

**The Rincon Towers:
A 12 Week Interdisciplinary Project Based Learning Unit for Social Science and
Architectural Design**

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Preface: This unit was completed by students at the Build San Francisco Institute in Spring of 2005. It grew out of a proposal written by the students to the What Kids Can Do Foundation in Fall of 2004. Although the project was student authored and followed student direction throughout, the standards based curriculum that supported the project was developed by the classroom teacher and the director of the Build SF program. As a model of student and faculty cooperation on learning design, it is a remarkable achievement. While this particular project is a “one time event” the project-based structure and lesson design of the modular approach taken by the teacher in structuring the student project is a replicable model.

Will Fowler

Program Director

Build San Francisco Institute

Program Structure:

The Build San Francisco Institute is a collaboration between the Architectural Foundation of San Francisco and San Francisco Unified School District. Students attend their regular high school and take core subjects in the mornings, then bus to BSFI for afternoon elective classes in Architectural Design and Urban Sociology. These classes are taught in an interdisciplinary project based approach, working with each student as an individual. All students create semester long goals, and instruction is designed to meet these individual goals. In addition all students are assigned a professional mentor, and meet two afternoons each week in the mentor's firm. This combination of real world experience and individualized instruction creates a school day structure quite different from the normal high school environment. The project based approach taken by the BSFI staff is highly effective in meeting the requirements of this structure.

Six Weeks Skills Building Modular Program

A video project is a time consuming process. Work created by professionals will take crews of several dozen workers months or years to complete. A dozen high school students who have little or no experience with video techniques, and in some cases, limited academic skills, will require a training period before attempting such a project. BSFI spends the first six weeks of the semester on skills development and background research before formally launching the project.

Student Proposal: In November 2004, the students of Build San Francisco Institute authored the following proposal for the What Kids Can Do Foundation of Providence Rhode Island. The proposal was accepted and funding was granted for the purchase of video equipment for the school. This outline led to the Rincon Towers Project design in the second semester of the 2004-2005 school year:



Grant Application

BUILD San Francisco

School: Beginning in the Fall of 2004, Architectural Foundation of San Francisco opened the Build San Francisco Institute, enabling San Francisco Unified School District students to join an experimental learning program in architecture and urban design. Offering classes and mentorships in the afternoon hours of the school day, the Build San Francisco Institute introduces students to the real world of urban planning design, offers them a unique opportunity to become involved in the development of San Francisco. In past years the participants of Build SF have worked with firms on the San Francisco Museum of Modern Art, the New San Francisco Main Library, the Magnet School of the Art, the Mission Bay Masterplan, and SBC Park. 10th-12th graders are eligible for this opportunity. This school consists of various types of ethnicities such as Filipino, African American, White, Hispanic and other races. The Institute has enrolled 15 students, under the supervision of 2 teachers. We are located at 654 Mission St in the South Of Market (SOMA).

2. PROBLEM AND HOPED-FOR IMPACT: The problem we chose to address is the effect of allowing market forces alone to dictate the supply of residential housing in SF South of Market (SOMA), recent development deals that the city has proved. It is important because low-income families will be moved to make room for high-end real estate. We hope we can bring this project to the city's planning commission and redevelopment agency decisions. We hope to benefit San Francisco's diverse communities.

3. RESEARCH QUESTIONS AND INITIAL THEORIES:

Our research has shown that a medium home priced home in San Francisco is around \$650,000 and is rising. According to the San Francisco Chronicle only 11 to 14 percent of people currently living in San Francisco can afford to buy a home. At the same time the city is building high-end condominiums starting from \$750,00-\$1.5 million. To build these condominiums the city is demolishing low-income housing further increasing the homeless population.

Theory:

- Is the city planning commission is demolishing low-income neighborhoods to build high-end property.
- Because the city is raising the standard of living, Government Subsidies cannot sustain the average family.
- Could mid to high-rise buildings be built to house low to middle income families and still be financially feasible?

