

Conservation and Restoration: Preserving Houston Architecture

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INTRODUCTION

Challenging, kinesthetic, and thought provoking activities are what the children desire at Draw Academy. My school is a prekindergarten through sixth grade charter school in HISD that consists of children who are creative, hardworking, and enthusiastic about learning. Each of my students holds his past educational encounters, which consist of lack of support from past teachers who hinder their present learning experiences. I have been challenged as a teacher to use all of my energy to motivate and encourage my children to be successful.

Draw Academy consists of 65 percent Hispanic, 27 percent African American, 7 percent Arabic, and 1 percent White. As you can see, Draw is a mosaic of various cultures all contributing their knowledge, experiences, and aspirations to complete the final product, their education. Forty-five percent of the students at my school are ESL (English as a Second Language) learners. Many of the students in the program are from Mexico while others are Arabic from the countries of Afghanistan and Pakistan who are also learning the English language for the first time. Of a school with 200 enrolled students, 21 percent of them are at risk. The conditions and support of their environments play an important role in determining if these children will graduate from high school. Together these students provide different prospectives on life and learning for myself as well as the other people they encounter.

As teachers we sometimes underestimate the capabilities of our students. We don't want to give an assignment that is too abstract and confusing, but we don't want to always give assignments or projects that are a "piece of cake." As a teacher, I wonder if my children will take an interest in a subject that has not been exposed to them on such a "spoon fed level," meaning straight from the textbook and followed by a worksheet. What are some of the interests of our children?

Architecture is a fun and exciting topic that many children are not exposed to in depth. Yes, in lower grade levels we talk about buildings in our communities and the people who work in them, but do we know who built these magnificent structures and why? In the city of Houston alone there are all sorts of buildings everywhere. Churches and houses are on every street. Schools are popping up everywhere to accommodate the population growth. Skyscrapers house some of Houston's top corporations. You can take your pick of a grocery store, not to mention all of the great libraries to catch up on the latest books. Can you think of a better way for children to learn about their cultural present in Houston than through its architecture?

BACKGROUND

A Brief History of Houston's Cultural Architecture

Our cultural history is reflected through architecture. Immigrants with various styles and techniques for construction settled Texas and established the city of Houston. African Americans, Mexicans, Chinese, Greeks, German, and French all came together to create a gigantic human mosaic, each group adding its own flavor and envisioning hope for a better future. With this melting pot unfolding, settlers created a new form of architecture to fit Texas' topography, vegetation, and climate.

Houston architecture illustrates our origins as a diverse city. A range of architectural replies answers questions about forming a new foundation. Early buildings were built according to the geography, materials of construction, and the cultural backgrounds of the builders. Tradition was a key factor in the design of buildings. Each builder or architect brought knowledge of conventional building methods, an insight into construction materials, and an adaptation to their newfound territory.

Scandinavians arrived in Houston in the 1840s. They were attracted to the possibilities for economic growth. As more Swedish, Norwegian, Danish, and Finnish people arrived the church became the social avenue for making friends and helping to form small communities. In the late 1920s one of the first Scandinavian Evangelical Lutheran Churches was built on land donated by parishioners. Members offered their money, labor, and skills. Many early Scandinavians worked in the fields of truck farming, shipping, industry, and other professional fields (von der Mehden, 183-91). Today as a reminder of their hard work and influence George W. Bergstrom Grocery Store still stands in its original place, a reminder of the Swedish-born architect Olle J. Lorehn, who helped to bring Houston a little Scandinavian flavor.

Germans migrated to Houston in the early 1830s and 1840s and are known as among Houston's earliest settlers. Many settlers stayed on the periphery of Texas rather than moving toward the interior of Texas because they found relatives and friends they knew from Germany. Other immigrants came from Germany, arrived in New York, and later moved to Houston. Their profound influence can be seen on street signs such as Binz named after Jakob Binz, a German-American who built the first skyscraper in Houston as well as major developments such as Hermann Hospital named after the Houston-born German-Swiss philanthropist George Hermann (von der Mehden, 166-77). On the grounds of Sam Houston Park, St. John Evangelical Lutheran Church stands preserved and restored as a keepsake of German influence on Houston architecture.

