



Better Schools
Partnership

The Goals

*To continue
to provide a
comfortable, safe and
healthy learning
environment in the
151 sites across the
OCDSB*

*To address serious
infrastructure renewal
backlog during times
of diminishing budget*

*To fund renewal
through reduced
energy spending*

*To model
environmental
stewardship in the
schools and the
community*



OTTAWA-CARLETON
DISTRICT SCHOOL BOARD

Work in progress

N E W S L E T T E R

The Better Schools Partnership® (BSP)

Better Schools Partnership is a partnering strategy with schools designed to create new value in terms of school, program and organizational renewal. The BSP strategy involves the partnership of facilities staff in the District, the education management team and Ameresco Canada. Working together, this team has devised many innovative ways to leverage savings which can be used to improve school facilities.

The result has been a more integrated solution that includes organizational renewal measures to improve facility life cycles and service quality. The District has also been a North American leader in pioneering the integrated learning resources of EarthCARE™, An Environmental Education Partnership, with its students.

The Program

With energy partner, Ameresco Canada, the OCDSB undertook to reduce its \$12.5 million annual energy bill. Phase I of the Better Schools Partnership program, begun in September of 1998, applied to 76 schools, ranging in age from five to 40 years. Initiatives included automation controls, lighting upgrades, water conservation measures, boiler conversions and replacements. The \$14.3 million investment in energy-related equipment resulted in a 30% reduction in annual utility costs, plus significant maintenance savings.

Phase II of the program was launched in the fall of 2001 to include all of the remaining schools. Many of the same measures employed in Phase I were put into place in the older school buildings. This \$16.5 million program, to be completed over the next three years is expected to cut an additional \$1.5 million per year from the District's utility bills and reduce greenhouse gas emissions by close to 30%.

In early 2003 Phase II was expanded by \$24 million. This addendum involves additional energy savings with a focus on building system renewal within many of the schools. Expected completion is early 2008.

Results to Date

- Phase I is saving the Board \$2 million annually with 8.8 tonnes of carbon dioxide emissions (and equivalents) reduced.
- The expected annual utility savings for Phase II at completion will be a further \$2.5 million and the Board is seeing approximately \$1 million in savings at this point.
- The total result at this stage of implementation of the full program is approximately \$3 million in savings.
- The greenhouse gas reduction resulting from Phase II is expected to be 11 tonnes of carbon dioxide bringing the total program reduction to a savings of 20 tonnes or a reduction of 32%. This is enough carbon dioxide to fill 11,000 small gyms.
- When completed, the total program savings in electricity would provide enough power for 5500 homes. The natural gas savings would heat 1200 homes and the water usage savings would provide for 1000 homes.



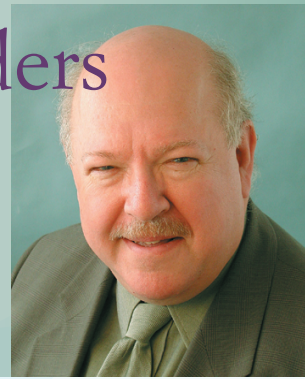
Poster winners from R.E. Wilson PS

Update from the OCDSB Stakeholders



Lynn Graham

Lynn Graham, *Chair of the Board*
Lorne Rachlis, *Director of Education*
Diane Jeudy-Hugo, *Superintendent of Physical Facilities*
Laura McAlister, *Superintendent of Instruction*
Tony Leblanc, *Area Supervisor*
Idris Sadikoglu, *Mechanical and Electrical Project Leader*
Connie Watson, *Principal, Goulbourn Middle School*



Lorne Rachlis

Achieving Goals, Exceeding Expectations

From a business perspective, the Better Schools Partnership program is working well, according to Lorne Rachlis, Director of Education. "The program allows for three to five times more renewal than conventional energy retrofits. For every dollar of investment, there is a potential of five dollars that can be reinvested in renewal work."

In addition, Rachlis says, "the program provides financial offset to deferred maintenance costs by investing in new building systems."

"We have achieved a great deal of savings in terms of maintenance – about \$300,000 per year," says Idris Sadikoglu.

"The biggest single impact of the program is to have the participation of the whole school board – staff, students, operations and maintenance staff," Sadikoglu adds. "The program has affected the entire system."

New equipment has meant efficient operation. "The work that we've been able to do through the partnership has significantly reduced the need for reactive maintenance issues," says Jeudy-Hugo.

