Cultivating Education for Sustainability (EfS) in Wisconsin Schools

December 2011
A Summary Report on the 2011 Statewide Input Process

This document summarizes the Cultivating Education for Sustainability in Wisconsin Schools Statewide Input process. It provides background context for education for sustainability (EfS) in Wisconsin, an overview of a statewide input process conducted in 2011, and a summary of the data collected.

Cultivating EfS in Wisconsin Schools Coordination Team
Sunshine Buchholz, WCEE EfS Specialist
Jennie Lane, WCEE K-12 Energy Education Program (KEEP) Director
Victoria Rydberg, Wisconsin Department of Public Instruction Environmental Education Consultant
Susan Schuller, WCEE EfS Specialist
Jeremy Solin, WCEE K-12 Forestry Education Program (LEAF) Director

Wisconsin Center for Environmental Education Staff
Sunshine Buchholz, WCEE EfS
Tim Byers, UW-Stevens Point Continuing Education
Ginny Carlton, Wisconsin Environmental Education Board
Randy Champeau, WCEE Director
Sarah Gilbert, Wisconsin K-12 Forestry Education Program
Samantha Giraud, Wisconsin K-12 Energy Education Program
Jesse Haney, Wisconsin Environmental Education Foundation
Chris Kuntz, Wisconsin K-12 Forestry Education Program
Jennie Lane, Wisconsin K-12 Energy Education Program
Gretchen Marshall, Wisconsin K-12 Forestry Education Program
Becky Martin, WCEE
Dan Martinson, Wisconsin K-12 Forestry Education Program
Jamie Mollica, Wisconsin K-12 Energy Education Program
Kelly Mortenson, Wisconsin K-12 Forestry Education Program
Nicole Rice, WCEE
Susan Schuller, WCEE EfS
Dan Sivek, UW-Stevens Point Faculty
Jeremy Solin, Wisconsin K-12 Forestry Education Program
Jessica Tomaszewski, UW-Stevens Point Continuing Education
Sara Windjue, Wisconsin K-12 Energy Education Program
Dennis Yockers, UW-Stevens Point Faculty
Carrie Bea Ziolkowski, Wisconsin K-12 Energy Education Program
Introduction

Overview
A shared vision of education for sustainability (EfS) is forming among Wisconsin’s citizens. In 2011, a process to cultivate this vision was coordinated by the Wisconsin Center for Environmental Education (WCEE) in collaboration with the Wisconsin Department of Public Instruction (DPI) Environmental Education Consultant and local, statewide, regional, and national organizations. The WCEE is committed to supporting schools and communities in implementing EfS initiatives and is developing materials and services for use by schools, educators, and community partners.

What is Sustainability?
A broadly accepted definition of sustainability is meeting current needs without compromising future generations’ ability to meet theirs (Brundtland: www.un-documents.net/ocf-02.htm). Living sustainably maintains the planet’s regenerative life support systems while meeting human needs. Sustainability supports lasting environmental health, economic prosperity, and social equity for current and future generations. A sustainable view recognizes that all life is interdependent and shares the same life support systems of the planet; it acknowledges humans are a part of the environment and not apart from it. Our goal, as educators, is to explore the key concepts that will build a sustainable future for life on Earth.

What is Education for Sustainability?
Education for sustainability (EfS) provides people with the knowledge, skills, ways of thinking, and opportunities to promote a healthy and livable world. It is a holistic and systems-based approach to teaching and learning that integrates social justice, economics, and environmental literacy. The ultimate outcome of EfS is to sustain both human and natural communities.

Context for the Process

In the World
The United Nations Decade of Education for Sustainable Development (2005-2014), for which the United Nations Educational, Scientific and Cultural Organization (UNESCO) is the lead agency, seeks to integrate the principles, values, and practices of sustainable development into all aspects of education and learning, in order to address the social, economic, cultural and environmental problems we face in the 21st century. The founding value of education for sustainable development (ESD) is respect: respect for others and respect for the planet and what it provides us with (resources, fauna, and flora). Countries around the world have undertaken initiatives to incorporate ESD at varying levels in formal education systems and in community work (UNESCO: www.unesco.org/en/esd/). Countries outside the United States commonly use the term ESD. ESD is usually replaced by education for sustainability in the U.S.

In addition, there are many international efforts around sustainability. One of the most common and familiar efforts is the eco-municipality movement, which is based on The Natural Step conditions and principles. The principles are used to guide decision making. Throughout the world and the United States, municipalities have been adopting eco-municipality resolutions that state they will utilize the principles as they make decisions within their communities. More information on The Natural Step: www.thenaturalstep.org/.
In the Nation

The U.S. Partnership for Education for Sustainable Development consists of individuals, organizations and institutions in the United States dedicated to ESD. It acts as a convener, catalyst, and communicator working across all sectors of American society. The vision is that sustainable development become fully integrated into education and learning in the United States. The mission is to leverage the UN Decade to foster education for sustainable development in the United States. Information on how the mission is carried out: http://usp.umfglobal.org.

