

WEST WING ELEMENTARY SCHOOL

Deer Valley Union School District

Executive Summary

West Wing is a 90,330 square foot elementary school completed in 2005. Funding totaled \$11.2 million. Although not a LEED certified school, it has many green features.

Green Features

West Wing has many green features, including:

- A sprinkler irrigation system with a moisture reading module to sense the need to skip a watering cycle due to recent weather conditions
- Lighting adjacent to the window wall are switched separately from the rest of the fixtures with the theory is this will allow for monitoring of times when additional lighting is actually needed
- High efficiency power transformers
- Suspended ceilings slope to the exterior windows to allow light to bounce off the ceiling into the center of the class room
- Buildings are laid out in an east west configuration to better control day lighting into the class rooms

Results achieved include:

Water Efficiency: The school site is located on a 70 ft. hill, creating a storm drainage problem. Through a creative design, storm water is contained then piped under the building, daylighted at the playing fields, collected again then released to a community retention basin.

Energy Efficiency: The bank of lights adjacent to the window wall in classrooms are switched separately from the rest of the light fixtures allowing teachers to more monitor when additional light is needed rather than turning all lights on at once.

Indoor Air Quality: The suspended ceiling slopes up to the exterior windows to allow light to bounce off the ceiling to the center of the classroom.

Sustainable sites: Building drawn up into a three story building to minimize building footprint and orientated across the slope of the hill in a two story walk-out configuration to minimize amount of rock excavation.

Savings: At the time of this report studies on energy savings are still being completed.

Benefits: Multipurpose area is also used by the neighborhood as community space.

Advice: The daylighting features make the campus more “upbeat” than other schools in the district. The students and teachers like working in the day lit areas. This is the best feature of the school because of its benefits.