

Southwest Architecture and Art

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Preface

We live in a time where the indoctrinated pedagogical paradigm of Modern America is losing its validity. The present paradigm falls short of its own standards and is reflected in lower SAT scores and higher dropout rates across the country. In theory educators know that education needs to expand beyond its present perimeters, but the means of applying new methods or deciphering which methods can produce the desired results is sometimes rather elusive. What is certain is that the acquisition of information and knowledge alone is not enough; many students have not been able to apply knowledge to their lives in meaningful ways that gives them a sense of belonging and self-worth.

Most alarming, are the far too frequent incidents occurring across the country of students acting violently towards others and themselves within the school system. So vivid in the minds of most Americans is the frightening and heart-wrenchingly sad incident at Littleton, Colorado. This is where two students planned and then executed a killing spree that resulted in the death of many students. At the end of the shooting spree they took their own lives. Their primary message was that they felt alienated and unaccepted without much to spark any interest in their lives. This incident is the epitome of adolescents crying out for something that gives them a sense of significance, belonging, depth and meaning.

In education we tend to overlook or minimize how important it is for individuals to find a sense of significance and belonging within social structures. In social situations, this is one of the primary goals that drive people's behavior. This force is directed by a combination of factors, such as individual temperament, peer acceptance, the stability of home life, the assimilation and accommodation of all prior experience, and the ease or difficulty of fulfilling basic biological needs. When these factors are combined they define the individual self-identity. The individual in turn reflects a sense (or lack thereof) of accomplishment, proficiency, and comfort during his or her interactions within community structures. School is one of the largest and most influential community structures that individuals encounter within American society. Education should create a place of communication, debate, exploration, open-mindedness, inquiry, practice, practical application, acquisition of knowledge, values and morals, and a foundation for life-long learning. Then individuals will have the skills to consider broader perspectives with greater depth when making decisions about real life issues. Beyond the acquisition of skills and learning strategies, education should help individuals be conscientious members of society who know how to moderate and govern their own behaviors in manners that are not detrimental to themselves or others. In this way, education is not just about the acquisition of knowledge but can be a part of the process that helps individuals lead the most well-adjusted, productive, rewarding, and fulfilling lives.

Holistic Education

If educators are dedicated to help students have a well rounded education so that they can be an

active and productive part of society, then the whole individual -- which includes mind, body, and spirit -- needs to be addressed. Presently, educators are primarily focused on expanding a student's mind through the acquisition of knowledge. They have also acknowledged the importance of the physical body and therefore integrated physical education and recesses into the curriculum. The issue of the spirit however, is generally skirted around or addressed indirectly because there is a fear of crossing the line dividing church and state. Although the primary concerns with the principle of the spirit are more subtle and have greater significance than religious indoctrination.

Presently, the public American educational system comes closest to acknowledging the spiritual aspects of students via psychology. The spiritual is represented in the schools by counselors or through special education's Individual Evaluation Portfolios (IEP) and is generally termed the psyche. There are several shortcomings with this system. The obvious shortcoming is that there are generally three or four counselors for a student body of 800 or more students. Therefore, counselors cannot adequately accommodate all of the students. Also, students only see a counselor when there is a "problem." This approach does not address the daily concerns of the spirit for all the students.

James Hillman and Thomas Moore are scholars instrumental in addressing in greater depth the more subtle concerns of the spiritual. Hillman and Moore use the term soul instead of psyche because it is more inclusive of the whole being, while psyche refers more to the mind's aspect of the spiritual. Hillman (1975) states, "by *soul* I mean, first of all, a perspective rather than a substance, a viewpoint towards things rather than a thing itself. This perspective is reflective; it mediates events and makes differences between ourselves and everything that happens."¹ Moore (1992) includes, " 'soul' is not a thing, but a quality or a dimension of experiencing life and ourselves. It has to do with depth, value, relatedness, heart, and personal substance."² The work of the soul or spirit is a continuous daily process that helps to direct the way decisions are made, whether they pertain to small details or major decisions. When spirit is considered, values and morals can be cultivated more readily. In the classroom, when students feel safe to be vulnerable and express real life concerns, then soul is considered. When a student learns to be empathetic with another student, especially when there has been a discrepancy, then soul is being cultivated. When students are encouraged to trust a hunch (intuition) and to test it out, spirit is being cultivated. When students learn to embrace and discuss their own sense of aesthetics, spirit is being cultivated. Soul or spiritual cultivation can be a means to embrace the complexities of humanity while retaining human contradictions and strengths.