In the late 1800s, Chinese people arrived in Houston. After World War II the number of Chinese people in Houston doubled. Many came from surrounding states of Arkansas, Mississippi, and Louisiana. Many Chinese people congregated in the downtown area of Houston creating a Chinatown as seen in areas such as San Francisco and Los Angeles. In the early 1900s restriction on citizenship did not allow Chinese people to perform or learn skilled labor. Instead

many Chinese families opened their own restaurants and grocery stores as a source of income. One of the first Chinese grocery stores was named Quong Yick. It opened in 1930 and later developed into a chain of five stores (von der Mehden, 67-73). In 1951 the On Leong Chinese Merchants Association Building was established. It was a three-in-one building that housed retail shops, office areas, as well as apartments. It was the first of its kind in the Chinese community of Houston and still stands today.

Greeks arrived in Houston in 1888. The Pollmanakos brothers were first known Greeks to arrive in Houston. For them Houston was an excellent place for economic growth. Working in cafes and running small businesses is how many Greek men earned money. Their intentions were to stay here a short time, earn money, and return back to their families. Their intentions were good but their actions were different. In the early 1900s women arrived looking for their husbands and family members who never returned back home. With this reuniting of families, religion was placed at top priority. They established the first Houston Greek Orthodox Church in February 1918 (von der Mehden, 116\18). Annunciation Orthodox Church at 3520 Yoakum, built in 1953, represents the Greek presence in Houston.

Mexicans arrived to Houston in the early 1900s. Some people were Texas born citizens while others arrived from Mexico. They created communities called *colonias* and later established *barrios*, which were neighborhoods where friends and families lived. One of the first neighborhoods was called El Crisol, which we know, as Second Ward in Houston. Since many of the Mexicans that helped to establish Houston were Catholic it was important for them to have a place of worship. Our Lady of Guadalupe was built as a simple structure and was one of the first Mexican Catholic churches (von der Mehden, 42-44). Years later a newer Our Lady of Guadalupe was built. In addition to a new church there was also a parochial school added to the church. An impact was made on the community because so many Mexican American and Mexican children were educated there. In 1988, Guadalupe Plaza was built across from Our Lady of Guadalupe church and it is a current expression of Mexican culture through its design and color.

In the early 1700s the French first arrived in Texas by accident. Rene Robert Cavelier, a French explorer, set sail to establish a colony along the Mississippi River. Due to bad weather and poor navigation Calvelier ended up along the coast near Matagorda Bay (von der Mehden, 195). The first known Frenchman in Houston was a missionary named Father Emmanuel Domenech. In his journal he wrote that Houston was “a wretched little town composed of about twenty shops, and a hundred huts, dispersed here and there” (von der Mehden, 196). In the mid 1800s French people arrived to Houston. There were a few French settlers that agreed with Domenech but for the most part many saw Houston as a land of opportunity, as did the French engineering Schlumberger corporation, which made searching for oil a priority. The French saw Houston as a place for opportunity and growth. Dominique Schlumberger and her husband John de Menil were major contributors to the Museum of Fine Arts, the University of Saint Thomas, and Rice University in the 1950s, 1960s, and 1970s (von der Mehden, 195-98). On the corner of Harvard Street, All Saints Catholic Church stands exemplifying French Romanesque attributes that show French influence in Houston architecture.

African American settlers arrived in Houston as slaves in the 1830s. Many people fail to realize that many slaves were taken on expeditions with famous explorers such as Cabeza de Vaca and Francisco Coronado. Many of the first blacks arrived as slaves before the city of Houston was founded. Slaves worked on plantations as farm hands and house servants. “Black labor helped to build the plank road and railroads that were vital to the city’s prosperity, and helped construct many of the city’s buildings. While most slaves performed unskilled labor, there were enough black craftsmen and skilled workers in the city to alarm white workers” (von der Mehden, 13). Due to this situation, the early workingmen’s associations limited the employment of blacks in craftsmanship roles. In 1865 twenty percent of African Americans were homeowners and lived on the outskirts of Fourth Ward in “Freedmantown.” Some African Americans acquired a title to land and began building their own homes, most commonly “shot gun” houses. Whites sometimes sold land to blacks on credit to help with this development. The catch was that you had to be a skilled worker, shopkeeper, small business owner, teacher, or a minister. Surprisingly, during this time neighborhoods such as Vinegar Hill were mixed with various ethnic groups. On the corner of Travis and Bell, Trinity Methodist Episcopal Church, the oldest black congregation in Houston, was established in the 1860s (von der Mehden, 20-28). Antioch Baptist Church, known as the oldest African American Baptist congregation in Houston, was established in 1866 and still remains in its original location on the corner of Clay Avenue.

