



Green Schools Case Study

*Susan Miller Dorsey High School
Los Angeles, California*



Dorsey High School received federal recognition as a Department of Education Green Ribbon School in April 2015. The following case study examines and provides insight into Dorsey High School's green initiatives as well as their experience in applying to receive recognition as a Green Ribbon School.

Looking to Dorsey High School as an example, your school can apply too!





Green Ribbon Schools

U.S. DEPARTMENT OF EDUCATION



Launched in 2011, the Department of Education's **Green Ribbon Schools** aims to encourage schools to “go green.” This program highlights schools with inspiring practices and provides educational institutions across the nation with examples of best practices. **Earth Day Network** is proud to have collaborated with other leaders in the green schools movement and the Department of Education to initiate this program.

Green Ribbon School awards recognize public and private schools of all age levels that demonstrate dramatic gains in both environmental literacy and reducing their carbon footprint while improving learning conditions.



Why Green Schools?

The next generation of innovative entrepreneurs and change makers depend on their schools to be effective learning environments. Green schools:

- *Save money!* Green schools use around 33% less energy than regular schools and significantly lower maintenance costs. These savings can be used to buy new textbooks or hire new teachers.
- *Cut carbon emissions!* Green schools use less electricity, cut down on waste, and teach students how to make environmentally-conscious choices.
- *Keep students & teachers healthy!* Fewer students and teachers have to take sick days when they are in cleaner, safer environments that encourage outdoor and physical activity.
- *Allow students to excel!* Students in green schools consistently have higher test scores because greener classrooms increase student concentration. Environmental education also connects students to the real world and increases interest in STEM learning.
- *Empower students!* Green schools empower students to innovate and take action to better their community.





All About Us

Dorsey High School

Founded in 1937, Dorsey High School in the Baldwin Hills Estates/Crenshaw Heights neighborhood of Los Angeles is a leader today in the green schools movement. The public school prides itself in ensuring its diverse student body receives a well-rounded education inside the classroom, at home and in the community. Dorsey High School prepares its students for the competitive world of post-secondary school and beyond by integrating environmental principles into their curriculum.

Earth Day Network

The first Earth Day on April 22, 1970, activated 20 million Americans from all walks of life and is widely credited with launching the modern environmental movement. Growing out of the first Earth Day, Earth Day Network (EDN) is the world's largest recruiter for the environmental movement and works with tens of thousands of partners in 192 countries to build environmental democracy and broaden, diversify and mobilize the environmental movement. More than 1 billion people now participate in Earth Day activities each year, making it the largest civic observance in the world.



The Three Pillars

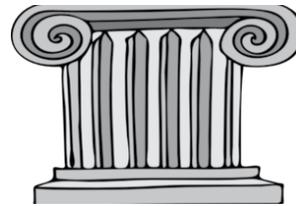
For a Green Ribbon School

Dorsey High School was recently recognized as a Green Ribbon School by the U.S Department of Education. Green Ribbon Schools awards public and private schools that reduce environmental impacts and costs, improve the health of students and staff, and provide interdisciplinary environmental education leading to environmental literacy.

What makes Dorsey so green? Read on to learn more about how the school fulfills the Three Pillars of a Green Ribbon School!

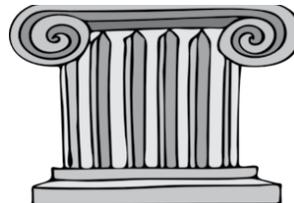
Pillar One:

Reduced Environmental Impact and Costs



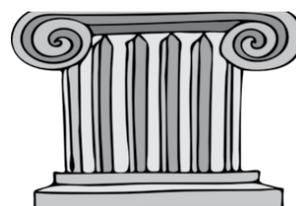
Pillar Two:

Improved Health and Wellness



Pillar Three:

Effective Environmental and Sustainability Education





Infrastructure

Pillar One

Green Ribbon Schools are evaluated on their success in reducing greenhouse gas emissions, developing conservation measures, and using on-site renewable energy in addition to improving water quality and efficiency.