Multiple Intelligences

Modern technology, particularly in the last 20 years, has made significant strides in understanding the complexities of the mind and body and how each works to assimilate and acquire information and knowledge. What is becoming clear is that not every person learns in the same manner. Different people have greater aptitudes for learning via different methods. Howard Gardner has proposed a theory of multiple intelligences that includes a more inclusive, divergent range of intelligence. This theory also addresses the issues of different styles of learning acquisition. Gardner's theory is based on knowledge of multiple and differentiated capacities of the brain, as well as on scientific observation and analysis of the historical record

of the range of human accomplishment. Gardner delineates seven distinct intelligences: linguistic, logical-mathematical, musical, spatial, bodily-kinesthetic, interpersonal, and intrapersonal. Each individual has all of these intelligences to some degree, but each person's strengths and greatest aptitudes may vary. Some individuals' intellectual strengths are in areas besides the linguistic or logical-mathematical areas, which is the premise of IQ testing. Gardner (1983) states, "The problem is less in the technology of testing than in the ways in which we customarily think about the intellect and in our ingrained views of intelligence. Only if we expand and reformulate our view of what counts as human intellect will we be able to devise more appropriate ways of assessing it and more effective ways of educating it."³ If we expand our concepts of intelligence, then we extend the range of our greatest potential; we broaden our possible means of communicating, interrelating, and making our lives have greater significance.

Differentiated Instruction

Differentiated instruction is a method of teaching that incorporates the idea of multiple intelligences. In this method, instruction is geared to accommodate varied and diverse learning styles to reach as many students as possible in as many ways as possible. The learning styles relate directly to the different intelligences; differentiated instruction provides multiple approaches to content, process, and product. When the teacher plans these multiple approaches, she anticipates and responds to differences in student readiness, interest, and learning needs.

When introducing or instructing the content of a subject it is important to vary the ways of dissemination. Books or tapes can be helpful for the linguistic learner who thinks strongly in terms of words, but a puzzle or an illustration book can engage the spatial learner who thinks in images. Bodily-kinesthetic people might enjoy a role-play or a hands-on project because they understand through somatic sensations. Within each intelligence area there is a multitude of ways to instruct that have greater potential for student learning than traditional methods. What is most important is to include as many ways as possible. A statistical study from J. Siegel, from Eastern New Mexico University, shows that of the students who drop out, 53% are weak visual learners, 43% are weak auditory learners, and that 88-90% are strong hands-on learners. This shows that we need to broaden the methods of instruction so all types of learners may succeed.

In differentiated instruction, process refers to how students make sense of the information or skills they are experiencing. Bloom's Taxonomy gives six basic ways to process information. The first is to *evaluate*, which is to judge something and be able to support that judgment. To *synthesize* something is to reform individual parts to make a new whole. To *analyze* something is to understand how parts relate to a whole, to understand structure and motive, and to be able to note fallacies. The *application* of something is to transfer knowledge learned in one situation to another. To show *comprehension* is to demonstrate basic understanding of concepts and curriculum and to be able to translate that understanding into other words. Finally, to show *knowledge* about something is to be able to remember something previously learned. Once again, there is a multitude of methods to help students process information and acquire skills and knowledge.

The final important component of differentiated instruction is the product. The final product works the best when it is a long-term endeavor; it demonstrates what students have learned.

Product assignments should help students to rethink, apply, and extend what they have learned over a long period of time. The final product is the main component of the curriculum that students can most directly make their own.

