

## **Architecture and History of Barelás**

*Lorraine Bustos-Martinez*

### **Summary**

This curriculum will teach middle school students architecture, oral and visual history of their neighborhood where most of them reside within the Barelás Community area. About 95% of these students are on free lunch programs, the community is poor and test scores are relatively low. The population is basically Hispanic, whose families settled in this area generations ago. The other students are immigrants whose families are seasonal or migrant workers. I teach ESL(English as a Second Language) at Washington Middle School. The students that I teach usually do not complete the entire year, and Spanish is usually their first language. The focus for the year is to teach these students to read, understand what they read and speak English, therefore this lesson will be introduced and carried through in Spanish and English.

A lot of the students that attend school, live at or near the historic renovated neighborhood of fourth street and Barelás. They will have a better understanding of this area and the relationship of architecture when this lesson is introduced to them. I will present a narrative history of the area. The objective is to create knowledge, observation, description and develop hands-on skill through architecture and design thinking.

This unit is an interdisciplinary curriculum. My primary focus during the next semester will be nine weeks to assist and direct students through this unit. They will be involved in a survey, hands on lessons, walking tours, face to face interviews with people of this community, and architectural history of this area. This curriculum emphasizes observation, critical thinking, practical skills, cultural knowledge and understanding, civic and aesthetic values, creative expression, reading and writing, speaking and listening, literature based instruction and creative-artistic problem solving, and hands-on expression. This unique discipline helps students become involved in practical learning skills. They will meet state standards and benchmarks as required by the district.

In the following curriculum I will introduce the historical background of the community of Barelás as it existed and as it is known today. This is informative to students, teachers, and community. The information was gathered for this unit was through numerous resources; the Albuquerque City Planning Office, Barelás business district residents, personal interviews of the residential area, newspaper clippings, architecture history for children, and New Mexico history books. This unit will reflect what will be utilized during the course of this semester, what can be taught, the method of teaching it and how it can be evaluated. This information is important for teachers who would like to teach a similar unit or other units that may reflect architecture.

### **Strategies:**

The classroom setting will be created into an architectural setting, giving students plenty of space to work individually or in groups work, which enhances cooperative learning. (Figure #1) They will learn architectural vocabulary terms such as vertical lines, foundation, vanishing

point, horizon line etc. They will have an opportunity to utilize their senses, work with clay, draw, construct models from cardboard or shoe boxes. They will learn about webbing or bubble diagrams, as well as grid work which helps them plot their ideas into designs for floor plan outlines.

A walking tour can help students identify geometric forms in architecture. The students will go on a field trip to the Historic Fourth Street/Barelas District. From this the students will learn the procedures for compiling information. They will take a journal and paper which they can write on while on their walking tour. Permissions letters will be sent home for each child; they must be signed and returned to their teacher. It is important to follow school field trip procedures. Students will understand what procedures are needed for this assignment about themselves, from the school and from the merchants.

I will include a permission letter which is included in this curriculum.(figure # 2) It will be presented to merchants prior to visiting their businesses. Students will have an opportunity to speak with merchants as well as with residents. A series of questions will be provided to all students to assist them while talking to merchants. They will be encouraged to solicit answers based on numerous questions. This helps students overcome their shyness, and become knowledgeable of the course matter.

Previously, I mentioned that these students are in school for a short period of time and it is important to begin this lesson as soon as school begins; it will help keep them. I will introduce the architecture lesson to students the first week of school. They will get a copy that introduces a brief history of Fourth Street/Barelas area. They will observe pictures of historical buildings that exist in this area. They will observe the different architecture styles of numerous buildings. As the semester progresses they will create hands-on three D projects. They will learn to read a map that reflects where this area is located. They will learn about the history, architecture, and present status of what is going on in this area to date.

I am including a list of the architectural terms which are going to be introduced and this will assist them to understand this unit. The Albuquerque City Planning office offers a list of photographed homes and locations. This may be obtained from their city offices.

