

Student adopts teacher's drive for solar panels

Brandon Persico

Staff Reporter

Science classes teach students that renewable energy is the path to a greener future. However, what can our school do to move energy consumption from the pollution of coal burning power to clean and efficient solar power?

The answer is solar panels, according to Dave Chapman (science).

"The idea started about eight years ago when I noticed that the school had a perfect angled roof and that legislation had passed tax incentives for solar panels," Chapman said.

In California, the Porterville Unified School District made the switch to solar panels and is pro-

jected to save \$44 million in the next 25 years, according to the Community Power Network (CPU) report.

In Michigan, few schools have solar panels on their roofs, except for Laker High School in Pigeon, Michigan.

"Mr. Whitmyer and I were given the day off to visit Laker High School which has alternative energy. We arranged a meeting and reported what we had found out. It was pretty impressive. They had been using solar power for ten years," Chapman said.

The total cost of the project not only includes the cost of the solar panels themselves, but the device that takes their energy and connects it to the

school and public grid. Until solar panels are at work in Okemos, the school will not be able to estimate how much money could be saved.

However, former OHS student Brad Detjen asked Chapman if he could do some surveying of the school's roof to determine where on the high school would be a good location.

"He concluded that the south and east facing roofs of C and D wings and the library get the most sunlight. When extra electricity is generated and sold back to Consumers Energy, it would take 6.6 years for the solar panels to pay off," Chapman said.

According to the CPU report, solar power systems work when the sun is out.

The solar panels generate power for the school and when the panels produce excess energy, the electricity is sent throughout the public grid in which the school will receive credit, therefore paying itself off.

Additionally, when the sun is not out, the school will still receive power from the public grid.

If the district is unable to fund the project, the board may consider a third party to lease the school property and install the solar panels.

Miles Bolton (11) is the student advisor to the solar panel project.

"My job is to organize, getting the administration to feel comfortable with the idea and get those who consult for solar energy to talk to [the administration] about the project," Bolton said.

Bolton said that Earth Club formed a committee to bring awareness to the public and school board. However due to the leaders being seniors, once they graduated the project was abandoned until Bolton personally restarted it last year. He is now working to have the project heard before the school board.

Okemos Schools Director of Finance Robert Clark explained the process by which the project needs to follow in order for it to reach the board.

"Once the information regarding the suitability of the building, cost and financing options and potential cost savings is gathered, the idea will be shown to the Superintendent and then possibly to the board," Clark said.

Clark also shared issues regarding the funding of the project.

"The current funding issue could be regarded as a stumbling block. Sinking

funds are committed for the next several years and would require an adjustment to priorities of the planned projects," Clark said.

Once the project is approved for funding, Bolton hopes to catch the attention of the public.

"Once the ball gets rolling we'll start to contact local newspapers [and] let people know, because there are not many schools within Ingham County that have solar panels and it's kind of a new [concept] for Michigan," Bolton said.

There are often many misconceptions that people have with solar panels in Michigan. Chapman shared that even when it's cloudy out and there is sufficient light, the solar panels will produce energy.

Chapman hopes to have the solar panels installed by August of 2016.

School assures that unused food does not go to waste

Chloe White

Staff Reporter

Every day students flood the cafeteria to order lunch, but how much of that food is wasted or tossed in the trash?

According to Okemos Food Director Lynna Hassenger, the food service employees throw away very little unordered food at the end of the day.

"We do history reports and production reports so we know pretty well how much to make," Lynna Hassenger (Food Service) said.

As for the styrofoam plates that the cafeteria uses, efforts were once made to eliminate them, but it resulted in costing more money for the school than helping the environment, according to Hassenger.

"We bought rewashable, permanent, plastic baskets like fast food

Compost proven to be productive means of waste removal



Over 60 percent of what we put in our landfills is organic waste, such as food scraps, yard trimmings, and paper, much of which could be recycled by composting.

The average US Household generates 650 lbs. of compostable materials each year.

Composting saves money. Families reduce their garbage collection bills and municipalities save money on transporting and disposing of waste when organic materials are eliminated from the collection system.

Facts courtesy Penn State University and BBC

Glorianne Francavilla

Staff Reporter

For those looking to reduce their carbon footprint, household waste, or increase the productivity and health of their plants, a potential answer could be compost.

Compost is decomposed organic material including plant and some animal products necessary to replenish tired soil.

"Although naturally occurring processes replenish the soil, in many instances, the soil becomes overworked and stressed, [therefore] it is unable to produce high levels of products. When people work compost into soil, it places many of those important nutrients back into the soil and the result will be higher product yields," GM Global Waste Reduction manager John Bradburn said.

Composting occurs everywhere in nature, but backyard composting is the managed decomposing of organic material to make a rich fertilizer while reducing human and animal waste.

"Instead of just throwing your food waste in the trash, it can be used to make good soil," Miles Bolton (11) said.

Compost is an easy place to put the majority of kitchen and yard waste, it does not cost a penny and it is environ-

mentally responsible.

Two elements make up compost: brown and green waste.