There are many organizations doing education for sustainability-related work in the U.S. Each effort has a unique focus and scale. At the time of this writing, the facilitators of Wisconsin’s input process did not identify any other states undergoing a similar process. Some of the established EfS programs in the U.S. include:

- **Center for Ecoliteracy** - supporting and advancing education for sustainable living: http://www.ecoliteracy.org/.
- **Cloud Institute for Sustainability Education** - preparing K-12 school systems and their communities to educate for a sustainable future by inspiring educators and engaging students through meaningful content and learner-centered instruction: http://www.cloudinstitute.org/.
- **Creative Change Educational Solutions** - advancing educational leadership and transformation through a lens of sustainability: http://www.creativechange.net/.
- **Facing the Future** - empowering students to think critically, develop a global perspective, and participate in positive solutions for a sustainable future: http://www.facingthefuture.org/.
- **Shelburne Farms Sustainable Schools Project** - helping schools use sustainability as an integrating context for curriculum, community partnerships, and campus practices: http://www.sustainableschoolsproject.org/.

In the State

Wisconsin is a leader in the development of eco-municipalities with the first three eco-municipalities in the nation being established here. Additionally there are a multitude of local sustainability initiatives including everything from saving energy, local foods, and sustainable transportation to formal and non-formal education efforts at schools. A successful statewide EfS initiative will tie to all the existing efforts to support and enhance the work already being done.

The WCEE began exploring the potential for EfS in the state in 2008. While maintaining its existing programming the staff began researching EfS by speaking with national leaders, participating in professional development workshops, and reading current literature. In 2010, a working group was established within the WCEE with the charge of determining how EfS would fit into the WCEE operations and culture as well as within Wisconsin’s educational system. The **Cultivating EfS in Wisconsin Schools Statewide Input Process** was initiated out of this working group. One of the goals of the working group was to ensure EfS initiatives were inclusive and accessible to everyone in the state. This required getting input on what others envisioned EfS would look like in Wisconsin.

In addition to the **Cultivating EfS in Wisconsin Schools Statewide Input Process**, two other plans to support education for environmental literacy and sustainability in Wisconsin were developed through collaborative input processes at the same time:

- **Wisconsin’s Plan for Environmentally Literate and Sustainable Communities** considers educational needs and responses for communities and supports sustainable practices at home, at work, at school, and at play. More information: http://eeinwisconsin.org/net/org/info.aspx?s=94369.0.0.2209
- **Wisconsin’s Plan to Advance Education for Environmental Literacy and Sustainability in PK-12 Schools** focuses on ensuring every student graduates environmentally literate. This plan addresses multiple aspects related directly to PK-12 student learning. More information: http://eeinwisconsin.org/net/org/info.aspx?s=86593.0.0.2209
Summary of the 2011 Statewide Input Process

Value of Visioning
Creating a shared vision unites individuals with varying perspectives by focusing on common beliefs and values and clarifies what the group believes to be important. It generates enthusiasm and inspires people to take action. To cultivate this shared vision about EfS in Wisconsin, input sessions were held around the state.

The goals of the sessions were to:
- Foster a shared understanding of EfS
- Identify EfS work already being done
- Identify potential partners and build relationships with them for supporting EfS statewide
- Identify the resources, information, and services needed to support EfS statewide
- Gather input on content and process for implementing EfS with students

Total number of input sessions = 25
Total number of participants = ~500

Participant demographics: Many walks of life were represented including parents, university students, retirees, and working professionals. Many sectors of society were represented including non-profit organizations, social justice organizations, faith-based groups, government officials, business owners, and sustainability-related community groups. Staff of UW-Extension, the WI Department of Natural Resources, and the National Park Service was represented. Many types of educators were represented including classroom teachers, administrators, non-formal, food-related, and higher education (universities, technical schools, colleges).

<table>
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<tr>
<th>Timeline for the 2011 Input Process</th>
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<tr>
<td>Feb</td>
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<td>Jan - Aug</td>
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<td>Mar - Aug</td>
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<td>Aug - Sept</td>
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<td>Sept</td>
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<td>Oct</td>
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<td>Nov</td>
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<td>Dec - Ongoing</td>
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About the Input Sessions
Eleven input sessions were led by facilitators between March and August 2011. The facilitators are individuals who work in or support EfS, have extensive existing community networks, and exhibit strong facilitation skills. The facilitators were also invited to participate based on the location in the state where they work or live to ensure input was gathered from as many regions as possible. The number of facilitators and locations was determined by the budget available for the process. The facilitators were trained on the input process at a day-and-a-half workshop February 24-25, 2011.
### Session Facilitators