#### Vocabulary:

truss	vanishing point	horizon line	vertical line	floor plan	bubble diagram
beam	column	arch	base	entry way	elevation
portal	foundation	vigas	bridges	tracing	grids
model	aesthetics	latias	plan view	data	city plan

#### Historical Summary:

Nobody remembers why, or who named this area "Barelas," but the first Spanish documents of 1662 mention Pedro Varela (Barelas) established the first farming ranch in this area. It is a predominately Hispanic neighborhood where the first Hispanic farming villages developed in the 19<sup>th</sup> and early 20<sup>th</sup> centuries not far from the ford of the Rio Grande River. The railroad system was developed in 1880. Soon after, Fourth Street became Route 1, and in 1924 the area was redesigned as U.S. Routes 66 and 85. This is the area which created an urban core .

This area is located on South Street Historic District within the city of Albuquerque, New Mexico in Bernalillo County. It begins three blocks south of downtown and is surrounded by the commercial and residential buildings. It is three blocks away from the old Santa Fe Railway Locomotive Shop and tracks. Most of the building are New Mexico vernacular houses built of adobe and corrugated metal roofs, Bungalow style homes, Queen Anne Style, four square houses, shotgun, wood and brick form homes, flat and hipped roof homes.(figure #3 roof styles)

The history that will be introduced will be based on the origins of this area and Route 66. Its major routes were the Chihuahua, Mexico Trail, and Santa Fe Railway otherwise known as the Camino Real, the main route connecting New Mexico to Mexico. Supply trains traveled the Camino Real (Kings Highway) twice a year bringing chocolate, paper, coffee, oranges and yard goods to isolated villagers. Barelas area is a path of history, it is located at the best ford of the Rio Grande, where the first bridge is located, not far from the Plaza and not far from the locomotive repair shops.

Barelas is one of Albuquerque's first forming communities originating sometime in the mid 1600's. This area has pioneered its earliest inhabitants and as it grew it fueled Albuquerque's early growth until 1960. By 1860, there were 300 people who farmed their fields by the *acequia madre*(main irrigation ditch). The vein that feeds the *acequias* is the Rio Grande which is known to be 1,800 miles long. The greatest river connects with New Mexico, Texas and Mexico.It plays an important role in the state of New Mexico history.

In the early 1800's, like other Hispano farming villages, a strong sense of community developed through family ties, and the custom of compadres (god-parents) began to move closer together from surrounding villages. These areas included Colorado and Chihuahua, Mexico after 1880. The area of Barelas formerly known as Varela, as previously mentioned, matured into an urban neighborhood. The area has a deeply-rooted historical, cultural connection to communities in the southwest or the U.S.- Mexico border region. The buildings in this area are dwellings that common folk of the time could afford. This constituted the original settlers and their descendants who migrated during the latter years.

### **Mexican Era 1660-1880:**

It is during this era of 1662 that Barelas was born because of its tributary valley location and position along the Camino Real (roadway). Many communities existed along this route from Mexico City to La Villa Real de San Francisco de Assisi de la Santa Fe, (Santa Fe, N.M.) New Mexico. New Mexico was governed under appointed and elected Captain don Diego Dionisio de Panalosa Briceno y Berdugo. The state was under Mexican Rule from 1822-1846. Two years later, on February 2,1848 the United States and Mexico signed the Guadalupe-Hidalgo Treaty. The United States under the direction of General Stephen W. Kearney paid Mexico fifteen million dollars for New Mexico, Colorado, Texas, California, Nevada and Utah.

It is during this era that adobe houses and single neighborhood general stores, metal roofs, canopies on stores were constructed. These canapes gave buildings a Spanish-Mediterranean -Caribbean look. Shady portales over the walkways of commercial buildings and stone veneers continue to exist today.

## **Farming Community 1830's:**

As more and more people populated the area, water from the *acequias* was diverted into the community by means of irrigation ditches for proper irrigation of this farming community. Homes were constructed in different styles of adobe and stone. The casa, or house began as a single, square-sided, flat-topped roof. The basic styles had corbels, canale, latias, vigas, bullets, moldings, columns, shingle, portals, posts, shudders, Victorian style, quatrefoil windows, bay windows, and pattern moldings.