Greens consist of vegetable waste, food scraps, coffee grounds, clipped grass and animal by-products. These products are high in nitrogen and are essential for plant health.

Browns include twigs, dead leaves and other garden scraps, which provide carbon for the plants.

To produce the best compost, browns and greens should be about 50/50. However, it may be beneficial to have slightly more greens than browns.

So what cannot be put in the compost? "No plastic, metals [or] aluminum foil. Nothing that isn't biodegradable," Maddie Stover (12) said.

Any inorganic material, diseased plants, pet waste (farm manure is fine), uncooked meat, dairy products, bones, pine needles and oak leaves cannot be composted. These may attract harmful pests, cause a putrid smell and make the compost more acidic.

"Home composting should avoid meat related products. People should also avoid using grass clippings in gardens used if they are treating their lawn with pesticides or herbicides," Bradburn said.

Since compost will smell, the pile should be located outdoors on soil

or lawn. The easiest method for composting is to create a compost mound. A compost bin is not necessary, but might be beneficial for larger compost piles. It is also possible to make your own compost bin as long as the bin has no bottom, limited aeration and loads from the top.

However, do not be turned away from compost just because of the smell.

"It's not gross, it smells a little bad but as long as you put it in the right spot it's okay," Stover said.

To get the best results from the compost, turn or aerate it every couple weeks. This speeds up the decomposing process by creating new passages for air and moisture. This can easily be done with a garden fork or shovel.

"This is called aerobic composting. Also keep in mind that food scraps could attract undesired wildlife so you may want to fence the area," Bradburn said.

Following these simple guidelines produces fertile compost in about six months, while reducing both waste and your carbon footprint.

"Everyone should compost!" Stover said.



Illustration credit Erin Wakeland

Make halloween 'Eek-o'-friendly with simple adjustments

Haley Robins

Staff Reporter

Halloween is one of the most celebrated holidays in the US.

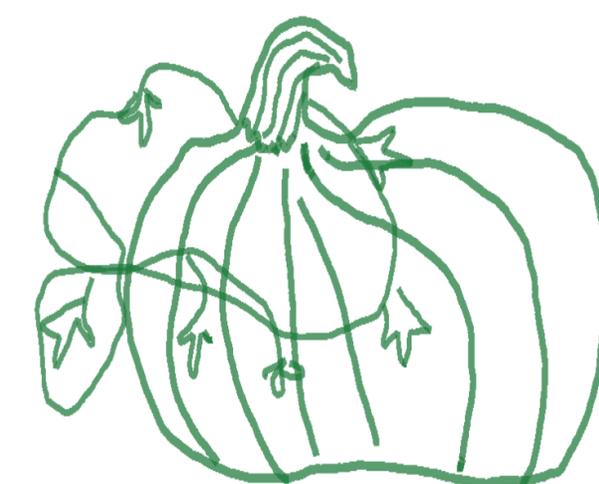
Needless to say, a lot of unnecessary waste is created between the candy, synthetic costumes, and decorations.

The US spends a whopping estimated total of \$7.4 billion on traditional holiday goodies.

However, with these simple tips, tricks and a little planning ahead, you can be sure to take part in the "eek-o-friendly" Halloween revolution.

DIY Costumes

This year, try going the DIY route and skip the pre-made plastic costumes. Host a costume exchange, or put together your own unique get-up using recycled materials and reusing old costumes. With these fun and innovative ways to reduce, reuse, and recycle you can sport a costume that will look



just as good on you as it will be for the environment.

Healthier Candy Options

On October 31 candy is truly the main focus. 158 million Americans will consume a total of 3.4 pounds of candy on average this Halloween. Although

these sugary treats may be just what we need to fix our candy cravings, much healthier options can satisfy your sweet tooth. More organic candy choices are out there than ever before! For example, organic lollipops can be found at Trader Joe's and Whole Foods offers all natural gummy bears by Yummy Earth. Organic foods use less pesticides, so snacking on these treats are healthier for your body and the environment. Furthermore, several brands use fairtrade ingredients in their candy, or donate some of their profits to eco-friendly organizations such as Yummy Earth candy and Endangered Species chocolate.

Eco-friendly Decorations

This year when decorating your yard for the spooky holiday, think about recycling old items to create a creative display. You can make a homemade display with old newspa-

pers, paper bags, old milk jugs and bed sheets. Decorating with nature can also spice up any drab holiday display. Using colorful leaves and unique gourds to decorate your house is beneficial for both you and the environment.

Reduce, Reuse, Recycle

Perhaps one of the simplest ways to add a splash of "green" to the standard orange-and-black holiday is using what you already have. For example, after you carve your jack-o-lantern, bake the seeds with some olive oil and a pinch of salt for a healthy seasonal snack. Instead of the typical BPA-ridden trick-or-treat buckets, opt for the old-school pillowcase to collect your loot in.

With these tips and (not so scary) tricks, you can have a "spook-tacular" holiday and make it beneficial for not only you and your friends, but the environment too!

"Even the amount of styrofoam they use now is much less than they used to."

-Dave Chapman