical traits and tracks). Once finished, they will have to present an oral presentation to their classmates. As a follow up or assessment activity, students will have to identify the animals' tracks and write a few facts about them. We will also listen to and identify these animals' sounds using the Internet by going to http://www.enature.com.

In this part of science, I will focus on teaching students about three birds that can be seen and/or heard in Houston: the house sparrow, the blue jay and the screech owl. We will learn some facts about these birds using the Internet at http://www.enchantedlearning.com. Students will compare and contrast them and will write a persuasive essay or paragraph stating which one of these birds could become a pet. Reading *Urban Roosts, Where Birds Nest in the City* by Barbara Bash will help my students to be better watchers of the nesting birds. This book explores the city places where some birds make their homes. Throughout these learning experiences, my students will keep a "Bird Watching Journal." Every day, they will annotate any observation related to birds anywhere. I do not expect my students to become birdwatchers; however, perhaps a few of them will develop it as a pastime in the near future. My sole intention is that my students be more attentive to what their senses communicate to them in terms of nature.

Finally, the science part of my curriculum unit will culminate with a fieldtrip to one of Houston's nature centers, the Arboretum. This center has a wildlife garden to demonstrate planting appropriate to attract wildlife to an urban backyard. Children will be able to observe in situ the natural habitat of some of the animals they've been learning through out this unit. This fieldtrip will take place at the beginning of May.

LESSON PLANS

Lesson Plan 1 – Houston Festivals

Objectives

Interpret a timeline
Organize and use information from a variety of texts

Materials

Teacher-made worksheet

White poster board

Crayons and markers

Brochures and Internet information about ethnic festivals in Houston

Procedures

The teacher will introduce the following vocabulary words:

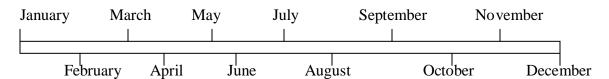
CelebrateCultureHeritageArts and craftsPerformerVendorParadeBoothEthnicOpen-airAtmosphereTradition

Then, the teacher will lead a discussion about Houston's ethnic festivals. The teacher will pose questions such as:

- When do Chinese people celebrate New Year?
- What is celebrated during the Cinco de Mayo Celebration?
- What can you find in the African-American Arts Festival?
- What do you think the Asian American Festival is about?

If there are any students who have been to a festival, they can explain their experiences while discussing the main ingredients of these kinds of festivals (food, arts and craft, parades and traditional dances and music).

For the next two activities, the students will be paired. They will use the brochures and the information given by the teacher about the following festivals: Houston International Festival, Japan Festival, Cinco de Mayo Celebration, Juneteenth Celebration, the African-American Arts Festival and the Asian American Festival. First, they will fill in a month timeline as the one that follows about the festivals, writing the name of the festival up/down the month it is celebrated.



In the second activity, the students will have to look for specific information about each one of the festivals, completing a chart like this:

Name of the festival	Date	Why is it celebrated?	Activities

Finally, each pair of students will choose one festival and will draw a poster announcing it. The poster will have to have the date, the place and the activities of the festival.

Evaluation

The poster and the worksheet will be used as evaluation.

Lesson Plan 2 - My neighborhood

Objectives

Use the compass to locate places using a city map

Get familiarized with the names and locations of some of Houston's neighborhoods and streets

Follow directions

Materials

Houston city map transparency School neighborhood maps Highlighters Manila construction paper Crayons

Procedures

The teacher will introduce/review the following words using visual aids or drawing them on the board:

North	South	East
West	Southeast	Northeast
Southwest	Northwest	Right
Left	At the corner	In front of
Opposite	Behind	Next to

Using a Houston city map transparency, the teacher will review orally the usage of a compass rose to locate places in the map. Students will be given the name of a street or neighborhood and they will have to say its location in Houston (Northeast, West, etc.) The last one we will locate will be Piney Point Village, the school area.

