

An Economic and Demographic Blueprint of Houston Redesigned

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A Dream Deferred

What happens to a dream deferred?

*Does it dry up
Like a raisin in the sun?
Or fester like a sore--
And then run?*

*Does it stink like rotten meat?
Or crust and sugar over--
like a syrupy sweet?*

*Maybe it just sags
like a heavy load.
Or does it explode?*

~ Langston Hughes

INTRODUCTION

How did the Allen brothers' dream encourage the beginning of the fourth largest city in the United States? When they were unable to secure the land they initially wanted to purchase for their township site, did they defer their dreams, or did they persevere and Houston exploded into the metropolis of today? The proposed theme of this unit is *An Economic and Demographic Blueprint of Houston Redesigned*. My unit will help teach students about the evolution of Houston, 1836 to present day. The scope of evolution will identify the Allen brothers' quest for economic development, immigration, dwellings, construction materials, famous houses and buildings, and architects. After examining historical economic situations and why the dream of the Allen brothers was one that was thoughtfully planned out and executed for a variety of reasons, students will be responsible for mapping out a redesigned Houston of the future. Will the government building still stay where it was built some 170 years ago, or will students see a need to relocate it? Students will complete a blueprint of Houston in 1836 as drawn by Gail Borden, using AutoCAD and the Sanborn maps. Middle school students will learn about the way Houston developed into a city (through articles and from various sources into the thriving metropolis) it has become today. After learning about the arrival of all the immigrants and where each group settled, students will obtain a better understanding of how Houston developed, economically and demographically, into the city that it has become today.

Students will follow a universal systems model to complete this unit. During the course of this unit students will identify inputs, meaning various external factors that affected the growth of Houston as a city: processes, meaning the trials and tribulations that people endured from the time Houston became a city in 1836 until the present; and outputs, meaning the outcomes of hard work and perseverance by which Houston is now viewed. Using the systems model students

should visualize the cyclical process that Houston experienced and is still experiencing in order to sustain and improve. Students will learn briefly about planning a city, marketing their own city by posing and answering the question as to why someone would want to live in their city, architects and styles of homes and buildings, and why and how certain materials may provide longevity in those homes and buildings they are designing. Students will experiment with a variety of materials to design, analyze, and create blueprints for their “new” city and houses/buildings, work as a part of a team to accomplish certain tasks required to sell that “new” city, and keep the city vital and prosperous. Critical analysis will be an integral part of each phase. Student will be required to research an architect, house, or building, including both historical data as well as futuristically projected data. Each student will be required to complete tasks individually and as a member of a team.

Background

The Allen brothers came from New York by way of Galveston in 1831. They moved around northeast Texas in 1832, I believe, to survey where they could make the most money while taking ownership in the success of that endeavor. Being shrewd businessmen, they could see the economic potential of the land surrounding Buffalo Bayou. The land they had originally wished to purchase was around Harrisburg but that was unavailable, so they decided to purchase land around the White Oaks Bayou (“The Allen Brothers”). Access to Buffalo Bayou where the White Oaks Bayou and Buffalo Bayou converge was navigable for what they Allen brothers foresaw as their future city’s method of transportation for goods and people.

To purchase the approximately 6,000 to 6,850 acres of land located near the Buffalo Bayou, the Allen brothers offered Mrs. Elizabeth Parrott, John Austin’s widow, somewhere between the sum of \$5,000 to \$9,500 (Hurley and Johnston 9). Houston was named after the hero of the new republic, General Sam Houston. The Allens started selling land for \$1.00 to \$1.50 an acre August 30, 1836 (*Houston*). They advertised Houston as the future “great interior commercial emporium of Texas” (“The Allen Brothers”).

Economics

The economic development of Houston was a key reason why the city prospered through lean times right through to the present. Texas was rich in pine, magnolia and gum trees (Johnston 20). In addition Scardino identifies the availability of loblolly pine, hickory, sycamore, pecan, willow, cypress, and post oak (60). Lumber provided materials for houses and businesses. In the 1850s raising cattle provided food for early Houstonians. Then in the period between 1860 through 1870 the railroads came to Houston. Traffic on the bayou was predominantly people and goods. Cattle could be shipped on railcars. Transportation by land and by sea was an economic coup d’etat for Houstonians. Not only were goods able to get to outside markets but goods, people, materials could be shipped into Houston. Cotton came to Houston from 1870s to 1880s. Cotton was the major cash crop in Texas and Houston became the distribution center for not only cotton but also lumber and cattle. In 1890, Gilbert speaks of small manufacturing plants being established to complement Houston’s economic products of lumber, cattle, and cotton (4). During this time Houston had food factories, saw mills, and lumber products manufacturers. Work was just starting on the deep-sea port of what is known today as the Ship Channel and completed around the turn of the century. Port Houston becomes the major oil port in the nation. From 1930 to 1940 rice was added as a new cash crop. Houston was well on its way to becoming a city to be recognized (Gilbert 5).