PURPOSE

Why teach about architecture?

Architecture reflects the time and the lifestyle of the people. New generations of Texans expressed beliefs and their moral convictions through the architecture that was constructed. Religion, education, and customs were all showcased through the designs placed upon public and private buildings. Structures paint a vivid picture of the sociological and environmental conditions of the builders. They also reflect the environment, traditions, and values a builder deems important.

Sadly, Houston’s unique and diverse architecture has been removed from its respected position only to be replaced with duplicates or “look alike” buildings as incomparable substitutes. Due to this epidemic, only a few Houston structures remain in their original form. I intend to teach the historical and cultural importance of various structures that are constructed within a community. Students will have the opportunity to view constructed landmarks as an intricate part of their history. I believe that students who lack an understanding of their cultural purpose in society lack a purpose for their education. By stating this I believe that children will realize that their past ancestors set goals for themselves and accomplished them not only for their personal fulfillment, but also the enjoyment of all nationalities yet to come.

STRATEGY

How do I teach children about architecture?

In this unit we will look at various areas of Houston and note the cultural contributions made to each area through architecture. The unit will be broken up into three core subject areas, which are language arts, math, and social studies. Every lesson will consist of an introductory story or poem. Each selection will expose children to various aspects of architecture such as building for shelter, learning about architecture through construction, and designing for purpose. In the simplest of stories and poems children will be able to reflect in their journals their emotions and feelings about the upcoming topic they are about to encounter. Children will also be introduced to a wide range of architectural terms. They will learn the meaning of words by looking at actual photographs of these architectural pieces. They will learn the meaning of preservation as it refers to the protection of buildings built in Houston from destruction and neglect. They will also learn the meaning of restoration in reference to the unit as meaning the revitalization or reconstruction of buildings in Houston to their original state of existence. Constructing and building their own communities will allow the children to gain knowledge in geometry making it easier for them to learn about three dimensional shapes and symmetry. There will be no problem incorporating social studies into the unit because every structure in Houston has some type of cultural reference, whether it is through architectural detail, the original builder of the structure, or its location in a community.

As critical thinking becomes a more common use in the classroom, children will begin to move from being concrete thinkers to more abstract thinkers. Through the use of critical thinking in this unit, children will be able to make connections among things that do not seem related. For example the collaboration of the various subjects under one topic makes it easier to go from diverse to more cohesive work which makes it easier for students to grasp the whole picture of the unit. We will discover how much effort it took for settlers to build structures.

OBJECTIVES

What do I want to accomplish from this unit?

With this unit I intend for my students to have a better understanding of their cultural history and the contributions their ancestors (great grandparents, grandparents, and other family members) have made to the city of Houston and their own personal communities. I want each child to gain a purpose for their presence in their own communities by recognizing buildings influenced or constructed by their ethnicity. Children should see Houston as a mosaic, a place of rich cultural influence and purpose. At the closing of the unit students should have a deep understanding of preservation and restoration. Children should understand that old doesn't mean useless. Everything serves a purpose whether it is brand new or older with a few cracks.

LESSON ONE: BUILDINGS FOR SHELTER: A PLACE TO LAY YOUR HEAD

Background Information

Our homes provide a feeling of comfort from the everyday grind, safety from the hidden evils that corrupt our world, and privacy that allows us to shape and mold our family's lives. Houses are a protection from various weather patterns in our Houston climate. Generally our homes are made with materials that are found locally such as wood, brick, and concrete. The very first homes were a temporary settlement. As various cultures moved and established themselves they were able to cultivate the land to make it more appealing to future settlers.

