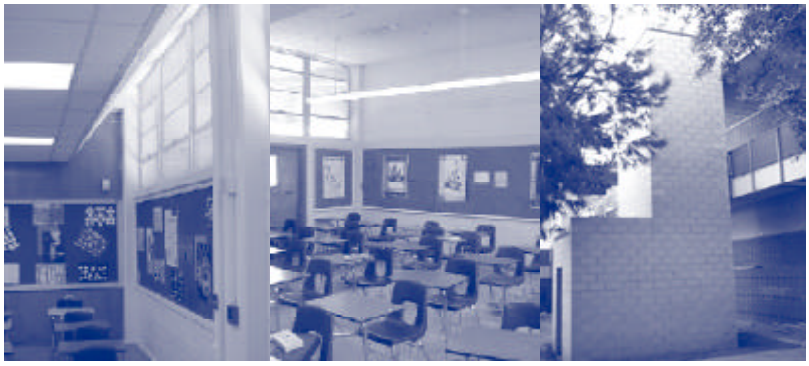
JUNE 2001

# Renewal

An update on the modernizations at El Rancho Unified School District

## El Rancho High School: In the Midst of Modernization



*Left: The new T8 lighting, and suspended ceilings result in a better lighting distribution, and a potential cost-savings for the District. Middle: The classrooms prior to modernization. Right: The new elevator in Building K meets ADA requirements.*

In September 2000, the much anticipated modernization work began at El Rancho High School. Scheduled for completion in two years, the work will be finished just in time for the school's 50th anniversary. Though similar in nature to other District modernization projects, El Rancho High School also presents some unique challenges.

The scope of work includes the following:

1. New electrical service and distribution
2. New HVAC (heating/ventilation/air conditioning) in most classrooms
3. New R-30 batt insulation on the roof underside
4. High efficiency lighting installation
5. New suspended ceilings
6. Partial restroom upgrade
7. Technology infrastructure installation

Additional modernization also includes the installation of two new elevators in buildings A and K, to comply with the Americans with Disabilities Act (ADA).

The high school presents some unique challenges due to its campus size. Covering 43 acres, El Rancho is roughly three times larger than other District schools. "Because the campus is so large, there is more work going on at any one time," said David Linsel, AIA, construction administrator of Flewelling & Moody Architects. "This presents unique challenges in trying to coordinate the volume of activity occurring simultaneously."

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## Invisible Improvements

The District's current modernization program focuses primarily on the utility infrastructure of the schools; items such as new air conditioning, electrical service and technology infrastructure are being upgraded, as well as ensuring that the schools are ADA compliant. While these improvements are vital, they are not easily "seen."

"Three-quarters of the work is behind walls," explained Ms. Julie Ellis, principal of El Rancho High School. "It will not be visible at all, and I think people need to understand that."

The current funding available will not cover many of the cosmetic improvements that are needed, such as painting. Instead, the modernization will focus on the functional capabilities of the facilities.

"With these modernizations, students have more technology available to them, climate control is better, and the schools will run more efficiently," said Jim Moreto, AIA, principal of Flewelling & Moody Architects. "Though many of the changes are not physically visible, the modernizations are making significant improvements to the quality of the District's facilities."



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# Defining the Scope of Work

Crucial to the success of ERUSD's modernization program was defining a scope of work that would address the most critical concerns. Needs assessment teams provided recommendations to the Board of Education, who ultimately approved the final scope of work.

**I: Site Advisory Committees**
The primary committee involved in determining the scope of work was the Site Advisory Committee (SAC). Each site formed a committee to identify and assess the modernization needs specific to their school. These committees included the following participants:

- The architect
- The school principal
- The curriculum heads
- The head custodian
- The PTA representative

of each site with the SACs. The Facilities Department includes the Director of Facilities, Ron Sherman, along with crew leaders from the following departments:

- Plumbing
- Mechanical
- Grounds
- Electrical

After all the assessments were completed, the information was then compiled and synthesized.