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
<th>Session Location</th>
<th>Date (2011)</th>
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<tbody>
<tr>
<td>Beau Mitchell</td>
<td>College of the Menominee Nation</td>
<td>Keshena</td>
<td>March 29</td>
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<tr>
<td>Sandy Vander Velden</td>
<td>Fox River Academy Charter School</td>
<td>Appleton</td>
<td>April 27</td>
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<tr>
<td>Dennis Weibel</td>
<td>UW-Stout</td>
<td>Menomonie</td>
<td>May 10</td>
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<tr>
<td>Steve Sandstrom</td>
<td>Alliance for Sustainability</td>
<td>Ashland</td>
<td>June 1</td>
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<tr>
<td>Rachel Martin</td>
<td>Sustain Dane</td>
<td>Madison</td>
<td>June 15</td>
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<tr>
<td>Melissa Rickert</td>
<td>CESA 10</td>
<td>Stevens Point</td>
<td>July 21</td>
</tr>
<tr>
<td>Jeff Su</td>
<td>Myrick Hixon EcoPark</td>
<td>La Crosse</td>
<td>July 25</td>
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<tr>
<td>Mary Anna Thornton</td>
<td>Conserve School</td>
<td>Land O’ Lakes</td>
<td>August 3</td>
</tr>
<tr>
<td>Melissa Rickert</td>
<td>CESA 10</td>
<td>Chippewa Falls</td>
<td>August 5</td>
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<tr>
<td>Sarah Johnson</td>
<td>North Lakeland Discovery Center</td>
<td>Manitowish Waters</td>
<td>August 17</td>
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<tr>
<td>Amy Heart</td>
<td>City of Milwaukee Office of Sustainability</td>
<td>Milwaukee</td>
<td>August 23</td>
</tr>
</tbody>
</table>

Each session was between two and three hours in length. Local foods, free resources, and door prizes were offered as incentives for participating. The sessions included time for networking, developing a vision for the future, gathering input on content and process for implementing EfS with students, and assessing current efforts and needs in regard to EfS.

The sessions were held at a location and date chosen by the facilitator. The facilitators were encouraged to use local sites such as nature centers or schools to build relationships with these sites. Participation in the sessions was open to the public. The facilitators were encouraged to invite a diverse array of participants from business, agencies, K-12 and higher education, municipalities, organizations, faith-based groups, agriculture, etc. Suggested participant lists were provided to the facilitators by WCEE staff based on previous workshop participation and interest expressed.

### Session Overview

| Networking, Resource Browsing | Opportunity for people to meet one another and browse resources to expand their awareness of local efforts and deepen their understanding of sustainability. |
| Welcome | Introductions and overview of the session. |
| Purpose & Background | Context for session, background on statewide effort, expected outcome of the process. |
| Envisioning the Future | Individuals consider: What do you want your community to be like in 30 years? Sharing and identifying common themes/shared ideas. Introduction to sustainability. |
| Educating for Sustainability | EfS connects the vision for the future to a sustainable community. Modified World Café process used to explore: What should students be learning and experiencing to enable them to help create the world you envisioned 30 years from now? |
| Sustainability in Our Community | Discussion: What sustainability-related initiatives are you aware of in this community? What are the indicators that something is sustainable? What tools, resources, and/or efforts do we need in schools in this community to further EfS? |
| Conclusion | Closing questions: What does this mean for K-12 education in this region? What is the connection between community efforts and K-12 education? |
Conference Input Sessions

In addition to the sessions led by facilitators, input was gathered at 9 conferences and 3 school in-services between October 2010 and August 2011 by WCEE staff. These events provided an opportunity to collect information from educators in specific content areas. The conference sessions were a modified version of the local vision sessions to fit within conference presentation format (one to two hours long).