Lesson One Objectives

- Determine reasons why families leave their homes.
- Describe how individuals, events, and ideas have changed communities over time.
- Listen and speak to gain knowledge of one's own culture and the culture of others.
- Reflect and communicate through writing.

Lesson One: Activity One

Materials

Out in the Country by Judy Pedersen

Butcher paper

Markers

As a class we will explore the topic of moving from one community to a new community. In the past many settlers from various cultures settled Houston and left their comfortable communities in their homelands. We will use graphic organizers such as KWL charts and webs to brainstorm on this topic.

Children will listen to the story "Out in the Country" by Judy Pedersen. Children will reflect on the story by answering questions orally such as, why did the family leave their Brooklyn apartment to move to New England? How do you think the little girl felt about leaving her home? Why?

Lesson One: Activity Two

Materials

Vocabulary Sheet One

Vocabulary Sheet One

1. Architecture
2. Architect
3. Blue prints
4. Materials
5. Houses
6. Apartments
7. Trailer homes

Children will begin discussing the vocabulary associated with architecture. Children will define each word and illustrate the meaning of each word using the programs KidPix and Clip Art. Children will also have the option of using magazines and drawing their own pictures.

Lesson One: Activity Three

Materials

Local architect

Occupation Day. An architect will come into the classroom and discuss his/her job with the students. He/ she will allow the children the opportunity to look at blue prints of houses and answer any questions the children may have. The architect will also discuss with the class architecture as it relates to design.

LESSON TWO: LEARNING ABOUT ARCHITECTURE THROUGH CONSTRUCTION

Background Information

Buildings in Houston make a statement everyday through there size, color, shape, and location. Houses, churches, factories, schools, skyscrapers, and other structures all create the communities we live in.

Lesson Two Objectives

- Understand that architects use various combinations of three-dimensional shapes to create structures that we see everyday.
- Connect resemblances in structures to cultural groups who built them.
- Create standing structures that resemble buildings found in Houston.
- Use writing as a tool for learning and research.
- Apply mathematics to solve problems connected to everyday experiences and activities inside and outside of school.

Lesson Two: Activity One

Materials

Poem entitled “Skyscrapers” by Rachel Field

Butcher paper

KWL chart

Markers

Before reading the poem children can brainstorm by doing a KWL chart about

skyscrapers. They can tell what they know about skyscrapers and ask questions about what they want to know about skyscrapers. As a class we will read the poem entitled “Skyscrapers” by Rachel Field from the book *Sky Scrape/City Scape* selected by Jane Yolen. After sharing this poem with your students ask them various questions related to the poem.

1. How does the poem make you feel?
2. What do you think a skyscraper is?
3. Can you name other structures in Houston that stand almost as tall as a skyscraper?

Following this discussion, children will complete the “L” on their KWL chart to tell what they have learned. Once they are finished children can draw a picture to illustrate their neighborhood, community, or city and write a reflection about their drawing.

Lesson Two: Activity Two

Materials

Vocabulary Sheet Two

PowerPoint Presentation One (See attached)

Vocabulary Sheet Two

Cone
Sphere
Cylinder
Rectangular prism
Cube
Pyramid
Vertex
Base
Edge
Face

PowerPoint Presentation 1

Learning About Architecture

- Houston Teachers Institute
- Spring 2002



1

Who designs buildings?

- What is an architect?
- Architects design buildings.
- An architect is a person who designs buildings. They draw buildings onto paper for construction workers to build them.



3

What shapes do you see in buildings?


- Architects design buildings using many combinations of three-dimensional shapes.
- cone
- sphere
- cylinder
- rectangular prism
- cube
- pyramid



4

Where can you find architecture?


- As you travel to and from school, what do you see?
- I see buildings that make a statement.



2

What do all of the shapes have in common?