They were constructed of earth tone colors, wooden framed windows and doors, roofs were either flat or steep patterned. These homes were constructed with different materials of the area until the railroad system integrated in 1880 into this farming community.

## **Railroad Neighborhood 1880-1948:**

Social changes took place when the railroad arrived in Albuquerque. It became a vehicle for economic transportation. The roundhouse was built offering jobs to numerous people of other areas along the Camino Real. About 80% of the neighborhood residents were of Spanish descent. Some Italian, Anglo, Irish, Greek and Polish Americans, Mexicans, Germans and Eastern United State immigrants moved into the area. By 1920 there were at least 1,500 inhabitants.

As a result this also influenced the form of architecture. It developed a stronger identity and soon boasted Victorian cottages and owner-built adobes with gabled roofs. The styles of these homes are characterized by bold design and irregular forms. A Gothic style home is constructed very strong with vertical narrow boards, diamond shaped windows, iron doors and window hinges.

Italian style homes had lower roofs, arch shaped doors and windows and double doors. Again as with the above mentioned styles, these buildings were not always modeled to accommodate the structure of the already existing building. This is an area of the city, unlike many others, where defined details of the architecture is either simplistic or very detailed.

As the downtown and Barelás area developed between the tracks, subdivisions of square blocks with narrow lots were plotted. These lots ran mostly north-south and a few east-west. A new style of homes was now being constructed. The architecture consisted of brick and wood frame houses with multiple intersecting roofs .

The area suffered when the Santa Fe Railway completed its conversion from steam to diesel locomotives, which required less maintenance. Repairs now were consolidated with Texas and California. By 1950 the employment for repairs reduced from 1,000 to 100 employees.

## **New Mexico Route 1 Highway Boom 1942-1945:**

Bridge Street was added south of Barelás 4th street (known today from the east side bridge; Caesar Chavez Blvd. and westbound is Bridge Avenue). The Camino Real Highway, recognized by the federal numbering system, was incorporated as U.S. Route 66 (East-West) and U.S. Route 85 ( North- South) highway traffic across the state of New Mexico went down

Fourth Street and over the Barelás Bridge. More than 3,500 vehicles were crossing this bridge daily. This was the classic first-generation automobile strip that resulted in having two major U.S. highways run down an existing residential street.

### **Construction of Service Stations, New Stores and Grocers 1931:**

Four service stations and eight stores elevated the neighborhood, especially with the grocery influence of Piggly Wiggly chain store. This influence emerged the shopping district area and now newer commercial buildings were being added alongside the first utilitarian designed buildings, attracting even more tourists because of its uniqueness. Central Avenue was constructed in 1931 and designated as the east-west Route 66 highway in 1931. Car and tractor dealerships continued to expand even through the Great Depression. New construction ceased during World War II due to the lack of resources and material and many men joined the armed forces. Many families moved to the East Coast in search of jobs. It is during this era that the locomotive shops employed 1,500 workers.

### **The Shopping District 1946-54:**

The district continued to expand after the war and traffic was more abundant and crowded. By 1948 traffic over the Barelás Bridge peaked at 15,000 and in 1952 it was 20,000 from second street to the Central Avenue Railroad underpass. Between 1947-1956 more angular International Style buildings were erected alongside the mixture of existing buildings. The merchant district attracted a large majority of Hispanic and Spanish-speaking natives from Northern New Mexico and Southern Colorado. Other merchants in this area were immigrants from Mexico, Greek-American, a Jewish-Polish American merchant family, a South-American physician, Cuban-American barber, and an Italian-American grocer.

### **Southern communities 1960:**

The new expanded communities South of Fourth Street were Los Lunas, Los Chavez, Los Padillas, and Isleta. The Northern communities were Albuquerque, Los Martínez, Los Darwinist, Los Chandeliers, Los Gringos, Alameda, Corrales, and Algodones. These areas usually were named after families' last names who resided there or named after their profession.