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<thead>
<tr>
<th>Name</th>
<th>Event</th>
<th>Location</th>
<th>Date</th>
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<tbody>
<tr>
<td>Sunshine Buchholz</td>
<td>Summit Elementary In-service</td>
<td>La Crosse</td>
<td>October 6, 2010</td>
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<td>Jeremy Solin</td>
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<tr>
<td>Sunshine Buchholz</td>
<td>Badger Bioneers Conference</td>
<td>Madison</td>
<td>January 20, 2011</td>
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<td>Jeremy Solin</td>
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<tr>
<td>Sunshine Buchholz</td>
<td>Wisconsin Association for Environmental Education</td>
<td>Tomahawk</td>
<td>January 29, 2011</td>
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<td>Susan Schuller</td>
<td>Winter Workshop</td>
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<td>Susan Schuller, et al.</td>
<td>Waupaca In-service</td>
<td>Waupaca</td>
<td>February 14, 2011</td>
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<td>Sunshine Buchholz</td>
<td>Western Wisconsin Education Conference</td>
<td>La Crosse</td>
<td>February 18, 2011</td>
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<tr>
<td>Jennie Lane</td>
<td>Central Wisconsin Educators Convention</td>
<td>Schofield</td>
<td>March 4, 2011</td>
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<tr>
<td>Sarah Gilbert</td>
<td>Wisconsin Technology Association Spring Conference</td>
<td>Wisconsin Dells</td>
<td>March 11, 2011</td>
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<tr>
<td>Sarah Windjue</td>
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<td></td>
<td>Wisconsin Society of Science Teachers Conference</td>
<td>Wisconsin Dells</td>
<td>March 17, 2011</td>
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<tr>
<td>Sunshine Buchholz</td>
<td>Conservation</td>
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<tr>
<td>Jeremy Solin</td>
<td>Conserve School In-service</td>
<td>Land O’ Lakes</td>
<td>April 21, 2011</td>
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<tr>
<td>Susan Schuller</td>
<td>Midwest Renewable Energy Association Energy Fair</td>
<td>Custer</td>
<td>June 18, 2011</td>
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<tr>
<td>Sunshine Buchholz</td>
<td>Wisconsin Association of Agricultural Educators</td>
<td>Green Bay</td>
<td>June 28, 2011</td>
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<tr>
<td>Jeremy Solin</td>
<td>Conference</td>
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<tr>
<td>Carrie Ziolkowski</td>
<td>Wisconsin Family &amp; Consumer Science Educators Conference</td>
<td>Green Bay</td>
<td>August 9, 2011</td>
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</table>

Additional Sessions

Two pilot sessions were held in Stevens Point during the development of the session process. The pilot sessions were used to test and refine the input gathering processes. In addition to the data, feedback was gathered from participants about the session length and amount of background information provided.
Summary of the data collected

Data was collected by the facilitators of the local input sessions and by the WCEE staff in the conference sessions and in-services. The process for data recording and capture is explained in the chart below. A summary of each data set follows.

<table>
<thead>
<tr>
<th>Educating for Sustainability</th>
<th>Data collection process</th>
<th>Sustainability in Our Community</th>
<th>Data collection process</th>
<th>Conclusion</th>
<th>Data collection process</th>
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<tbody>
<tr>
<td>EiS connects the vision for the future to a sustainable community. Modified World Café process used to explore: What should students be learning and experiencing to enable them to help create the world you envisioned 30 years from now?</td>
<td>Small groups recorded their ideas on flip chart paper. At the end of the activity, the facilitator recorded big ideas shared by each group on another flip chart. After the session, the facilitator transcribed the ideas shared and sent them to the EiS Coordination Team.</td>
<td>Discussion: What sustainability-related initiatives are you aware of in this community? What are the indicators that something is sustainable? What tools, resources, and/or efforts do we need in schools in this community to further EiS?</td>
<td>Individuals recorded their ideas on flip chart paper. After the session, the facilitator transcribed the ideas shared and sent them to the EiS Coordination Team.</td>
<td>Closing questions: What does this mean for K-12 education in this region? What is the connection between community efforts and K-12 education?</td>
<td>The facilitator recorded group ideas on flip chart paper. After the session, the facilitator transcribed the ideas shared and sent them to the EiS Coordination Team. NOTE: not all groups had time to respond to these questions.</td>
</tr>
</tbody>
</table>
Know/Think/Do Data Summary

Question asked: What should students be learning and experiencing to enable them to help create the world you envisioned 30 years from now? Consider what knowledge (know), ways of thinking (think), and skills (do) students would have.

Number of participants commenting on this question: 515
Number of data points collected during the 11 input sessions: 991

Data processing procedure: Data from these sessions was collected and compiled. Similar ideas were grouped under one of 45 categories and the categories are organized under three main headings: Think, Know, and Do. There is a fourth heading, "Other," which was added to group comments that did not fall under the Think/Know/Do headings. All the categories below were identified based on the input sessions.

Data from the 11 input sessions were used to identify the categories under each heading. The data from the workshops, conferences, and in-services were then used to validate information gathered at the input sessions and add new ideas or information where appropriate.

Below is a list of the headings. Under each heading is a list of the categories identified in the data analysis. Numbers are included after each category to indicate the frequency of comments that category received from the input session data.

Data summary

THINK

Data categorized under the think heading relate to ways of thinking, including perceiving or processing information, frames of reference, and values.