Differentiated instruction is designed to modify instruction in response to each student based on individual learning profiles, interests and varied readiness levels. The learning profile is based on intelligence preferences and learning styles, as well as on how the learner sees himself in relation to his culture, gender and the rest of the world. Student interests have to do with what students themselves find relevant, worthy, and with what sparks their curiosity. The overall readiness level is based on a student's readiness with a given skill, concept, or way of thinking. With all the components together, a more inclusive approach to instruction is achieved which has greater potential in reaching a broader range of students.

Design Studio Model

A new paradigm for education is the design studio model (DSM) which integrates the concepts of multiple intelligences, differentiated instruction, and interdisciplinary instruction into a working, applicable methodology. The DSM of instruction evolved out of interdisciplinary learning activities of the Architecture and Children Institute's curriculum by Anne Taylor, Ph. D., George Vlastos, Architect, and others. The learning environment for the DSM is set up like a studio, workshop, or laboratory. The students are taught to learn in a manner similar to architects and industrial designers. This program is focused on learning through visual thinking, problem solving, creative thinking, group interaction, communication skills, and respectful consideration for the built, natural, and cultural environments.

If the design studio model were viewed three-dimensionally, the basic components would look like a three-sided pyramid with the top fulcrum point being *interdisciplinary* learning. The arms would radiate out from the top and the end-points of the arms would be; *concepts*, *skills*, and *context*. Each point would connect with each other point, thereby linking it all together.

The DSM curriculum deals with specific skills and content information that are universal and applicable in all subject matter disciplines. Concepts represent the content information, which is the knowledge to be learned. The knowledge is viewed as universal, representing the order of the universe. It is taught across disciplines instead of as the product of separate disciplines. One discipline can be related to another discipline through a common concept. The concept of balance is a good example. In math, balance relates to one-to-one correspondence, scale and weight, or symmetry and asymmetry. In science, balance can be studied in ecological or chemical balance. In the visual arts, one can look at balance of color, form, or composition. And in social studies one can study the balance of economical or political power. The concept of balance can be applied in the same manner throughout the different subjects.

Skill acquisition is progressive and it too is universal. There is a learning sequence that includes, but is not limited to, such skills as sensory perception, observation, language and labeling, comparing, predicting, valuing, and scientific and intuitive creative problem solving. It is important when skills are being taught to include individual and cooperative learning strategies.

The context for learning concepts will vary from place to place depending on age, geographic area, and culture. The DSM uses the context of the local environment to teach basic concepts and skills. In this way, the concepts and skills can be applied in a site-specific manner, creating a curriculum that is relevant and applicable to the lives of the students.

The DSM incorporates both project-based and design-based learning. Project-based learning has lots of technical material and utilizes hands-on projects as a strategy for teaching complex concepts and skills. Design-based learning tends to emphasize the more humanistic and artistic side of design; it is more concerned with developing creative thinking. Combining both together, the DSM's curriculum incorporates open-ended problems that are intended to invite many unique responses without necessarily having one definitive solution. In this manner, students can increase their fluency and creativity in skills and concepts while solving difficult problems.

The Design Studio Model incorporates a more holistic approach to education. Working individually and cooperatively, students excel at their own rate to learn skills and concepts within a context that is pertinent to their lives. When teachers utilize a variety of learning styles for instruction, more students become motivated, and therefore have the means to discover all the possibilities for an enriching and rewarding education.

Summary

Although the answers to the educational system's problems are not simple, the means and methodology towards a more successful education must be more inclusive and holistic. New educational paradigms that address learning complexities have much to teach educators so that a broader more encompassing education system can emerge for all learners. The ultimate goal, which is to produce intelligent and conscientious individuals who continually achieve their greatest personal potential and express it in their daily interactions within society, can then succeed.

Curriculum

Each individual sub-unit is designed to be one to two weeks in length. Depending upon students needs and the scheduled length of class, the units can be lengthened or shortened. Also any part of a unit may be used to adapt it to a specific curriculum.