Demographics

Early Houston was a multi-ethnic city. Some of the groups were composed of Caucasians (whites), African-Americans (Blacks) and Mexican-Americans (Hispanics). This paper will

address some of the ethnic groups that contributed to the economy of early Houston, but it is not a complete account of all groups that contributed to the success of the city. One of the reasons why Europeans migrated to Houston was the trade treaty with Great Britain in 1837. In 1839, France became the first European nation to recognize the Republic of Texas. In 1840 and 1841, immigrants from the Netherlands and Great Britain started migrating toward Texas, then followed by Belgians. The French and German presence was strong in the early development of Houston when in 1842, Henri Castro, a Frenchman, received two grants for settling 600 Europeans. In addition, two other Germans, Henry Francis Fischer and Burchard Miller contracted with 1,000 settlers to come to Texas. The Fischer-Miller grants obtained in 1842 were sold to the Adelsverein, a German society to promote German immigration. Real estate was booming in Texas and was the place to be in the mid-1800s in spite of its weather, climate and mosquitoes (Kingston 99, 102-103).

Some of the Caucasian population contributing to the economic development of Houston consisted of Germans and German-Swiss, French, Scandinavians, and the British/English from other parts of the United States. In the later part of the 1800s the Greeks and Chinese contributed to the economy and demographics of Houston.

It goes without saying that the British who left England and came to America were not all satisfied with living back east, thus venturing into the unknown west. This paper addresses the immigrants who were German, French, and Scandinavian and who contributed to the economy and demographical diversity of Houston.

The German presence in Houston was among the earliest settlers. A Frost Town was centered on Spruce Street and a second location in the Heights area was known as Germantown (Gish 1).

Gish mentions Frederick Law Olmsted's observation that in the 1850s German contributions to the economy consisted of being small tradesmen and mechanics. Given that the presence of German businessmen in early Houston, their economic contributions made Houston prosper. Gish lists some of the prominent German American accomplishments provided by a survey provided by Karl Micklitz, a Houston German American (Gish 4):

1. Bering family had many branches and involved in manufacturing and the hardware business. The family was active in the Methodist church.
2. Jacob Binz built the first six-story skyscraper in Houston.
3. Heitmanns were leaders in the hardware business and later in oil-field supplies.
4. Henry Henke was one of the founders of Henke & Pillot, which later became part of the Kroger grocery chain.
5. George Hermann, a Swiss-German was one of the city's leading early philanthropists. We still enjoy Hermann Park today.
6. Priester family contributed a doctor, and the family had important property holdings in lower downtown Houston.
7. Schweikart arrived with the German Society in 1839 promoting the insurance business.
8. Settegast was a German agent in the Adelsverein active in real estate, raising cattle, and livery stable operations and undertakings.
9. Rudersdorf was a builder of many of the turn-of-the-century homes in the city.
10. Usener well researched family that arrived with the German Society.

Today Houston still has Germans arriving who come from all walks of life and represent great diversity in professions involved in the hotel and restaurant. Business and a number of German scientists involved in the steel or oil industry Gish notes, "The German-American Chamber of Commerce believes that the German heritage in Texas provides, along with other

factors a positive climate for German business in Texas” (10). Germans found economic success in Houston after the war as illustrated by the number of German petrochemical companies, steel processors, financial concerns, land developers, and German hotels and restaurants that still exist today (Gish 3-4, 10).

John Ambler notes that one third of Houston’s foreign-born population in 1850 was made up of 48 French people. In 1860 they were fourth in number only to the Germans, Irish, and British. Because of their small numbers it was hard for them to form a permanent and distinct French community (Ambler).

Ambler writes that after World War I there were fewer than fifty French-born people residing in the Houston area. Those consisted of a few university teachers, a part-time consular agent and a few war bridges. Two professors, Professor Jules A. Verne, the chairman of the French department at the University of Houston and Andre Bourgeois, professor of French at Rice University, organized a French theater, *Le Petit Theatre Franois*. Amber discusses that after the outbreak of World War II, the French community grew due to the arrival of dozens of French engineers employed by the Conrad and Marcel Schlumberger. The Schlumbergers contributed to Houston’s economy by establishing the Schlumberger Well Surveying Corporation in 1934. Ambler notes with the influx of French due to Nazi-occupied-Paris, the arts in Houston became enriched by Conrad Schlumberger’s daughter, Dominique and her husband Jean de Menil. The de Menils donations to the arts include major contributions to the Museum of Fine Arts, the University of St. Thomas, and Rice University. They were responsible for building the Rothko Chapel and a new Menil Museum to house their outstanding collection of works of art (Ambler).