For the next activity, students will work with a school area map. Following the teacher's instructions they will highlight the post office, the school, a church, a bank and a mall. Afterwards, using the construction paper, students will draw their streets and the

adjacent streets. They will draw their homes and what is nearby them: mall, supermarket, restaurant, park, bank, etc.

Evaluation

Students will write a description of their streets using the vocabulary introduced at the beginning of the lesson. This description will be glued/attached to their street maps and displayed in a classroom bulletin board.

Lesson Plan 3 - Animal Research

Objectives

Dictionary skills

Organize and use information from different sources

Write a research paper

Express ideas orally based on knowledge

Materials

Teacher-made worksheets

Encyclopedias

Computers with Internet access

Procedures

This activity will start in the classroom. As an introduction, the teacher will review how to search for information both in an encyclopedia and on the Internet. The following vocabulary will be introduced:

Research guide words clue words
Diet traits camouflage
Critter species life span
Prey predator extinction

Students will write sentences using a graphic organizer to become familiar with the meaning and usage of the new words. Then, they will be paired: one student will be A, the other one B. Each pair will have to choose an animal from a given list. Each student will be given a copy of a fill in worksheet with the following information:

Name of the animal

Classification

Habitat

Food

Behavior

Physical traits – size, coloring and distinguishing features

Surprising Information

Student A will do the research using the library encyclopedia and/or books, and student B using the Internet. Afterwards, the whole class will go to the school library to

start the research. Once finished, we will come back to the classroom and the pairs will compare all the information gathered. Students will have to write a research paper on their animal. The format will be an informative writing assignment given by the teacher.

Evaluation

Students will make a short oral presentation to their classmates about the animal they researched. The research paper will be used as evaluation as well.

ANNOTATED BIBLIOGRAPHY

Books for Teachers

- Carson, R. *A Sense of Wonder*. New York: Perennial Library, 1984.

 This book stresses the importance of experiencing the beauty that can only be found in nature.
- Damude, N. & B. Conrad. *Texas Wildscapes for Gardening for Wildlife*. Texas Parks & Wildlife Press, 1999.

 A pretty good book on how to design gardens to provide the habitat required by native wildlife. Very comprehensible.
- Dixon, Terrell F., Ed. *City Wilds*. Athens: The University of Georgia Press, 2002. A collection of 35 short essays and stories about urban nature. It takes the reader to lakes, gardens, forests, parks, etc.
- Gardiner Grimmer, G. *The ABC's of Texas Wildflowers*. Austin: Eakin Press, 1982. This is a great book written and designed for classroom use. Each area of the state is represented with a description of the most common wildflowers and their pictures. There is also a useful glossary at the end of the book.
- Kriegle, J. & the editors of Houston Home and Garden Magazine. *Houston Garden Book, A Complete Guide to Gardening in Houston and the Gulf Coast*. Fredericksburg: Shearer Publishing, 1991.

 This book is very well organized even for inexperienced gardeners. It has plenty of pictures of most of the plants. There is also a chapter on native plants.
- Robinson, B. C. *Birds of Houston*. Austin: University of Texas Press, 1998.

 This is an excellent field guide for amateur birdwatchers; it is easy to use. There is a detailed physical description of more than 50 birds and a picture of each one.

Sheldon, G. and T. Hartson. *Animal Tracks of Texas*. Canada: Lone Pine Publishing, 2000.

A very useful pocket book. It has a short description, footprints and pictures of many animals.

- Tveten, John L. *The Birds of Texas*. Fredericksburg: Shearer Publishing, 1993.

 This book has outstanding color photography. It is organized into ten sections based on birds' appearance, habitat and behavior. This arrangement helps the reader to find and identify birds easily. There is an introduction that summarizes the main characteristics of each bird family.
- Winningham, G. A Place of Dreams Houston, An American city. Houston: Rice University Press, 1986.

 This book is about how Houston developed throughout the years. It has beautiful old and modern pictures of the city in black and white and color.