At this time, the architect advised the SACs that the allowable state funds for the modernizations would not support the entire wish lists made by the committees. The assessments were then re-prioritized, and the uniform scope of work was presented to the Board, for approval.

**BOARD OF EDUCATION**
**Makes final decision**

**DISTRICT FACILITIES DEPARTMENT**
**Shares service history, and infrastructure knowledge of each site**

**SITE ADVISORY COMMITTEE (SAC)**
**Primary committee at each site**

**DESIGN TEAM**
**Makes site, building, & equipment assessments**

**II: The Design Team**
The Design Team made assessments of each site to verify existing site, building, and equipment conditions. Their recommendations were reported back to the SACs. The Design Team consisted of the:

- Architect
- Structural engineers
- Mechanical engineers
- Plumbing engineers

**III: The District Facilities Department**
The Facilities Department made additional site assessments, and shared the service history and infrastructure

The final needs assessments were prioritized as follows:

**GROUP ONE**:
The District decided to address the state and federal mandated scope of work as a priority, including:

1. Fire, life and safety compliance
2. ADA accessibility/compliance

**GROUP TWO**:
This group consists of standard modernization work, with higher priority items listed first. The uniform scope of work consists of the high priority items across all sites, and additional scope is added as the construction budget permits. This scope of work includes:

1. Upgrade electrical system
2. HVAC installation/replacement and ceiling insulation
3. Suspended ceiling and new high efficiency lighting
4. Modernization of toilets
5. Interior painting
6. Classroom sink replacement for access compliance
7. Interior flooring
8. Interior finishes (tackable vinyl surfaces)
9. Window replacement (only in sites where identified)
10. Administrative area reconfiguration
11. Site drainage retrofit
12. Miscellaneous work

**GROUP THREE**:
These are site-specific "wish lists" created by the SACs.

While there is a uniform scope of work for all schools, the final scope of work completed will vary at each site, due to the following factors:

a. Project allowance as approved by the state
b. Size of the school and existing conditions
c. Construction industry bid climate at time of bidding

# Getting Wired at El Rancho Unified School District

Years ago, the government realized the positive impact that technology could have on the learning experience, and they've supported their position by making millions of dollars in grants available to educators. El Rancho Unified School District sought out government funding to assist them in acquiring state-of-the-art technology, and in doing so, this additional funding allowed the District to reallocate modernization funds to other priorities.

*El Rancho High School students, from left to right: Robert Moreno, Chris Figueroa, Claudia Flores*

In part one of a two-part story, we'll investigate the impact the E-rate grant had on the District's technology infrastructure; in the next issue, we'll examine the benefits of the Digital High School grant.

The Schools and Libraries Universal Service Fund, more commonly known as the E-rate, was created by the federal government in 1996 to ensure that all eligible schools and libraries have affordable access to modern technological and information services. El Rancho Unified School District applied for the grant, and was awarded $1.7 million in the spring of 1999.

The primary focus of this grant is to provide Internet access to classrooms across the country. El Rancho Unified School District, with the assistance of Cisco Systems, designed a wireless network system to give all of the District's sites Internet access, without incurring monthly fees.

ERUSD installed what is probably, "the largest wireless based infrastructure of any school district in LA County," said John Moss, director of information technology for the District. "And in doing so, the District has saved a ton of money." By making the initial investment in this system, the District has avoided costly fees in excess of $12,000 per month, which would be the ongoing expense of using a more common Internet access system, such as a multiple T1 lines.

When the District applied for the grant in 1998, GE Capital, the management company who submitted a proposal for the job, guaranteed their prices. In May 1999, when the funding was awarded, GE Capital was obligated by their initial quote. "By putting in the proposal so far back, we locked in prices and saved a considerable amount of money," said Mr. Moss, "and I think we probably got about $4 million dollars of work at today's prices, for $2 million, with the component that the District kicked in."

The benefits of the E-rate grant to the District are far-reaching. By pursuing this grant, the District was able to install an advanced Internet access system at a very economical price, without incurring ongoing monthly fees. In addition, by receiving these funds, the District's modernization funds have been allocated elsewhere.