New lighting has meant fewer ballast replacements. Building automation means that problems can often be located remotely, meaning that the right technician is sent with the right tools for the job.

"There aren't many opportunities that come along that provide such substantial and immediate results. It's a win-win for all – students, staff and broader school communities," concludes Rachlis.

BSP in Action – Goulbourn Middle School

Beginning last summer, a new heating system (with a new boiler and controls) and new lighting were installed at Goulbourn Middle School. Better air quality was immediately noticeable according to Principal Connie Watson. "It was a major overhaul. It's really changed the quality of air exchange in the classrooms. We're quite pleased with it."

She feels that the improved environment will contribute to learning: "If students can't concentrate because the air quality is poor, they want to sleep and, of course, you need sufficient lighting so their eyes don't get tired."

Tony Leblanc, Area Supervisor, points out "that as far as the custodians go, there's a reduced need for dusting because the air handling system is so much better."

"There's an incredible improvement in air quality, comfort and temperature," he says.



Goulbourn Middle School.

Challenges Met

"One of the challenges is making sure that all the parties involved understand the potential and the wide scope of what can be achieved," says Jeudy-Hugo. "The players are always changing and you want to keep people at a level of awareness that makes them participating partners."

Another challenge is keeping the work on schedule. "One of the biggest challenges can be the time constraints," points out Tony Leblanc. "It's such a compressed timeframe we're dealing with when you can actually access the school."

"And it's always a challenge making renewal dollars go as far as possible," says Jeudy-Hugo. "The bigger paybacks happen early in program. Now we are in a transition time, where we're moving toward relying more on occupant behaviour to support objectives in terms of energy savings. People have to change their behaviours to actually help support energy conservation."



Parkwood Hills PS Furniture Project, Innovation winner

An integral component of the Better Schools Partnership is EarthCARE, an activity-based, environmental occupant behaviour program designed for students and staff throughout the school District. Its goal is to make environmental awareness and action a part of the culture of the District. EarthCARE inspires students to become environmental stewards and to bring the concepts they learn at school to their homes and into their communities. As well, building operators in the District are provided training through the EarthCARE program to operate their sites more efficiently and effectively.

The three basic themes of the program - energy conservation, waste reduction and water conservation - are demonstrated through a variety of lessons and activities. These concepts are then practised every day as students are encouraged to actively contribute to a healthier environment through simple, but significant efforts, such as turning off lights and computers when not in use and adhering to the "3 Rs", reduce, reuse, and recycle.

EarthCARE, under the direction of Superintendent Laura McAlister, has been enthusiastically adopted across the OCDSB through a variety of projects and activities. The following are just a few:

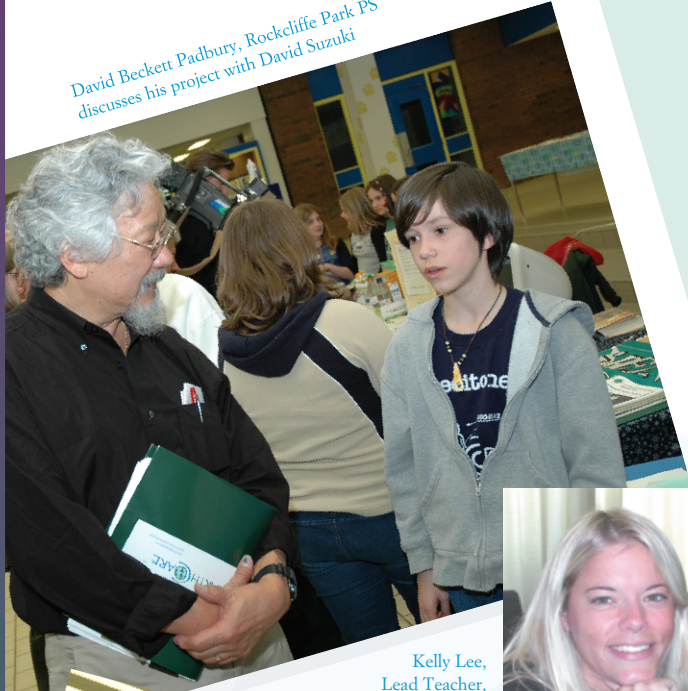
- The Paper Revolution - paper that has only been used on one side and is not confidential is stored in boxes in classrooms for re-use. Teachers accept assignments on these recyclables and some schools are accepting newsprint as well.
- Pizza Boxes - pizza boxes are now accepted for recycling because of a partnership between the schools and the pizza outlets. Schools only order from outlets that use plastic liners to absorb grease and all food is cleaned from the boxes before recycling, leaving them free from contamination.
- Overhead projector and Power Point use - reduces photocopying, thereby saving paper.
- LOCO (lights off, computers off) - School audits revealed that significant energy is wasted in empty classrooms with lights and computers left on, so students and staff practise "LOCO".
- Battery recycling, battery bake sales, battery raffles, battery collection competitions. These imaginative ideas keep coming as schools develop strategies to encourage people to recycle dead batteries.
- EarthCARE Fair was held on April 20, 2004. This board-wide event featured three dimensional globe projects, conservation posters and innovation presentations. Dr. David Suzuki congratulated the winners and spoke to the students.