The closure section of all projects is included within the direction section of the units. All final projects will be displayed for a presentation given by the student or for a class critique of the work. For each evaluation create a list of questions for the students to consider to help facilitate discussion.

Southwest Architecture –Unit 1 Visual and Spatial Drawing

Objective

To help students observe, think, and express ideas visually while understanding the basic concepts of drawing and architecture.

Vocabulary

Contour, line variation, form, positive and negative space, light, shade, and shadow, value, volume, symmetry, asymmetry, abstraction, realism, biomorphic, organic, inorganic, texture, bubble diagram, geometric form, plan view, elevation drawing, section drawing, ratio and scale, view-finder, schematic drawing.

Skills and Concepts

Subject areas: Art, Math, Geometry, Science.

Skills: Visual and verbal communication, fine motor skills, measuring, observing, recognizing, classifying, problem solving, creative self-expression, aesthetic valuing.

Concepts: Line, form, space, composition, rhythm, harmony, symmetry, asymmetry, balance, scale, proportion, volume, texture.

Materials

Pencils, large and small black felt tip pens, gray markers, drawing paper, tracing paper, colored pencils, pastels, colored magic markers. Various architectural images that can be projected onto the wall either by opaque projector or slide projector. Various organic fruits and vegetables that can be cut in half to view the cross section. Various objects that make a variety of sounds.

Directions

1) Contour and blind contour. Students will first draw their hand any way that they want. Next have them draw a contour of their hand without looking at the paper. This will not look much like a hand -- it is not supposed to. This builds up their hand to eye coordination and allows them to observe more closely. Students should take at least five minutes to do this exercise. The idea is to look at each small detail of their hand so that they begin to see details. If students work through this too quickly, have them try it again. Finally they draw a contour of their hand while looking at it. Students should put these drawings up on the board for display. At the end of the exercise students should view each other's work. They should discuss and evaluate what this process was like for them to do.

2) Have students ready with an assortment of drawing materials. Start the first drawings with materials that are black and gray shades. After the first few drawings allow the students to include color if they choose. Use the noise-making objects, without the students seeing them, one at a time. Then have students draw an image of the noise. Encourage them to try different qualities of mark-making to get the various aspects of the noise. Students should work on these for approximately 3 minutes. For the last couple of drawings, have students give the sound a personification. The sound should now take a more solid form instead of just abstractions. Allow ten minutes for these drawings. Students should put the work up for display and discuss and critique the work.

3) Students will be set up with a variety of drawing materials and paper. Use the fruits and vegetables, cut in half, for this exercise. Have a couple of cross section architectural plans to show as examples. Then have students draw several of the cross sections first with pen and paper. Then have them do one or two with color. Then have several viewfinders ready that are proportional to the size of paper that you are using. An example would be a 1' x 1 ½" viewfinder for a 12" x 18" piece of paper. Explain ratio and how it is used. Then let them use the viewfinder to find a section of one of their own drawings to then enlarge it. The image should

fill the entire paper and will have an abstract quality. The final product should go on the board.

4) Students will use paper and black and gray drawing materials. Use the projector to put up one image at a time of the architectural images. Start with simple ones so students can draw the contours. Relate this to positive and negative space. These should go fairly quickly -- about a minute each. Then introduce the idea of light, shade and shadow. Have students use three different materials to draw each element, such as a pencil, thin marker and a thick marker. Have the students look at the different elements as shape and form, and geometric form wherever appropriate as they draw the architectural image. These drawings should be 3-5 minutes in length. Once again these drawings should be put up for display and discussion.

5) Use all the drawing materials listed. Have several bubble and floor plans as examples. The final project will be a series of schematic drawings, starting with a bubble diagram and then a floor plan, that develop a design for an outdoor patio area where students can have lunch and then use for a study area. Have each student list and then diagram all the things needed for the patio. Students can use the tracing paper to adjust and improve their ideas. When the bubble diagram is finished, have them start on the floor plan.