By the mid 70s, French commercial interests were extensive. Ambler indicates by the 80s French banks were established in Houston, and more than thirty French firms were providing the oil and gas industry with multiple services. Among the more recent capital ventures were hotels and various real estate developments (Ambler).

Another ethnic group that contributed to the economy of early Houston was the Scandinavians. Included in the Scandinavian group were Swedes, Danes and Norwegians. The attraction to Houston was the diverse business opportunities it offered. The first recorded Swede who lived in Houston, only for a short while, was Sven Magnus Swenson who later moved on to Austin to become a successful businessman. Louis J. Marchiafava and Charlotte Peltier note, “As an industrious people, Scandinavians have found the competitive spirit of Houston’s commercial environment compatible with their talents and with their desire for life’s material comforts and the good life represented by middle-class status.” Another early Swedish settler who remained in Houston was August Forsgard who became a successful merchant. One of the main reasons Scandinavians continue to move to Houston is the association with the shipping-related industries (Marchiafava and Peltier).

Also the African-American (Black) population has been in Houston since the beginning. African Americans were in Houston because they were born in Texas and what is present-day Mexico. “Free blacks came to Texas because there was greater economic opportunity for them and much less racial prejudice under Spanish and Mexican governments than in the United States” (Wintz).

Blacks helped clear the land for the Houston town site. As enslaved people, they also raised sugar cane and cotton on plantations, which were Texas’s main cash crops. However, they were also skilled workers who helped build roads, railroads, houses, and buildings. During the Civil War, African Americans took over and operated the fire department in Houston. Post-Civil War blacks lived in Third Ward and Fourth Ward in what was referred to as Freedmen’s Town. The white population was willing to sell property cheap on the outskirts of town to the blacks. Most blacks who were able to purchase their own land/homes were skilled workers, shopkeepers, and

owners of small businesses, teachers, ministers, doctors, and some politicians. Renowned blacks during the early days of Houston were Reverend Jack Yates, Dr. Benjamin Jesse Covington, Reverend Antioch, Julia C. Hester, and Nat Q. Henderson. Famous twentieth century blacks in Houston include Barbara Jordan and Mickey Leland. Although today's blacks reside throughout the city of Houston, however, the highest concentration is still located in the Third and Fifth Wards of the city (Wintz).

Houston appealed to the Mexican population because of the work that was available for them. The Mexican people, some say, stayed in Houston after it was founded as prisoners of war. However, a clearly defined community originated during the 1910s to 1920s. The reason they came and stayed was because their skills were needed. Mexican Houstonians contributed to the building of the port, the railroads, and numerous industries emerging in Houston during this time (Melville 1). Margarita Melville writes:

The railroads built in Texas after the 1850s contributed decidedly to Houston's growth by bringing a great deal of economical activity. Houston became a manufacturing and distribution center for Texas' cotton, timber, and oil products. Many workers were needed, and the railroad construction found Mexican laborers to be hard, dependable workers. (2)

One of the more famous Mexican families that contributed to the development of not only the Mexican community but also the city of Houston was the Sarabia family. The oldest son, Socorro Sarabia, worked his way up by working on the railroads, becoming a lab or contractor for the Southern Pacific Railroad and then securing employment for Mexicans on the railroads. Another of the Sarabia family members, Jose, opened the Azteca Mexican Theater, which was located around the Congress, Preston, Franklin, and Louisiana streets. The Second Ward was home to a radio station, KLVL, Morales Funeral Home and Rusk Elementary School, to name a few Hispanic landmarks. There is a public perception that all Hispanics in Houston are Mexican Americans. There is clearly a distinction, however, between the Mexican Americans and the arrival of Latin Americans who now call Houston their home. Mexican Americans have contributed to Houston's economy since before it was a city through to the present day in a plethora of ways that have enriched many Houstonians' lives (Melville 1-2, 5, 12).

Students should be familiar with the term "ward." Initially, Houston's city charter of 1839 organized Houston into four wards. In 1866, the Fifth Ward was added to accommodate the growing population (Kever). Not until a decade later was the need for the Sixth Ward recognized and added to what constitutes the six wards of Houston. The wards were established as political geographic subdivisions. The term ward today holds more a meaning of a sense of neighborhood or community having nothing to do with politics. Jeannie Kever, from the *Houston Chronicle* notes that "Nowadays, the wards are a social and cultural phenomenon, only loosely geographically defined and with no bearing on how our civic leaders are elected." That term ward has since been used in the political arena that is now Houston's politics but has been replaced with today's term, City Council districts.