4. RESEARCH METHODS AND ANALYSIS: Some methods we plan to implement include working with non-profit organizations, study past and present surveys, interpret local statistics, contact city agencies, research the internet, speak with local planners and developers, and use videotape to record the neighborhood's condition as well as its progress. We will also interview experts and residents directly affected by the SOMA renovation. David Habert, a redevelopment planner, says "We're trying to create a neighborhood where people want to live", but what is happening is that they want to create a neighborhood where rich people want to live.

5. FINAL PRODUCTS, ACTION, AND PUBLIC ATTENTION: Our team intends to create a multimedia report, including digital video, power point, and an extensive written analysis. We will present our findings to the City Planning Commission and the Redevelopment Agency. We expect to lobby support from the Department of Health and Human Services, architecture/development firms, and public support.

6. EVALUATION: We hope to impact the development of SOMA, by building more affordable housing and less single occupancy rooms (SRO's) hope to learn the process that the city is developed, apply math and design knowledge, that we have and will learn from SF Build Institute, to the real world and influence public opinion.

7. OBSTACLES: Getting people to follow up on our information and accept our proposal as a valid fact. We feel that our project will be intensive. Time will be a major factor because results will not happen over a short period. Money is an obstacle, because we need equipment. Patience is needed to get lobbyists. But truthfully this will be a difficult task to accomplish. We have a lot of good ideas for SOMA, but the reality is our plan will take several years, even generations to accomplish.

The Rincon Towers Project

Background: San Francisco is a unique city, geographically as well as culturally. The peninsular location and the geology upon which the city rests creates a series of challenges for urban developers. Hampered by lack of space and seismic constraints, the city has a difficult time growing. The population of San Francisco has remained remarkably stable over the last fifty years and in recent years has even declined slightly. This series of constraints combined with the desirability of the city culturally has created one of the most expensive housing markets in the nation and an accompanying shortage of affordable units for working class families. In an effort to address these problems, the City Planning Commission is in the process of approving a new approach to housing design in the South of Market region of the city – high rise condominium towers on an area known as Rincon Hill. As a requirement for approval, developers must commit to a percentage of affordable units to be constructed with each new tower. These affordable units, however, need not be located in the area of the construction, but can be developed “off site”, elsewhere in the city. The students will investigate this plan and the process through which it is being approved through deep background research, interviews with the principal participants, and a video survey of the area. This research will be distilled into a ten to fifteen minute video, directed, scripted and edited by the students. Faculty members will assist the students in developing their ideas, writing and editing, and training in video techniques.



Final Project on South of Market Housing

Organizing the Project:

As is usually the case with a quality PBL activity, the project tended to grow out of the students' vision, rather than a teacher 's lesson design. In this model, the teacher is a

coach, not an instructor. Although he oversees production of the final product and guides students to an understanding of the issues, he does not dictate a set of answers. In fact, as students soon discovered, in an urban development problem as complex as the Rincon Towers Project, there is no one “right answer” at least not in the usual school understanding of correctness. As a sidebar, it is interesting to note that in this regard the instructors were students as well. In a project as complex as this, no one has a definitive “right answer.” At the same time, it is even more important in PBL to establish a structure for the project. These structures are much more closely aligned to those of a design or production studio than that of the usual high school classroom. This alignment meets the goals of BSFI in that it introduces students directly to professional methodology found in urban planning and design. As the project evolved, each section of the video became a module, with its own set of research requirements, artistic challenges, writing and analysis issues and final synthesis of information. Within each modules, the instructors embedded a set of standards based challenges which the students needed to meet in order to achieve their goals.

Twelve week Structure

Students will organize, research, develop and present a final group project centered in a major design or development issue for San Francisco. This student led demonstration of knowledge will utilize all of the skills and concepts taught in the Architectural Design and Urban Sociology Modules. Using a similar modular approach, the project is divided into twelve separate modules. Each module will be studied by the entire class. However, separate teams of students will be given the responsibility for converting the research into the final video edit.