- Faces- flat geometric shapes like a square, rectangle, or triangle
- Edges- straight line that is formed where the faces meet
- Vertices- the point where the edges meet
- Bases- the face that the figure sits on



5



Children will view a power point presentation that shows various structures or buildings found in Houston. Structures will include houses, churches, schools, libraries, skyscrapers, and grocery stores. Children will identify each shape that is represented in each picture shown. After the presentation is shown a discussion will follow. Children will have several questions to answer individually after the oral discussion.

1. What shapes did you see in each picture?
2. Did you find more than one shape that helped to create a building? Why or Why not?
3. What subject do you study in school that helps you learn about shapes?

Lesson Two: Activity Three

Materials

Cardboard slab	Straws
8 oz empty water bottles	Cereal boxes
Empty milk cartons (pint)	Glue
Metal chip cans	Tape
Empty toothpaste boxes	Scissors

Children will find things around the house that resembles shapes that have been covered in class. Children will bring their findings to school to create their own miniature Houston communities. Children will name their buildings and give their importance to their communities.

Procedure

1. Before beginning the assignment as well as during the assignment, children should pay close attention to their surroundings as they travel to and from school. Have students look at the shapes that are used to create buildings and the ways that those particular shapes are positioned.
2. Discuss with the children the importance of having a foundation before building a structure. The cardboard piece will be used as the foundation in this project for children to glue and tape their pieces onto.

3. Children need to problem solve before they begin gluing and taping their pieces together.
4. After children have positioned, taped, and glued their pieces down, they can identify each structure and tell its significance to their miniature Houston community.

LESSON THREE: DESIGNING FOR A PURPOSE: GLORIFYING HOUSTON IN THE PRESENT

Background Information

Houston's architecture exemplifies vast and diverse representations. Who would have thought that just by looking at a structure that you would be able to find and identify cultural influences? Cultural diversity in architecture can be portrayed in the simplest of ways; for example, through a slanted roof or columns or in a more complex way such as by an architect who designed the structure.

Objectives

- Identify and explain the significance of writers and artists and their stories, poems, statues, paintings, and other examples of cultural heritage from communities around the world.
- Acquire historical and geographic data about the community using a variety of print, oral, visual, and computer sources.
- Use a problem solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, evaluate the effectiveness of a solution.
- Use a decision making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision.

Lesson Three: Activity One

Create a web or a graphic organizer about why buildings look the way they do. After the web is complete explain to the children that buildings have many reasons why they look different from one another.

Possible Reasons for the Differences

1. Climate: What is the temperature in the area? Is the area cold or hot?
2. Texture and shape: What materials are you going to use? Brick, wood, stone, etc.
3. Color: Is the structure going to blend in or stand out?
4. Personal Taste: Do you want to use your own creative skills so your structure won't look like everyone else's?

5. Importance: Why is your structure being built? To serve the community? Does a special person live there?

Lesson Three: Activity Two

Children will learn several architectural terms related to the structures found in Houston. They will be able to see a picture of each one as it relates to a structure. Children should define each word and find pictures out of magazines to go along with them.

Vocabulary

1. Arch
2. Columns
3. Balcony
4. Arcade
5. Veranda
6. Dome
7. Spire
8. Stone
9. Wood
10. Brick
11. Clay

After the vocabulary has been covered and examples of each word have been given, children will be able to create the following architectural pieces out of clay.

Lesson Three: Activity Three

As a class we will discuss the words preservation and restoration. Children will listen to the poem “Red Flower” by Ann Turner from the book *Sky Scrape/City Scape* selected by Jane Yolen.

After the poem is read several times, the children will be asked the following questions:

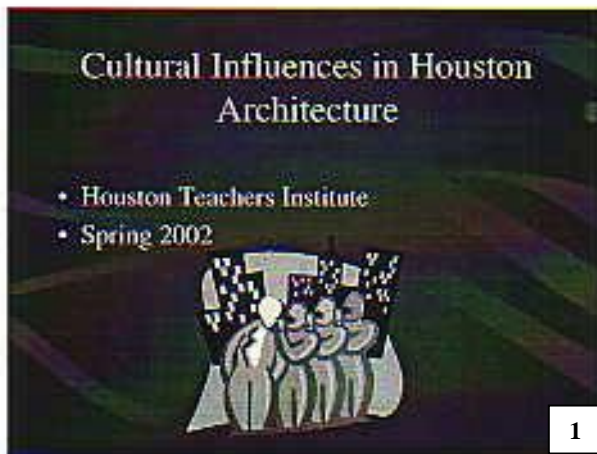
1. What do you think the poem is about?
2. Who do you think the speaker in the poem is?
3. Why do you think the speaker thought no one lived in the building?
4. What clues helped you believe this?
5. What changes would you make to the building to make it look more lived in?
6. After learning about different buildings in Houston, do you think this building serves a purpose in the community? Why or Why not?