The first ward of Houston was located north of Congress and west of Main. It was the original center for the business district in Houston. It was located close to Allen's Landing, and where Buffalo Bayou and White Oak Bayou converge ("The Six Wards"). Initially, whites, including a variety of ethnic backgrounds, lived in hotels occupying first ward. Churches, businesses associated with commerce, and some of the first homes built in Houston were located in first ward ("The Six Wards").

Today the area around First Ward is commercial property such as banks, hotels, skyscrapers, churches, libraries, parks and museums, and some loft apartments. The University of Houston Downtown is located in the First Ward. From an article in the *Houston Chronicle*, September 7,

2004, the First Ward is described as, “Originally the city’s business district and then a thriving melting pot, it’s now filled with dusty shops and light industrial complexes” (“Where the Wards Are”). Part of the first ward was taken to create the Fifth Ward (“The Six Wards”). The architectural style in this ward was mixed with Gothic, Renaissance to today’s modern.

Another of one of the original four wards was Second Ward. It was roughly bounded by the railroad tracks on the south and west, Lockwood Avenue to the east and Buffalo Bayou to the north. Once a well-to-do suburb in the early 1900s was speckled with warehouses along the Bayou and Rail Road and was home to the mansions of the plantation owners (“The Six Wards”). Today the Second Ward is predominately Hispanic and home to warehouses and soon to be loft apartments.

The Third Ward was one of the original wards in Houston. It encompasses a triangular area south of the University of Houston to Old Spanish Trail, north to the Gulf Freeway (I-45), west to Fannin, and east to the HB & I Railroad (“Third Ward”). This area became Houston’s center for the African-American community. Third Ward is home to the Eldorado Ballroom, Texas Southern University, and the University of Houston, main campus. Today Third Ward is occupied by predominately blacks, according to the *Census 2000: Demographic Data*, which indicated that out of 15,463 occupants 13,854 were Non-Hispanic Black according to the 2000 Census. Styles of homes and buildings are neoclassic, modern, Gothic and Victorian.

The last of the original wards is Fourth Ward. Fourth Ward was known as Freedmen’s Town and was home to the freed slaves after emancipation. This area was located south of Congress Street and west of Main Street and located southwest of Buffalo Bayou. This ward was the center of black cultural and professional life in Houston during the late nineteenth and early twentieth centuries. Fourth Ward housed more whites than blacks up through the nineteenth century, but it noted that it was one of the city’s most important African-American historic communities. This ward was populated with the first black churches, schools, and political organizations (Wintz).

Some of the reasons that Houston attracted a substantial black population were: it was located on a major route that brought freedmen to the city; whites subdivided land for rental properties for blacks; and early black organizations and educational institutions found bases in Houston. Gregory School was the first public school for blacks in Houston (Wintz).

Shortly after the Houston Riot of 1917, Houston’s black population in the Fourth Ward lost its prominence to the Third Ward, which attracted more black institutions. A combination of factors aided in the decline of the black population in the Fourth Ward. There was limited expansion available because of its locale. Also white institutions and downtown businesses infringed on the Fourth Ward. The City Hall complexes built in Fourth Ward also displaced blacks. Finally, a public housing development for white defense workers was built on land north of San Felipe. Today only a small black population resides in the Fourth Ward. The majority of the buildings are skyscrapers (Wintz). However, in the near future loft apartments will inhabit that ward.

Some of the architectural style of houses in that area were mid-Victorian and shotgun houses that were similar to the Acadian-style homes in Louisiana (“Historic Structures: 4th Ward Cottage” and “Pillot House”). Today’s Fourth Ward architectural styles are neo-classic, modern, Renaissance, and Victorian.

Two more wards were added to Houston at different times. The Fifth Ward was added to Houston in 1866. This ward included parts of the First and Second Wards. By the mid-1800s Fifth Ward was home to the north edge of Houston’s Ship Channel, industrial area workers, and domestics for affluent Houstonians. During pre-Civil War times this area was not highly populated. In 1866 half the population was black and the other half was white. Fifth Ward was

also home to Frenchtown, a four-square-block area comprised of 500 blacks of French and Spanish descent from Louisiana (Kleiner). Today, Fifth Ward's inhabitants is approximately two-thirds black, according to the *Census 2000* statistics.

The last ward to be added to Houston was the Sixth Ward in 1876. This ward was created from the portion that was north of Buffalo Bayou in the Fourth Ward ("The Six Wards"). The inhabitants of the Sixth Ward are predominately Hispanic. This area is known as the Sixth Ward Historic District. The architectural style in the Sixth Ward is mainly Victorian.