Project Modules

Module One

Topic: Introduction to San Francisco



California Content Standards Addressed:

Social Science:

- Students show the connections, causal and otherwise between particular historical events and larger social, economic, and political trends and developments.
- Students recognize the complexity of historical causes and effects, including the limitations on determining cause and effect.
- Students interpret past events and issues within the context in which an event unfolded rather than solely in terms of present-day norms and values.
- Students understand the meaning, implication, and impact of historical events and recognize that events could have taken other directions.
- Students analyze human modifications of landscapes and examine the resulting environmental policy issues.
- Students compare the present with the past, evaluating the consequences of past events and decisions and determining the lessons that were learned.
- Students analyze how change happens at different rates at different times; understand that some aspects can change while others remain the same; and understand that change is complicated and affects not only technology and politics but also values and beliefs.

Fine Arts:

- Understanding the historical contributions and cultural dimensions of the visual arts.

Challenges:

This module introduces students to their city and its unique personality. In order to understand the impact of a major redevelopment plan such as the Rincon Towers Project, the students first must take a good look at what is here now, and why its character is so special.

- Students will collaboratively create a list of the features of the city that make it unique and define its character and define a “San Francisco aesthetic”
- Students will videotape examples of the unique San Francisco urban landscape
- Students will research the history of the city and the elements that have shaped its character
- Using their research, students will write a one minute script for the video production “The Rincon Towers.”

Module Two

Topic: Introduction to Urban Development

California Content Standards Addressed:

Social Science:

- Students compare the present with the past, evaluating the consequences of past events and decisions and determining the lessons that were learned.
- Students analyze how change happens at different rates at different times understand that some aspects can change while others remain the same; and understand that change is complicated and affects not only technology and

- politics but also values and beliefs.
- Students use a variety of maps and documents to interpret human movement, including major patterns of domestic and international migration, changing environmental preferences and settlement patterns, the frictions that develop between population groups, and the diffusion of ideas, technological innovations, and goods.
 - Students relate current events to the physical and human characteristics of places and regions
 - Students distinguish valid arguments from fallacious arguments in historical interpretations.
 - Students identify bias and prejudice.
 - Students construct and test hypotheses; collect, evaluate, and employ information from multiple primary and secondary sources; and apply it in oral and written presentations
 - Students show the connections, causal and otherwise, between particular historical events and larger social, economic, and political trends and developments of historical events and recognize that events could have taken other directions.
 - Students analyze human modifications of landscapes and examine the resulting environmental policy issues.
 - Students conduct cost-benefit analyses and apply basic economic indicators to analyze the aggregate economic behavior of the U.S. economy.

Fine Arts:

- Students analyze the role and development of the visual arts in past and present cultures throughout the world, noting human diversity as it relates to the visual arts and artists.
- Identify and describe the role and influence of new technologies on contemporary works of art.
- Identify and describe trends in the visual arts and discuss how the issues of time place, and cultural influence are reflected in selected works of art.
- Discuss the purposes of art in selected contemporary cultures.



Challenges

In this module students learn the process of large scale urban development, including such past re-development projects South of Market as the Moscone Center and the Yerba Buena Center. Students learn the interplay of political, cultural and economic forces that lead to, or prevent large scale urban development. Students become acquainted with such concepts as capital, finance, risk, venture capitalism, interest rates and the role of the entrepreneur in creating urban change.

- Students use primary sources to investigate plans for new development in the South of Market area
- Students analyze the political, economic and cultural aspects of development in San Francisco
- Students interview experts in SOMA development
- Students create a video sequence analyzing development in the SOMA area

Module Three:

Topic: Introduction to Rincon Hill Development

California Content Standards Addressed:

Social Science:

- Students relate current events to the physical and human characteristics of places and regions
- Students distinguish valid arguments from fallacious arguments in historical interpretations.
- Students identify bias and prejudice.
- Students construct and test hypotheses; collect, evaluate, and employ information from multiple primary and secondary sources; and apply it in oral and written presentations
- Students show the connections, causal and otherwise, between particular historical events and larger social, economic, and political trends and developments of historical events and recognize that events could have taken other directions.
- Students analyze human modifications of landscapes and examine the resulting

environmental policy issues.