Lesson Three: Activity Four

Materials

PowerPoint Presentation Two (See attached)

PowerPoint Presentation 2



Cultural Groups

- Houston architecture shows our diverse backgrounds. Here are a few of the cultural groups that have made Houston the great city it is.



3

Mexican Influence

- Mexicans arrived in Houston in the early 1900's. Some people were Texas born citizens while others arrived from Mexico.
- They created communities called colonias and later barrios.



6

German Influence

- German people arrived in Houston from Germany during the 1830's and 1840's.
- The first skyscraper in Houston was built by a German-American.



4

More Information About Mexican Influences

- Today Guadalupe Plaza exist across the street from Our Lady of Guadalupe Church. This plaza is a current representation of Mexican culture through its design and color.



7

More Information About German Influences

- At Sam Houston Park, St. John Evangelical Lutheran Church stands preserved and restored. Notice that this church has a slanted roof which is common in German architecture.



5

Greek Influence

- Greeks arrived in Houston from the country of Greece in 1888. Many of them came to make a better life for themselves and their families.



8

More Information About Greek Influences

- At Sam Houston Park, the Nichols-Rice Cherry House stands. It is typical of Greek architecture with its flat roof, four columns, and the doorway crowned by a pediment.



9

Chinese Influence

- In the late 1800's Chinese people arrived to Houston from the country of China.
- Many Chinese families opened their own restaurants and grocery stores as a source of income.



12

African-American Influence

- African-American settlers arrived in Houston as slaves in the 1830's.
- African-American labor helped to construct many of the city's buildings.



10

More Information About Chinese Influences

- As you look at the border of this building in Houston, you can see the Chinese architectural influence.



13

More Information About African-American Influences

- Antioch Baptist Church, know for the largest African-American Baptist congregation, was established in 1866 and still remains in its original location on the corner of Clay Avenue.



11

Remember

- Architecture reflects the time and the life style of the people. It also reflects the environment, traditions, and values a builder deems important.



14

We will watch a power point presentation entitled “Cultural Influences in Houston” which highlights cultural influences on architecture found in Houston. Greek, German, Mexican, African American, and Chinese are all cultures shown in the presentation.

Lesson Three: Activity Five

As a closing to the unit and I think an appropriate ending for the children, they will journey on a field trip to the Heritage Society in Sam Houston Park. Sam Houston Park is the oldest park in Houston and is a fascinating place for children to explore Houston’s past. During this tour they will be allowed to see Old Place which is a restored and preserved house that helps to educate students about the early Texas pioneers and their settlements in Texas. They also will tour the Yates House, which helps to explore the cultural contributions of African Americans in Houston and the state of Texas as a whole. Children will also have the opportunity to participate in hands on activities that explore nineteenth century life in Texas.

ANNOTATED BIBLIOGRAPHY

Teacher Resources

Alanen, Arnold R. and Robert Z. Melnick. *Preserving Cultural Landscapes in America*. Baltimore, Md.: The John Hopkins University Press, 2000.

Through reading this book you will learn new and innovative ways of preserving and interpreting the United States landscapes. Cultural influences throughout the United States are also expressed.

Barna, Joel Warren. *The See Through Years: Creation and Destruction in Texas Architecture and Real Estate 1981-1991*. Houston: Rice University Press, 1992.

This book provides a look into the architecture of Houston during the years of 1981 through 1991. It focuses on the economy of Houston during this time and the decision to demolish structures around the city.

Barthel, Diane. *Historic Preservation: Collective Memory and Historical Identity*. New Jersey: Rutgers University Press, 1996.