Dorsey High School:

- **Energy:** Built two LEED Silver and Collaborative for High Performance Schools (CHPS) certified buildings.
- **Energy:** Replaced over 50,000 sq. ft. of dark roofing and asphalt with lighter surfaces, which reflect the sun and cool the campus.
- **Energy:** Installed a solar panel system, which produces almost 43,000 kwh annually.
- **Water & Grounds:** Students planted 60 trees on campus that sequester 6,000 pounds of CO₂ per year.
- **Water & Grounds:** Captures stormwater runoff to be reused with a water detention system and permeable concrete walkways.
- **Water & Grounds:** Dedicates over 50% of the campus to green space for outdoor recreation, classrooms, gardens, and native plant habitats
- **Waste:** Diverts 29% of its waste through student-run recycling initiatives.
- **Alternative Transportation:** Promotes walking, biking, and taking public transportation.



Infrastructure

Pillar One

Resources for Your School!

- **Energy:** Install renewable energy.
 - [The renewable energy consortium for schools](#)
 - [Rebates by state](#)
 - [Study of US solar on schools](#)
- **Energy:** Construct a green building on campus, using these guidelines.
 - [LEED building guidelines](#)
 - [CHPS operations report card](#)
- **Energy:** Retrofit your school with more efficient light bulbs, HVAC systems, and appliances.
 - [Energy Star treasure hunt and portfolio manager](#)
 - [Alliance to Save Energy power save schools](#)
 - [Department of Energy advanced retrofit guidelines](#)
- **Water & Grounds:** Add more green space to sequester carbon by planting trees, gardens, green roofs, and outdoor classrooms.
 - [Let's Move school garden checklist](#)
 - [LAUSD green roofs on schools](#)
- **Waste:** Start a recycling campaign on campus and buy more environmentally-friendly products.
 - [Earth Day Network recycling plan](#)
 - [Green schools buying guide](#)
- **Alternative Transportation:** Start a bike and walk to school day to promote greener transportation to school.
 - [Bike to school day](#)
 - [Safe routes to school](#)



Use your District as a Resource

Most infrastructure updates are coordinated through your school district. Connect with a representative to talk about options!



Improved Health & Wellness

Pillar Two

Green Ribbon Schools are also evaluated on their capacity to provide students with a healthy studying environment and facilitate education about health, nutrition, and outdoor physical well-being.

Dorsey High School:

- **Environmental Health:** Classrooms have sound levels below 50 dBA and primarily use natural lighting, supplemented by high quality lighting fixtures. This allows students to understand and concentrate well in class.
- **Environmental Health:** The LA Unified School District (LAUSD) has a robust Asthma Program run by the nurse office. In order to increase asthma awareness, students produced award-winning videos on how to control asthma triggers.
- **Environmental Health:** LAUSD's Integrated Pest Management Program has received two Innovator Awards from the California Department of Pesticide Regulation for their use of heat to eradicate termites, instead of chemical pesticides.
- **Nutrition & Fitness:** Grows a native plant garden on campus. The garden serves as an outdoor classroom for science classes as well as supplies produce for cooking classes.
- **Nutrition & Fitness:** Encourages students to go outdoors through hiking expeditions to Audubon and Hahn State Park, in partnership with the Sierra Club and Outward Bound.
- **Nutrition & Fitness:** Partners with Mother of Many (MOM) to help students produce, "Cooking Live with Dorsey High," a Web TV production. Recently, the Culinary Arts students were published on the USDA's site for their award-winning Recipes for Healthy Kids Challenge and visited the White House.
- **Nutrition & Fitness:** Implements a coordinated school health approach that uses partnerships with non-profits, community-based organizations, and local agencies to provide a safe learning environment.



Improved Health & Wellness

Pillar Two

Resources for Your School!



- **Environmental Health:** Use natural light in classrooms.
 - [Daylighting](#)
 - [Philips Brighter Futures](#)
- **Environmental Health:** Clean schools with less chemicals.
 - [Cleaning for asthma safe schools](#)
 - [Guide to green cleaning](#)

- **Nutrition & Fitness:** Provide students with fresh produce and involve them in cooking so they can learn by doing. Even use the produce from your own school garden!
 - [Healthier US Schools Challenge](#)
 - [National School Lunch Campaign](#)
 - [National Farm to School Network](#)
- **Nutrition & Fitness:** Encourage outdoor learning and physical activity through hiking excursions, gardening, and community fitness programs.
 - [Action for Healthy Kids](#)
 - [Sierra Club outings](#)

Get a Grant!