- Students conduct cost-benefit analyses and apply basic economic indicators to analyze the aggregate economic behavior of the U.S. economy.



Fine Arts:

- Processing, analyzing and responding to sensory information through the language and skills unique to the visual arts.
- Creating, performing and participating in the visual arts.
- Students analyze the role and development of the visual arts in past and present cultures throughout the world, noting human diversity as it relates to the visual arts and artists.
- Identify and describe the role and influence of new technologies on contemporary works of art.

Challenges:

In this module, students begin to “zoom in” on the Rincon Hill Neighborhood and the proposed development of the Rincon Towers. In order to appreciate the changes promised for the area students must grasp the history of Rincon Hill, the changes of demographics that have occurred over time, and the significance of the proposed change as a departure from the traditional “San Francisco” aesthetic. Students must understand the economics of development and the current trends in the San Francisco Real Estate Market. Students will begin to understand such concepts as “on-site and off-site affordable housing ratios.

- Students conduct primary research on the proposed development of the Rincon Towers.
- Students attend Planning Commission meetings to hear conflicting opinions on the passing of the proposed development
- Students conduct expert interviews to learn in detail how the proposed development will provide a percentage of off-site affordable housing

- Students will create a video sequence analyzing the proposed building of the Rincon Towers

Module Four:

Topic: Overview of SF and RH History

California Content Standards Addressed:

Social Science:

- Students show the connections, causal and otherwise between particular historical events and larger social, economic, and political trends and developments.
- Students recognize the complexity of historical causes and effects, including the limitations on determining cause and effect.
- Students interpret past events and issues within the context in which an event unfolded rather than solely in terms of present-day norms and values.
- Students understand the meaning, implication, and impact of historical events and recognize that events could have taken other directions.
- Students analyze human modifications of landscapes and examine the resulting environmental policy issues.
- Students compare the present with the past, evaluating the consequences of past events and decisions and determining the lessons that were learned.

Fine Arts:

- Students analyze the role and development of the visual arts in past and present cultures throughout the world, noting human diversity as it relates to the visual arts and artists.
- Identify and describe the role and influence of new technologies on contemporary works of art.

Challenges:

In this module students develop an appreciation for the long and important history of the Rincon Hill Neighborhood and the various roles it has played in San Francisco. Students learn that neighborhoods are not static, but dynamic and go through life cycles and alterations to suit the needs of each particular era. Economic factors will be studied as well as social and cultural keys to change. Defining the traditional San Francisco aesthetic will be an important aspect of this module.

- Students use primary and secondary sources to research the history of the Rincon Hill Neighborhood.
- Students collect images documenting changes over time and styles of architecture in the Rincon Hill Neighborhood
- Students discuss the evolution of neighborhoods and factors that contribute to their advance or decline
- Students create a script for a video sequence on the history of Rincon Hill



Module Five:

Introduction to San Francisco and Rincon Hill Geology

California Content Standards Addressed:

Social Science:

- Students use a variety of maps and documents to interpret human movement, including major patterns of domestic and international migration, changing environmental preferences and settlement patterns, the frictions that develop between population groups, and the diffusion of ideas, technological innovations, and goods.
- Students relate current events to the physical and human characteristics of places and regions
- Students distinguish valid arguments from fallacious arguments in historical interpretations.

Challenges:

San Francisco, like many cities is defined by its peculiar geological base. Once a city of sand dunes, with little room for expansion and limited bedrock for building, the city has grown in spite of these limitations. Students will study the role the environment plays in creating new structures in the city.

- Students study the geology of San Francisco and learn which seismic elements restrict building styles and heights in the city.
- Students interview experts on the application of physics and seismic principles to modern construction methods
- Students understand how the physical environment plays a role in determining different styles of architecture
- Students create a video script explaining why the geology of Rincon Hill is especially suited for high rise development, while other sites are more appropriate for low cost housing.