When students are finished, they will each give a short presentation to the class on their bubble and floor plans. Students can discuss concerns for the patio and explain how they solved any problems they encountered.

Southwest Architecture – Unit 2

Historical Perspective

Objective

To have students be able to identify various architectural elements and how they belong to the five basic southwest styles: pueblo, Spanish colonial, Navajo, historical Anglo, and modern.

Vocabulary

Adobe, Anasazi, banco, canale, corbel, column, colonnade, cosmology, fogon, frieze, gable, hogan, latilla, masonry, molding, pediment, plaza, portal, portico, post, sipapu, zaguan.

Skills and Concepts

Subject Areas: Art, math, science, language arts, geography, social studies.

Skills: Classifying, observing, comparing, communicating, problem solving, and valuing.

Concepts: line, form, space, light and color, aesthetics, culture, region, socialization, consuming, heat, energy, wind motion, evolution, geography, inter-relatedness, ratio, scale and proportion, and geometric construction.

Materials

Pencils, small and large markers, drawing paper, tracing paper, opaque or slide projector, light table, architectural references. Have a poem or short story that relates to Pueblo or Spanish lifestyle. Tools for clay modeling include red clay, rulers, work knives and forks, rolling pens and slats, cardboard, and various sizes of twigs.

History

There are five basic southwest architectural styles including the Pueblo, Spanish colonial,

Navajo, historical Anglo, and modern. The earliest three styles have several elements in common which really define them as southwestern. These include such items as the use of natural materials, building orientation based on the influence of natural forces, and religious and cultural influences in design. The historical Anglo style was much more influenced by the advent of the railroad in the late 1880's when New Mexico was finally connected to the rest of the country. Then new construction technology was available and the ability to get a variety of materials from across the country began. The modern style that is distinctly considered southwestern is some form of Pueblo or Spanish revival. Below are listed several identifying features and characteristics for each style.

Pueblo

The buildings were rectangular in shape and they were made out of mud, usually called adobe. They had flat roofs with vigas for support. Room sizes were small, approximately 8' x 10', because stone tools were the early Pueblo peoples' only implements so they could only harvest smaller vigas. There were few windows if any in most of the structures. There was no landscaping. The earlier pueblo entries were through the roof with ladders for access. It was not until much later that the doorways were on the outside of the buildings. The reason for roof entryways is based on the native people's cosmological belief that they emerged out of the ground. The rectangular units were connected to each other to form community buildings and had a step ladder appearance. This created a passive solar effect where the terraces protected them from the wind and caught the morning sun. People slept and lived a great deal of the time out on top of the roofs. It was a semi-public environment. There was a very strong sense of community where everybody was connected to each other. They lived in family clusters to share their resources. It was a matrilineal system where children stayed with the women.

The Anasazi, or "the ancient ones," who entered the southwest about A.D. 1, were the ancestors of the Pueblo Indians. These early Indians are referred to as the "Basket Makers" because they had not yet learned to make pottery. Before A.D. 500 they had begun building pit houses -- partially underground dwellings with a circular plan. Early pit houses were saucer-shaped, made of sticks smeared with mud. Later ones had a framework of posts and crossbeams covered with brush to form the roof. A hole in the floor, the sipapu, symbolized the place where the first Anasazi emerged into this world. Kivas, normally round stone structures used by later Pueblo people for religious ceremonies, are thought to be patterned after those early pit houses.

Navajo

Navajo hogans have taken several forms from the early forked stick hogans with interlocking poles. Circular stonewalled dwellings with log roofs were also built. Later hogans were often flat-roofed, earth-covered square structures of four poles, or the larger six or eight-sided hogan with notched logs forming the circular shape. All had a smoke hole in the roof and door facing the east to greet the morning sun. A blessing rite was performed for new hogans.

