



Student Actions to Reduce Your School's Environmental Footprint

Eco-Audits & Hands-On, Inquiry-Based Projects

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Green Schools Initiative



Schools' Environmental Footprint

WASTE

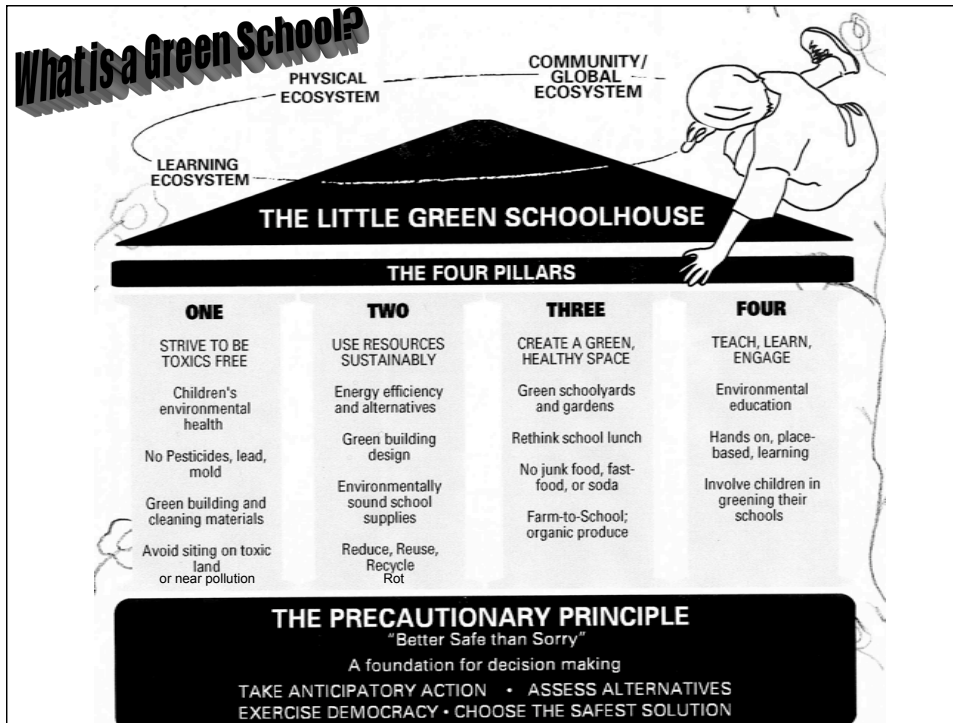
- An average school district diverting 75% of its waste can save annually \$600,000.
- If 125,000 schools switch to recycled paper they could save about 6 million trees each year!

ENERGY

- Schools use about 13% of all of the energy in the U.S. (125 million tons of carbon).
- Schools could save 25% of the energy they use now, saving \$2 billion each year (enough to hire 30,000 teachers!).

WATER

- An average school district could save 3 million gallons of water.



How to Create Green Schools



1. Green School Committee
2. Environmental Vision Statement
3. Environmental Assessment
4. Action Plan
5. Curriculum
6. Monitoring & Evaluation
7. Informing, Involving & Celebrating!

Adapted from: Eco-Schools International

Benefits of Hands-On Environmental Education

- Hands-on learning
- Solutions to real-life challenges
- Fun!
- Improves math, literacy and critical thinking skills
- Helps create healthier kids and schools



“Closing the Achievement Gap” Report by SEER:

...students learn more effectively within
an environment-based context than
within a traditional educational
framework....



Green Schools & Student Achievement

David Sobel's Research, Director of Teacher Certification Programs and the Center for Place-Based Education at Antioch New England:

- 10 years researching place-based inquiry-based learning
- Paired 70 schools doing EE with 70 without; 78% of the time schools with EE programs outperformed those without

"Green schools are BETTER than No Child Left Behind approaches for improving academic achievement, AND students become civically engaged" -- David Sobel

Key Elements of Inquiry-Based Learning

"Active" learning where students ask questions, formulate and test theories, evaluate results

1. Introduce topic, concept, principle, hypotheses
2. Do environmental audit, collect data, compile results
3. Students decide on and take actions, based on audit
4. Students reach out and educate community
5. Reflect, evaluate, and celebrate