Websites for Teachers

- Buffet, H. et al. *Biodiversity 911 on the Web*. June 2003. <www.biodiversity911.org>. Click on "Local Links" and, under "Houston," click on "Museums and Nature Centers."
- Burger, Donald R. *My Favorite Nurseries in Houston*. June 2003. <www.burger.com/nursery.htm>.

This site contains a list of nurseries in Houston. These nurseries are the favorites of Donald Ray Burger in alphabetical order and with a short of description of each one.

- Citizens' Environmental Coalition. May 2003. http://www.cechouston.org. It includes a guide to Houston nature centers with their programs and children activities.
- Col, J. *Enchanted Learning*. June 2003. http://www.enchantedlearning.com.

 This educational site has many activities for birds. There is a section called "All About Birds," which offers lots of information about feathers, migration, classification, evolution, etc and descriptions of many birds, along with some activities ready to use in the classroom.
- Gomez, N. *Houston Pictures*. June 2003. http://www.houstonian.freeservers.com/ WebPageLinks/pictures.htm>.

A gallery of pictures of Houston at its best. This page contains a few old pictures of the city, most of them in black and white.

Houston Arboretum & Nature Center. May 2003. http://www.HoustonNatureCenter.org.

This site contains information about the Houston Arboretum and Nature Center, a non-profit nature sanctuary. It also has a list of nature, conservation and ecological websites (click on "Nature & Conservation Links").

Houston Area Survey 1982-Present, The. 6 June 2003. www.houstonareasurvey.org/ index.cfm>.

This site has the Houston Area Survey 1982-Present. Click on Current Report to view the copy (Acrobat Reader) of *Houston's Economic and Demographic Transformations: Findings form the Expanded 2002 Survey of Houston's Ethnic Communities* by Rice professor of sociology Stephen Klineberg. This is a very comprehensive study about Houston's four largest ethnicities.

- Liebson, C. *The Herb Society of America*. May 2003. http://www.herbsociety-stu.org. In 1968, The South Texas unit of The Herb Society of America, Inc., was founded. It is a not-for-profit organization focused on service and education through the promotion of the use, knowledge, and enjoyment of herbs. The organization sponsors programs dedicated to education and research in the same field. At the site, there is a page for children that contains a bibliography, which lists books and films relevant to kids on the subjects of herbs, plants, and theme gardens.
- Morgan, C. *EEK Teacher Pages. Educational Resources*. 1998. Wisconsin Dept. of Natural Resources. June 2003. http://www.dnr.state.wi.us/org/caer/ce/eek/teacher/edres.htm.

At this site, teachers can find information on how they can help their students to use the Environmental Education for Kids site. *EEK!* is an e-magazine for children in fourth through eighth grade, which includes activities and resources for education and enrichment.

- Parks and Recreation>Final Draft Master Plan (September 2001). Houston Parks and Recreation Department. June 2003. www.ci.houston.tx.us/pr/masterplan/. A site from the City of Houston government. It contains the parks and recreation final draft Master Plan (Sep. 2001). It has several appendices about population characteristics and densities of super neighborhoods in Houston.
- Vascular Plant Image Library. 2003. Texas A&M University. June 2003. http://www.csdl.tamu.edu/FLORA/gallery4.htm.

Texas A & M has this great site of vascular plant images.

Books for Students

- Bash, Barbara. *Urban Roots; Where Birds Nest in the City*. San Francisco: Sierra Club Books/Little, Brown and Company, 1990.

 In this book the author describes where birds such us pigeons, crows, owls and killdeers build their homes in the heart of the city. Its watercolor illustrations show the reader how some birds have found unusual places to nestle (railroad track, streets lights, etc.). This is a wonderful book for kids to read as it teaches them what kind of places they can spot a nest.
- Capogna, Vera Vullo. *Did you Ever Wonder about Things you Find in your Backyard?*. New York: Benchmark Books, 2000.

