

Educate to Escape: Greening Kelly Creek Elementary School

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Introduction to Leonardo Academy

- Charitable not-for-profit organization
- Mission: advance sustainability
- What we do:
 - Develop new approaches and methods for sustainability
 - Help companies, organizations, families, and individuals implement sustainability
- Areas of Work
 - LEED implementation and certification support
 - Overall sustainability for organizations
 - Emissions footprints, reduction strategies, and offsets
 - Sustainability training services



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Educate to Escape Contest

- Contest held by Ford and Extreme Makeover Home Edition
 - Applications were submitted nationwide
 - More than 35,000 schools entered
- Kelly Creek’s head custodian submitted winning essay
- Grand Prize: \$250,000 of green upgrades



Kelly Creek Elementary School



About Kelly Creek Elementary

- K-5 Elementary School located in Gresham, Oregon
- Certified Oregon Green School
- Well-known for Aardvark recycling program
- District is a nationwide leader in Energy Efficiency
 - Kelly Creek is a top performer: EnergyStar score = 93
 - Building Dashboard monitors real-time energy use
 - School uses <10 kWh when unoccupied

Priority Setting

- LEED-EB was a high priority
- Chose upgrades that would allow school to earn LEED-EB prerequisites
- Leonardo Academy held a visioning session to set remaining priorities with teachers, staff, parents, and students
- A new playground was very high on the school's list

Chosen Upgrades for the School

Final list of upgrades included:

- Recycled-content playground equipment
- Recycled rubber matting
- Water-efficient fixtures
- Ventilation testing and balancing
- Eco-friendly whiteboards
- Marmoleum flooring
- Low-mercury lighting



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LEED-EB Implementation

- Leonardo Academy assessed ability to earn LEED-EB
 - Gold certification thought to be possible
- All prerequisites met with help from green makeover
- Most existing operations in compliance with LEED
- High EnergyStar score meant school could skip some more difficult credits
- Most tracking was performed at the District level
 - Credits requiring tracking would be difficult to earn

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Challenges and Solutions

- Drastic budget cuts and employee shortages left school in a difficult position
- Facilities staff had limited time to devote to LEED
- One solution was to eliminate credits requiring tracking
- Leonardo Academy conducted a focused site visit to assist the school with gathering all necessary application materials

Summary of Application Highlights and Opportunities

- School was able to apply for Silver Certification
- Eligible for all 18 energy efficiency points
- Eligible for all 5 water fixture efficiency points
- Majority of points for alternative transportation and green cleaning were also attempted
- Recycling program could not be used for LEED certification because tracking was not in place
- Leonardo Academy is working with the school to set up recycling and purchasing tracking for future recertification efforts

Points Attempted

Points Attempted	
Sustainable Sites	11
Water Efficiency	8
Energy and Atmosphere	20
Materials and Resources	1
Indoor Environmental Quality	6
Innovation in Operations	6
Total	52



Ongoing Benefits

- School is a model to the district and community
- 38% reduction in water use since 2008
- Playground is accessible to special needs students and will not need to be replaced for many years
- Marmoleum flooring improves IAQ and is easier to clean



Lessons Learned

- LEED-EB can be integrated into student learning activities
- Adequate staff time and resources are VITAL to LEED-EB!
- Energy efficiency and water efficiency can take you a long way
- Before beginning the LEED-EB process, assess your need for outside resources
- Don't be afraid to seek help

Thank You!

Contact for Additional Information

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