



## BENCHMARKS FOR EXCELLENCE IN ENVIRONMENTAL LEARNING & SUSTAINABILITY AND STUDENT ENGAGEMENT

Green Street has its roots in supporting programs that actively engage youth in environmental stewardship. During its second phase (2005-2010), Green Street has expanded its program themes to include broader issues related to environment and sustainability. It remains an environmental education initiative that encompasses related sustainability issues and perspectives.

The standards fall into three main categories: the themes, the goals and objectives of Environmental Learning and Sustainability, and the actual Pedagogy, or the practice of ELS. A program that meets all or most of the following Benchmarks is **actively engaging youth in environmental stewardship over time**. All Green Street programs are subject to these criteria.

CRITERIA
<b>A. Current Themes of Interest</b>
Environment
Economy
Society
<b>B. Program Design and Content</b>
<b>C. Pedagogical Methods</b>
<b>D. Mechanisms for Long Term Impact</b>
<b>E. Marketing, Communications and Evaluation</b>

### A. CURRENT THEMES OF INTEREST

In expanding its themes of interest, Green Street has referred to the United Nations Decade of Education for Sustainable Development, Draft International Implementation Scheme, UNESCO 2005, and the Canadian youth priority concerns for sustainable development, "Mapping the Mind Maze" survey of youth by the United Nations Association in Canada (2002).

Green Street's initial program theme areas included Biodiversity, Climate Change, Ecosystems, Energy, and Water. These have been expanded to include the following themes:

## ENVIRONMENT

### **Biodiversity**

Biodiversity, the variety of life on Earth and the natural patterns it forms, creates the web of life of which we are an integral part and upon which we depend. Human impact threatens individual species and all those living things that depend on the interaction of life forms.

### **Climate Change**

The harmful impact of climate change is of worldwide proportions. To limit damage to the atmosphere requires awareness and action from the individual to international levels.

### **Ecosystems**

The interaction of individual components of every ecosystem results in an effect that is greater than the sum of the individual parts. All aspects of society and economy are dependent on ecosystems and their functions.

### **Energy**

Much of the world currently depends on inexpensive fossil fuels to heat homes, operate transportation systems and drive the economy. Meanwhile significant portions of the world's residents do not have the luxury of a single light switch. Both ends of this energy use spectrum challenge the environment's capacity to absorb the results of human energy use.

### **Water**

Freshwater is a critical component of ecosystems and an essential human resource. Awareness and management challenges are critical environment and development issues.

## ECONOMY

### **Lifestyle and Sustainable Consumption**

Sustainable lifestyles and ways of working are required to overcome poverty and protect the natural resource base for all forms of life.

### **Food and Agriculture**

A healthy environment provides humans with the food needed to sustain healthy populations. Current practices and dependencies challenge this capacity requiring that sustainable food production be achieved without compromising other environmental functions.

## SOCIETY

### **Peace and Human Rights**

Skills and values for peace and human rights enable people to live with human dignity and avoid insecurities and conflicts that undermine sustainable development.

### **Human Health and the Environment**

Healthy individuals are dependent upon healthy environments, both important pre-conditions for sustainable development.

### **Governance and Citizenship**

The full participation of citizens in decision making as part of transparent government structures and processes provides the best context for addressing sustainable development challenges.

### **Sustainable Urbanization and Transportation**

Cities pose threats to sustainability but also offer opportunities to address the challenges faced by both urban and rural citizens. With more than half the world's population located in urban areas, cities are the context through which many social, economic and environmental challenges will be met.

### **Indigenous and Local Knowledge**

Local and indigenous, including language, naming and classification systems, resource use practices, ritual, spirituality and worldview, are important resources in achieving sustainable practices.

## **B. PROGRAM DESIGN AND CONTENT**

Green Street benchmarks are based on our current understanding of the ways in which students learn best - they are used to select and evaluate program provides for Green Street support. In order to gain that support, Green Street requires that programs have clear goals and objectives that are explicitly stated and reflected throughout. These include:

### **Knowledge Components**

The program must be based on well-founded significant concepts and must be appropriate for the age, abilities, and skill level of the participants. Also, it must fall in line with local curriculum, and be *relevant to the community, culture and place*. Finally, it should be organized so that new learning is built on a foundation of students' previous knowledge.