Houston's economy and the land of opportunity it provided was the reason so many people were willing to come west. With the emerging population, housing became an issue that needed to be reckoned with immediately. Tents were okay for the interim, but if you were used to living in a house, changes needed to be made and expeditiously. Many of the immigrants who came to Texas brought with them dreams for a new life and a new beginning. Many houses were constructed in the architectural styles that reminded them of their homelands. The basic necessities were food, clothing, and shelter. People could live off the land for food and hunt or send back east for clothing, but what about a home? They surely had lived in more than tents back east or whatever country they came from, so the next order of business was shelter and furnishings. But what about the merchants? They could not use tents year round, and churches and learning institutions needed to be constructed so they could civilize the Republic of Texas, thus supplementing the economy in Houston. So people started to build houses, stores, and hotels in the beginning to accommodate the influx of people to Houston. This section of this paper will explain the different styles of architecture that Houston experienced from the beginning until present day.

Architecture

One could deduce that the structures and houses of Houston were built they way they were and with the materials used because of the climate. Describing the climate in Houston, Ayele Wolde notes:

Nowhere [is]...the climate quite as brutal as it is in Houston. The heat is legendary and rightly so. It is Red Sea heat, without the beneficence of soothing breezes and languid lifestyles. The humidity makes one despair, and the rainfall, which doesn't seem to be a staple conversation piece, tries my imagination in order to determine just how much water a cloud can hold (39).

The typical house in early Houston was built from some type of lumber, usually a one-room cabin type and one story, with a porch on the front of the structure. Later houses were frame and consisted of two rooms joined by a passageway. The chimney was normally placed at the end of the building where there was a gable. Roofs were of three different types which were shingles, boards or shakes, which also covered the porches. One structure that was indigenous to the German settlements was the *Fachwerk* structure. These types of structures were joined with mortise and tenon joints secured with wooden pegs or tree nails. Some openings were framed for doors and windows and panels formed by the framework were filled with a variety of material from brick or stone noggin (Robinson).

During Antebellum Texas some plain masonry and frame buildings prevailed during this architectural period. The Greek Revival style dominated Texas architecture from 1840 to 1870. Principle features of the Southern version of Greek Revival style was the classic temple form, the porticos or porches with a supported roof supported by columns. Columns were of three main types, Doric, Ionic, and Corinthian. Greek Revival style had a central hall with rooms to either side in a symmetrical design, meaning that what ever was on the right side of the hall was on the left side of the hall in size, shape, and number. Likewise an equal number of windows flanked the

doorway, with a columned porch. Even the frame houses would exhibit a few classic details such as capped posts on the porches, a cornice, and multi-paned double-hung sash windows. Many Catholic churches were built in the Gothic Revival style. While a builder's background often found its way to a typical structure most Gothic Revival style structures displayed pointed arches, buttresses, and steeply-pitched roofs (Robinson).

Also, during this time the Anglo-American style was brought west. These buildings were similar to new houses being built in many master-planned communities throughout Houston. The buildings had masonry fronts that were either one to two stories high. Semicircular arches with French doors and fanlight transoms ordinarily spanned street-level openings; if a second-story was included, it had segmental arches and double-hung windows. Parapets were ornamented with a variety of brick or stone patterns (Robinson).

The period from 1870-1900 marked the Victorian period in Houston. This also marked the period in Texas of rapid expansion and new fortunes. With this new wave of expansion came the demand for a variety of buildings such as opera houses, schools, hospitals, libraries, and public markets. It was noted that with technology evolving, development of cities and architecture within them changed considerably. The Victorian style achieved a romantic and picturesque effect that was rich in detail as well as being ornate. Symmetry was not a concern in the Victorian style. In fact buildings were characterized by the off-center tower and the projecting bay (Robinson).

Admiration of character and magnificence replaced appreciation of beauty of proportion and details characteristic of the antebellum period. To achieve character and magnificence a variety of styles and designs were combined with a variety of materials. These attributes were evident in countless houses in picturesque styles by the use of intricate towers, porches with scroll work or caps on columns, decorative glass, dormers, bay windows, style of shingle pattern, spindle-work and punch work (Robinson).

After the Victorian period Houston seem to be a melting pot of various types of architecture. There have been numerous accounts of different houses and structures that combine several styles to create their own designs. This to me indicates that even early Houston was not static in its infancy as a city but pleasantly eclectic.

Following the Victorian period is what is known to some as the Colonial Revival period. Barrie Scardino identifies the first Colonial Revival house in Houston as the Jonas Shearn Rice house built in 1902 (95). Another of the earliest homes during this period was the Thomas L. Hackney house built in 1903. Most of the homes during this period were magnificent mansions in size with classical features from previous architectural styles both inside and outside (Scardino *et al.* 95).

