

JANUARY 2018

OUR PATHWAYS TO ENVIRONMENTAL SUSTAINABILITY

The School Energy and Recycling Team (SERT) program monitors the energy use and recycling participation in all Montgomery County Public Schools (MCPS) on a regular basis. Keeping track of our energy use and recycling performance and providing this information back to schools increases awareness about the importance of conservation. This data helps schools analyze their individual school performance and take corrective actions when necessary to maximize conservation. Through the continuous efforts of our students and staff, MCPS can significantly reduce energy use and increase recycling.

All MCPS secondary schools have an opportunity to create a model resource conservation plan to include energy conservation and responsible recycling projects/initiatives towards a sustainable future. SERT invites all MCPS middle and high schools to participate in the annual LEAD BY EXAMPLE campaign reinforcing a culture of conservation and sustainability. Proven projects and initiatives may be highlighted in SERT's Best Management Practices manual, an online resource with helpful conservation strategies and expectations for efficient building use and operations. Entries can include energy calculations, behavioral strategies, energy-efficiency projects, awareness campaigns, presentations to the staff and community, posters and videos created by students, etc.

Entries will be judged on their clarity and content; opportunities for leadership and teamwork; community involvement; usefulness, and how activities raise conservation awareness. SERT awards will be granted to the winning middle and high school, and all participants will receive certificates of participation. Students may earn SSL hours for activities. Continued on page 4

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MODEL SUSTAINABLE PRACTICES IN YOUR SCHOOL AND LEAD BY EXAMPLE

Does your secondary school have conservation activities that go beyond regular recycling? Have you created programs that raise awareness about conservation? If so, you should enter the **LEAD BY EXAMPLE** contest!

GET INTO THE HABIT OF TURNING THINGS OFF

Anything that uses electricity and has an "off" switch should be turned off when it's not being use. Saving energy is as simple as flicking a switch.

DON'T TRASH YOUR RECYCLING EFFORTS

Contamination is the one thing can ruin all of your recycling efforts. It's terrible, but it can be prevented.





TURN STUFF OFF!

DID YOU KNOW that approximately one third of electricity use in a school comes from lighting? Another third comes from items that plug into the wall. Therefore, approximately 66 percent of the electricity used in schools can be directly controlled by students and staff.

We all know that electricity is a precious and expensive commodity. But remember that when we conserve energy, we're also conserving financial resources that can be redirected to educational initiatives.

One way to reduce electricity consumption is by encouraging students and staff to turn off lights in unoccupied rooms. A simple way to make sure the lights get turned off is to ask the last person in line at the elementary level, or the last person in the room in secondary schools to turn off the lights before leaving the room.

School-based SERT teams can help Montgomery County Public Schools (MCPS) save a significant amount of electricity by encouraging energy-aware behavior. One way to increase awareness is by creating and posting handmade light switch covers. These colorful covers are fun for students to make and also reminds others to turn off the lights when waking out of an empty room. Making light switch plate covers is a fun and rewarding activity

for your school's SERT/Green Team. It's a creative activity that can be done during an indoor recess or a SERT meeting. Laminating the completed switch plate signage will allow it to be used for a longer period of time.

A great bit of information to add to the light switch plate cover is to calculate the wattage of the overhead lighting. After your SERT team has made the calculation, put that number on the cover so all can see the impact of doing so. Contact SERT if you need help with the calculations.

There are approximately 8,000 classrooms throughout the MCPS system. If classroom lights were accidentally left on for two extra hours each academic day, it would cost our school system an average of \$400,000 per year. Imagine how much money we could save if each of us did their part to turn off the lights when they're not needed! Turning the overhead lights off—for an hour or even just a few minutes—will save energy.

Many schools conserve energy by leaving hallway lighting off on sunny days, taking advantage of natural daylight. Typically, the light from windows plus the interior emergency lights that are always on provide enough illumination

to meet the needs of students and staff. Some schools leave the hallway lights off until just before staff and students arrive. There are many ways to conserve—but the best way to conserve is not to use energy when it is not needed.

For items plugged into the wall, think about what can be turned off when it's not in use. Working together in a concerted effort to turn off the thousands of MCPS computers when not in use will help us conserve energy and save money. How about the Promethean boards and Elmos? What else around your school is plugged in, but not being used and still using energy? Look around for phantom plug loads—energy can still be consumed by electronic devices even when they're turned off or is in standby mode.