1. CONSEQUENCES (22)
2. EMPATHY, GRATITUDE, & HOPE (15)
3. ETHICS & VALUES (19)
4. EQUITY & SOCIAL JUSTICE (4)
5. GLOBALLY-MINDED, CULTURE, & DIVERSITY (31)
6. HOLISTIC THINKING & SCALE (6)
7. INTERGENERATIONAL (16)
8. LIFE-LONG LEARNING & EDUCATION FOR ALL (15)
9. LOCUS OF CONTROL (27)
10. OVERCOME FEARS & AMBIGUITY (7)
11. RELEVANCE (10)
12. RESPONSIBILITY (9)
13. SENSE OF PLACE (16)
14. SYSTEMS THINKING (14)
15. VISIONING (15)

KNOW

Data under the "knowledge" heading resides within the cognitive domain and includes content knowledge, concepts and information, and background knowledge.

1. CIVICS, DEMOCRACY, & GOVERNMENT (4)
2. ECOLOGY & THE IMPORTANCE OF NATURE (32)
3. ECONOMICS, COST ANALYSIS, & SUPPLY AND DEMAND (26)
4. ENERGY, CLIMATE CHANGE, & TRANSPORTATION (45)
5. FOOD EDUCATION & AGRICULTURE (26)
6. FORESTRY (2)
7. HEALTH ISSUES (8)
8. HISTORY (14)
9. INTERRELATIONSHIPS (31)
DO
Data related to actions, activities, skills, and behaviors a sustainably literate person might exhibit were organized into categories under the "do" heading.

1. ADAPTABILITY (4)
2. CIVIC & COMMUNITY INVOLVEMENT (33)
3. COLLABORATION & RESPECT (41)
4. COMMUNICATION (21)
5. CRITICAL THINKING, PROBLEM SOLVING, CONFLICT RESOLUTION, & BEING RESOURCEFUL (28)
6. EVALUATION & REFLECTION (5)
7. EXPERIENCES WITH NATURE & PLAY (33)
8. INNOVATION & CREATIVITY (9)
9. LEADERSHIP SKILLS & MODELING SUSTAINABLE BEHAVIORS (36)
10. LEARNING OPPORTUNITIES & METHODS (100)
11. LIFESTYLE CHOICES & RESPONSIBLE ACTIONS (57)
12. SKILLS TRAINING (40)
13. STORIES (7)

OTHER
Additional data related to sustainability literacy were organized into the following categories:

1. COMMUNITY DESCRIPTION (29)
2. SAFE PLACES (8)
3. SCHOOLS & TEACHER PROFESSIONAL DEVELOPMENT (19)
Indicators Data Summary

**Question asked:** What are the indicators that something is sustainable?

**Number of participants commenting on this question:** 214

**Data processing procedure:** Like ideas were compiled under descriptive headings. A summary was written for each heading.

**Data summary**

**CLEAN/HEALTHY/NOT HARMFUL** – The production, use, and disposal of a product are not harmful to humans, or any organism, and the environment. Improvements made in the community are made without being detrimental to another community or location. The air and water are clean and exceed environmental standards. People are healthy.

**EQUALITY/RESPECT** – There is equality and a high level of respect among the people. There are opportunities for different voices when decisions are made. People are cooperative and collaborative. The gap between the rich and poor is lessened. The basic needs for all people are met. Decisions are made with a win/win approach.

**HAPPY/VIBRANT/PEACEFUL** – Within the community, people are happy. The community is thriving. Women are empowered. There is peace.

**INTEGRITY OF THE ENVIRONMENT** – Any action done in or to the environment does not compromise the integrity or health of the environment. People are stewards of their local environment.

**LACK OF ILL SOCIAL EFFECTS** – The crime and poverty rates are low. Infant mortality is low. There are fewer discipline problems in schools.

**LOCAL ECONOMY** – The local economy is healthy and thriving and supports the community. Resources are produced locally.

**LONGEVITY** – Long-term planning is used for every decision. The idea of planning for the seventh generation is considered. Products are made to last. Actions are not detrimental to future generations. People are able to be self-sustaining.

**RENEWABLE/NOT WASTEFUL** – Products are made efficiently with as little waste as possible. An item is renewable. The life of a product is useful throughout (cradle to cradle idea). Renewable energy and high energy efficiency is used.

**SUSTAINABLE ACTIONS** – Opportunities are created in schools to engage students, teachers, and the community in socially and environmentally friendly activities. There is a high level of civic engagement in the community.

**SUSTAINABILITY EDUCATION LITERACY** – The knowledge of the people is supporting sustainable literacy. Students can pass basic sustainable literacy tests. People are globally minded and culturally sensitive. Consumers consider the environmental and social impacts of the products they purchase.

**VISUAL/TANGIBLE** – It is visually apparent that something is sustainable. Indicators might include green space, food pantry gardens, cooperatives, organic foods, signs in the community, labels on food products, etc. These are things you can tangibly see in a community.
Tools Needed Data Summary

**Question asked:** What tools, resources, and efforts do we need in schools in this community to further EfS?

**Number of participants commenting on this question:** 243

**Data processing procedure:** Like ideas were compiled under descriptive headings. A summary was written for each heading.

