Nathan Bishop Middle School



Education Built to Last
Facilities Best Practices Tour 2013

Nathan Bishop Middle School 101 Sessions Street Providence, RI 02906

Serving 674 students, Grades 6-8 67.7% Free and Reduced Lunch Eligible Built 1929, major renovation 2009 140,000 sq ft

School website: www.ppsd.org



Facility

Tools for Schools participant
Energy monitoring kiosk
Solar hot water production
25% onsite renewable energy produced
21% reduction in water use

Health

Greenhouse on site Green Seal cleaners

Education

Science classes use kiosk energy data in classrooms
After school science program
Down City Design program used in greenhouse classroom
investigations
Partnerships with city Universities and organizations

Student urban outdoor project calculating traffic data

School Highlights

CHPS-NE Verified Design

Energy Star 2011 recognized, 85 Benchmark score

2011 RI Science Olympiad second place winner

Gray water used for cooling towers and flushing needs



The Nathan Bishop historic renovation project has been very successful in not only conserving our environment, but has become a model for sustainable schools. The 21st century learning environment is being used to enhance the curriculum. The facility truly is a teaching tool.

~ Joseph da Silva, RIDE School Construction Coordinator

Read more about this school and other Green Ribbon Awardees at http://www2.ed.gov/programs/green-ribbon-schools/awards.html

The Nathan Bishop CHPS-NE project has been very successful in not only conserving our environment and resources, but is becoming a model for sustainable schools and "Schools as Tools." There are kiosks at the school which are metering live energy data and demonstrating consumption trends including water. The kiosks have excellent schematics of how the solar HW, gray water systems, controls, and energy recovery units work. The science classrooms integrate these systems into their curriculum.

There is an after school science curriculum that has been developed by the science staff and the Providence After School Alliance (PASA), as well as Down City Design. The students are building an on-site greenhouse as part of this program.

Nathan Bishop placed second in the 2011 RI Science Olympiad. The school has partnerships with PASA, Brown University, RI School of Design, the Jewish Community Center, and a Parents' Expertise Workshop.

All of the building mechanical and electrical equipment is state of the art efficient. Features include gray water used for the cooling towers, bathroom toilets and urinals. This system uses rainwater treated with UV light. State of the art controls, energy recovery units, solar hot water, and a rooftop weather station, variable speed drives on fans and pumps, and daylighting strategies are also used. Nathan Bishop earned the Energy Star rating in 2011 with a benchmark score of 85.



