The Green & Healthy Schools Institute

Conference Notes

October 28th, 2016

Kromrey Middle School in Middleton, WI

Key Note Speakers: Jim Beckmann and Erin Green

Why get involved?

- Kromrey Middle School has saved over $3 million on costs because of sustainability.
- Shared how 2016 and this decade so far has been the hottest on record. We've seen glaciers melting, sea levels rising, storm surges, death of sea life, desertification, heat waves, forest fires, and many more devastations.
- Overall, there has been a population explosion on our globe and more people are continuing to move to cities. As a result, there has been deforestation and increasing demand for food. These are all reasons to become more active and involved in the movement to promote sustainability in schools.

Being Proactive – simple steps to becoming a sustainable school

- Some schools have been able to completely demolish and reconstruct into green institutions, but for those schools that can't do this they can take very simple steps to becoming environmentally conscious.
- Have older buildings inspected and retro commissioning done. Most of the time these buildings aren't running efficiently. He suggests being proactive instead of reactive. Don't wait for something to happen to make a difference, start now.
- Night audits where an individual or a group goes around school building after school hours to make sure all lights and technology is turned off. These simple changes can have a positive impact on the environment and costs. By doing this, schools save money and can invest this money into fixing the building.

- Glendale Elementary School in Madison as an example of a sustainable school: they use a lot of natural lighting in the school so electricity consumption and costs have been greatly reduced.
- Recommended doing energy benchmarking where goals are set. Teachers should also regularly declutter their classrooms.

School Gardens

Glendale Elementary School started with only three raised beds. They have expanded a lot since then and all classes use the gardens in some way. There are also summer school courses on gardening. Start out small and work your way up.

Renovation

- Glendale added water bottle filling stations to reduce the use of plastic water bottles.
- Put in polished concrete floors and saved a lot of money. They didn't have to add unnecessary chemicals in the construction.
- Built an underground irrigation system for the football field.
- Staff Fitness Center for teachers.
- Spread awareness about being sustainable with the students and families along with the greater Madison community.
- Use renewable forms of energy. Have many solar panels installed.
- Glendale buys their gas on an open market from Canada.
- Indoor air quality management, make sure classrooms are comfortable.
- Appearance matters—make sure entrance, parking lot, hallways and exterior are all maintained.

Other Activities

- Waste audit: 7th graders weighed collected trash from the school. They then sifted through it and discovered much of it could actually be recycled.
- Tip: Make best practices standard practice.
- Provide counseling for students, teachers, and faculty.
- Students help with composting for the school at an offsite facility (composting is not actually at the school for logistic reasons)
- Offer holistic health services—student absences declined after this was introduced.
- LEED is helpful

- Track carbon footprint and savings.

Workshop #1 Student Engagement:

"Principles of Garden-based Education" by Nathan Larson, director of Cultivate Health Institute.

- Gardens are beneficial to teaching because they are interactive.
- Recommendations: take students to raspberry patch (or any fruit or veggie garden) where they can eat. Kids enjoy it more when they can grow it because they develop a relationship with it. They love hands on activities, such as making salsa from tomatoes in the garden.
- Resources:
  - www.wischoolgardens.org
  - www.teachinginnaturesclassroom.org
  - www.csgn.org
  - www.edibleschoolyard.org
- Contact: Nathan Larson, email: nathan@communitygroundworks.org or nathanlarson@wisc.edu
- If you're teaching at a Green & Healthy School or if you have a garden add your school this map: http://eeinwisconsin.org/net/content/searchspecial.aspx?s=0.0.0.2209&btid=3&load=0&tid=38000&basic=1
- Tip: Dave Rhoads has a copy of Nathan's book on school gardens. There are lots of pictures and many tips on creating your own school garden. Ask him about it!

"Indoor Activities/Investigations for Students in Energy Efficiency" by Annie Baker, outreach specialist. Contact info:

- Check out this website: http://www.ase.org/projects/powersave-schools
- Teachers should use Stem Hero, an electricity meter tracking technique that can be accessed online. Students read meters, synthesize and interpret data, engineer and evaluate real world solutions. http://www.stemhero.org/start

Plastic Pollution Coalition

Contact: www.plasticpollutioncoalition.org

- Local high school students came in and talked about their Plastic Pollution Coalition club where they increase awareness about plastic pollution and solutions.
- Encourage students to use reusable containers for lunches.
- Try to get a club started at your school.

Workshop #2 Energy

From Tom Kulegewski (sp?) from Fort Atkinson on Sustainable Energy

- "Ethos" of conservation.
- Resource: http://dpi.wi.gov
- His school uses solar hot water for heating the pool.
- When it comes to wind energy, it's important to invest in good wind energy instead of poor or faulty technology.
- "Solar tubes" in large spaces such as gyms. A solar tube would provide lights directly from the roof to shine down to the gym. When there's not enough light coming down from the roofs, electric lighting will automatically turn on. Install sensors to turn off lights in stairwells.
- Contact: tomk@fortschools.org or reach him at (920) 563-7808