SUSTAINABILITY IN GREENDALE SCHOOLS
What is ‘Sustainability’?

*Sustainability*: meeting current needs without compromising future generations’ ability to meet theirs.

(Brundtland: [www.undocuments.net/ocf-02.htm](http://www.undocuments.net/ocf-02.htm))
**SOCIETY:** 
“*Social Capital*”: Students, staff, parents, school board, community, tax payers, regional districts, state, national, global

**ECONOMY:** School budget, operating costs, value of services, products, resources within each school, the district, village, region, state, national markets; “life-cycle-cost analysis”

**ENVIRONMENT:** Impact on resource consumption, landscapes, carrying capacity, biodiversity, water quality, nature’s future viability, atmosphere

**Triple Bottom Line**

- **Sustainability**
  - (a delicate balance)

- **Economy**

- **Environment**

- **Society**

- **Equitable**

- **Viable**

- **Bearable**
Sustainability Committee focus...

- Energy
- Recycling & Solid Waste Management
- Health & Wellness
- Transportation
- Indoor Environmental Quality
- Classroom Integration
- Community Connections
- Green & Healthy/Green Ribbon Recognition
- School Sites/Forest
## Timeline

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Celebrating our achievements in sustainability

Great work in progress...
that furthers our goals to contribute positively
to our students, staff and community
10 years of accomplishments at GSD

- A healthier, safer, more productive and cost-efficient environment
- Minimum annual energy cost savings of $200,000
- Engaged community (GreenTeam, Nourish Expo, healthy lunches)
- National recognition
- Improved communications
- Improved purchasing
- “De-cluttering” expertise!
District Health & Safety Committee

Safety committee – 2002
Staff wellness program -2003

- ~98% participation
- includes measureable healthy living commitments
- access to on-site nurse practitioner
- access to a EAP program
- Access to staff fitness center & classes
Educated staff on IAQ and TfS

EPA IAQ Great Start and Leadership Awards – 2009

EPA IAQ Excellence Award in 2011

Reduced worker compensation claims saving $50,000/yr
Energy Projects & GHS Renovations

- New T-8 low-watt lighting, occupancy sensors, ceilings - 2004
- $14 million referendum passed - 2007
- New heating plants, digital controls, pool equipment, coils and operational upgrades
- GHS became an Energy Star Partner and saved $200,000/year on energy
- Outdoor lights on timers
Solar thermal panels at GHS heat water using solar electric energy

15 glazed panels to supplement the schools hot water for kitchen and bathrooms

Pool water heating system is made up of 32 HC-50 solar collectors
Energy Update
GSD 2011-2012 Results:

- Natural Gas: 41% usage
- Electricity: 59% usage
- Natural Gas: 12% cost
- Electricity: 88% cost

Natural Gas
$ 55,425

Electricity
$399,639
The district has a goal for energy savings...

5%

100,000 kWh

6,840 Therms
Water Conservation & Turf Grass

- Installed new restrooms, plumbing and fixtures throughout GHS that are more water and energy efficient
- Replaced all drinking fountains in the district with energy saving models
- Reduced year round irrigation on school grounds- substantial water savings
Benefits

- Increased energy efficient material
- Reduced maintenance
- Increased efficiency in cleaning time
- Lower scuffing
- Longer lifetime & durability (40+ years)
- No chemical treatment
- No hazardous inhalants emitted in maintenance
Green Purchasing, Green Cleaning

- Reduced copying costs, paper use leading to $20,000 cost savings per year
- Switched to green cleaning chemicals and procedures at no extra cost
Improved culture to maintain healthy indoor environments

- Removed air fresheners
- Removed hanging material from ceilings
- Removed paper from bulletin boards and painted for color
- Reduced use of plants and stuffed furniture

An “end of school” staff checkout insures the de-cluttering continues

Educated staff on HVAC & IEQ
School Garden
Empty Bowls Events - 11 years!

Donations collected for Hunger Task Force of Milwaukee

$72,000 raised at GSD since 2002 to fight hunger in Milwaukee
Nourish Events 2011, 2012

- Attended by over 200 community members and district families
- 50+ Exhibitors, live demonstrations, student presentations
- Information on health, wellness, nutrition, local healthy food, environmental & water conservation tips
- May 11, 2013 Nourish!
Food & Nutrition

- Introduced healthier foods
- Classroom celebrations
- Breakfast & lunch reworked in 2012 to be healthy
- Classroom snack options distributed
- Food consumption measured
- ProStart Culinary track at GHS
- 2nd Grade use garden veggies
- Processed foods eliminated
Fitness & Health

- Student and Family Assistance Program (SFAP)
- Community Run/Walk
- Fitness nights out at Elementary Schools
- Parent Advisory Committee (Wellness)
- Fitness Logs (Nov & Dec)
Reduce, Reuse, Recycle, Refresh

- Repurposing paper (notebooks, books)
- Aluminum Can- clean up and Boy Scout donation
- Art project reuse: smocks, tee-shirts, plastic bags
- Kindergarten Juice containers recycled for art
- Trash Clean-ups in woods
- Annual garlic/mustard pulls
District Sustainability Team

Past initiatives

- Began 2 school gardens to grow produce and use for curriculum
- Team education in the “Natural Step” & lower impact ways of living and sustaining environment
- Held (2) community events to highlight “green sustainability” topics

Future goals/interest

- Possible greenhouse or hoop houses at GHS
- Continue student wellness team to focus on providing healthy foods learning environment for students
- Involve local experts students & community
Measure & Reduce Resource Consumption

- Electricity
- Natural Gas
- Water/Sewer
- Gasoline/Diesel
- Waste
  (↑Recycling)
- Paper, supplies
- Etc…
Track, Trend & Analyze Resource Use

- Electricity
- Natural Gas
- Water
- Waste & Recycling
- Transit/Transportation
- Others as determined
Expose Staff & Students to Resources, Activities & Grants
Raise environmental and sustainability literacy for staff & students
Reduce District’s Environmental Impact
Improve District Sustainability Communications

- Weekly Electronic Sustainability Tips
- Quarterly updates
- Annual reports
- News Releases
Is there something you would you like to see at your school?

Example 1: Improve Recycling & Waste Management

Example 2: Increase knowledge, understanding and literacy on “Sustainability for Education”

How can the district help?
(Are there resources, tools or contacts should consider?)

Example: Use Green & Healthy Schools Tools
Things you can do right now..

Practice recycling in your area

Turn off lights with occupancy sensors if out of area, not waiting for the sensor to activate

Let the sun shine in, open blinds, which also boosts achievement

Get involved with the Sustainability Project

Continue to use less paper
Contact Information

District Sustainability Team Representatives:

Heidi Hennessey, Kayla Slaasted, Pam Schulteis, Jessica Holschbach, Kim Wahl, Amanda Berg & Josh Bartelme (student) - Greendale HS
Marlene McIlheran and Holly Miller- Greendale MS
Kathy Warner- Canterbury Elementary
Keith Matzkanin- College Park Elementary
Lisa D’Acquisto and Fred Clement - Highland View Elementary
Carole Engel – Greendale Community Member
Erin Green, Kim Amidzich & Brian Koffarnus- Administration
Mindy Anderson- Greendale Education Foundation
Karen Nenahlo- CESA 10 Sustainability Facilitator
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