Turning off lights and electrical devices is as simple as turning off a faucet. We wouldn't walk out of a restroom or kitchen and leave the faucet running, would we? Leaving lights on and other electrical items turned on when they're not being used is really no different. It is waste of a precious resource.

The final third of electricity use comes from the Heating Ventilation and Air Conditioning (HVAC) systems, most of which is used in the summer for air conditioning.

<u>Contact SERT</u> for more information about energy conservation.

CLOSINGthe GAP

SIMPLE SOLUTIONS FOR IMPROVING RECYCLING RATES

IN THE <u>FIRST INSTALLMENT</u> of our "Closing the Gap" series, we underscored the importance of infrastructure – having the right recycling bins that are properly labeled and lidded, and of course, knowing what can and cannot be placed in those bins. The <u>second article</u> emphasized the importance of awareness because most people will recycle while in our schools once they know what can be recycled.

So, now that your school-based SERT team is up and running, and you have all of your recycling bins in place with labels and lids, and everyone knows about recycling in your school, you may think that's the end of the story. If your recycling infrastructure is set up perfectly, everyone will recycle properly. Then your school's recycling data will improve, and we'll all live happily ever after, right? Wrong.

Unfortunately, there is something that can derail all of your progress. Even if our students and staff have put every piece of their recyclable material in the proper bins, it could all still end up as trash.

Do you know what happens when the commingled bins are mistakenly emptied into the paper dumpster, or vice versa? What happens when a recycling dumpster gets contaminated by trash? Do you realize that if one contaminated school dumpster is emptied into the recycling truck, it can ruin the recycling efforts of every school on that truck's route for that day? An entire truck load of recycling can be trashed because of one ugly word:

CONTAMINATION

There are two ways for a recycling dumpster to become contaminated: either someone puts materials into the wrong dumpster, or someone from the community finds a dumpster unlocked and uses it for their trash. Both scenarios yield the same damaging result and can greatly impact our recycling efforts systemwide.

This is why we stress the importance of keeping our recycling dumpsters locked at all times. (Yes, we understand that the current frigid weather conditions may tempt us leave the dumpster unlocked, but please don't!)

Remember to check your dumpster frequently to ensure that it's locked and that the gravity bar is in the locked position. If your dumpster has a broken lock, lid or gravity bar, fill out a work order repair request on Maximo or contact SERT right away. By diligently working together, we can make sure MCPS' recycling program continues to be successful!









Submissions should demonstrate the effectiveness of each project by creating a plan and measuring result.

EXAMPLE

Documentation is an essential component of the LEAD BY

EXAMPLE campaign. Entries could include energy audits with recommended conservation practices, task lamps for staff, computer shutdowns, contests, plans to increase recycling weights, video and social media awareness strategies, etc. The questions, "What will we do?" and "How will we do it?" should be answered.

The LEAD BY EXAMPLE <u>matrix</u> provides assistance in structuring your entry and should be included in contest submissions. All supporting documentation should be attached (physically or electronically) to the matrix to demonstrate your actions. This would include your working papers, flyers, video clips, artwork, calculations, performance measures, etc. Helpful resources are linked at the bottom of the matrix sheet.

SERT offers resources such as infrared thermometers, light and watt meters, suggested morning announcements, energy audits, individual school data, posters and signage, previous **LEAD BY EXAMPLE** campaign previews, and other energy and recycling resources. To receive support, guidance, and/or an in-school visit, contact the SERT program by phone (240-314-1090) or email (SERT@mcpsmd.org). Entry forms are available on our website.

DEADLINE FOR ENTRIES: MARCH 16, 2018

Spatlight

This newsletter is produced by the School Energy and Recycling Team (SERT) program and distributed to SERT leaders, school-based SERT teams, building service personnel, and others who are interested in conservation and sustainability. As part of the Montgomery County Public Schools Department of Facilities Management, the SERT program provides opportunities for all schools to participate and receive incentives and recognition for their energy conservation and recycling efforts. We support a balanced environment for the integration of all students to work together in a culturally diverse environment, and strive to provide the resources, support, and vision of the future for a successful conservation program at each school. Promoting the connections between human behavior and its impact on the environment reinforces our culture of conservation and increases participation in our mission to conserve resources and recycle actively.









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