### **Revitalization and Restoration 1960-present day:**

The rapid growth and changes of the economy declined affecting Barelás physically, socially, economically, and politically. It is important to know that the majority of these buildings remained the same. Therefore; in 1992, an architectural project got underway directed by the U.S. Department of the Interior and registered this area for historic preservation. The reason behind this was due to the decline of security and the wide spread of crime, boarded up buildings and windows, security barred homes and remaining businesses and basically the deterioration of a once booming community.

The state and the city have allocated grants of up to \$2,500 or match property owner expenditures as high as \$25,000 to renovate the area. The services provided for this will include free design services, publicity of the area's history and revitalization, contrasting color schemes to enhance the detail and character that each building once had, the replacement of fixed

windows and coverings with security shutters, reconstruction of sidewalk canopies. Signs, sidewalks, road repairs, lighting system and the new construction of the Rio Grande Zoo, Biological Park, and the most recent underway construction of the Cultural Center

### **Interview:**

The most recent construction that has been introduced in this area has been the Hispanic Cultural Center. It was introduced in the first session of the 41<sup>st</sup> legislature. Its primary focus is to educate and serve New Mexico arts and humanities. This includes art, drama, traditional and contemporary music and dance, research, literary arts, genealogy, oral history, publications, special events from storytelling and fiestas, films, videos and culinary art.

### **Oral personal interview procedures:**

1. Set a schedule to interview, call the person ahead of time, and ask permission to interview.
2. Be sensitive, courteous and polite.
3. Arrange a time schedule and location to meet.
4. Utilize the spoken language that the interviewee is comfortable speaking.
5. Ask direct questions and wait for responses.
6. Get permission to photograph or record if needed.
7. Stay on task with your time-management.
8. Thank them for the interview and schedule for a second one if needed.

The cultural center will be constructed off of Fourth street and Bridge street. Every person who lived in this area sold their lots to the city except Adele Martinez. In a recent interview she revealed that she refused to sell.

*"I was born here, I was born at home in this house, we only had the midwife. My mother had eleven with the midwife in this home." "And then my sister, she died over here in our other house." This was the corner house near the ditch and my mother bought this land from the Springers, and when we bought here, a lot of people started buying over here." "We bought the land and my mother and small brother stated making adobes and they build the house."*

*"The one that is older, was the one that made the house."*

*"I had two boys and two girls." "Fourteen grandchildren, twelve great grandchildren and six great-great grandchildren and soon to have a seventh."*

*"I have five living generations, and I am seventy-nine years old."*

*"I don't regret not selling because this is my home, and this is the land that was bought with the money that my mother gave to buy it." "The politics had meetings, but not with us to have a nine feet fence built around us."*

*"I feel like I will be in prison, and what they are doing is not right."*

*"In my heart, my beloved son, he is the one who died at age twelve here, he played the guitar, he planted the trees, and he hung a tire from this tree."*

*"and I won't destroy what he did."*

Adele's fond memories will live in this home until the day she dies, she will not sell.

Adele gave a description of what the area looked like when she was a little girl, she said that her grandfather was a French man and moved to New Mexico from California. She felt comfortable speaking in both Spanish and English languages.

The cultural center is being constructed around her property. There will be a high wall surrounding her home. Many residents of this area have expressed that Barelás area has cultural value as well as traditional family pride. As mentioned previously, the area's inhabitants have lived here for numerous years and find it difficult to move away. The cultural center will become a part of the other cultural facilities along the Rio Grande Valley with the zoo, the aquatic botanic area, old town plaza, and the railroad. The historic district provides residents and businesses an opportunity to enhance this valuable neighborhood.

A pamphlet states that: "the mission of the New Mexico Hispanic Cultural Center is to create a greater appreciation and understanding of Hispanic Culture for the public at large. NMHCC will provide a venue for presenting the historic/contemporary representations and achievements of this rich culture over the past 400 years."