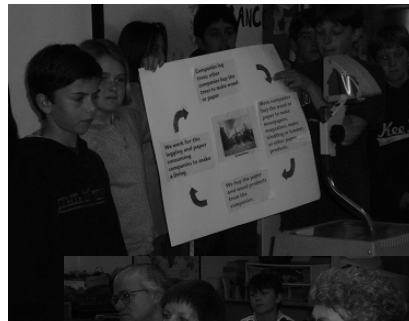
Saving forests through recycled paper

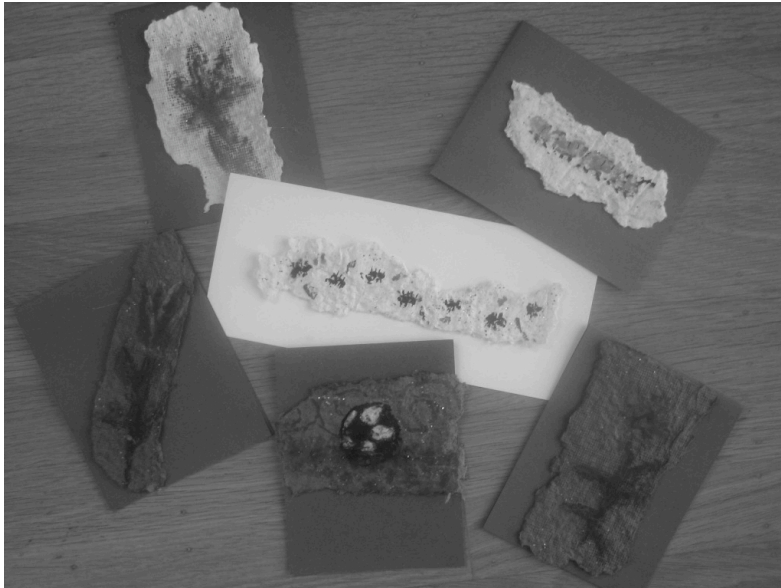
Paper Audit

	Current – 0% recycled paper	30% recycled paper	100% recycled paper
Cartons per year	124	124	124
Price per carton	\$34.99	\$35.99	\$45.99
Price per year + tax	\$4,339	\$4,463	\$5,703
Difference		\$124	\$1,240
Trees used	74	52	0
Energy used	119 mil BTUs	103 mil BTUs	67 mil BTUs
GHG emitted	17.6K lbs CO2 eq	15.6K lbs CO2 eq	11.1K lbs CO2 eq

Sources: prices from Staples; resource uses from www.papercalculator.org by Environmental Defense.

Use audit to take action, measure progress, influence decisions





5th graders raised \$375 from hand-made recycled paper cards and donated to school to defray cost of switching to recycled paper and to groups protecting ancient forests!

Cut Catalogs Contest



5,356 kids in 13 states have canceled 28,054 unwanted sales catalogs so far... <http://www.parkschool.org/>

Reduce Your Carbon Footprint

- Earth Team calculator, others
- Turn It Off campaign – survey how many lights and electronics left on
- Bike, carpool to school – survey how many 1-family cars
- Anti-idling policy – idlers get “tickets”
- Estimate carbon savings of changes



Junk Mail Tree



Chronicle / Darryl Bush

The tree educates people about forest destruction and how to stop junk mail

Petition Drive



Students could organize a petition to the county advocating for commercial compost facility

Break Up with Your Bottle

- La Costa Canyon H.S. campaign
- 1.5 million barrels of oil used to make plastic water bottles
- Break Up with your plastic bottle...buy a reusable one!
- Video contest:
www.quantumshift.tv/v/1207008311



Schoolwide Opportunities to Communicate & Celebrate

- Earth Day Fair & Celebration
- Assembly Series
- Service Learning
- Clubs & Councils
- ➔ Public purpose focus



Green Day

- High school fair organized by students – outside speakers, workshops, booths, campus greening projects to build garden and cobb bench



EARTH DAY FAIR



Celebrate Earth Day!

- Recycling Race
- Organic food taste test
- Junk Mail Tree
- School-wide mural/art project
- FreeCycle/Swap Meet
- Recycled bottle rockets
- Musical instruments out of recycled materials
- Bicycle blender
- Used sneaker, cell phone drive
- Handmade paper out of recycled paper
- Displays from classroom projects
- Recycled art projects
- Gardening, wildflower seed balls
- Activity with a local group

Create Your Workplan

- What is a topic at your school that you are inspired to address with your students?
- How can you do an audit to analyze the problem?
- What actions could students take? How will you measure progress?
- How will you communicate with your school community? How will you celebrate your accomplishments?
- Start small and succeed! Success is infectious...



Resources

- Green Schools Initiative
www.greenschools.net
- Facing the Future
www.facingthefuture.org
- CA's Education and the Environment Initiative Curricula (85 units, K-12, standards-based)
www.calepa.ca.gov/eei

**Those who say it can't be done
Should not interrupt those already doing it**

-- Chinese proverb





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