Module Six:

The Aesthetics of the High Rise Building

California Content Standards Addressed:

Social Science:

- Students analyze human modifications of landscapes and examine the resulting environmental policy issues.

Fine Arts:

- Aesthetic Valuing: Responding to, analyzing, and judging works in the visual arts.
- Connections, Relationships, Applications: Connecting and applying to what is learned in the visual arts to other art forms, subject areas and careers.

Challenges:

While skyscrapers were the triumph of 20th century architecture, they are not always viewed with awe in the 21st. In this module, students will examine the aesthetic considerations of high rise buildings and join the debate on their usefulness. Students will study classic examples of high rise architecture and determine a set of values that they can apply to the proposed models of the Rincon Towers.



- Students learn the history of the skyscraper
- Students study drawings, models, and photographs of famous high rise structures
- Students create 3D computer images of high rise structures
- Students interview a leading high rise architect to learn the principles of high rise design
- Students analyze the appeal of high rise condominiums to top end markets
- Students discuss the transformation of the San Francisco skyline that will result from the Rincon Towers.
- Students debate the artistic and cultural values of high rise structures in the Bay Area
- Students create a video script about the addition of new high rise buildings in San Francisco



Module Seven:

Affordability Issues

California Content Standards Addressed:

Social Science:

- Students analyze how change happens at different rates at different times; understand that some aspects can change while others remain the same; and understand that change is complicated and affects not only technology and politics but also values and beliefs.
- Students distinguish valid arguments from fallacious arguments in historical interpretations.

Fine Arts:

- Students create a two-or three-dimensional work of art that addresses a social issue.
- Students present a universal concept in a multi media work of art that demonstrates knowledge of technology skills.

Challenges:

Limited by its size of 49 square miles, and its geological constraints, San Francisco is still a place where people want to live. This combination of factors pushes housing costs to some of the highest in the nation. While the upper middle class finds opportunities for their price range, working class families find themselves increasingly pushed out of the market, or into less desirable neighborhoods. Students, looking to their future, have doubts that they will ever be able to live in the city of their birth as young adults. The question of affordability, and more importantly affordable by whom, is one which every student takes very seriously.

- Students study classic models of urban social organization
- Students calculate rates of housing expenditures for San Francisco and compare to national averages
- Students calculate necessary income levels for family of four to live in San Francisco
- Students discuss role of finance in determining final design criteria
- Students discuss race, culture and neighborhood demographics in terms of urban development
- Students conduct primary and secondary research on the impact of the Rincon Towers Project on new affordable housing units in San Francisco
- Students create a video script about the impact of Rincon Towers on affordable housing in the city

Module Eight:

Introduction to City Planning

California Content Standards Addressed:

Social Science:

- Students analyze how change happens at different rates at different times; understand that some aspects can change while others remain the same; and

understand that change is complicated and affects not only technology and politics but also values and beliefs.

- Students construct and test hypotheses; collect, evaluate, and employ information from multiple primary and secondary sources; and apply it in oral and written presentations.

Fine Arts:

- Identify contemporary styles and discuss the diverse social, economic, and political developments reflected in the works of art examined.



Challenges

Students are surprised to learn that the city doesn't just happen – that skilled professionals work diligently to plan for the future. The process through which a project such as the Rincon Towers gain s approval is an excellent example of modern democratic government procedure. Students begin to appreciate the complexity of the decisio0n making through which a city evolves.