The NMHCC will serve as a local, regional, national, and international site for the study and advancement of Hispanic culture. The center will be located in the heart of New Mexico, a place with a long and storied tradition of Spanish influence and settlement reflecting the unique ancestry of Indo-Hispanic roots. Students will have an opportunity to tour this center upon completion and will have an opportunity to write poetry that reflects their knowledge of their Hispanic background.

### **Evaluation:**

Students will have an opportunity to become involved with hands-on projects that they have not had before. Numerous youth are not properly educated about the value of neighborhood. This lesson will allow them to value the quality and hard work that has been emphasized in this area.

This project will change their views about architecture styles, community, history, observation, listening skills and hands-on learning techniques. They will be able to transition this into their personal lives and learn to respect their community. After becoming involved in this architectural program and learning about their community, students will think before destroying their neighborhood (spray paint).

The curriculum's effectiveness will be evaluated by teacher observation and interest, hands-on projects, community involvement and display of final projects. Students will consider a variety of approaches within this historical community, through family and peer involvement, record keeping of the neighborhood that they studied. The kinds of lines the building design has, the shapes, colors, texture and their interest in the buildings. As their teacher, I will be responsible for all aspects of instruction, grading students progress and scheduling activities, involving teams, planning trips, and inviting speakers and project evaluation.

Project will be evaluated by the number of students who are involved in this project, their hands-on activities and note taking journals. Their general interest as students, teachers, parents, and the community as a whole.

## Letter to Property Owner(Figure #2)

(A letter such as this will be drafted prior to students touring their neighborhoods, community, or business.)

1. Decide on a letter to send to property owners.
2. What do you want them to know about your project?
3. Are they willing to be interviewed?
4. Can you take photos of their building?

Date

Name if known

Street address

City/State/Zip Code

The students from Washington School are going to be in your neighborhood this week collecting data for our Architectural Design Planning Class. We are attempting to incorporate the study of history and architecture in our ESL class. This block was chosen because of the different kinds of architectural styles, common architectural details, and because we live and attend school near this area. Our project is supported by our school(name of school).

We would like to sketch, photograph, and study the area of homes and businesses. We count windows and doors, observe designs and with your permission record an oral interview. We would like to have your permission to bring (total number of students into your front area of home or business. Our visit is 45 minutes and we will try not to bother you in any way. Thank you for enriching the education of our youth.

### Lesson Plan: Schematic drawings and architectural conventions

Goal: The students will create architectural floor plans, this will help their thinking skills, visual and spatial thinking and techniques.

Vocab:   elevation drawing   horizon line           perspective drawing  
          vanishing points     three-dimensional     section drawing

Purpose: To introduce the students to drawing a simple and familiar object in an architectural style.

Procedure: Demonstrate in a drawing the figurative lines which begin in the center horizontally.

At the beginning of the line on the left hand side, label this Vanishing Point A. Draw a line from A across to the left hand side and label this Vanishing Point B. The line in the center is called Horizontal Line. The line that runs up and down and crosses the center of the Horizontal line is the Vertical Line.

Materials:     paper   pencil   ruler   paper   construction paper

Drawing Exercise:

This is a drawing that architects use to see how a building will look in a detailed lay-out. The vanishing points are important because it allows you to see the your drawing at an eye level and as humans have three parts to their body, so does a building. The center is the middle (torso), the roof (head), and the lower area (feet).

Optional Exercise:

An oblique perspective drawing will help students see how a building looks and feels inside. Provide tracing paper and pencil and show them an empty shoe box as their design. After drawing two squares overlapping they will connect the corners by drawing lines to each corner.

Evaluate: Ask each student to think about the squares or boxes that surround them their lives (ie; a car, television, a windows, they eat in tables, sit in boxes etc.) Clarify the meaning of boxed-in, and consider the multiple approaches that help see your surrounding area.

### **Lesson Plan: Bubble Diagrams**

Goal: The students will utilize their senses during this assignment and learn the schematic techniques that will represent space, order and form.