Spanish Colonial

Spanish settlers entered the southwest in 1598 under the leadership of Don Juan de Oñate. Spanish Colonial buildings were built out of adobe mud bricks, vigas, and various wood and metal details. The Spanish were the innovators for the commonly used adobe brick. The

Spanish also had metal tools. This meant they could have larger rooms because they could collect larger vigas with their superior tools. The roofs were flat with canales, or drains, to carry excess water off the roofs. Buildings were rectangular in form with one-storied rooms connecting to each other, only one room deep, in L-shaped or U-shaped form. There were very few windows and not many doors between rooms, but each room usually had an exterior door that led to the communal placita or courtyard. Quite often the Spanish would have 3-5 families that would build a cluster together. Usually this would start as one L-shape structure of 3 rooms for one family. Then extended members of the family would add on another three rooms for their family. This created a stronger compound that could be defended easier.

The Spanish also considered the wind and the sun when they built these structures. The back of the L-shape would be to the north, which was the direction from which the wind primarily blew. The patio would then be on the inside of the L-shape so that it would catch the morning sun. The Spanish did a lot of woodcarving and gave attention to detail. The corbel, which projects from a column to support the weight of the horizontal beam, has been given considerable recognition as a southwestern architectural detail. The Spanish also aesthetically and pragmatically utilized large portals, or heavy and imposing doorways or entrances. A zaguan was a gate large enough for wagons or livestock and usually had a smaller pedestrian entrance included.

The interiors of the rooms usually had bancos, which are benches adjoining a wall used for sitting and sleeping space. Each room had a fogon, a bell-shaped adobe fireplace that fit into one of the corners. There were usually very few furnishings, and most were utilitarian. Embroidered colchas and carved and painted santos, images of saints, were the only non-utilitarian objects. Over time there was lots of fusing and mixing together of these cultural methods.

Historical Anglo

From the 1870s to the 1940s there were several Anglo styles that were prevalent and evolved over time. These include the Hall-and-Parlor floor plan, the center hallway floor plan, and the bungalow style. They each had some distinguishing features but had many in common. The more common features included a pitched roof or a flat roof, front porch and a brick fireplace. The buildings were free standing, sometimes multi-storied, oriented to the street and made out of wooden or brick materials. Buildings were centered round the heat source. As time passed more detail and features became prevalent as did the mixing of the various stylistic components.

Modern

Most modern southwest architecture is based on some form of Pueblo or Spanish revival. John Gaw Meem was an architect who was very influential in starting what is considered the beginning of the Pueblo revival tradition. Over time, and especially most recently, architects have taken components of the various southwestern styles to create a modern architecture. This contemporary architecture is based on aesthetic, not structural, elements.

Directions

1) Give a lecture on the main historical points of southwest architecture. Throughout the

lecture use visual images to support and help define various styles. At the end of the lecture read the poem or short story about some aspect of southwestern lifestyle, then have the students draw an illustration that represents some portion of the story. Have students display their work and discuss how they choose their images.

2) When students enter the room have several tracing/drawing stations set up that students may rotate to freely. This may include a light table, a slide projector, an opaque projector, and loose references at another station. These stations will all have representations of the various southwestern styles of architecture. These may include elevation drawings, floor plans, or section drawings. The students will take turns tracing the projected or loose images. Students who have a harder time free-hand drawing will benefit greatly from this method.

3) Prior to this class, pick out a neighborhood area within walking distance of the school that represents southwestern architecture. If possible, have some historical sites on the tour. Have students go on a walking tour of this area. Create a scavenger hunt of architectural styles and details that the students can identify while on this tour. Have students work in pairs. Have some of the items on the list drawn out that they must label. Also have some items that are just terms that they must then draw. Give extra credit for items students identify that are not on the list.

4) When back in the classroom, go over the walking tour and discuss any area of the tour that brought up questions for the students. This might include such things as why a particular house was one style and not another, the lack or excess of a particular architectural component, and so on. This is a good point to do a small quiz to see how much information the students have assimilated.

5) Have students work in groups of four. Each group will make an architectural model out of clay, based on either the Pueblo or the Spanish colonial style. Each group will figure out tasks that are necessary to complete the project and take turns in the execution of tasks. When students are finished with the project they will give a presentation to the class explaining how they made architectural stylistic choices.

