

The South Valley, the Environment and Future Development

Tradition vs. Change: The South Valley in the 21st Century **Mathew J. Kanapilly**

This unit is designed as a year long project. Its ultimate goal is to instill in students at Rio Grande High School an appreciation of their home, the South Valley in Albuquerque New Mexico. The South Valley is a predominantly Hispanic, 300 year-old agrarian community. Currently, with the population of Albuquerque growing quickly, the rural environment of the South Valley is threatened by urban encroachment. The intent of this unit is to prevent this.

The first part of this unit will explore the cultural history of the South Valley. The cultures of the Pueblo, Chicano and Anglo residents of the Valley will be examined. The effect of these cultures on the environment of the Valley will be studied, as will the effect of the environment on these cultures.

The second part will examine the phenomenal explosion of suburban culture in the United States after WWII. Levittown will be studied as a model of suburbia. Postwar suburban development in Albuquerque will also be studied. By comparing the unique South Valley with ubiquitous suburbia, students hopefully will have a greater appreciation for their home.

The third part will examine the South Valley today and in the future. What is the state of the South Valley today? What will be its state in the near future? Finally, students will have to predict what they believe the environment and the culture of the South Valley will be like in the year 2050. Will the Valley be developed by real estate agents for profit, resulting in subdivisions, or will development in the Valley proceed according to a plan designed to preserve its uniqueness for future generations? Students must decide their futures.

Impact of the U.S.-Mexico War on New Mexico History and Albuquerque's South Valley Acequia Culture **Silda Rivas Mason**

This U.S. or World History high school unit has two perspectives. One looks to the past and focuses on the *acequia* system and culture

that flourished here in New Mexico during the colonial Spanish period. It also studies the history of the land grants, the events that followed after the signing of the Treaty of Guadalupe-Hidalgo, and the resistance movements that were propelled into action by the takeover of the land by legal and illegal means. The other perspective looks to the present conditions of the *acequia* network here in Albuquerque. Students will conduct experiments comparing the ecological benefits of an unlined *acequia* versus a concrete lined *acequia*. They will make use of field journals to collect data on the flora and the fauna in and along the *acequias* and the Rio Grande.

**The Gifted and Talented of Benjamin Harrison Middle School:
South Valley, New Mexico
Ragina C. Moyers**

According to authorities on gifted/talented education of culturally diverse and socioeconomically disadvantaged children, and my own personal experiences, maintaining ethnic identity is an important component in development for gifted/talented students. There is a strong relationship of ethnic pride and the development of healthy self-concepts and achievement.

Based on this information, students will read and discuss the following Indo/Hispanic literature: *I, Columbus*, *Don Fernando Duràn y Chaves's Land and Legacy*, *Don Josè: The Last Patrón*, *We Fed Them Cactus*; selections from the anthology *Literature of the American Southwest*, and excerpts from *Acequia Culture*.

Utilizing what they've gleaned from their readings and discussions, students will write essays, short stories, summaries and poetry, conduct research, develop presentations, and participate in fieldtrips and workshop/seminars.

**Alternative Energy and Building Techniques
Andrew Parker**

The purpose of this unit is to introduce three alternative building techniques and the use of solar energy as a power source. The items discussed in the paper contribute to a healthy, environmentally friendly, lifestyle. A brief history of rammed earth, adobe, and straw bale homes and the construction techniques used are discussed. Using these earth friendly (sustainable) methods in conjunction with solar power, environmentally sound homes can be constructed. In addition to alternative building techniques, the design of solar panels and how they work and the general concepts of electricity are explored. The

design and function of passive and active solar systems are introduced. Suggestions are made on how to remodel an existing home to rely passive solar energy, and ways to reduce energy consumption. The activities suggested at the end supplement the curriculum and direct the reader toward more information.

Air Quality **Raji Sinha**

This unit is designed for Rio Grande High School (RGHS), mainly for tenth to twelfth grade students. It covers the fundamentals and relatively nontechnical field of air pollution. We will discuss the historical perspective of air pollution, the causes and effects of air pollutions, the green house effect, government air pollution control programs, South Valley Partners in Environmental Justice (RGHS is situated in the South Valley).

There are seven lesson plans included with this unit. Lesson plans are designed such that students will understand the health effects due to air pollution, and problems of air pollution in their community. My hope is to get them involved in community service to address the problems regarding air quality.

Working in the South Valley:Assessing Environmental Impacts **Judy Stewart Vidal**

We remember best what we do. Curriculum needs to be relevant to students' lives. Stewardship of the environment will be one of the greatest challenges of tomorrow's citizens. Technology is increasingly shaping every facet of our lives. Students need to know that they can make a difference. Students need to prepare themselves for the real world.

This unit is the outline of an entire course being created in 2001-2002 at Rio Grande High School's new program for juniors and seniors called "The Environment and Technology in the Community Guild." This class is an 11th grade "school-to-work" class being taught along with three other Guild classes (English 11, U.S history, and AP environmental science). Its purpose is to prepare students for the world of work, to enable them to have a meaningful work experience, and for them to frame their work experience in terms of its environmental impact.

Crusin" and Choosin': Transportation along the South Valley **Camino Real**

John Wright

We live in an increasingly technological society. This has profound implications for our culture and the world ecologically, socially and economically. This unit looks at the ecological, social and economic implications of the premier, and perhaps the most prominent, technology of modern culture-the car. Students will examine various aspects of their community and see how it is impacted by their transportation choices. How much time do people spend in their cars? How much money do we spend on our cars? Why do we like cars so much, and what do we like about them? How are our lives affected by the car culture?

The students in the South Valley have a special tie to this topic. Historically El Camino Real, the official road of the Spanish New Mexico, passed through the valley on or near roads used today.

This unit focuses on the 9th grade language arts class, although this unit could be modified for a wide variety of applications from social studies to science. It would best be taught collaboratively with those teachers. Students will use various language arts skills such as speaking, writing essays, writing advertisements, making a brochure and reading a variety of materials from technical work to literature.