The Art deco or Modern style follows the Colonial Revival period. Some of the structures that fall into this period of architecture are the Gulf Building, built from 1927-1929 and the San Jacinto Monument. Robinson also calls attention to the Houston City Hall being built during this era. Architecture of this time mostly has incorporated aspects and taken bits and pieces from such classic designs as Gothic or Georgian Colonial and added them to some of the same plan layouts from earlier architectural times. I think this is one of the reasons that once past World War II architectural styles have been combined in some way to create a new look but they're combinations of many styles or designs from old (Robinson).

Some of the more prominent architects in historical Houston were Michael DeChaumes who was the first architect to work in Houston in 1837, Alfred C. Finn, William Ward Watkin, Joseph Finger, John Staub, Kenneth Franzheim, Robert Bryce, Cesar Pelli, N. J. Clayton, Eugene T. Heiner, George Dickey, and Olle J. Lorehn. There were also several architectural firms with

multiple associates such as Caudill, Rowlett & Scott, S. A. Oliver & Company, H. C. Cooke and Company, Lang and Witchell, and Skidmore, Owings & Merrill. For the scope of this paper this list is a partial list and is not meant to discredit or slight any prominent architect of the time. Each has a work attributed to them in numerous resources used to complete this paper. Students will be introduced to these architects through the homes and buildings they are credited for designing.

Houston today is still an architectural pleasure to view with its tall skyscrapers of various eclectic styles. As our economy changes so will our architecture. More houses will become available, and old buildings that have long since seen their better days will be refurbished and turned into loft apartments. People will still try to buy houses that will portray their artistic and financial capabilities. I recently visited a house that was just built for charity and the floor plan was that of a Greek Revival style with an ultra modern brick exterior but no rounded archways that I think would have really been terrific, but it was selling for \$1.9 million. Many of the design characteristics were what I would call when old meets new. The house is pleasing to the eye, very functional and energy-efficient yet lacked something special that would be remembered throughout the ages.

IMPLEMENTATION STRATEGIES

A timeline of architectural styles will provide students with just a few examples of the noteworthy houses and buildings that have and still do exist in Houston. Students will put into chronological order, based on the completion date of structure, houses and buildings throughout the history of Houston. Unfortunately some of the historical houses have been demolished since they were built as does happen with expansion, but a push to renovate, restore, and preserve historical buildings is an ongoing plight that still exists in Houston and its surrounding areas. The timeline will start with the Republic Antebellum houses and structures, such as the Antioch Baptist Church, which is still located in downtown Houston amongst the skyscrapers. Next, the Greek Revival or Southern Colonial style will depict homes, such as the Charlotte Baldwin Allen House built in 1850 or Judge Andrew Briscoe's house built in 1837 and some Gothic style churches (Scardino *et al.* 111). Following the Southern Colonial period is the Victorian style period (Robinson). Some of the more noted houses and commercial buildings built during this era are the Albert A. Van Alstyne house built in 1877; the Charles S. House house and Jehu W. Johnson-James Oliver Wesley Ross house, both built in 1882; Dr. James H. Blake's house, built in 1884 (Scardino *et al.* 129, 134-135, 82-83), and ending the period the City Hall and Market buildings built in 1904 (Powell 48).

I will lead the discussion directing students to think about why each structure was built and why the specific materials were used for each structure respectively. What type of architecture is prevalent in Houston that portrays ethnic background? An example of a leading question would be "What type of material would you use to build your house?" "Since the heat and moisture in the south is unlike any weather encountered in the north, would this influence your decision for the type of material used in constructing your house?" and "How did people decide where they wanted to live and in what style house?" Students will be asked to identify some photographs of the previously-mentioned homes and buildings that were located throughout historical Houston. Then students will be asked to identify houses and buildings occupied by Texans. Students will need to contemplate the correlation between houses and people's careers. How did the economy help or hinder the building of some of the homes and buildings in Houston? Students will obtain information from history classes, teacher-supplied materials, and the Internet. "Which demographic area (ward) would you choose to live in today if given the choice?" "Would the price of gas be a factor in where you would decide to live?"

Additionally, I would have students think about how they would design Houston. Would there be still be only four demographic areas (wards), or would they follow the example of

present day six demographic area (ward) structures, even though those wards are not politically associated today? Students will be assigned to a group/team and I would have them decided how many demographic areas (wards) Houston should have and what types of houses should be built. How could you market real estate in the Houston area? Different scenarios will be given to each group/team and they must come up with a viable solution to the scenario by planning either a house to constructing a blueprint of a “Redesigned Houston.”

The proposed length of this unit would be six weeks. The scope of this unit will be vocabulary, studies about houses and buildings, famous Houstonian architects, hands-on activities, research reports, timelines, current events, presentations and team building activities.