This book provides information on historical preservation throughout the world from the late 1800s to the 1900s.

Blackburn, Sadie Gwin, Dorothy Knox Howe Houghton, Katherine S. Howe, and Barrie M. Scardino. *Houstons Forgotten Heritage: Landscape Houses Interiors 1824-1914*. Houston: Rice University Press, 1991.

This book gives the reader a look into Houston's past history. Actual photographs of demolished buildings are shown.

Echols, Gordon. *Early Texas Architecture*. USA: Texas Christian University Press, 2000.

Explore this book as it divides the state of Texas by regions and discovers cultural influences by location around the state.

Field, William. *The Last of the Past: Houston Architecture 1847 to 1915*. Houston: The Greater Houston Preservation Alliance, 1980.

This book provides information on Houston buildings from the years of 1847 to 1915. There are numerous photographs and sketches of these buildings for examination.

Fox, Stephen. *Houston Architectural Guide*. 2nd ed. Edited by Gerald Moorehead, et al. Houston: The American Institute of Architects / Houston Chapter and Herring Press, 1999.

This guide is excellent for learning about structures around the city of Houston. It provides actual photographs and historical information about each building.

Robinson, Willard B. *Gone From Texas: Lost Architecture Heritage*. USA: Library of Congress in Publication Data, 1981.

Through the exploration of this book the reader is allowed to see past structures in Texas before they were demolished.

Rybczynski, Witold. *The Look of Architecture*. New York: Oxford University Press, Inc., 2001.

Timing plays a major role in determining if an architectural structure will be successful. Journey through this book as it discusses how solid and impressionable architecture focuses on timing rather than design.

Speck, Lawrence W. *Landmarks of Texas Architecture*. Japan: University of Texas Press, 1986.

Landmarks found in Texas such as universities, museums, and other buildings share with the reader the importance of our state history.

Tung, Anthony M. *Preserving the World's Great Cities: The Destruction and Renewal of the Historic Metropolis*. New York: Clarkson Porter Publishers, 2001.

This interesting book discusses with the reader about preserving various structures in the world. It focuses on the destruction and the revitalization on many famous cities. It also allows the reader to gain knowledge on the cultural history of these cities.

von der Mehden, Fred R. *Ethnic Groups of Houston*. Houston: Rice University Studies, 1984.

This brilliant book gives the reader information on various ethnic groups that helped to establish the city of Houston. Numerous photographs take the reader back in history.

Student Bibliography: Non-Fiction

Adam, Robert. *Buildings How They Work*. New York: Sterling Publishing Co, Inc, 1994.

This children's book gives a prospective on how structures are made. It tells the process, materials needed, and the styles of structures.

Bare, Colleen Stanley. *This Is a House*. New York: Cobblehill Books, 1992.

This book provides the reader with detailed information about how houses are built. The book starts out with blue print from an architect and continues by showing the builders who help to build the final product.

Cardner, Robert. *Architecture*. New York: Twenty- First Century Books, 1994.

This wonderful book of experiments shows children how to relate to architectural designs.

Dorros, Arthur. *This Is My House*. New York: Scholastic, Inc., 1992.

This book focuses on different materials that can be used to build houses and the ways houses are built around the world.

