

GREEN SCHOOLS MANUAL

A green school is one that:

- Demonstrates *respect* for the Earth by conserving natural resources, and
- *Learns* from the Earth by bringing nature into the classroom and the classroom into nature.

Conserving: For example.....

- Conserve water
- Keep the campus free of litter
- Recycle
- Limit use of non-recyclable materials
- Reuse materials
- Insulate
- Use solar power for heat and energy

Learning: For example.....

- Use the outdoors as a place for learning
- Maintain a school garden
- Maintain a nature-based outdoor learning laboratory
- Have a play area for recess with natural materials such as log stumps and large rocks for climbing
- Bring natural materials for beauty and learning into all classrooms, such as live plants, a single flower or green-leafed stem in a vase

Note from green school educators:— 2 key features of a green school:

1) A green school uses the "natural environment as the integrating context" for all learning. It uses the local natural environment to teach students concepts in all disciplines, while emphasizing hands-on real world learning experiences.

2) A green school incorporates the community in the process, so that the school becomes a place for the whole community to learn and contribute to — in this way, students develop stronger ties to their community, a greater appreciation for the natural world, and a heightened commitment to serving as active, contributing citizens

These two keys inform everything that happens in the school, from the facility (structure, energy use, light and comfort, water), to the food prepared and consumed (local, fresh — e.g. one school built its own clay beehive oven to make bread, which they sell), to the outdoor classroom (both its use and creation/development), and how this process is informed by and informs the community (there are many experts in a school community just waiting to be tapped).

3) "Plant and maintain various parts of the school grounds, with teachers and children researching, planting and then eating the produce of school vegetable gardens: Good learning and good eating!"

4) An ideal "Green School" is a small-scale model of an ecologically sustainable society. Learning includes all academic disciplines (not just science and EVS), specific educational strategies, and a strong connection between a school and its community.

Features of a green school. Some examples:

1) Save electricity and water by turning off lights and water taps whenever not in use; replace worn tap washers to prevent leaking, etc.

2) Reduce and manage waste by having zero-waste school:

- a. having litter-free schools (no one will drop any litter on school grounds; all students and staff will pick up any litter they see);
 - b. reduce waste at source: e.g. no plastics to school; reduce purchase of individually wrapped candies, which are a huge source of litter;
 - c. sort waste by bio-degradable compostables (use for school vegetable garden and local farms), and recyclables / re-usables (paper, plastic, glass);
- 3) Encourage trees and gardens in school grounds, and students' care of these;
 - 4) Food ordering will be locally sourced, sustainably grown;
 - 5) Local, sustainable / renewable materials will be used in construction and repair of school buildings;
 - 6) High level of eco-literacy: Students become deeply knowledgeable about climate change causes and effects; resource conservation and causes of degradation; the fragile Himalayan ecology; impacts of excess consumption, growth, resource use, and pollution on ecology; flaws of the GDP paradigm and understanding of 'full-cost accounting'; etc.
 - 7) Study best practices and stories of sustainable practices throughout world;
 - 8) Have nature field trips to study and appreciate the natural world. E.g. learn about local plants, flowers, medicinal herbs, water sources, local ecology, resources; and other species and micro-organisms. I.e. "get close to nature; observe it; feel it; touch it; experience its wonder; love it" (HPM)
 - 9) Involve community — draw on local wisdom; be model for community; students transfer values to parents;
 - 10) Adopt local water sources, streams, sections of rivers and forests; and provide sustained care, cleaning, and preservation;
 - 11) Walk to school where possible (teachers set example); minimize car use or carpool and use public transport where possible.

And more materials on Ministry of Education website (www.education.gov.bt):

E.g. 7-page set of Green School assessment indicators, in 5 categories:

- Curriculum integration
- School grounds enhancement
- Community-based education
- School sustainability
- Administrative support



Green Ribbon School Recognition Criteria

Green Ribbon Schools take a holistic approach for children, with an environmentally healthy campus, student health and nutrition, play and learning with

nature.

Green Ribbon schools foster children's health and well-being through coordinated school health and regular connection with nature and community. When most of the criteria are met, research indicates students will be healthier physically and emotionally, perform better academically, get along better with others and will be on their way to establishing positive life-long habits.

Four Criteria Areas:

Healthy and Environmentally-friendly Campus

The school works to reduce environmental impacts; conserve natural resources; create a sustainable healthy and safe school environment.

Activities may include: Energy Conservation, Water Conservation, Waste Management/Recycling, Transportation, Pollution Prevention, Green Spaces/Habitats

Nature Play and Outdoor Activity

Students are encouraged to learn, play and create outdoors. Outdoor play and recreation in nature are part of the culture of the school and community.

Activities may include: Nature play and exploration, Daily unstructured time outdoors, Access to nature, Time for connection to nature, Life-long outdoor skills, Nature-based after-school programs

Health and Nutrition

The school and community provide students wholesome nutrition, encourage life-long healthy habits and body awareness.