Sixth, seventh and eighth grade students will be responsible for learning the basic vocabulary associated with architecture and economics. The Internet plus teacher-supplied books will be the references for students to use. Some of the vocabulary words that will be included in this unit are:

Portico, cornice buttress, transoms, Neo-Classic, Modern, Southern Colonial, Queen Anne Style, Tudor, bungalow, Spanish Colonial, Georgian Revival, Italian Renaissance, Art Deco, International Style, Greek revival, Gothic, Doric, Ionic, Corinthian, capital, pilaster, engaged column parapets, dormers, mortise and tenon joints, tree nails, noggin, weatherboard, symmetry, asymmetrical, row house, dog trot, mud-cat chimney, and spindle posts.

Next students will be introduced to some of the famous houses and buildings throughout the history of Houston. Students will create a timeline of events based on their research of historical events that took place in Houston. Along with the buildings students will be introduced to some architects. Students will do a research report on an architect or famous house or building of their choice.

A great portion of this unit will be through hands-on activities. Students will use a web quest to obtain needed information to complete projects. They will also use Microsoft Publisher to create a brochure to attract prospective newcomers to the Houston area. Students will use AutoCAD to create a blueprint of their “Redesigned Houston.”

Final project for this unit will be a group/team PowerPoint presentation. Requirements for the number of slides and graphics will be forthcoming. All students need to participate and will be graded by a rubric along with fellow students for participation, delivery and content.

This unit is intended to complement the Technology Education lab that is part of my classroom. The activities students will partake in will help students when they go to Construction and CAD, Engineering Structures, Aerodynamic Principles or Road Transportation Applied Educational Systems, Inc (AES) modules.

LESSON PLANS

Lesson One: Homes and Buildings

Objective

This lesson introduces different styles of houses and buildings prevalent in the Houston area. The objective of this lesson is to help middle school students learn to identify houses and buildings by type and analyze why each was built where they existed. Middle school students will also be able to identify the possible materials used in the construction of each type of house and/or building. This lesson will be the basis for future lessons and constitutes the foundation for this particular curriculum unit. Vocabulary, through group mapping, will be the introduction to familiarize students with the architectural style of houses and buildings in Houston.

Procedure

Middle school students will be divided into groups/teams to complete this lesson. Each group will draw from five different pieces of paper to know which house or building they have. Each group will need a minimum of three references about their house or building. A lead spokesperson should be democratically chosen by the group to lead the discussion. Another person should act as the scribe for the group to keep notes to reflect upon. Another student should be the spokesperson, which may be the lead person or someone else. Students will give orally, to the class, their findings, as well as filling in the group mapping activity where appropriate information is needed and completing a 5-10 slide PowerPoint Presentation or comparable alternative.

Materials Needed

- Photographs of various architectural styles of houses and buildings
- Computers
- Internet access
- Microsoft PowerPoint Presentation or comparable presentation software
- DVD creation software and hardware
- Digital visual projector and screen

Assessment

A grading rubric with the five different criteria will be used to assess students work. This rubric will be used so students may know ahead of time what is expected and which grade they will strive to work towards. Team participation will be awarded according to the team and the teacher's observations.

AP Students may elect to produce a DVD of their findings for class presentation.

Special Needs may complete a 5-slide PowerPoint Presentation or one that is comparable with adjustments made to the grading rubric to reflect content master where applicable.

Grading Rubric for Oral and Written Presentation

Criteria	4	3	2	1
Organization	Information presented is in an interesting, logical sequential order that audience can follow.	Information presented is in a logical sequential order that audience can follow.	Difficult to follow because the sequence jumps from topic to topic illogically.	No logical sequence is present.
Grammar & Neatness	Presentation has no misspellings or grammatical errors.	Presentation has no more than two misspellings and/or grammatical errors.	Presentation has three misspellings and/or grammatical errors.	Work has four or more spelling and grammatical errors.
Research/References	Team uses three required amount of references cited correctly.	Team uses two references and cited correctly.	Team uses one reference but improperly cited.	Team uses no references.
Team Participation %	100	50/50	30/70	< 30

Criteria	4	3	2	1
Oral Presentation	Presenter knows the material and can speak orally from memory. Eyes are scanning the room and not fixed in one area. Receptive to questions. Great interaction with audience.	Presenter knows the material and can speak orally from memory. Eyes are fixed in one area. Somewhat receptive to questions.	Presenter reads the material and can speak orally from memory. Eyes are scanning the room and not fixed in one area. Not receptive to questions.	Presenter reads material. Not receptive to questions. No interaction with audience.
Total Points				

Lesson Two: Marketing Houston

Objectives

- To introduce students to the ward structure in Houston of 1839 compared with present day Houston.
- To have students analyze why certain buildings and houses were built in specific areas.
- To be able to sell a house or building based on the economic factors based on research from previous lessons.
- To have students create a Real Estate Marketing Brochure for selling real estate in their “Redesigned Houston.”