Southwest Architecture – Unit 3

Perspective

Objective

To have students be able to render realistic drawings in one and two-point perspective.

Vocabulary

Two-dimensional, three-dimensional, horizon line, vanishing point, converging lines, horizontal, vertical, scale, proportion, volume, composition.

Skills and Concepts

Subject Areas: Art, Math, and Science.

Skills: Observing, measuring, using tools, interpreting data, using gross and fine motor skills, visual communicating, valuing.

Concepts: Measurement, scale and proportion, line, form, volumetric form.

Materials

Pencils, markers, drawing paper, tracing paper, rulers, colored markers, colored pencils, drawing boards, masking tape.

Directions

- 1) Begin by explaining basic perspective tenets while drawing it on the board. Then start with one-point perspective drawings. Instead of trying to do a building use their names in block letters. After they get the perspective correct have them create 3D volume by shading parts of the letters.
- 2) Reiterate the method for creating two-point perspective. Have students practice the basic idea on simple imaginary buildings. If students are having problems with this have them copy or trace some two-point perspective images.
- 3) Using drawing boards take the students onto the school's campus where they have a complete two-point perspective of the school. Then have them make a drawing considering and creating a strong overall composition.
When students are finished with the drawings have them put them up on the board to critique the work.

Southwest Architecture – Unit 4

Architects

Objectives

To have students be able to name at least 3 architects and identify some of the stylistic elements that these architects use in their specific work.

Vocabulary

Pueblo revival, futuristic, modernistic, ergonomics, aesthetics, balance, symmetry, asymmetry, ambiance.

Skills and Concepts

Subject areas: Art, Social Studies, Language Arts, Science, Philosophy

Skills: Observing, visual and verbal communicating, comparing, classifying, inferring, and valuing.

Concepts: Ecological balance, habitat, inter-relatedness, landscape, form, space, harmony, rhythm, balance, emotive/affective meaning, aesthetics, culture, socialization, values.

Materials

Drawing paper, tracing paper, pencils, markers, colored markers and colored pencils, architectural images for critique and use of a computer pod for a day.

Architect Profiles

John Gaw Meem

Born in the small town of Peletas, South Brazil in 1894. He arrived in Santa Fe in 1920 suffering from tuberculosis to seek medical help. During the next two years in the hospital, Meem began to study the southwestern architecture of which he had become so fond. Regaining his health, Meem began to pursue his new passion. In 1926 Meem was one of the founders of

the old Santa Fe foundation to preserve the historic fabric and unique character of Santa Fe. This was the beginning of Meem's architectural career. Meem's architectural style was called Pueblo revival and had many details reminiscent of old Franciscan churches. Some of Meem's accomplishments include remodeling of the La Fonda Hotel from 1926-29, a 1933 commission to build UNM's administrative building (now Scholes Hall), and UNM's Alumni Chapel built in 1959. Meem passed away in 1983 leaving a legacy to southwestern architecture behind him.

Paolo Soleri

Paolo Soleri is a Ph. D. architect from Italy. He came to America to study architecture at Taliesin with renowned architect Frank Lloyd Wright. In 1948 Soleri left Taliesin to start building his own designs based on his beliefs in the fundamentally flawed design of the city sprawl. Soleri believes that urban decay is eminent due to increasing isolation from the natural world, and the excessive use of materials that this sprawl effect created. This in turn will create social isolation and ecological disruption. Soleri's distinct alternative to urban sprawl is in creating cities that are complex living organisms. In this way the vitality of urban life is increased without destroying the natural world. Soleri termed this new paradigm archology, which is the mixing of ecology and architecture. Soleri is most well known for his continued work in Arizona on an architectural archology project called Arcosanti that began in 1970. Today Arcosanti has not reached its full design potential. There has been a lack of funding and interest to support Soleri's idea. Despite setbacks Soleri continues to pursue his dream for the future of urban renewal.