**Data summary**

**AWARENESS/INFORMATION** – A small number of comments were made related to raising public awareness about EfS, clearly defining EfS and its goals, and developing communication tools that build local support.

**CURRICULUM/EDUCATIONAL RESOURCES** – The greatest number of responses to this question related to EfS curriculum and activities. Specific suggestions include movies, kits, field trips, books, and hands-on field experiments. Several comments related to getting kids outdoors and having access to outdoor sites were made. The need for examples, data, measurement tools, and web-based material accessible to parents and students were identified.

**GARDEN/FOOD RELATED** – Input about gardening included building school gardens, developing Farm-to-School programs, and getting local foods into school lunches. Also suggested were teaching proper nutrition and involving students in hands-on projects with gardens and composting.

**LEADERSHIP/ROLE MODELS** – The need for role models and example schools was suggested. Having sustainability directors or coordinators was also mentioned.

**MONEY** – The need for funding was mentioned multiple times. Specific needs include field trip transportation, lab materials, school supplies, grants, and support for students going into the community.

**PERSPECTIVE** – Suggestions related to perspective range from being positive and thinking creatively to getting unstuck from tradition and being open to new ideas. Additional ideas include focusing on problem solving skills, differentiating between needs and wants, and being dedicated to implementing EfS.

**PROFESSIONAL DEVELOPMENT** – The need for teacher professional development was mentioned multiple times. Suggestions included seminars, conferences, including parents and community members and administrators, and moving beyond just science topics.

**RELATIONSHIPS** – There were suggestions to build relationships between school and the community, creating community partnerships, and increasing community involvement. Also suggested were building relationships between K-12 schools and higher education, connecting with resource professionals, and using elders in schools.

**SCHOOL SUPPORT** – The need for planning time and greater flexibility for teachers (in assessment strategies, meeting standards, learning outside the classroom, etc.) was identified multiple times. Also mentioned were the need for smaller class sizes, more parent involvement, and greater support from administration.

**SPECIFIC RESOURCES** – A variety of specific items were mentioned including rain barrels, composters, and recycling. Additional suggestions include clean air and water, more teachers, family nights, and internships.

**TRANSPORTATION RELATED** – A small number of suggestions about having bike share programs, bike lanes, bike maintenance education, and improving pedestrian and bike advocacy were made.
Community Resources Data Summary

**Question asked:** What sustainability-related initiatives are you aware of in this community?

**Number of participants commenting on this question:** 229

**Data processing procedure:** Like ideas were compiled under descriptive headings. A summary was written for each heading.

**Data summary**

**ALTERNATIVE ENERGY** – This category includes solar array and wind turbine installations as well as power plants fueled by biomass. Most data was not specific to a site or region but some mentioned schools and municipal buildings. Additional initiatives mentioned were LED stop lights, biodiesel, and geothermal heating.

**EVENTS/EDUCATION** – A wide array of events were identified such as festivals, sustainability fairs, and water walks. Also included were study circles, light bulb sales, and solar home tours. Educational efforts included workshops, classes, forums, and demonstrations projects.

**GARDENING/FOOD** – A variety of suggestions related to local food and gardening were identified with community gardens and farmer’s markets most prevalent. Also included were CSA’s (community supported agriculture), urban gardens, and initiatives such as food pantries accepting local produce. School-based efforts include Farm-to-School programs, school gardens, and school lunch programs including local produce.

**INCENTIVE PROGRAMS** – Grouped in this category are programs designed to motivate behavior such as Tree City USA, Travel Green WI, and NatureWise from utilities.

**INFRASTRUCTURE** – Specific efforts toward sustainability that were mentioned were the creation of LEED certified buildings, adding green roofs, and revitalizing downtown areas.

**LIFESTYLE CHOICES** – This category includes specific actions that can be chosen to reduce environmental impact including using rain barrels, eating leftovers, installing motion sensor lights, cohousing, composting, and reusing storage containers.

**ORGANIZATIONS/PROGRAMS** – Over one hundred organizations and programs were identified as having some connection to sustainability. The list includes non-profit organizations, businesses, higher education, nature centers, and schools. Programs included both statewide and regional efforts. Program focus ranged from environmental to educational to social.

**PLANNING** – Several specific sustainability committees, coalitions, and task forces were identified. Less formal groups were also mentioned such as Natural Step groups and eco-teams. City and county planning efforts were also mentioned.

**PLACES** – An array of places were mentioned including preserves, habitat corridors, and restoration areas.

**PURCHASING** – Consumer purchasing data included the name of specific stores offering items such as green building supplies, natural foods, and local arts. Also mentioned were general categories of purchasing such as consignment, second hand, recycled material, and food and art cooperatives.

**RECYCLING** – The practice of recycling as well as specific city or regional recycling programs were identified. Some of the specific recycled items identified were batteries, carpet, organic material, and clothing.