Parkwood Hills PS's Chief Custodian, Les Dusza proudly displays a recycled chair from the winning Elementary Innovation project at the EarthCARE Fair

EARTH CARE TM

AN ENVIRONMENTAL EDUCATION PARTNERSHIP

David Beckett Padbury, Rockcliffe Park PS
discusses his project with David Suzuki



Kelly Lee,
Lead Teacher,
Merivale HS



Merivale High School teacher Kelly Lee coordinated the EarthCARE Fair and comments that she has "an enthusiastic group of students that do a wonderful job with all that we do. We are much more conscientious with lights, computers, recycling and we remember to have fun, too!"

The schools complete regular audits to ensure that the project is on track. Secondary students serve as EarthCARE Catalysts (ECC) whose role is to promote environmental action at their own school as well as to take the message to their elementary and middle schools. Events such as litterless lunch week and upgrading recycling programs bring visible change.

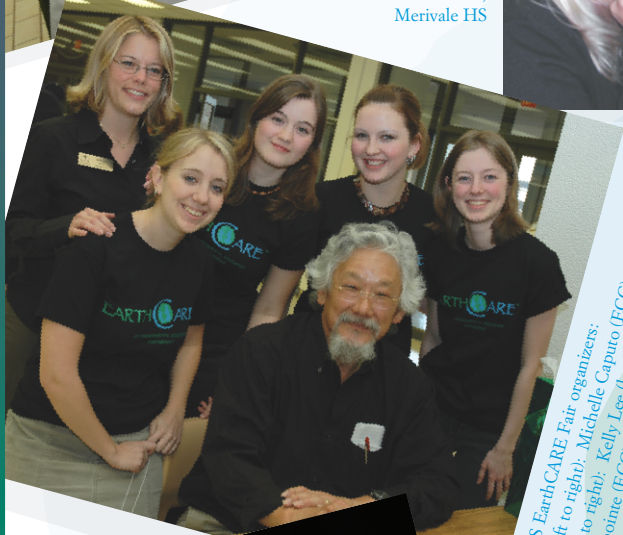
Lynne Bosquet, a Grade 12 student and EarthCARE Catalyst at Merivale HS, has helped with audits and worked on posters with the students at two local elementary schools. "It's easier to get kids more involved with the environment when they're younger so they're more likely to conserve when they're older and to recycle and to realize the importance of it."

Michelle Caputo, also a Catalyst at Merivale HS, notes that it can be more difficult to get environmental concerns across in high schools, but EarthCARE is making progress. "We have a good program here. People are starting to realize what they can recycle; our boxes are getting much cleaner and we have to do less sorting every week. EarthCARE is a step to a cleaner environment."

Elementary schools are enthusiastically behind the program with school-wide poster competitions, regular energy use audits, recycling and attention to LOCO. Johanna Cutts spearheads the environmental work at Blossom Park Public School and says, "I think it's something every school should be participating in."

EarthCARE team member Miranda Mole, a Grade 8 student at Blossom Park, who plans to continue her environmental work in high school next year, comments on how students react to the program: "Everybody at the school is very helpful and they do their part."

Marc Rennie, also an EarthCARE Blossom Park team member, thinks the work of EarthCARE is important because "it's all about looking after the environment and, if you do your part, then it will look after you."



Merivale HS EarthCARE Fair organizers:
front row (left to right): Michelle Caputo (ECC); Dr. David Suzuki;
back row (left to right): Kelly Lee (lead teacher);
Katherine Lapointe (ECC); Shannon Murphy (ECC)
and Lynne Bosquet (ECC).