Ricardo Legoretta

Legoretta is one of today's leading modern architects from Mexico. He is most widely renowned for his use of sharp linear shapes and form and his dramatic use of color. Legoretta recently designed the new addition to the Santa Fe College, which was completed in 1998.

Directions

- 1) Start with a historical background of the Architects. Throughout the lecture use ample examples of the different architects' work. Include, if possible, a video on one or more of the architects. At the end of the lecture have the students find different southwestern aspects of these different architects' work. Also have students critique the work and explain their opinions.
- 2) Have students work in groups of four for a pictorial game of architectural elements. Put architectural elements in a jar on separate pieces of paper. Then have each group, one at a time, pick a piece of paper and then draw it on the board for their group to identify. Give them one minute. If they do not guess correctly let the next group guess (without extra time) until someone gets it right. The group that gets it correct gets a point. At the end of class, the group with the most points gets a prize.
- 3) Have this day reserved in your school's computer pod. Students will go to the Internet to find information on other architects. Have students collect information that they can share the next day with their classmates about the architect they choose, this should include visuals. Students should either pick a southwestern or non-southwestern architect. The student should be able to explain to the class why this architect's style is or is not southwestern.

Southwest Architecture – Unit 5

Color

Objective

To have students gain an understanding and familiarity with color, how color works in relationship to other color, and its emotive quality.

Vocabulary

Color wheel, primary, secondary, and tertiary colors, warm and cool colors, neutral colors, complementary, hue, spectrum, value, tint, shade, intensity.

Skills and Concepts

Subject areas: Art, Math, Science, Social Studies.

Skills: Observing, measuring, predicting, classifying, experimenting, interpreting, gross and fine motor skills, and application.

Concepts: Temperature, color, balance, rhythm, harmony, affective/emotive meaning, composition, refraction and reflection, power, value, and relativity.

Materials

Brushes in a variety of sizes and shapes, watercolors, tempera paints, paper, scissors, glue, old magazines, visual references of an assortment of painter's artwork.

Directions

- 1) Start with a lecture on color and its relation to light. Go over the basic color wheel and the placement of the twelve colors on the wheel. Show examples of the way different colors create an emotive effect. Have students describe what emotive effect different images create for them and why. Have students take a blank color wheel and mix, fill in, and label the different colors on the wheel. Have students place these on the board for display.
- 2) Have students brainstorm together as a class to create a list of words that have been used to describe colors. Out of that list have students pick ten. Then have students make a color representation of each word. Students may use images cut out of magazines to represent the words or create a drawing as a representation. Have students place these on the board for discussion.
- 3) Have students go back to the architect that they picked out from the computer pod. They will then do a painting in two-point perspective of one of the architect's buildings. Students will choose a color theme, such as warm or cool colors, complementary colors, or highly intense colors in which to paint the image. Have students display and critique the work.

Southwest Architecture – Unit 6

Final Project

Objective

To have students apply and integrate all the components of art and architecture that they have learned up to this point in a self-expressive way.

Vocabulary

Any and all terms that have been introduced prior.

Skills and Concepts

This will include any of the subject areas as well as cover an assortment of skills and concepts depending on the individual's project.

Materials

This may include any of the materials listed in the prior units.

Directions

The student is more self motivated and guided in this final unit. Each student will create a presentation board to be presented to the class. This can include bubble plans, floor plans, section, elevation or perspective drawings, color representations, and models. The students will have a choice between creating either:

- A. a modern or futuristic home that would be geared for a family in the year 2020
- B. a living space for a particular animal of their choosing
- C. a community center for their neighborhood.

Each student will be responsible for creating a proposal, outline and goals that they will submit at the beginning of the unit. They will also submit a list of problems that they encountered in the production process and how they overcame them. Each student will be given more time for this last presentation so they can fully go over their ideas.

Endnotes

¹ Moore, Thomas, (1975). A Blue Fire, 20.

² Moore, Thomas, (1992). Care of the Soul, 5.

³ Gardner, Howard, (1983). Pg. 3-4.

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