Vocab:    sound graphics    images            space            design  
              spacial relation    form collision    unity            order

Purpose: The students will observe the bubbles and hear the balloon, they will feel the bubbles and the air from the balloon as they blow them up and they descend.

Procedure: The students will observe the life of a bubble and compare it to the life of a building. Once they see the first, fourth, fifth bubble blowing out they will draw the birth, life and death of a bubble. Explain to them that buildings have the same format, their foundation, the upright building, and the roof. When this building collapses or burns it will lose its life.

Material: colored balloons pencils paper crayons construction paper

Exercise: Students will be asked to observe balloons that are about to be blown up, ask them to observe carefully and begin to draw what they see from birth, middle and death as it occurs in a pattern. This is a retrospective movement drawing showing how the balloons fly through air and space. Have students create bubble diagrams and explain to them that each represent space needed to live in.

Floor plan: After they cut out their colored circles they can arrange them on a flat surface cardboard area and label each space; kitchen, bedroom, living room etc. They can compare various spaces and sizes and arrange them where they want them to be: This a technique that architects use to start developing their ideas into designs that are to come alive. The final project teaches them that planning for an idea takes time and effort, whether that is a trip, cooking, homework, or a party.

Evaluation: Students present their plan and drawings and explain what they have completed. They will be evaluated on their imagination, innovation and creativity.

**Lesson Plan:**

Objective: the students will go on a walking 4<sup>th</sup> street tour to observe buildings and their architectural styles.

Goal: students will gain a visual understanding of the varied buildings and neighborhood area. Apply this knowledge by writing about the area in their visual journals utilizing sensory perception.

Materials: hand out a list of questions that only they will answer after walking through the area.  
Camera

Procedure: They will also have an opportunity to utilize cameras and take pictures of the architectural structures that most interest them while on a walking tour toward 4<sup>th</sup> street area.

1. Define architectural terms.
2. Read questions orally regarding each structure.
3. Observe the architecture.
4. Focus camera and choose the best angle (taking photos with your back to the sun).

Vocabulary:

	asps	latias	territorial style	placita
banco	lintel	Victorian	horno	
buttress	merida	steeple	vigas	
adobes	ventana	corbel	fogo	
roof pitch	fish scale	molding		

Define each word and label each photo taken in walking tour with appropriate vocabulary. Illustrate each word as a piece of work. Display their work in the classroom walls.

Evaluate: Students now have a more fluent vocabulary and can communicate and understand through visual aesthetics the detailed architecture of the buildings and the design that each structure has.

## References and Bibliography

Anaya, Rudolfo. *Heart of Aztlan*. Albuquerque: UNM Press, 1976.[ Novel set in post World War II Barelmas].

Albuquerque's City Planning Committee. *Albuquerque's Historic Landmarks*. 1993.

Albuquerque's City Planning Committee. *A Chronology of South Fourth Street and Barelmas*.1995.

*Chihuahua Trail*. 1958, reprinted Norman: University of Oklahoma Press, 1995.

Ching, Francis D.K..(1996).*Architecture Form, Space, and Order*.International Thomas Publishing Inc.

Garcia, Laura vigil. "Brief Recollections of South Barelmas." Unpublished Manuscript, 1992. [SWCollections, Albuquerque Library; CSWR,UNM].

Kinsman, C. Design. *Historic Albuquerque Tour Map and Guide*.1992.

Kinsman, C Design. *Albuquerque New Mexico's Historic Route 66 Tour Guide and Map*.1993.

Martinez, Dela. Interview at Ms. Martinez home June 1999@ (4<sup>th</sup> and Bridge).

Taylor, Anne, Ph.D.1991. *Architecture and Children Teachers Guide*. Albuquerque, N.M:  
School Zone Institute.

Wilson, Chris. "Barelas-South Fourth Street Historic District." National Register of Historic  
Places nomination prepared for the City of Albuquerque Planning Department,1996.

Wilson, Chris. 1986. *University Neighborhoods History Handbook*. Albuquerque, New Mexico.