Kelsey
Dauphinee -
Convent
Glenn PS
poster
winner



Knoxdale PS's EarthCARE Team with Dr. Suzuki



Broadview PS winner



Secondary innovation winners, Colonel By SS



Robert E Wilson PS's globe competition entry

EarthCARE means that elementary school students of all ages take part in preserving the environment, becoming aware, as Timour Ibrahim, also a Blossom Park student, says that "whatever we do now will impact future generations."

Their teacher, Johanna Cutts, concludes, "We have to take things in hand today if there's going to be a tomorrow. EarthCARE has been a positive experience here. We have a school with many different nationalities and students with varying socio-economic backgrounds and by doing things together for the environment, we're all on the same page."

"The educational component of the program helps students themselves develop into responsible citizens and environmental stewards of the planet," says Lynn Graham, Chair of the Board.

"The EarthCARE program has been very successful. You can walk into most of our schools and see signs of environmental action at work," says Diane Judy-Hugo, Superintendent of Physical Facilities at the OCDSB. "Those are the measures of success of the program - you can see things that are actively happening."

Poster Winners (over 800 entries)

Kelsey Dauphinee-Conroy, Grade 1, Convent Glen ES;
Miss Caesar's JK - SK Class, R.E. Wilson PS;
Nassima Dahmani, Grade 5, Knoxdale ES;
Sofia Hou, Grade 7, Broadview PS;
Allissa Heath, Grade 9, Ottawa Technical Learning Centre;
Christine MacKay & Brenda Abbott, Grade 12, Colonel By SS.

Globe Winners (18 entries)

Kindergarten to Grade 5 Category: Metcalfe PS and Roland Michener PS;
Honourable Mention: R.E. Wilson PS;
Grades 6 - 8 Category: Queenswood PS;
Grades 9 - 12 Category: Colonel By SS and Ottawa Technical Learning Centre.

Innovation Winners - Dr. David Suzuki Award (7 entries)

Elementary: Parkwood Hills PS - Environmental Club;
Secondary: Colonel By SS Environmental Club, "FROGG".

EARTH CARE™

AN ENVIRONMENTAL
EDUCATION PARTNERSHIP

Smarter Schools
for Better Learning



Better Schools
Partnership

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More photos available at www.earthcarecanada.com



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Diane Jeudy-Hugo,
Superintendent of Physical
Facilities, OCDSB



Laura McAlister,
Superintendent of
Instruction, OCDSB

Partnering Works

According to Diane Jeudy-Hugo, "the partnership concept provides a forum for experts in the field to work together towards a common goal. Success is far more achievable, with better performance results and better financial results, if you have experts from different fields working together toward a common goal. The sum is always more than the parts – that is one of the strengths of the BSP. And it's nice to have been in the partnership long enough for people to actually start to see the results."

She continues: "Partnering is a great learning experience – which is what we are about. It's really good role modeling for citizenship and problem-solving for the students as well."

"A successful business partnership with BSP has provided solutions to address growing renewal backlog issues while providing students with better learning environments," adds Director Rachlis.

The educational component has made its own contribution to the partnering concept. "The EarthCARE program has forged new partnerships that are quite exciting," says Jeudy-Hugo. "For instance, we see custodial staff in schools and students working together on projects and solving problems. Where else can you get a partnership where you have financial benefits and you're teaching team work at the same time?"

"Having Ameresco as our partner has created many exciting opportunities for us: facilities and instruction have developed a better understanding of each other's needs and goals; student partnerships have evolved between secondary and elementary schools; interactions among students, custodians and teachers have changed. We are enhancing the development of life skills for our students while demonstrating leadership in this critical area of environmental action at the same time," explains Laura McAlister, Superintendent of Instruction.



Dave Seymour
congratulates
Director
Lorne Rachlis
with a
Better Schools
Partnership
Green Globe
award for
outstanding
achievement.

To learn more about EarthCARE™ and the Better Schools Partnership®, please contact Tim Cresswell, V.P., Ameresco Canada Inc., at 1-888-483-7267 or tcresswell@ameresco.com.

You can also visit the Board's web site at www.ocdsb.edu.on.ca or the EarthCARE web site at www.earthcarecanada.com. For additional information about Ottawa-Carleton DSB contact Maggie Melenhorst or Hyacinth Haddad, Communications and Information Services, at (613) 596-8791



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