In upcoming issues, we'll examine the Digital High School grant, and how the learning experience is being enriched through the use of computers.

## The Four Phases of Modernization

The District's 16 schools are grouped into four phases of modernization, as follows:

I: El Rancho High School
Selby Grove Elementary
South Ranchito Elementary
North Park Middle School

II: Rivera Middle
Rivera Elementary
North Ranchito Elementary
Valencia Elementary

III: Rio Vista
Magee Elementary
Durfee Elementary
Burke Middle School

IV: Pio Pico Elementary
Birney Elementary
Meller Elementary
Obregon Elementary

These groupings are based on needs assessments and funding considerations. Other factors include:

- El Rancho High School and Selby Grove received priority because they did not participate in the initial technology infrastructure upgrade from the 1994 bond monies, and the District incorporated the infrastructure upgrade with the modernization work.
- South Ranchito and North Park Middle School were recognized as having immediate needs for modernization.
- Groups II and III were selected based on need, as well as ensuring that one middle school was included in each phase.
- Meller and Obregon were not originally included in the modernization, and so they were added once the District leveraged more state funding.

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Modernizing facilities while they are occupied involves careful planning. At ERUSD, construction work is coordinated around campus activities, including testing and special events, to minimize the impact on students and teachers alike.

The modernization was originally scheduled to begin in 1997; however, the work was delayed for the District to secure additional state funding. Despite the perceived inconveniences, the additional funding enabled the District to expand the modernization program to encompass all 16 schools, instead of the 14 originally budgeted.

Ms. Julie Ellis, principal of El Rancho High School, has been an active participant in the modernization process. Ms. Ellis attends weekly meetings with the project management team, and works hard to bring in as many cosmetic improvements as she can, those that weren't included originally.

The available modernization funds will allow for much-needed improvements; however, they will not cover all items on the school's "wish list."

"The community probably needs to understand that maintaining schools is an expensive proposition, and we all need to be aware of that, and think positively about it, as we look at bonds, taxes, etc.," explained Ms. Ellis.

School districts across the country are embarking on modernization programs similar to ERUSD. Last year, the National Education Association estimated that public school systems nationwide would need $322 billion to repair and modernize facilities. Communities across the country are gearing up for the journey.

# Cash Flow Analysis

## The E-rate Grant

The purpose of the E-rate grant is the installation of the technology infrastructure necessary to provide Internet access in every classroom. When the grant was awarded to El Rancho Unified School District in 1999, 12 schools had already had the conduit installation and construction completed, from the 1994 General Obligation Bond monies. The E-rate covered the conduit installation for the remaining four schools, as well as the complete installation of the wireless network, including additional Cisco equipment not listed here.

The diagram below illustrates the breakdown of funds.

**CASH IN:**

| | |
|---|---|
| **May 1999 $1.7 Million Awarded From E-rate Grant** | **District Contributed $330,122** |

**CASH OUT: (E-rate funds Projects):**

| | | |
|---|---|---|
| Connectivity Hardware & Wiring/Cabling Net Cost (District-wide) | | $ 1,123,471 |
| Labor Net Cost (District-wide) | | $ 355,758 |
| Conduit Installation & Construction at El Rancho High School | | $ 216,125 |
| Conduit Installation & Construction at Meller Elementary | | $ 55,797 |
| Conduit Installation & Construction at Salazar High School | | $ 26,290 |
| Conduit Installation & Construction at Selby Grove Elementary | | $ 59,864 |
| **INSTALLATION & CONSTRUCTION AT ALL SCHOOLS** | | **$1,837,305** |
| Other Cost | | $ 130,722 |
| -- Configuration of 16 servers and proxy | $75,254 | |
| -- LAN Installation/Configuration | $32,115 | |
| -- Network Management Set-up | $ 6,000 | |
| -- Network Management Station | $17,333 | |
| Connectivity Hardware Maintenance | | $ 21,120 |
| Taxable Items @ 8.257% | | $ 40,975 |
| **TOTAL, INCLUDING ADDITIONAL SET-UP COSTS AT ALL SCHOOLS** | | **$2,030,122** |