**TRANSPORTATION** – Sustainable transportation options identified included bus use, park & rides, biking, and the state van pool. Also mentioned were mechanisms put in place to support sustainable transportation such as planning for and creating bike lanes, installing bike racks, and developing bike and walking paths.
Implication for K-12 Education Data Summary

Questions asked: What does this mean for K-12 education in this region? What is the connection between community efforts and K-12 education?

Number of participants commenting on this question: 167

Data processing procedure: Like ideas were compiled under descriptive headings.

Data summary

COMMUNITY IMPLICATIONS (a selection of comments)
- Sustainability Education is a great context for curriculum development and for how schools fit into the community and vice versa
- Sustainability will reach beyond school grounds and will need community involvement when planning and implementing
- Community needs to invest time and know that it’s worth it
- Community values school and wants to invest
- Community becomes the classroom: mutual mentorship between students and community members, students as teachers
- Need greater understanding of community assets and how to leverage them to the advantage of the schools and community.
- Community can provide promotion, funding, opportunities and resources
- Develop long-term partnerships with organizations, businesses, families, agencies
- Schools as community centers

SCHOOL IMPLICATIONS (a selection of comments)
- Change focus on what learning should be
- Adds relevance to learning – purposeful, useful
- Need administrative support and engagement
- Paradigm shift – every project a child does has a real purpose, a meaning in their communities
- Teacher training is really important
- Build and support teacher motivation by sharing why it’s important and success stories
- Provide teacher support through mentors/coach and non-formal educator partnering with teachers
- Provide tools and strategies to connect to curriculum goals and standards
- Need schools as leading model within communities: innovative ideas flowing out of schools
- Teachers use the community experts in their lessons
- Greener schools
- Need willing and engaged teachers
- Student and parent integration into school administration/structure
- Need to convey to practicing K-12 teachers how to integrate sustainability (not replace) into existing curriculum. Kids identify what needs to change at school.
The WCEE’s Commitment and Approach to EfS in K-12 Schools

The WCEE builds capacity for developing environmental literacy in K-12 schools and is committed to coordinating long-term, statewide EfS initiatives. We provide leadership in EfS consistent with our professional and personal aspirations, experiences, and skills. EfS provides the WCEE with a collaborative approach to developing environmental literacy and sustainable communities. EfS is being integrated into all existing WCEE programs allowing collaboration to become central to our operations.

We facilitate opportunities for schools and communities to apply a holistic, systems approach to teaching and learning that expands the potential for people to live more sustainably. The WCEE foresees the development of a variety of EfS resources and services to assist schools and local partners in implementing EfS. The WCEE supports existing EfS efforts and will collaborate with schools and partners to expand EfS initiatives.

What is Education for Sustainability in K-12 Schools?

Education for sustainability utilizes effective and innovative educational practices. Learning is place-based, service-oriented, experiential, project-based and driven by student inquiry. Subject areas are not limited to defined blocks so learning is interdisciplinary and students experience the type of learning processes adults face daily. EfS addresses and incorporates core curriculum standards, 21st century skills, career and technical education goals, and STEM learning goals.

Integrating EfS in K-12 schools creates an opportunity to advance students’ understanding of the world using a systems approach to understand their own communities. EfS transforms schools into places where students are proud and excited to be by using the local community as the context and purpose for their learning. The learning focuses on actual people and places not textbook examples. Students gain the awareness, knowledge, skills, attitudes, and experiences necessary to become lifelong learners who are literate in sustainability, socially responsible, and passionately involved in their communities.

When learning focuses on the local community and school itself there is an increased sense of purpose, meaning, and relevance. Teachers serve as guides to ensure learning is meaningful, relevant, and meets district and state requirements while students co-create learning experiences with their teachers, peers, and community members by providing input on what topics are important to them.

Education for sustainability is integrated into the school curriculum, operations, facilities, and culture. This makes the school a model from which the students, staff, parents, and community members can learn by example. By infusing all aspects of the school, the school community becomes part of the educational process through the involvement of all staff (administrators, educators, buildings and grounds, facilities, and food service). Depending on a person’s interest and area of focus, this model offers multiple entry points for engaging in learning and action. Entry points can include topic areas, subject areas, program components, action projects, cultural connections, or other aspects.
Partnerships with community members, families, non-profit organizations, and businesses can build capacity for projects at the local level. New sources of information, funding, and support will result when schools connect with local expertise. Learning is guided by core concepts, processes, and action orientations identified in a community vision session. The vision and way it is reached is continuously updated to ensure it is relevant and involves key stakeholders and audiences. Projects and learning evolve through time based on the needs of the community, influx of new information and understandings, and new educational approaches.

**Relationship between Environmental Education & Education for Sustainability**

The definition of environmental education commonly used in Wisconsin to guide program design and implementation was developed by the Wisconsin Environmental Education Board (WEEB) (1998).