### **Skills**

Students must have opportunities to *practice critical thinking and processes* (i.e. hypothesis making; collecting, organizing and assessing data; inferring, analyzing, problem-solving, and investigating controversial issues), and to address skills that ensure safe learning.

### **Values**

The program must promote increased sensitivity to and *appreciation of the environment*, cultures, and views of others and include an ethic of care, consensus building and responsible citizen action. It must also support the personal and societal capacity to *take action* necessary for sustainability.

## **C. PEDAGOGICAL METHODS**

**Rigor, Critical Thinking, Active Learning, Self-Expression and Authenticity** are seen as essential to attaining high levels of student engagement. The pedagogical methods that support this goal include the following:

- 1. Accommodating Diverse Learners**  
Activities address a range of learning styles and teach to both cognitive and affective domains.
- 2. Open-ended Instruction**  
Opportunities for students to study topics more deeply are provided and encouraged.
- 3. Student-directed Learning**  
Group and cooperative learning strategies are a priority.

**4. Experiential Learning**

Direct experiences are used to develop and deepen connections to the environment, and to encourage personal affinity and emotional connection with earth and other species. Outdoor learning is also part of the program or encouraged as a follow-up activity where appropriate.

**5. Connected to the World Outside the Classroom**

Learning activities are grounded in a real-world context.

**6. Case Studies**

Local relevant cases and references are used as a means of integrating concepts. Case studies and scenarios are presented with a range of possible solutions.

**7. Integrated Learning**

Concepts and issues are examined through their social, political, economic, ethical and ecological contexts. A systems thinking approach to the dynamic, complex way of relationships is provided.

**8. Locus of Control**

Opportunities are provided for students to choose elements of program content, and the medium in which they wish to work.

**9. Service/Action Learning**

Opportunity exists to practice action skills and strategies for environmental stewardship (planning, communication, group skills, team work, safety and leadership skills). It also provides opportunity to practice active citizenship - connecting curriculum to environmental action in school buildings and grounds and in homes, neighbourhoods and communities.

**10. Values Education Methodology**

Examination and clarification of individual and social value systems and the exploration of a range of perspectives, beliefs, biases and assumptions.

**11. Assessment and Evaluation of Student Learning**

Students actively demonstrate their knowledge and skills. Additionally, appropriate student assessment methods/mechanisms are utilized including reflection and self-assessment opportunities.

**12. Learning Materials**

Program materials readily integrate into prescribed curriculum. Materials provide clear directions, background information and adaptation suggestions for teachers. Learning materials are prepared taking in account all of the previously identified Green Street benchmarks.

## **D. MECHANISMS FOR LONG TERM IMPACT**

### **Supporting Teacher Self-Sufficiency and Competency**

Programs that promote and increase the capacity of teachers to incorporate Green Street benchmarks into their classroom planning and instruction are more likely to continue once outside support diminishes. It is important that programs promote teacher awareness and knowledge of the principles of sustainability and their practice in personal and professional realms. Additionally, they should promote opportunities for teachers to extend student learning in addition to and beyond the scope of the learning activities presented by providers.

### **Strategic Alliances**

Programs that facilitate and encourage strategic alliances contribute to the long-term viability of Green Street initiatives. Whenever some portion of Green Street programming is adopted by the current school system, government agencies or local non-governmental organizations, the chance of long-term viability increases. Programs encourage support and endorsement from the school and/or school board.

Opportunities for sharing, extension and continuity are also provided (e.g. information, engage fellow students, community members, follow-up programs, volunteer and mentoring programs, links to community action projects, student forums, camps, institutes, support for Environmental clubs, annual conferences and youth groups).

Finally, programs link across age groups so that students receive multiple coordinated learning opportunities achieved through the cooperative efforts of multiple agencies and organizations.

## **E. MARKETING, COMMUNICATION ET ÉVALUATION**

Programs offer opportunities for student recognition and celebration in the broader community and profile student efforts as a means of building community awareness. They also provide teachers with links to related relevant resources, programs, organizations and individuals.

Finally, an evaluation component that tracks and measures results at the level of short-term objectives and longer-term goals.