- Students will research historical maps and city plans
- Student will learn various classical models for city organization
- Students will read selections from Global City Blues by Daniel Solomon and Life and Death of Great American Cities by Jane Jacobs
- Students will attend SF Planning Commission Meetings
- Students will center the Rincon Towers Project in the overall San Francisco General Plan
- Students will create a video module on the Rincon Towers as a planned civic development

Module Nine:

The Economics of Urban Development

California Content Standards Addressed:

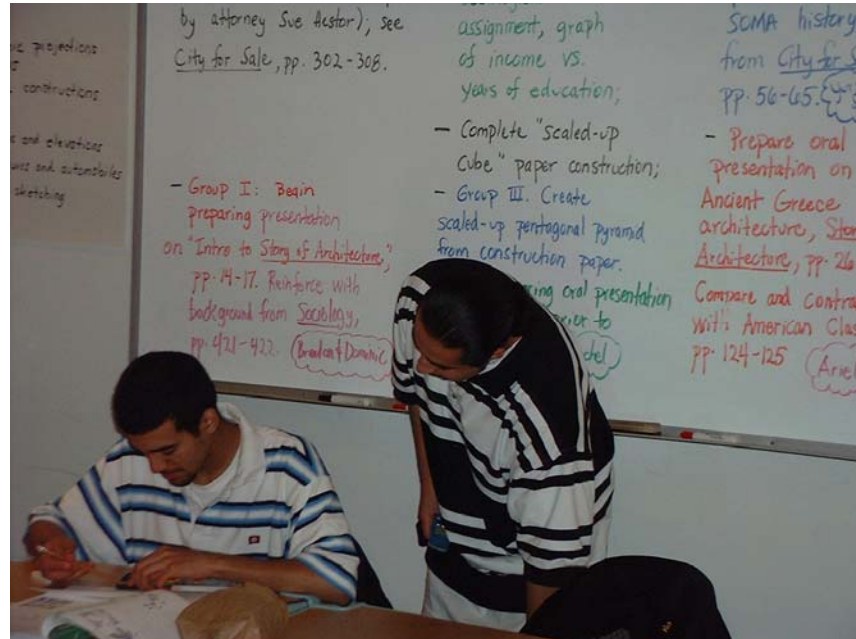
Social Science:

- Students conduct cost-benefit analyses and apply basic economic indicators to analyze the aggregate economic behavior of the U.S. economy.

Fine Arts:

- Describe the relationship involving the art maker (artist),the making (process),the

- artwork (product), and the viewer.
- Identify the intentions of artists creating contemporary works of art and explore the implications of those intentions.
- Analyze and articulate how society influences the interpretation and message of a work of art.



Challenges

How does a 600 million dollar deal come together? Who has the power to command the expenditure of such huge sums? For students, this is a great mystery, one that is not explained by television programs about Donald Trump. By meeting the real estate developers, the financiers, and the architects of the Rincon Towers, the students begin to learn that the process of high finance is something that can be studied and learned, and that real people – not tabloid stars – are behind the creation of large urban developments. By studying basic economics, and the mathematics of real estate, students begin to appreciate the risks of this high stakes game.

- Students will understand the basic workings of capitalism, including supply and demand, the role of the entrepreneur, loans and interest, capital investment and rates of return
- Students will calculate the rate of return on a 600 million dollar investment
- Students will understand the role of economics in determining aesthetic considerations

Module Ten:

The Human Face of Urban Growth

California Content Standards Addressed:

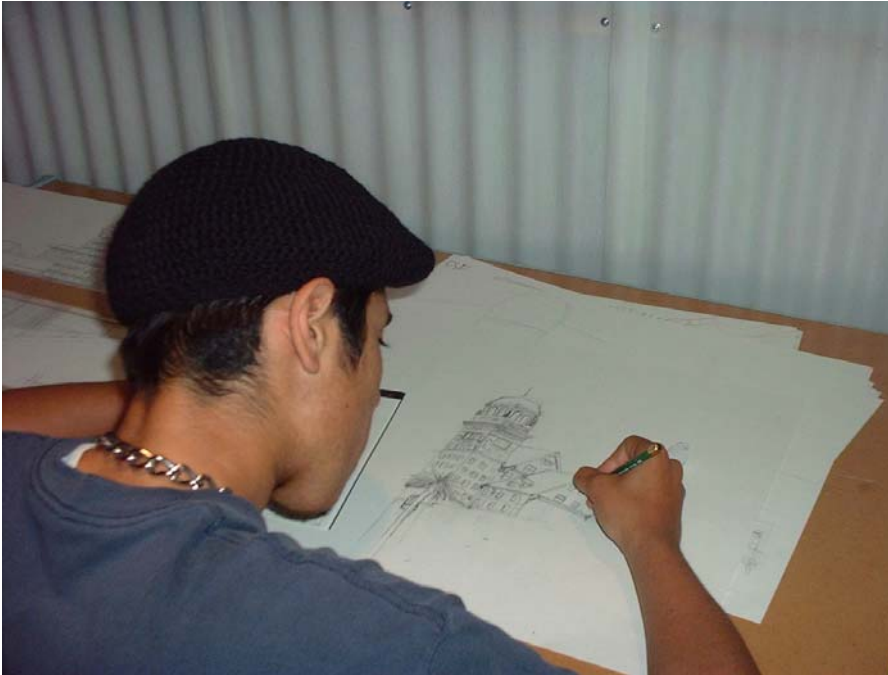
Social Science:

- Students recognize the complexity of historical causes and effects, including the limitations on determining cause and effect.

- Students analyze how change happens at different rates at different times; understand that some aspects can change while others remain the same; and understand that change is complicated and affects not only technology and politics but also values and beliefs.
- Students show the connections, causal and otherwise, between particular historical events and larger social, economic, and political trends and developments.

Fine Arts:

- Investigate and discuss universal concepts expressed in works of art from diverse cultures.



Challenges:

When one neighborhood undergoes the transformation foreseen for the Rincon Hill neighborhood, the current population is affected. Students, however, need to understand the process in its entirety, and not develop limited knee-jerk reactions to the problem. In this module, students begin to evaluate the human factors in urban development, and the choices the city must make to satisfy all of the various stakeholders. It becomes clear to the students that there are choices, and that there may be a variety of “right” answers. Choosing the correct “right” answer is the problem.

- Students will identify demographic groups and subgroups in San Francisco by income, ethnicity, age and job classifications
- Students will identify neighborhood values and trends based upon demographics
- Students will research root causes of homelessness
- Students will understand cultural values in determining design aesthetics
- Students will interview housing pro growth and anti growth advocates
- Students will understand terms such as “pied a terre”, absentee landlord, and foreign capital investment

- Students will create a video report on human considerations in development in San Francisco

Module Eleven:

San Francisco as an Urban Center

California Content Standards Addressed:

Social Science:

- Students relate current events to the physical and human characteristics of places and regions.

Fine Arts:

- Construct a rationale for the validity of a specific work of art —artwork that falls outside their own conceptions of art.

Challenges

Many students are familiar with social difficulties through their exposure through the media. Other students are all too familiar with social problems in their daily life. In this module students begin to understand the real impact of 21st century urban social issues, and the extent to which they are present in San Francisco.

- Students will study local graffiti and its role in social communication
- Students will study crime rates and the breakdown of crime by neighborhoods
- Students will discuss root causes of poverty and the need to provide social services
- Students will learn the interplay between government and citizens
- Students will understand the workings of complex urban infrastructure systems
- Students will create a video report on urban issues in the Rincon Towers neighborhood



Module Twelve:

Final Analysis of Research and Conclusions

California Content Standards Addressed:

Social Science:

- Students construct and test hypotheses; collect, evaluate, and employ information from multiple primary and secondary sources; and apply it in oral and written presentations.

Fine Arts:

- Students create a two-or three-dimensional work of art that addresses a social issue.
- Develop written criteria for the selection of a body of work from their portfolios that represents significant achievements.

Challenges:

What did we learn? What does it all mean? In this module, students review their research and draw general sets of conclusions about the major issues raised in their study of the Rincon Towers.

- Students will discuss and analyze the complexity of the Rincon Towers project and form opinions based upon evidence as to its feasibility
- Students will present their conclusions as a part of a presentation to a panel of experts