- Glenn, Patricia Brown. *Under Every Roof: A Kid's Style and Field Guide to the Architecture of America*. Singapore: Tien Wah Press, 1993.
This wonderful book explains styles of architecture on a child's level. Numerous illustrations allow for children to make associations with architectural terms and their meanings.
- Glover, David B. *Make it Work: Building*. New York: Two-Can Publishing Ltd., 1994.
Detailed information is given throughout this book on building various structures. The structures in this book range from building tents to constructing igloos.
- Good, Keith. *Shape It!: Magnificent Projects for Molding Materials*. Minneapolis: Learner Publications Company, 1999.
This amazing book will give children examples of structures and the various molding materials they can use to build them.
- Hill, Lee Sullivan. *Towers Reach High*. Minneapolis: Carolrhoda Books Inc, 1997.
This book gives the reader an introduction to the various structures that exist around cities.
- Isaacson, Philip M. *Round Buildings, Square Buildings, and Buildings That Wiggle Like a Fish*. New York: Alfred A. Knopf, 1988.
This book provides the reader with architectural knowledge about buildings from all over the world. The book even has a chapter entitled "Old Bones and New Bones" that relates to old and new buildings.
- Kaplan, Andrew. *Careers for Number Lovers*. Brookfield, Connecticut: Millbrook Press, 1991.
Through this book, children are given the opportunity to read about the everyday life of an architect.
- Macaulay, David. *City: A Story of Roman Planning and Construction*. Boston: Houghton Mifflin Company, 1974.
This book gives children the opportunity to learn about the building of the Roman Empire. It also provides blue prints for projects children can use.
- Milo, Francesco. *Masters of Art: The Story of Architecture*. New York: Peter Bedrick Books, 1999.
This children's book follows architecture chronologically from its beginning to its existence now.
- Pratt, Paula Bryant. *World History Series: Architecture*. San Diego, Calif.: Lucent Books, Inc., 1995.
This book follows the different eras of architecture from the Ancient world to contemporary architecture.

Ricciuti, Edward. *American's Top Ten Skyscraper's*. Woodbridge, Conn.: Blackbirch Press, Inc., 1998.

This book tells the readers everything they want to know about American landmark buildings. It gives the top ten most recognized buildings found in the United States.

Siberrell, Anne. *Houses: Shelters from Prehistoric Times to Today*. New York: Holt, Rinehart, and Winston, 1979.

This book begins with prehistoric shelters and follows how shelters have evolved over time.

Singer, Donna. *Structures That Changed the Way the World Looked*. Texas: Raintree Steck-Vaughn Publishers, 1995.

This book shows the reader how one structure can affect the skyline of area.

Stanush, Barbara Evans. *Texas: A Story of Texan Cultures for Young People*. Houston: Endowment, Inc., 1988.

In this exciting book, children are able to learn about various cultures that settled Texas. This book tells the reader about celebrations, games, and recipes that are all associated with different cultures.

Stienecker, David L. *Discovering Shapes: Three-Dimensional Shapes*. New York: Blackbirch Graphics, Inc, 1997.

Through this book, children can learn about three-dimensional shapes as they relate to mathematics.

Weiss, Harvey. *Model Buildings and How to Make Them*. New York: Thomas Y. Crowell, 1979.

This book gives detail directions on building model houses. Examples of construction are either out of wood or cardboard.

Wilkinson, Philip. *Super Structures*. New York: DK Publishing, Inc, 1996.

Through this book, children can discover the amount of time and the hard work it takes to build amazing structures found all over the world.

Wilkinson, Philip. *Eyewitness Books: Building*. New York: Alfred A. Knoff, Inc., 1995.

This book gives educational information about buildings. Through this book children can learn definitions of words as they relate to architecture.

Yolen, Jane. *Sky Scrape/City Scape: Poems of City Life*. Honesdale: Wordsong/Boyd's Mills Press, 1996.

This beautiful children's book contains poems about city life written by various authors. It begins with poems about structures and then continues with poems about communities. The illustrations are beautiful and are definitely eye catching.

Student Bibliography: Fiction

Flint, Russ. *Let's Build A House*. Nashville, Tenn.: Ideal Children's Books, 1990.

This book shows the reader the process of building a house from the ground up.

Grossman, Bill. *The Banging Book*. Mexico: HarperCollins Publishers, 1995.

Young children destroy the structures they have created. After giving thought to what they have done the children rebuild their structures back to their original form.

Henri, Adrian and Simon Henwood. *The Postman's Palace*. New York: Atheneum, 1990.

A postman builds enormous structures for the enjoyment of others.

Maynard, Joyce. *New House*. New York: Hartcourt Brace Jovanovich, Publishers, 1987.

A young boy decides that he wants to build a tree house but he has no materials. He decides to use the left over materials from the house being built across the street to build his tree house.

Pedersen, Judy. *Out in the Country*. New York: Alfred A. Knopf, 1991.

This story is about a family who leaves their Brooklyn apartment to make a better life for themselves in New England.