Procedure

Half of the class will receive a list of famous houses and buildings. Students will use the Internet, teacher-supplied books, and communication with others to determine which ward those houses and buildings resided in during the early years of Houston. Then students will become hypothetical planners and real estate agents to market their “Redesigned Houston” by using Microsoft Publisher or Microsoft Word to create a professional looking marketing real estate brochure. Students may use digital photos to enhance their brochures.

Upon completion of the research and creations, students will discuss their findings in a class setting. Discussion will be student-directed and facilitated by the teacher, only when necessary.

Materials

- Computer
- Microsoft Publisher or comparable software
- Digital Photographs
- Web creation software

Assessment

Students will be graded on the validity of information obtained and a rubric for the presentation. Students may work in groups of three to four members, dependent on class size. One student should be democratically elected by the group as the spokesperson/leader. Students presenting should have handout materials for the listening class members so any questions may be answered immediately and notes taken.

AP Students may create a basic real estate web site with four web pages and one navigation page. Web sites should be interactive and contain digital photos, testimonials obtain from current home

owners (parents, or relatives), factious contact information, pleasing graphics and some type of animation.

Special Needs may use MSWord to create a flyer for their hypothetical real estate company. Flyer should contain a piece of clip art or photo of a home or building, and factious contact information.

Brochure Rubric

	1	2	3	4
Display	All parts not clearly labeled.	Some parts are clearly labeled.	Majority of parts are clearly labeled.	All parts are clearly labeled.
Grammar/ Spelling	There are many grammatical and spelling errors.	There are several grammatical and spelling errors.	There are minor grammatical & spelling errors that don't detract from the presentation.	There are no mistakes in grammar or spelling.
Presentation	The brochure is presented with difficulty for the audience to hear & little eye contact.	The brochure is presented with an uncertainty tone in voice, but attempt to make eye contact is noted.	The brochure is presented with a fluent voice, and occasional eye contact.	The brochure is presented with an expressive and fluent voice, and good eye contact.
Layout	Layout is confusing. Components are inconsistent and information is missing.	Layout is somewhat organized. Most components are inconsistent. Partial information is present.	Layout is organized. Most components are consistent within publication. Information can be found.	Layout is well organized. Consistency of components makes locating information easy.
Content	Content does not cover subject.	Content somewhat covers subject. Facts may be not complete.	Content covers subject sufficiently. Most facts are helpful and correct.	Content covers subject thoroughly. Facts are helpful and correct.
Total Points				

Lesson Three: Famous Architects

Objectives

Students will be introduced to a variety of architects whose work has impacted the design and construction of homes and buildings in the Houston area. Students should be able to recognize a structure because the class has learned some of the vocabulary that will be part of this lesson. Students will be able to correlate the name of the structure with the architect's name and location of the structure.

Procedure

Students will be given a list of famous Houstonian architects to select from. Decisions of the students are voluntary, however if students cannot decide on an architect than one will be assigned to them.

Materials

- Digital camcorder and media
- Photographs of architecture either taken by students or accessed from the Internet or other sources
- List of Houstonian architects complete with their most noted works

Assessment

Students will be graded on a rubric provided. Research will be a key factor in the success of this lesson.

AP Students created a video of the works of an architect that you choose.

Special Needs will have a modified lesson for identification purposes and a matching worksheet to match homes to architects.

Lesson Four: Final Presentation

Objectives

Students will design and create a multimedia presentation using Microsoft PowerPoint to explain their experiences with this curriculum unit. Students will apply their teambuilding skills to complete this lesson. Students will use technology to appropriately complete this lesson following the guidelines and rules for copyright laws.

Procedure

Teams will consist of the same students from the group/team activities. Teams should create a Microsoft PowerPoint presentation that shows what the group learned from this curriculum unit. The criteria for the final Microsoft PowerPoint presentation is as follows:

- Number of slides: 10-15
- Slide transitions and background should be appropriate for the class presentation
- Number of graphics/photographs: 3-7
- Video clip: 2-3 minute in duration
- Font Size: Appropriate for class viewing, 24 point suggested
- Font Color: Appropriate for educational viewing
- Sound: Appropriate for educational and class viewing. Must be appropriate for slide being viewed
- Presentation length: 5-10 minutes

Slide content should consist of pictures that are explained with connection to vocabulary. Content should include team-building skills that were used to accomplish the activities. Web sites should be included where information was obtained. Animation could be used to show different types of forces that affect bridges and buildings; this option would depend on the version of software used to create the presentation.

AP Students should be able to add animation or create a web site of their findings.

Special Needs: An abbreviated presentation with clip art and appropriate size fonts and colors for aesthetics. Verbal presentation should be appropriate to special needs.

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