Activities may include: Access to healthy foods, Food and farm awareness, Nutrition education and body awareness, Healthy campus/fitness options, Life skills, Wellness plan

Nature Education

Across the curriculum, teachers integrate nature and natural systems as a context for learning, using both indoors and outdoors as classrooms.

Activities may include: Nature and natural systems curricula, Interdisciplinary/Integration across subject areas, Field investigations and projects, Citizenship/stewardship opportunities, Use of outdoor learning space, Teacher Training in nature education

Having the following in each criteria area will help ensure a lasting change for the school and community: Student-driven Projects, Parental/Family Involvement, Campus-wide & Administrative Support and Community Connection & Partnerships.

GREEN SCHOOL SNAPSHOT, Quick Self-Assessment Rubric

Major Green School Elements	1	2	3	4
<p><u>Curriculum Integration</u> Student learning is organized primarily around environmental themes, concepts and projects (EIC= Environment as an Integrating Context)</p>	<ul style="list-style-type: none"> ✓ Environmental issues are rarely taught and tend to emphasize problems rather than solutions ✓ Students rarely, if ever, go outside to learn 	<ul style="list-style-type: none"> ✓ Env. issues are explored occasionally in other disciplines besides science ✓ Study of the environment happens primarily through electronic media, lectures and books 	<ul style="list-style-type: none"> ✓ An interdisciplinary EIC approach is sometimes used ✓ Students go outside to study locally relevant env. issues several times a year 	<ul style="list-style-type: none"> ✓ An EIC approach is consistently used for most learning in most disciplines ✓ Focus on real life env. issues that connect to students' daily experience requires frequent and regular study out of doors
<p><u>School Grounds</u> The school grounds are specifically used as a developmentally appropriate learning laboratory for any and all parts of the curriculum</p>	<ul style="list-style-type: none"> ✓ No effort is made to develop the school grounds for learning or non-human habitat 	<ul style="list-style-type: none"> ✓ Some outdoor areas are designated as observation or study areas ✓ Some effort is made to reduce asphalt/concrete, and increase green space 	<ul style="list-style-type: none"> ✓ Gardening and field observation are well supported ✓ Some effort is made to connect school grounds activities to larger landscape conservation efforts 	<ul style="list-style-type: none"> ✓ Students take a leading role in the design/maintenance of school grounds as safe and healthy places to learn and play, and as models of habitat improvement and restoration
<p><u>Community-based Education</u> Community projects and partnerships based on real life issues bring more resources into the school and enhance student learning</p>	<ul style="list-style-type: none"> ✓ No attempt is made to implement service learning approaches ✓ Very minimal involvement of non-school community members in school activities 	<ul style="list-style-type: none"> ✓ Mentoring/partner programs exist within the school to practice community connection skills ✓ Some projects require input from or output to community members 	<ul style="list-style-type: none"> ✓ Community donated time, money and materials are measured and growing ✓ Many students are actively involved in interdisciplinary projects that emerged from community connections 	<ul style="list-style-type: none"> ✓ Several long term school-community partnerships create active, two-way dialogue and action steps to enhance student learning ✓ Students routinely work directly with school and community decision makers
<p><u>School Sustainability</u> The school models sustainable practices in areas such as water and energy conservation, all kinds of waste reduction, and creating a healthy indoor and outdoor environment</p>	<ul style="list-style-type: none"> ✓ No programs exist to reduce resource consumption or improve indoor/outdoor environmental quality 	<ul style="list-style-type: none"> ✓ Some attempt is made to raise awareness about one or a couple of school sustainability issues ✓ Some resources, wastes and env. quality indicators are occasionally measured 	<ul style="list-style-type: none"> ✓ Some progress is made toward multiple challenging and substantial school wide sustainability goals ✓ School sustainability results are widely published and reported by students 	<ul style="list-style-type: none"> ✓ School building design and operations incorporates many best env. practices ✓ Students design, monitor, report on, and make decisions about school sustainability indicators and programs
<p><u>Administrative Support</u> Decision making structures within the school and district consistently and systematically promote all types of Green School activities</p>	<ul style="list-style-type: none"> ✓ Green School activities are ignored or discouraged by school administrators and/or other decision makers 	<ul style="list-style-type: none"> ✓ Some administrative support exists to use EIC projects to meet state, district or school learning standards/goals ✓ EIC instructional strategies and ecological literacy are accepted as legitimate topics for teaching and learning 	<ul style="list-style-type: none"> ✓ An EIC approach to instruction and testing is encouraged and supported with some time, money and material resources ✓ School literature talks about environmental issues as being important 	<ul style="list-style-type: none"> ✓ Administrators and board members are consistent public advocates and leaders for Green School activities ✓ Planning, professional development, and organizational change efforts focus on Green School capacity building