Check out the Green Strides website for different grant opportunities to help fund new initiatives at your school!

[Learn More](#)





Effective Environmental & Sustainable Education

Pillar Three

Lastly, Green Ribbon Schools are evaluated on their ability to integrate learning about environmental, energy, and human systems across learning disciplines, and to promote service learning.

Dorsey High School:

- **Interdisciplinary Learning:** Emphasizes an integrated approach to learning. The humanities program integrates artistic expression, social justice, and environmentalism. For example, students produced documentaries on littering.
- **Interdisciplinary Learning:** Involves over 50 students through the Global Warriors Eco-Club. The students have implemented a multi-level recycling program and won the Battle of the Schools Generation Earth Program in 2009.
- **STEM Content, Knowledge, & Skills:** Participated in The Aspen Challenge, a national seven-week challenge to provide a sustainable solution to a problem.
- **STEM Content, Knowledge, & Skills:** Partners with the LA Audubon Greenhouse program to provide students paid internships at the Baldwin Hills Scenic Overlook where they conduct research with biologists and restoration ecologists.
- **Civic Knowledge & Skills:** Promotes the Restoration Leadership Program, which teaches students habitat restoration techniques and facilitate six cleanups each year.
- **Civic Knowledge & Skills:** Partners with Leo Politi Elementary School to give high school students the opportunity to work with their younger peers to restore the habitat of schoolyard bird species.
- **Civic Knowledge & Skills:** Collaborates with a wide range of community organizations in order to create space for Dorsey students to flourish as well as give back to the community.

Effective Environmental & Sustainable Education

Pillar Three

Resources for Your School!



- **Interdisciplinary Learning:** Integrate environmental education across disciplines
 - [STEM to STEAM](#)

- **Interdisciplinary Learning:** Start an eco club on campus
 - [How to start an environmental club](#)
 - [Mobilize your students](#)

- **STEM Content, Knowledge, & Skills:** Provide interactive, hands on learning opportunities
 - [CLEAN Network educational resources](#)
 - [Earth Day Network lesson plans](#)
 - [North American Association for Environmental Education \(NAAEE\)](#)
 - [Alliance for Climate Education \(ACE\)](#)

- **Civic Knowledge & Skills:** Create lasting partnerships with community organizations and get students involved in their communities
 - [Benefits of combining environmental education and community service](#)
 - [Guidestar directory of non-profits](#)



Partner up!

Collaboration is the key to success. By working with community organizations, a school can increase its capacity to provide excellent programming and services to its students.



Green Ribbon School

Application Recommendations

Be Prepared

- Start early!
- Make sure to bring key players together early on.
- Study previous Green Ribbon School winners to see how they received recognition.
- Make use of the [Green Strides website](#) for information on the application process and helpful hints.

Open the Conversation

- Completing the application requires a District team, including the principal, teachers, custodial and administrative staff, students, and parents.
- Involve students in the application process. They are a great first-hand resource for information and offers them an experiential learning opportunity.
- There are lots of calculations! They are pretty easy but do take time. Make this a fun activity and task students with calculating their school's utility consumption.
- Reach out to your state Green Ribbon School representative to answer questions.

Filling in the Application

- Highlight partnerships you have cultivated over the years to show how you collaborate with the larger community.
- All ideas count! You may not even realize that some of your programming includes environmental education. Think creatively about your projects.
- Respond to as many questions as you can to receive the most possible points.
- Your narrative is important. Draw the judges in with a story and contextualize your school's success.



Green Ribbon School Timeline

Spring: U.S. Department of Education provides information for the next award cycle

Fall: Schools, districts, and post secondary institutions complete and submit applications to state education authorities

February 1: State education authorities submit nominees to the Department of Education

Summer: Department of Education hosts national awards ceremony

Summer: State education authorities publish their applications for school, district, and post secondary categories

Winter: State education authorities close competitions and review and select nominees

Earth Day, April 22: Department of Education announces national awardees

[Apply Now!](#)



Contact Us!

Earth Day Network

Need more information? Interested in Earth Day Network's Green Schools campaigns and resources?

Join the Educator's Network!

Contact Information:

Email: education@earthday.net

Website: edu.earthday.net

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Washington, D.C. 20036