*Environmental education is a lifelong learning process that leads to an informed and involved citizenry having the creative problem-solving skills, scientific and social literacy, ethical awareness and sensitivity for the relationship between humans and the environment, and commitment to engage in responsible individual and cooperative actions. By these actions, environmentally literate citizens will help ensure an ecologically and economically sustainable environment.*

Environmental education (EE) is an evolving field. It evolved out of fields such as Nature Studies, Conservation Education, and Outdoor Education, emerging in its contemporary form from the 1972 Stockholm Conference on the Human Environment, the Belgrade Charter, and Tbilisi Declarations. Each change of name better encompasses its goals and intentions and better clarifies any ambiguities of purpose. Some people have co-opted the term EE and attached it to any form of education – such as nature study or environmental science - that has an environmental focus. Meanwhile, others have tried to convince the public that EE is a form of radical environmentalism. Both actions have led to confusion and distortion of what EE is. EfS, on the other hand, more explicitly suggests the holistic and socially-inclusive perspective that EE was intended to provide.

EfS and other global and national educational movements have led some EE professionals, including those within the WCEE, to explore transforming our emphasis to work toward EfS. The WCEE believes EE is a foundation of and will remain an integral component of EfS.

**Role of Partners**

Partners around the state are essential to cultivating EfS in Wisconsin. The WCEE does not have the capacity to work individually with every school in the state. Local facilitators were invited to host the vision and input sessions to build their community networks. The steering group of facilitators will continue to guide and assist with the development of resources and services as local needs arise. By coordinating a statewide EfS effort, the WCEE can offer an anchor to help partners leverage resources to implement EfS locally. The WCEE will work extensively with partners to support the implementation of EfS in schools. One of the WCEE’s key indicators of success throughout the development and implementation of the program will be the engagement and support of local partners.
Cultivating Education for Sustainability in Wisconsin Schools Process Partners

Next Steps

On September 29, 2011, a gathering titled *Shaping the Future of Education for Sustainability (EfS) in Wisconsin Schools* was held. Thirty two participants attended including the EfS in Wisconsin schools coordination team, the input session facilitators, WCEE staff, classroom teachers, school administrators, and representatives from a variety of organizations around the state.

Participants learned of the results of the vision sessions, each facilitator sharing his or her experience and conclusions. The facilitators and the meeting participants reviewed the summarized data and generated thoughts on gaps and trends. It was strongly recommended that more student voices and perceptions be reflected in the vision process. There was concern that sustainability is still viewed as something that is done to the environment, rather than shifts in ways of thinking, behaving, and understanding. The group needs to foster appreciation that sustainability includes safe neighborhoods, economic stability, and social justice. Some participants noted that social and emotional health was not mentioned and there needs to be a stronger sense of community and spaces to spark creativity and play. The group agreed that systems thinking needs to be emphasized more in the process. EfS should be inclusive of all people, working with communities to empower people to work together toward a shared goal of sustainability.

Meeting participants then engaged in an EfS program design process utilizing the data summary. Ironically, a common assertion of many of the group members was to avoid use of the term “program.” Rather, EfS
should be an overarching idea or understanding that is shared by many entities working collaboratively; some participants suggested creating a “brand” for EfS in Wisconsin.

The group concurred that EfS still needs the development of support materials and services. Several times it was emphasized that there are many current and ongoing efforts in the state working towards EfS; there just needs to be more sharing, networking, and collaboration. The idea of a “re-framework” was suggested to emphasize that many concepts, ideas, and strategies already exist; they just need to be repackaged or shifted to better reflect the vision of EfS. The re-framework also needs to be a “living,” flexible document that can change through time to reflect new and different ways of approaching EfS or specific locations in which EfS is implemented. There does, however, need to be a redefinition and restructuring of what education is and accomplishes when viewed through the EfS lens. Another strong suggestion was to ensure scalability of whatever tools and resources developed; this would enable application ranging from the individual level, to the classroom and school, and to the community and eventually the entire state.

The participants explored what role the Wisconsin Center for Environmental Education would play in moving EfS forward in Wisconsin. It is important that the WCEE continue to develop the statewide vision and build relationships among collaborators working for EfS in Wisconsin. The WCEE could coordinate the development of the frameworks and identification of associated support materials to be used by PK-12 schools and their local communities. Working with other players in the state, the WCEE could provide consulting services, conduct events, and offer inservice and other professional development experiences for PK-12 schools and those that work with schools. It was recommended that the WCEE highlight positive models and success stories to lead by example.

Finally, the group generated a list of big ideas – which are bolded throughout this summary. Remembering that EfS is a means and not the end, these ideas and others will continue to be reference points and reminders for what EfS in Wisconsin should be, think, and do.