 It describes the appearance and behavior of a variety of living things that can be found in a backyard, including spiders, bees, robins, slugs, squirrels and blue jays with excellent illustrations. It is a very useful book for children to realize that backyards are bursting with life.
- DeSpain, P. *Eleven Nature Trails: A Multicultural Journey*. New York: August House Publishers, 1966.

 This beautiful book has 11 tales from 10 different cultures, is very easy to read and has beautiful illustrations.
- DiSalvo-Ryan, Anne. *City Green*. New York: Morrow Junior Books, 1988.

 This story is about how a group of neighbors start a community garden in a vacant lot with plenty of litter.
- Fleming, Denise. *Where Once There Was a Wood.* New York: August House Publishers, 1950.

 This beautifully illustrated book shows the modern development of natural areas. Although it conveys the negative aspect of development, it provides suggestions for welcoming wildlife. It is a wonderful book that inspires discussion within the classroom.
- Fife, Dale H. *The Empty Lot*. San Francisco: Sierra Club Books, 1991.

 This book gives a message of conservation and brings it to children. It is about a man who owns a vacant lot and wants to sell it. After visiting it he decides not to sell it. He realizes that the lot is not empty; many animals live there.
- Heberman, E. *The City Kid's Field Guide*. New York: Simon and Schuster, 1989. This book describes some common urban American animal and plant species. It shows how each species has learned to survive in its human-made environment.
- Latimer, J.P. & Stray Nolting. *Backyard Birds*. New York: Houghton Mifflin Company, 1999.

 This is a guide of the birds that are most likely to be seen in the backyards of

North America. It has color photographs of birds in their natural habitat.

Rivera-Ashford, Roni Capin. *My Nana's Remedies/Los remedies de mi nana*. Tucson: Sonora Desert Museum Press, 2002.

This book is a great introduction to herbs used as medical remedies and to the art of the curandera. It is a bilingual picture book with beautiful illustrations. It includes a section on common native medicinal plants of the region, prepared by ethnobotanist Ana Lilian Reina.

- Tafury, N. *Do Not Disturb*. New York: Greenwillow Books, 1987.

 The movements and actions of a family camping in the woods cause the forest creatures to also move and make noise.
- Thatcher Hurd, M. *Wilson's World*. New York: Harper & Row, 1971. Wilson starts out painting a beautiful world but soon his world is so full of people and cities it is not fit to live in.
- Thornhill, Jan. *Wild in the City*. Toronto: Greey de Pencier Books Inc., 1999.

 This is an engaging book splendidly illustrated. It describes the nocturnal activities of some city dwellers like the skunk, the nighthawk, the squirrel, the bat, the kestrel, etc. There is also a short description of some of the animals at the end of the book.
- Wheeler, Jill. *Beastly Neighbors, a Book about Animals*. Edina, MN: Abdo & Daughters, 1993.

This book discusses the habits and behavior of several animals frequently found in and around cities and towns. There is a chapter about most common birds seen in cities and on how to observe them.

Websites for Students

Conrad, J. *Backyard Nature*. 2003. Webling Funding. 10 May 2003. http://www.backyardnature.net>.

This site classifies the animals into two groups: the lower animals (no backbones) and the higher animals (with backbones). It also classifies the plants into flowering plants, gymnosperms and spore-producers. It has a description and pictures of the animals and plants. It also contains a few stories that can be read month-by-month. Students can also post their haiku poems.

- EPA Region 7 Kids Page. May 2003. http://www.epa.gov/region07/kids/links.htm. This site has links to environmental sites with activities and projects for kids.
- Koshollok, J. 4Kids.com. 2 May 2003. http://www.4kids.com/Science/kenvironment.html.

This site has both online activities and printables for kids. Very easy to use.

Larabie, L. *Kid's Valley Garden*. Pakenham Junior Horticultural Society. 10 Mar. 2003. http://www.raw-connections.com/garden.

This is a site that explains children how to plan a garden. It gives some information about herbs, flowers and vegetables on how to plant and grow them. It has also a links page.